

**Entry, Risk Selection and
Stability in a Community-Rated
Health Insurance Market
without Risk Equalisation**

Report for Vhi Healthcare

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Executive Summary

Health insurance in Ireland was, until 1997, provided by a State-owned monopoly insurer which operated open enrolment and community rating. Health insurance is seen as a voluntary top-up to the free, tax-financed State health system, entitling insured persons to choice, priority admission to hospital care and other additional benefits. Hospitalisation costs are the principal risk covered. Aside from tax-deductibility of premiums, the State monopoly insurer was expected to operate without subsidy, and has done so. Approximately 50% of the population, drawn mainly from the middle and upper income groups, have chosen to pay for private health insurance, which is marketed mainly through places of employment. Coverage has risen steadily over the years, and was only about 35% in 1990. Premiums paid to private health insurers account for roughly 7% of total health expenditure in Ireland, underlining the supplementary nature of the system.

Community rating means that insurers must charge the same premiums to clients with hugely varying likelihood of claims. Elderly people could face premiums 7 or 8 times those quoted to the younger age groups, if premiums reflected risk, as they do with motor insurance. It is Government policy to equalise the premiums, and also to insist on open enrolment: clients cannot be refused on risk grounds. While these arrangements may find justification in social policy, they create an anomalous market. The incumbent is saddled with a legacy of higher-risk clients, while the entrants will tend to recruit in the younger age groups. A stable market requires arrangements which offset the differences in costs faced by the players, since differential pricing (the solution in normal insurance markets) is forbidden.

The largest player is the former State monopoly, Vhi Healthcare, with almost 80% of premium income. There are now two further players, BUPA, which is believed to have almost 20% of the market, and Vivas, a very recent entrant. Risk equalisation has *not* been introduced, although it is provided for in the legislation and a formal scheme has been designed and published. The introduction of risk equalisation, which would involve cash transfers between insurers, ultimately rests with the Minister for Health and Children. The size of the transfers in question determines whether the regulator, the Health Insurance Authority, can make a recommendation to the Minister to introduce such a scheme, since upper and lower bounds have been specified. While the size of the transfers calculated in the two six-monthly reviews thus far undertaken have permitted this possibility, the regulator has declined to recommend the introduction of risk equalisation.

In order to comply with an EU directive (the Third Non-Life Insurance Directive, 92/49/EEC), the Irish Government enacted the 1994 Health Insurance Act and a regulatory structure was put in place in 1996, amended in 2001. The UK-based company BUPA entered the market in 1997, and a second entrant, an Irish firm Vivas entered in 2004. BUPA has built a market share of roughly 20%, while the recent entrant has a negligible share at this stage. There are also some small employer-operated schemes not open to the public.

It is argued in this report that, unless insurers are allowed to charge differentiated premiums based on risk assessment, a competitive health insurance market with community rating and open enrolment *but without Risk Equalisation* will prove to be unsustainable. Some players, specifically the large incumbent(s) with a preponderance of inherited high-risk clients, are likely to become progressively unable to compete, and ultimately to go bust.

The remedy is a risk equalisation fund or some equivalent compensating mechanism. In the absence of some such mechanism, insurers will have incentives to market aggressively at those market segments believed to be low risk. Recruitment to private health insurance plans in Ireland is typically in the younger (and healthier) age groups, often on commencing employment. This increases the likelihood that the incumbent insurer will retain higher-risk clients, due to client inertia, while entrants will recruit mainly healthier clients and will thus enjoy lower claims costs. Market instability is inevitable, in the absence of risk equalisation.

Since 2003 the regulator, the Health Insurance Authority, is required under the legislation to determine once every six months whether to recommend that the Risk Equalisation scheme be triggered. In two determinations to date, the regulator has not made a recommendation to trigger the scheme, arguing that there is insufficient evidence of market instability.

This report examines the basis for these regulatory determinations. It considers also the trends in market shares since the end of the monopoly in 1997, and patterns of switching between insurers. It reviews the pricing strategy of the players and the available evidence on claims experience.

The paper also examines the question of market stability. It concludes that

- A health insurance market with open enrolment and community rating, but without risk equalisation, cannot be dynamically stable in real-world circumstances;
- Any snapshot appearance of stability is deceptive;
- The incumbent will face progressively more serious financial difficulties, including pressure to raise premiums as its client base ages;
- Given solvency rules, the incumbent may be unable to generate the reserves needed to maintain open enrolment;
- The first entrant is likely to earn supernormal profits;
- There will not be meaningful price competition, since the entrant has no incentive to compete for most of the incumbent's clients;
- Overall market pricing will be higher than it needs to be;
- There are artificial incentives to entry in the Irish system.

The overall conclusion is that the Irish regulator should move now to trigger the commencement of the risk equalisation scheme. This is essential in order to create

conditions of *competitive equality* between market participants, a precondition for socially beneficial competition between them.

It is difficult to achieve normal competitive conditions in a community-rated market, even with risk equalisation, given the pricing uniformity imposed on the insurers. Many analysts and commentators oppose community rating for this reason. However it is a serious confusion to oppose the introduction of risk equalisation into a community rated market on the basis of perceived shortcomings in the community rated model. The choice is between community rating with risk equalisation, and community rating without it.

Section 1: Introduction

The Irish legislation and subsequent regulations envisages a private health insurance market with the following features:

- An incumbent or legacy insurer, State-owned, carrying initially a book corresponding to the total market, and hence 100% of all age/gender/risk groupings.
- Community Rating; each player must quote common rates to all risk-groups, and there can be, for example, no age or gender weightings;
- Open Enrolment and Lifetime Cover; and
- Freedom of entry for new companies, provided they meet general solvency requirements.

The authorities recognised that a community-rated market will not result in conditions of competitive equality between players, and specifically that the incumbent will face higher average claims costs as younger clients are recruited by the entrants. Accordingly there is provision for Risk Equalisation, a system of payments between the players which would offset, or at least seek to offset, the differing claims costs that they face.

A regulatory agency, the Health Insurance Authority, is charged with recommending to the Minister when the Risk Equalisation scheme should be triggered. Every six months, the HIA considers data submitted by the market participants. In two determinations to date, it has declined to recommend the initiation of the Risk Equalisation payments.

Our report is laid out as follows: the next section reviews briefly the international experience, and concludes that no country has chosen a community-rated arrangement without risk equalisation. Section 3 reviews the HIA determinations to date, followed by a discussion of the principal economic issues involved in Section 4. Section 5 deals with experience to date in the Irish market without RE, and our conclusions are in the final section. An Appendix deals with the evidence on the propensity of Irish consumers to switch health insurers.

Section 2: International Experience

The Irish health insurance market can be characterised as a community-rated, open enrolment market without risk equalisation. So far as we are aware, no other country operates a system with the precise characteristics of the Irish one.

Private health insurance (PHI) markets in the European Union are diverse in terms of the types of health insurance on offer, premium levels, benefits provided, levels of access, selection criteria, policy conditions, mechanisms for premium-setting and national regulatory regimes.

The proportion of the population covered by PHI varies between member states and by type of cover. Insurance policies purchased by groups or deducted from employee pay rolls are important in many member states and currently account for almost all PHI policies in Sweden, Ireland, Portugal, Greece and the UK, and about half of all policies in the Netherlands and France. PHI coverage in many member states has remained fairly stable for some time suggesting that the market for PHI may have reached saturation point. In all cases, the PHI market is greatly affected by the nature and coverage of the State health system.

PHI markets in certain member states are characterised by a high level of product differentiation. While this brings certain benefits to consumers by increasing choice, evidence suggests that consumers may not always have adequate information available to enable them to compare PHI products.

At present, open enrolment policies are rare among voluntary health insurers in the EU. PHI premiums in many member states rise with age and most insurers set a maximum age limit for purchasing PHI (usually between 60 and 75 years).

PHI markets in the EU are currently dominated by non-profit or provident associations. Many of these adhere to solidarity principles in their provision of PHI. In recent years, their share of the PHI market has declined in some member states and they may continue to lose further market share to for-profit commercial insurers. Most member states do not use tax incentives to encourage individuals to purchase PHI.

Risk adjustment systems to reduce incentives for insurers to lower their costs by risk selection are rare in PHI markets in the EU and those that do exist have been criticised. The German system appears to be limited in its effectiveness and leaves considerable incentives for insurers to risk-select. The Dutch system is apparently unable to correct fully the consequences of adverse selection and eradicate incentives to risk-select. A system of risk adjustment also operates among mutual associations providing substitutive PHI in Belgium.

The private health insurance system in Australia is very similar to the Irish system. A key element of both systems is community rating. Private health insurance in Australia is a voluntary facility for private funding of hospital care which sits alongside a compulsory tax-financed public system, Medicare, that is available to all.

The introduction of Medicare in 1984, however, led to a considerable decrease in the level of private health insurance cover taken out by the general population and led to rising premiums. In 2000, following recommendations from the Industry Commission Inquiry, the Government introduced Lifetime Health Cover (LHC), to address the adverse selection problems caused by community rating. This penalises late entry into private insurance by imposing a loading on top of a base premium for every year a new entrant is older than 30, up to a maximum. The intentions of the national government were to halt the decline in private membership that had occurred since Medicare was established, and to encourage younger and healthier individuals to take out and maintain private health insurance in order to improve the overall risk profile of members, which was expected to result in lower premiums. The private health insurance funds, however, increased premiums in early 2002 citing rising costs resulting from rising claims.

Private health insurance in South Africa also has similar characteristics to the Irish system following a reform of the private health care system over the last number of years. The Medical Schemes Act 1998, which came into effect in 2000, is based on the following fundamental principles: community rating, open enrolment and prescribed minimum benefits. While a risk equalisation system was not introduced at that time, this was due more to the issue of timing rather than opposition to such a policy measure. An International Review Panel was established in November 2003 to provide advice on risk equalisation. The Review Panel made its recommendations in early 2004 and argued that there was an urgent need to introduce risk equalisation to ensure the stability of the health insurance market. The South African Cabinet has recently decided in principle to commence risk equalisation, and monetary transfers are expected to commence immediately upon its introduction.

Section 3: Review of the Risk Equalisation Issue

To date, the Health Insurance Authority (HIA) has presented the Minister for Health and Children with two reports under Article 10 of the Risk Equalisation (RE) Scheme, 2003, for the periods 1 July 2003 to 31 December 2003 and 1 January 2004 to 30 June 2004.

The table below shows the results of the HIA's analysis of the financial returns for the two insurers in the market, Vhi and BUPA. Vivas entered subsequent to the 30th June 2004.

Table 1: HIA Analysis of Insurer Returns, H2 2003 and H1 2004

| | Jul-Dec 2003 | Jan-Jun 2004 |
|---|--------------|--------------|
| Total Market Insured Persons (MIP) | 1,846,685 | 1,869,918 |
| Total Market Equalised Benefits (MEB) | €316,877,620 | €336,075,492 |
| Market Positive Equalisation Adjustments (MPEA) | €11,644,378 | €11,803,918 |
| MEP (with HSW = 0.0) | 3.7% | 3.5% |
| MEP (with HSW = 0.5) | 4.0% | 4.4% |

Source: HIA

The total market, in terms of persons covered, increased by 1.3% while there was a 6.1% increase in the Total Market for Equalised Benefits. The HIA calculated a MEP of 3.7% for the first 6-month period, and a MEP of 3.5% for the second period, using a Health Status Weight (HSW) of zero. Allowing for one-half of the difference between the two insurers in health status (within age/gender groups), that is with a HSW of 0.5, the MEPs were higher, indicating poorer health status (higher claims) within age/gender groups for Vhi Healthcare compared to BUPA.

The **MIP(Total)** represents the average of the number of persons insured with products that are subject to RE (excluding those serving initial waiting periods) at the start of the six month period in question and the corresponding number taken mid-way through the six month period.

The **MEB(Total)** represents the amount of benefit that is subject to RE that was paid by undertakings in the six month period.

The **MPEA** represents the amount of the transfer that would have been paid in respect of the six month period if RE were in force and no phasing applied to the payments.

The **MEP** is equal to MPEA divided by MEB(Total).

3.1: HIA Consideration of the Issues

The Authority stresses in its reports that it must consider the following issues when making its recommendation:

1. The best overall interests of health insurance consumers,
2. The need to maintain community rating across the market for health insurance
3. The facilitation of competition between undertakings.

The HIA is mandated by legislation to consider the facilitation of competition in its decisions on whether or not to recommend the commencement of risk equalisation payments (Report 1, p.6).

The Health Insurance Amendment Act 2001 provides some guidance on the definition of the best overall interests of health insurance consumers. It states

"the best overall interests of health insurance consumers includes a reference to the need to maintain the application of community rating across the market for health insurance and to facilitate competition between undertakings". (p.8 RE Guide July 2003).

The HIA stated in both its reports that, when determining whether or not RE should be commenced, in the best overall interests of health insurance consumers, it would consider matters including:

- The differences in risk profiles between insurers
- The relative size of insurers
- The age/sex profile of insurers' policyholders
- The rate of premium inflation
- The number of insurers in the market/new entrants to the market
- The effect of any transfer on premiums payable by consumers
- The overall size of the market
- The effect of payments on the business plans or solvency of insurers
- The commercial status of insurers.

(Reports 1 and 2, p.5).

However, there is very little specific statistical detail or analysis provided in the HIA's reports on these matters. Since there were only two players in the public market for these time periods, the revelation of detailed market statistics would in effect reveal

each player's details to its competitor, a situation which changes with three or more players.

3.2: Timing

The Authority has clearly stated its reluctance to initiate the risk equalisation scheme on the basis of the data it has received to date. It will shortly consider data for the most recent six-month period, H2 2004. The following extracts from the HIA's reports provide an indication of its position regarding the timing of the introduction of risk equalisation.

In its first report, the HIA argued:

"Given the importance of the decision and the other factors mentioned in this Report, it might be considered more prudent not to base a decision to commence risk equalisation payments on a single set of returns". (Report 1 p.8)

We will argue below that the first set of returns confirmed that the market was not functioning normally, and provided an adequate basis for decision.

The HIA highlighted the issue of seasonal effects in its second report as a reason why it intends to hold off on the introduction of RE payments in the short-term (i.e. to ensure that any seasonality in the data is accounted for):

"Furthermore, there appears to be some seasonality in the data of at least certain undertakings disclosed in the returns. In this context, the Authority recognises that over time further data (including more returns), which may provide a more complete picture, will become available and will inform future deliberations. (Report 2 p.1)

The seasonal adjustment of economic or other time series is important, since seasonal effects can indeed be significant. The Central Statistics Office has recently begun to issue seasonally adjusted estimates of quarterly data series (including the National Accounts and Quarterly National Household Survey) which it has been publishing in unadjusted form since the inception of coverage several years ago. CSO have expressed the view that a minimum of 24 or 25 observations are needed in order to estimate seasonal effects, a figure that would take 12 years to accumulate with half-yearly data. Two or three observations is inadequate for reliable detection of seasonal patterns, but so is four, eight or ten, and the Authority must decide on available information. High levels of MEP have been computed for both 'seasons' to date.

3.3: "Appropriate Circumstances" for the Initiation of RE

The HIA has frequently referred to "appropriate circumstances" in its reports. The HIA issued a Policy Paper in Sep 2002 in which it states its preliminary view:

"....that the introduction of RE could be justified in the appropriate circumstances."

The Policy Paper went on to state that

"...intervention may not always be appropriate to address difficulties in the private health insurance market, and where intervention is necessary, risk equalisation may not be the most appropriate, or even an appropriate form of intervention to use."
(Reports 1 and 2, p.5)

In this, HIA seems to be implying that it has reservations, not outlined in detail, about the risk equalisation scheme as contained in the current scheme, the triggering, but not the design, of which is the matter to be determined by the Authority.

In its first report to the Minister, the HIA stated:

"The Authority remains of the view that, in the appropriate circumstances, the best overall interests of health insurance consumers in a community rated market could be served by the commencement of risk equalisation payments." (Report 1 p.8)

This statement was reproduced in its second report:

"The Authority remains of the view that, in the appropriate circumstances, the best overall interests of health insurance consumers in a community rated market could be served by the commencement of risk equalisation payments." (Report 2 p.11).

Neither of the HIA reports contains any discussion of what these 'appropriate circumstances' might be.

3.4: Rationale behind the HIA's Decision

In its first report, the HIA was extremely brief in the reasons behind arriving at its decision not to implement risk equalisation payments.

Reasons given in First Report

1. *There is insufficient evidence of a threat to market stability.*

Comment: The HIA does not define its understanding of 'market stability', nor does it explain what it considers would be evidence of market instability.

2. *The value of the MPEA, in the context of the level of premium paid in the market and the number of consumers in the market, is low. This is also reflected in the value of the MEP. As a result, the potential benefits that could accrue for health insurance consumers directly from the transfer of funds would appear to be small.*

Comment: The HIA states that the MPEA of €11.6m is "low". For the full year covered to date, these payments proved to be of the order of €23m. Relative to what magnitude is this figure deemed to be 'low'?

The HIA also state that the potential benefits for consumers resulting from the transfer of funds appears to be 'small', but no methodology for assessing the significance of these benefits is offered.

3. *In this context the potential benefits of commencing risk equalisation payments at this time are outweighed by uncertain competitive consequences, which could arise.*

Comment: It is unclear what the HIA means by “uncertain competitive consequences”. No analysis of the conditions of competition in the market is offered.

Reasons given in Second Report

In its second report the HIA provides more detailed reasons behind its decision to again defer the introduction of risk equalisation:

1. *As a proportion of the level of claims paid in the market the MPEA has reduced since the previous report. This is reflected in the value of the MEP, which has reduced from 3.7% to 3.5%, with a Health Status Weight equal to 0.*

While the MPEA has reduced as a proportion of the level of claims, its absolute value for the six-month period from 1 January, 2004 to 30 June, 2004 has risen from €11.6m to €11.8m since the previous report. When viewed in the context of the number of health insurance consumers in the market and the amount of premium paid (c. €1 billion in 2003) the value of the MPEA, therefore, remains relatively low. As a result, the potential benefits, by way of any possible percentage reduction in premiums, which could accrue to individual health insurance consumers directly from the transfer of funds, would appear to be small.

Comments:

- The HIA states that the value of the MPEA remains relatively low (€11.8m), in the context of the number of consumers in the market and the amount of premium paid. But low compared to what?
 - What reduction in premiums would not be considered small?
 - The introduction of risk equalisation, aside from initiating transfer payments between insurers, would have other effects on the market, not addressed in either report.
2. *As detailed in its Policy Paper [see, in particular, Section 3], the Authority is cognizant of the possibility of instability arising in a community rated market, which would threaten the maintenance of community rating across the market, and that in certain circumstances the commencement of risk equalisation payments might be appropriate in order to address such instability.*

If the Authority considered, based on the information available to it, that such a threat were imminent or would inevitably arise it would, all else being equal, recommend the commencement of risk equalisation payments in order to maintain community rating. However, based on its analysis, the Authority does

not consider that such a threat is imminent or will inevitably arise. Such a threat is, however, a possibility that the Authority has taken and continues to take very seriously.

Specifically, as part of its deliberations the Authority considered analyses of certain trends in the market, including the levels of lapses and sales for different insurers, the growth in the memberships of different insurers, the total growth of the market, the risk profiles of insurers as well as other matters detailed in its Policy Paper [see, in particular, Section 3]. In doing so it aimed to ascertain whether there is a possibility of a threat to the stability of the market arising, which should be addressed at this stage by the immediate commencement of risk equalisation payments. While some data in relation to matters such as lapses and sales give rise to some concern and will continue to be monitored, there was not sufficient evidence of such a threat when the totality of the data available to the Authority was considered.

The possibility of a threat to the stability of the market arising, which would warrant the immediate commencement of risk equalisation payments was also considered in the context of the financial positions of the insurers. In particular, in assessing whether such a threat to individual insurers exists, levels of profitability were considered relevant and in this context the Authority considered both publicly available information (Annual Report for Vhi Healthcare, returns to the UK Financial Services Authority by BUPA Insurance Limited) and other financial information provided to the Authority on a confidential basis by Scheme undertakings.

Comments:

- What are the “certain circumstances” in which the commencement of RE payments “might be appropriate”?
 - The HIA states that they are aware of the “possibility of instability arising in a community rated market”. The HIA does not believe, based on its analysis, that a threat to stability is inevitable, but rather that it is no more than a “possibility”. We will argue below that a community-rated market without risk equalisation is most unlikely to be stable in any economically meaningful sense, and that the onus is on the Authority to argue that such an outcome is theoretically and empirically plausible, which they have failed to do.
 - The HIA considers that some data (e.g. lapses and sales) are a reason for some concern, however, when all data is considered there is not sufficient evidence of a threat. The HIA does not reveal the data or analysis which has led it to believe that there is no threat to stability.
 - The HIA states that it has examined the financial positions of the insurers, however there is no specific detail from the HIA regarding this examination, e.g. their opinion on the relative profitability of the players in the market, adequacy of reserves or projections of balance sheets with/without risk equalisation.
3. *The Authority notes that premium increases in the market in recent years have averaged c. 9% p.a., although this rate of increase appears to have slowed*

dramatically of late with the announcement of a c. 3% increase in Vhi Healthcare's premiums for contracts renewing in 2004 / 2005. The Authority also notes that in 2002 / 2003 Vhi Healthcare increased their premiums by 18%, while BUPA Ireland increased their premiums by 14.4%. In this context, the Authority is concerned about the level of competitive pressure on each insurer in the market.

The Authority considers that the introduction of risk equalisation, in the present circumstances, could reduce the competitive pressures within the market without significantly increasing benefits to health insurance consumers. Noting the scale of recent rises in premiums and mindful of the real and potential benefits of competition the Authority considers that to recommend, at this time, that risk equalisation payments be commenced would not be in the best overall interests of health insurance consumers.

Comments:

- The HIA is concerned with the level of competitive pressure on Vhi and BUPA given the significant premium increases in 2002/03. Vhi is tariff controlled, since all premium increases must be approved by the Minister for Health and Children. BUPA is not price controlled and we will argue below that it has adopted a price follower strategy.
 - What analysis has been undertaken of the reasons behind Vhi's and BUPA's price increases?
 - The HIA believes that introducing RE in the present circumstances "could reduce the competitive pressures within the market without significantly increasing benefits to health insurance consumers". Why does the HIA believe that competitive pressures could (not would) be reduced? No analysis is offered of the nature and extent of competition in the market, there is no discussion of the players' pricing strategies, and hence no analytic base for the conclusion drawn.
 - The HIA seems reluctant to introduce RE in the absence of evidence that there will be "significant benefits to customers", but the report lacks any definition of 'significant'.
 - The HIA believes that introducing RE would not be in the best overall interest of health insurance consumers due to (a) the scale of recent rises in premiums, (b) the real and potential benefits of competition. However these conclusions are asserted rather than argued and contrary conclusions are plausible.
4. *Furthermore, there appears to be some seasonality in the data of at least certain undertakings disclosed in the returns. In this context, the Authority recognises that over time further data (including more returns), which may provide a more complete picture, will become available and will inform future deliberations.*

Comment:

This seems to suggest that the HIA intends to hold off on the introduction of RE simply to enable them to examine a longer time series for seasonal adjustment purposes.

3.5: Risk differences

In its second report, the HIA referred to the differences in the risk profiles of insurers not accounted for by differences in the proportions within age and gender groups and their effect on the MEP. The Authority has observed that there are material differences in claims experience within prescribed age and gender cells between insurers. This is evidenced by comparisons of the MEP calculated with a Health Status Weight (HSW) of 0 and with a HSW of 0.5 reproduced in the table below. We have added a column showing the MEP which would correspond to actual claims experience (HSW = 1).

Table 2: Calculations of MEP for 2003 and 2004

| | MEP with HSW = 0.0 | MEP with HSW = 0.5 | MEP with HSW = 1 |
|-----------------------|--------------------|--------------------|------------------|
| July-December 2003 | 3.7 | 4.0 | 4.3 |
| January-June 2004 | 3.5 | 4.4 | 5.3 |

Source: HIA; DKM Calculation.

When allowance is made for health status, the MEP is greater, and amounts to be transferred larger. The gap widened in the second period.

Section 4: Economic Aspects of a Community-Rated Market without Risk Equalisation

Until such time as the Health Insurance Authority chooses to trigger risk equalisation in the Irish health insurance market, the market will continue as a rare, and possibly unique, example of community rating with open enrolment but without any offsetting mechanism to deal with risk selection. In this section, we argue that risk selection is inevitable, and argue that the market will inevitably be unstable without some compensating measure. We consider a range of economic issues raised by this type of market.

4.1: Theoretical Issues in the Design of Insurance Markets

Insurers, when free to do so, will seek to match premiums to their perception of the likelihood of claims and their cost. Thus pure life insurance for young people is considerably cheaper than it is for the elderly. The reverse is the case with car insurance, in both cases reflecting the companies' perception of risk and hence of claims frequency and cost. But life insurance and motor are markets where there is no control, other than market competition, on the premiums which insurance companies may charge, nor are they required to accept risks offered to them. They can simply refuse business, or can quote premiums designed to chase business away.

In these markets, it does not matter if one car insurer has mainly younger drivers, with higher claims, because that insurer will have charged higher premiums to offset the riskier profile of business. Equally some insurers in the United Kingdom actually specialise in writing policies on the lives of the elderly, with premiums to match. A book of risks consisting of younger lives should, other things equal, be no more profitable than a book of older lives, if the actuaries have done their work carefully in setting premium rates.

The health insurance market is very different. The companies, while free to pitch their overall premium level wherever they wish, cannot differentiate between categories of risk, and must, in effect, offer the same price to all, even though it is evident that risk, and hence claims cost, varies enormously from one individual to the next. Aside from health status, there are systematic and sizeable variations by age/gender. Thus unlike the situation in the car insurance market, or in the life business, insurers cannot match expected revenue and expected cost on a risk-by-risk basis. This is the consequence of community rating with open enrolment. Each individual risk written is likely to be a winner (young, healthy) or a loser (older, less healthy) for the insurer. With the power to vary premiums, the car insurer in contrast should regard each risk written as equally likely to be profitable.

Thus for the regulated health insurer, the inability to vary the premium to match the risk means that profitability will depend on the mix of clients who seek cover. Clients of course cannot be refused (open enrolment) nor can the premium quoted be varied (community rating) to match the riskiness of the client. Should one insurer end up,

through accident, happenstance or the success of competitors' risk selection strategies, with a riskier basket of clients than the market norm, financial solvency will require that it charge a higher average premium. It will not be permitted to regain equilibrium through, for example, refusing to renew cover for riskier clients. But a higher average premium will be difficult to sustain, particularly if it incentivises lower-risk clients to switch. For all of these reasons, it has been widely accepted that the design of a community-rated health insurance market will need to include provision for risk equalisation, or for some equivalent mechanism designed to promote conditions of competitive equality between players in the marketplace.

Appropriate provisions for the introduction of risk equalisation have been included in the Irish market design, but have yet to be activated. Activation is the prerogative of the Minister, on the advice of the Health Insurance Authority. Clearly the extent of the departure from average in the risk profile of the different health insurers is a key issue. This can arise from two sources. If recruitment is concentrated in younger age groups, and bearing in mind that people in their 20s and early 30s have medical claims less than one quarter of those in their 60s, a new entrant will passively acquire a lower-risk customer base than the incumbent. If the entrant is pro-active in marketing (targeting TV ads at programmes with a known younger audience profile for example) this effect will be accentuated.

The principal method of recruitment of subscribers into voluntary private health insurance in Ireland has traditionally been through the workplace, and the typical recruitment age is around 29-30. Young employees are informed routinely in larger organisations that subscriptions can be deducted through payroll, and the insurance providers regard this distribution channel critical. Of the nature of things, customers recruited through this channel will have a bias toward the younger age groups, as is evident from the age-breakdown of employment.

Table 3: Employment Rates % (ILO Definition) June to August 2004

| Age Group | 15-19 | 20-24 | 25-34 | 35-44 | 45-54 | 55-59 | 60-64 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|
| % In Employment | 29.3 | 72.1 | 80.5 | 76.5 | 72.5 | 57.3 | 37.8 |

Source: Labour Force Survey, Central Statistics Office.

The employment rate shown is the percentage of the total population in each age group that is in employment. The Labour Force Survey data show that in Ireland, this percentage is highest in the 25-34 age group, and falls away rather rapidly in the older categories. It is low in the 15-19 group, a reflection of high educational participation rates, but rises quickly to 72% for the 20-24 group. Clearly recruitment of subscribers, even at random, from the labour force, would produce a bias toward younger and lower-risk clients. With new entrants, even if they did not focus their recruitment of subscribers at all, but passively adopted the main established industry recruitment channel, they would find their 'book' filling with predominantly younger and less risky clients.

But they have powerful incentives not to be passive. Since they must charge the same price to all, profitability will be enhanced if they succeed in attracting a predominantly younger client base and hence the likelihood of lower claims. Thus they can be expected to focus their advertising, marketing and sponsorship activities in such a way as to target the most desirable (younger and fitter) segment of the market, while discouraging client recruitment in the older (thus less healthy and more prone to claim) age groups. The absence of any risk equalisation arrangement reinforces these incentives.

4.2: Competition, Entry and Market Distortion

A community-rated health insurance market is unlikely to display the efficiency and competitive characteristics of a less-regulated market such as motor or property insurance. The requirement that all risks be accepted by a company, and at the same price, means that few customers will be paying the actuarially fair premium. If we simplify and think of age as the sole indicator of risk, there will be a band of middle-aged clients of whom this will be true, but all of the young will be charged too much, and all of the old too little. This creates the risk that the young and healthy will perceive an opportunity to self-insure, deferring membership and thus raising the average premium of those choosing to join, a phenomenon noted by Australia's Industry Commission (1997) report.

There have been concerns in Ireland about the attraction of entry, and increasing the number of players has been seen as a legitimate object of policy. To the degree that risk equalisation deters entry, this has been a factor in the deferral of risk equalisation. However in a market as heavily regulated as this and with such heavy restrictions on pricing, the relationship between the number of competitors and the intensity of competition is not simple. We would argue that without risk equalisation there cannot be conditions of competitive equality between the players, and that additional players do not intensify competition in any simple way.

The absence of competitive equality arises because the market consists of a large, formerly monopoly, incumbent and, until recently, a solitary entrant. The incumbent has progressively moved onto a different cost curve from the entrant as the latter has recruited lower-risk clients leaving the incumbent with the higher cost curve. In such a market, the larger company will tend, at least initially, to be the price leader, and the second company does not have the normal incentives it would have in an undistorted market.

Indeed the incentives for pricing by the entrant are perverse. Aggressive pricing, possibly well below the incumbent, is feasible to the degree the entrant's cost curve will be below that of the incumbent. But such pricing will stimulate volume and runs the risk of attracting clients with high claims likelihood to switch from the incumbent, thus destroying the entrant's cost advantage. Thus long-run profitability is *not*, in this distorted market, improved by chasing market share.

The entrant should behave, at least initially, as a price-follower, and this would appear to have been the pattern in Ireland since 1997. There is a limit to the market share which the entrant should profitably seek, and profits will be maximised by pricing to contain market share. Indeed, in the duopoly which emerged in recent years in Ireland, the entrant faced two risks in pricing policy:

- (i) Price too far below the incumbent, attract too large a market share consisting of older and less healthy clients, moving up the cost curve and damaging profitability, or
- (ii) Price too close to the incumbent thus controlling market share growth. This strategy, while it will be profitable due to the lower claims incidence and cost, may attract further entry.

In 2004, a third entrant, Vivas, has emerged, suggesting that Bupa's profitability at the prices it chose was enough to stimulate entry. This raises an interesting question about the optimal pricing strategy of the recent entrant. It could price aggressively, but runs the risk of attracting the incumbent's (older and less healthy) clients rather than the more attractive clients of the first entrant. Under the Irish regulatory regime, the second entrant will enjoy exemption from any risk equalisation scheme for a period of three years from October 2004. This is an important subsidy to entry, and potentially sizeable if the company can successfully target a market niche of low-claiming clients.

Since the companies offer slightly different product packages, precise comparisons of prices are not possible. To date, Vivas would appear to have chosen a pricing strategy a little below the first entrant, Bupa, whose prices are in turn a little below Vhi Healthcare. Vivas does *not* appear to have sought to aggressively undercut the profitable first entrant, suggesting that because of the distortions created by the regulatory regime, and counter to economic intuition, additional players do not lead to heightened price competition in the marketplace for health insurance under current Irish arrangements. The price discounts offered by the entrants, compared to Vhi Healthcare, are small compared to the cost savings deriving from younger clients and lower claims costs.

With the playing-field tilted against incumbents and towards entry, pending the introduction of risk equalisation, there is clearly a possibility that the market could come to resemble the life-cycle of the planets, with entrants continually favoured and incumbents in danger of demise. This pattern of birth and death would reflect, not the normal playing out of market forces, but the distortions created by the regulatory regime.

A barrier to entry in some industries may be the existence of significant scale economies. Entrants could have higher unit costs due to smaller volumes. We are not aware of any studies which establish the existence of scale economies in Irish insurance markets, and the main nonlife markets typically have four, five and more competitors, with occasional entry and exit. Bupa, as an offshoot of a large UK operation, should not in any event suffer diseconomies of small scale, and Vivas is a start-up which was not deterred by this factor. Entrants can avail of the scale economies of established operators through out-sourcing of functions, and we understand that this is the Vivas strategy on the operating cost side.

The distortions created by the presence of risk selection and the absence of a risk-equalisation scheme in Ireland mean that the market does not meet an important requirement for economically beneficial competition. This requirement is that there should be conditions of competitive equality between players. They should face the same availability of factors of production at the same prices, the same tax and

regulatory regime (both conditions apparently satisfied in Ireland), but also the same terms and conditions of access to the demand side of the market. Under open enrolment and community rating, this condition is violated. The incumbent cannot select customers on the same basis as the entrant, and is thus burdened with a higher cost curve. The entrant can be profitable without engaging in aggressive price competition. Indeed, the pursuit of market share and the aggressive attraction of customers is not a sensible strategy in a market of this type.

4.3: Stability in Markets

The term 'stability' is used in a rather specific and technical sense in economics. It concerns the *dynamics* of a market (or a whole economy), and is focussed on the behaviour of the market over time. In the jargon, it is concerned not with statics but with dynamics. In particular, stability analysis seeks to answer questions about the likelihood that the market will develop through time along a durable equilibrium path, or will tend to become characterised by violent cycles or collapse. In order to uncover the dynamics of a market (or a firm, or an economy), it is necessary to consider the features that drive performance over time. Evidence of instability in real-world markets would include

- Continuing price rises (or price falls). Hyperinflation for example is a manifestation of macroeconomic instability.
- Widespread bankruptcy and consequent exit by firms, or continuing incentives to destabilising entry.
- Severe cycles of boom and bust in the volume of activity.

A stable market in contrast would be characterised by steadier prices, infrequent exit or entry, and less volatility in margins or volumes. Unstable markets can create the appearance of vigorous competition, while cartelised or monopolistic markets deliver stability at the cost of inefficiency and the extraction of rent from consumers by producers. But market stability is entirely consistent with economic efficiency and effective competition.

Stability is not a snapshot or short-run concept. A market, or indeed a whole economy, could be prone to ultimate instability while exhibiting a deceptive appearance of normality at a point in time, over a short period, or over a succession of short periods. In an unstable market, there are forces at work which will *ultimately* drive the market towards some form of collapse or malfunction. The forces leading to instability could be powerful and violent, with rapid effects. But these forces may equally take time to assert themselves, or may not be strong enough to be noticeable in a snapshot or over a short period. They may also be masked due to short-term extraneous influences: a market headed for trouble could appear temporarily healthy due to a generally benign macroeconomic environment, for example, and this has often been observed with property bubbles.

An example of instability in a single firm, and an illustration of the pitfalls of the snapshot approach, is the following:

- A hypothetical firm has revenue of €1m per month, and this is expected to remain constant;
- The firm agrees a labour contract with employees costing €500,000 per month initially and giving it profit of €200,000 in Month 1, since non-payroll costs are €300,000 and are also assumed constant;
- There is a clause however in the labour agreement that will increase payroll by 5% per month.

Clearly this firm will be profitable in Month 1, and for some months thereafter, but it must go bust in due course. Given the speed of the monthly payroll escalation, its profits would actually evaporate in Month 7. The company's finance providers, if they knew about the payroll contract, could well have withdrawn support sooner. But a snapshot of the P & L account in Month 2 would show them only the following reassuring picture, with comparables from Month 1:

Table 4: Snapshot of a Hypothetical Firm

| | Month 2 | Month 1 | % Change |
|---------------------------------|-----------|-----------|----------|
| Turnover | 1,000,000 | 1,000,000 | 0 |
| Non-Payroll Cost | 300,000 | 300,000 | 0 |
| Payroll | 500,000 | 525,000 | +5% |
| Profit | 200,000 | 175,000 | -12.5% |
| Profit as % Turnover | 20% | 17.5% | - |

A casual analysis of the figures for Month 2 could well give this doomed enterprise a clean bill of health. It is profitable in Month 2, indeed has a strong profit margin; payroll has risen somewhat, and turnover is flat, but non-payroll costs are under control. Things seem reasonably benign. But the dynamics, concealed in the snapshot because the Table covers just two months, are fatal.

The dynamics of this firm are best brought out by explicitly modelling the process which drives profit over time. This is

$$\text{Surplus} = \text{Turnover} \text{ minus Payroll Cost minus Non-Payroll Cost}$$

with a stability condition that the Surplus must remain positive. Clearly in the example shown, all variables are constant except Payroll Cost. Since this rises exponentially, the Surplus *must* become negative at some point, breaching the stability condition, and the process is dynamically unstable.

Of course, it could take a long time for the instability to manifest itself in a snapshot. In this example, if payroll expanded by only 1% per month instead of 5%, the firm would not begin to lose money until Month 34, versus Month 7. The snapshots in the

early periods would be even less likely to raise the alarm. But both of these processes are unstable, in the sense that they will ultimately lead to collapse. Instability in this simple type of model is an absolute. There is no concept corresponding to 'almost stable', any more than one can be slightly pregnant. Of course it matters whether collapse is imminent, particularly to policymakers, but a market where collapse may be a long way off is not thereby rendered dynamically stable, or 'almost stable': it is unambiguously unstable, albeit with a long fuse.

There are many examples of markets which display instability. A recent example was the US market for risk capital during the dotcom boom, when excessive capital availability led to large-scale value destruction and widespread corporate collapse. In more conventional markets, instability can be associated with the nature and pattern of regulatory intervention. The US air carrier market was deregulated as long ago as 1978, but the market remains volatile, with numerous large carriers already gone bust, several others in bankruptcy protection, regular and destructive price wars and new entrants in plentiful supply. Government is often accused of exacerbating the situation through, for example, in the case of US air carriers, large bail-outs of insolvent companies, an artificial barrier to exit and a disincentive to rationalisation. The travails of the California electricity market in recent years have been attributed in part to a poorly-designed regulatory regime.

Patterns of excessive entry and exit were listed earlier as possible evidence of instability. Either a regulatory regime or policies of State subsidy can induce excessive entry, through tilting the playing field in favour of entrants. Governments often pursue such policies inadvertently, but sometimes the intention can be the explicit promotion of entry, in the belief that greater numbers of participants will ensure that the market is more vigorously contested.

4.4: Concepts of Stability in a Health Insurance Market

The essential element in the HIA's two determinations to date, on the issue of triggering risk equalisation, appears to us to revolve around the Authority's perception that there is as yet inadequate evidence of instability in the Irish market. We would argue both that this is only partly a matter of evidence, and that in any event the available evidence points in the direction of an unstable market.

The question is only partly a matter of evidence since the conditions for a community-rated market to be stable, without risk equalisation, are *a priori* implausible. If all players face the same costs from suppliers and the same regulatory requirements, market stability requires that their mix of business should display the same risk characteristics and hence the same claims costs. Given

- the incentives for entrants to risk select
- the inevitable concentration of customer recruitment in the younger, and less risky, age groups, and
- the likelihood that the incumbent's older customers will display inertia,

it is most unlikely that an entrant will accumulate a book of customers with characteristics remotely similar to the incumbent. But this is a requirement for competitive equality and hence for market stability.

The HIA's own calculations support this view. Any computed Market Equalisation Percentage which indicates a transfer from the entrant to the incumbent is evidence that the forces we have identified are indeed at work. Dynamic stability could be asserted to hold only if computed MEPs happened to be zero or close to it, and we will return to this question in Section 5 below.

4.5: Pricing Strategy for Incumbent and Entrants without Risk Equalisation

The incumbent former monopoly company will have a balanced book of risk initially, containing both younger and older members. Younger members may be under-represented to the degree that they are overcharged relative to actuarial risk, but whatever younger members there are will be on the books of the incumbent, and available to cross-subsidise the older, riskier clients. The incumbent faces the following scenario when the first entrant emerges:

- A haemorrhage, at least in relative terms, of the most desirable clients as the entrant focuses on recruitment in the younger age groups, or as this happens naturally even without such a focus;
- A consequent rising cost curve;
- Inability to do anything about it, given open enrolment. For example, the refusal of cover to older clients, or higher charges to them, are both ruled out by the regulatory regime;
- Solvency requirements which place a floor on the permitted ratio of reserves to premiums written;
- Ultimately the necessity to increase prices to maintain adequate reserves.

The first entrant faces a completely different pricing dilemma. It is small in the early years, and will wish to grow business. But it needs only to demonstrate some price advantage to create a marketing pitch to younger recruits. It has no incentive to price so aggressively as to appeal across the board to the entire client base of the incumbent, and the behaviour of Bupa, which appears to have priced similar offerings about 10% below Vhi Healthcare is interesting in this regard. Given the substantially lower cost curve on which Bupa has been operating, it could have been more aggressive. A controlled increase in market share, concentrated in the less claim-prone market segments, is the optimal strategy for the first entrant in this type of market, and Bupa appears to have understood this. It helps if the incumbent feels the need to increase prices, and the entrant can follow along behind with a constant differential. The result of course is an average level of pricing in the market which will exceed what would have arisen without the entrant.

But the first entrant's strategy is complicated by the risk of further entry. If prices are kept close to the incumbent, profits will be strong due to low claims costs, but potential entrants will become aware of this and a second entrant becomes likely.

The additional entrant will enjoy an advantage over the incumbent, but also possibly over the first entrant, to the extent that the first entrant has a book of risks which will have begun to age and thus to move up the claims curve. The second entrant also enjoys immunity from the application of risk equalisation for three years. There may be no pricing strategy for the first entrant which can simultaneously

- Avoid excessive and unprofitable market share growth, and
- Avoid excessive profitability and the stimulation of further entry

In Ireland, the second entrant, a start-up, has commenced business, and also faces a pricing choice. To date, the second entrant appears to have pitched prices close to the Bupa level, and at a modest discount to Vhi Healthcare.

4.6: Confusing Opposition to Community Rating with Opposition to the Introduction of Risk Equalisation

A community-rated (CR) health insurance market is inevitably subject to severe distortions. The providers are required to sell, to the various customers, a product which varies substantially in value according to risk characteristics but at a common price. Most customers will be either very attractive or very unattractive. This is as large a distortion to a market as one could imagine, and will incentivise non-optimal behaviour, in particular risk selection. For this reason, there are many critics of community rating, and their arguments are summarised in the report of the Australian Industry Commission referenced earlier. They include

- Incentives for young (healthy) people not to join at all, since they are overcharged;
- Equity and economic objectives which are not clearly articulated;
- Possible regressivity, in that the benefits, including tax reliefs, accrue to the relatively better-off;
- The last point is reinforced when the system is effectively supplementary to a universal and free national health service;
- The system requires a continuing inflow of younger members to subsidise older ones, and thus has some of the features of a 'pay-as-you-go' pension plan, and similar risks;
- It fails to penalise customer choice of risky activities (smoking, substance abuse, poor dietary habits);
- Ancillary products and services, such as cosmetic dentistry, can be inserted under the CR umbrella.

As we have argued, CR has the additional feature that the encouragement of a normal competitive market is difficult given the distorting effects of the regime. This is especially so without some form of Risk Equalisation. Community Rating is

Government policy in Ireland, and the social policy benefits have been deemed to outweigh the above list of concerns.

It appears to us that some commentators have confused arguments against community rating with arguments against the introduction of Risk Equalisation into a pre-existing CR system. This is particularly the case with arguments about competition. It is difficult to create normal competitive conditions in an insurance market with CR, but it is impossible without some attempt, such as risk equalisation, to offset the destabilising consequences of risk selection. In other words, if the priority is competition in the health insurance market, then there is a respectable case for an end to community rating. But given that CR is a priority, a CR market without risk equalisation is an even poorer approximation to a properly functioning competitive market. The new entrants have no incentive to challenge the incumbent's large market share through price aggression, and it is not even clear that the arrival of additional entrants helps matters.

Section 5: Experience in Ireland without RE

5.1: A CR Market without Risk Equalisation and the MEP

In the absence of risk equalisation, whatever MEP would have arisen has to be borne as a cost by the company (in Ireland the incumbent Vhi Healthcare) which would have been in receipt of the equalisation payments.

Under the Irish regulations, the HIA can recommend the commencement of risk equalisation to the Minister if the MEP lies between 2% and 10%. If the MEP goes over 10%, the decision rests solely with the Minister. With the aid of some simplifying assumptions, we attempt in this subsection to consider the practical significance of these limits. The assumptions are

- Insurers are expected to maintain reserves, which we will equate to equity capital, and we will assume that the target ratio of equity to premiums for health insurers is 0.4.
- The MEP is expressed as a % of benefits, and we will assume that the ratio of equalised benefits to premiums is 0.7.

The limits of 2% to 10% which set the bounds to the HIA's area of discretion can now be re-expressed. As a % of premiums, a transfer below 1.4% or over 7% will escape the area of discretion. To deal with the upper bound first, the implication is that the HIA could choose not to trigger transfers even if the incumbent were short, so to speak, 7% of premiums, or between €50m. and €60m. per annum at the current scale of operations. When expressed relative to equity, the 7% becomes 17.5% in terms of return on capital. In other words, the upper bound would correspond to a situation in which the incumbent was somehow able to survive with a commercial burden corresponding to an excess return on capital of 17.5%. We are not aware of the genesis of this 10% upper bound, and have seen no calculations which support the figure chosen. But it should be clear that it has been set at an utterly impractical level. Vhi Healthcare had an average net profit in the two years to February 2004 of just over 6% of premiums. No company in the insurance business could contemplate carrying excess cost of remotely near 7% of premiums. The burden would wipe out profit and lead to an early breach of solvency requirements.

At present, the Market Equalised Percentage with a HSW of 1.0 is in excess of 5%. At 5%, a company denied this amount through the non-introduction of Risk Equalisation must somehow find an excess return on capital of one-half the amount corresponding to the 10% MEP upper limit. This works out at 8.75% in excess return on capital. It is easy to see why, in the 1996 regulations an *upper* limit of 2% for the MEP trigger to Risk Equalisation was envisaged.

But even the lower bound, set at about 1.4% of premiums on our assumptions, would require an excess return of 3.5% on equity, a tall order. While it may be reasonable to set a lower bound, below which the triggering of risk equalisation is not worth the trouble, the 2% MEP lower limit chosen is not trivial at all, and an

incumbent company would be suffering a serious commercial handicap at this type of figure.

In the case of Vhi Healthcare, its turnover (earned premium) grew €105m between y/e Feb 2003 and y/e Feb 2004. If the solvency requirement binds, this means that reserves must increase by €42m to respect the assumed 40% rule. The only source of increase in reserves is retentions, and the company would not have the capacity to write new business unless profits were at a level adequate to keep reserves in line. It is in this context that the HIA's conclusions about the significance of their computed MEP should be seen. An annual sum of the order of €25m is hugely significant in the context of the Irish market, equating as it does to roughly one-half of Vhi Healthcare's annual surplus. Insurance companies *must* have adequate reserves to permit an expansion in business written, since the regulator, the IFSRA, requires them to observe minimum ratios of reserves to premiums. An insurer which failed to make a surplus, the only source of extra reserves in the case of Vhi Healthcare, would have to refuse business or breach its solvency ratio. Unless the incumbent enjoys large excess reserves, not the case with Vhi, the failure to transfer the calculated MEP amounts could be more than enough to ensure that market instability (in the form of inability to sustain open enrolment) is an empirical reality.

A final conclusion on this point is that the computations of MEPs in the zone 3 to 4%, even without an allowance for health status which pushes the figure up into the 4% to 5% zone, appears to have rung no alarm bells at the HIA. This may be due to some perception that, since the permitted range of discretion is 2% to 10%, and the mid-point is 6%, then anything under 6% is presumed to be in some sense tolerable.

But this line of reasoning, if it is indeed what lies behind the HIA's conclusions, accords to the 10% upper bound a status which it ought not to be accorded. There is no rationale for it, and the Irish health insurance market would have been traumatised long before it was ever reached. Specifically, it is clear from the figures that Vhi Healthcare would have been forbidden to write business long before that figure was approached, due to inadequacy of reserves. If the roughly €25m not currently being transferred corresponds to an MEP (unadjusted for health status) of about 3.5%, then a 10% MEP would mean that an amount in excess of Vhi Healthcare's surplus was not being transferred. The company would be unable to add to reserves at all, and would have to freeze its nominal business volume or even reduce it, given the solvency rules.

5.2: Pricing

In this subsection we discuss the main trends in pricing which have occurred in the Irish market since 1997.

5.2.1: Trends in Private Health Insurance Premiums

Health insurance premiums have increased steadily since the late 1970s. In spite of the liberalisation of the market in 1994, BUPA Ireland's entry in 1997, and Vivas's entry in 2004, premiums still continue to increase. As reported in the study by York Economics, the annual increase in Vhi Healthcare's premiums was similar during the periods before and after the entry of BUPA Ireland.

Table 5: Mean Annual Increase in Premiums

| | Vhi Healthcare | BUPA Ireland |
|-----------|-----------------------|---------------------|
| 1980-1996 | +10.2% | - |
| 1990-1996 | +5.9% | - |
| 1997-2003 | +10.0% | +9.6% |

Source: York Economics

- Over the period 1980-1996 (inclusive), the mean increase in Vhi Healthcare's premiums was 10.2%, compared to 10.0% between 1997-2003.
- The mean annual increase in Vhi Healthcare's premiums over the period 1990-1996 was 5.9%, which was nearly half the post-1996 period.
- The post-1996 mean annual Vhi Healthcare premium increase (10.0%) is slightly higher than the average for BUPA Ireland since it commenced operation in 1997 (9.6%).

When BUPA entered the market it did not adopt an aggressive pricing strategy. It did not set its price substantially lower than the incumbent Vhi Healthcare in an effect to gain market share quickly and encourage large numbers of Vhi Healthcare customers to switch.

5.2.2: BUPA's Pricing Strategy

From an examination of pricing trends in the industry, it is clear that BUPA has adopted a price followership strategy. However, we note the fact that similar price increases may be partly explained by factors which affect all participants in the industry. Vhi Healthcare sets the price (subject to approval from the Minister), while BUPA follows by charging a similar, but slightly lower, price. Upon entering the market BUPA priced itself approximately 10% below Vhi Healthcare. [The new entrant Vivas claims its premiums are approximately 20% lower than those currently available in the market]. BUPA tends to increase prices on 1st March for all contracts with renewal dates after that date, while Vhi Healthcare tends to increase prices on 1st September. Vivas, which entered the market in October 2004, has yet to announce a price increase. It is interesting to note that the most recent round of price increases (in September 2004 and February 2005 for Vhi Healthcare and BUPA respectively) were significantly lower than in recent years.

BUPA's first premium increase came into effect in early 1999. There were only two occasions when the premium increase between the two insurers differed by more than 1% point. The first of these was in 2002/2003 when Vhi Healthcare increased premiums by 18%. This led to major criticism which may have been a factor behind BUPA's decision to increase its premiums by 14.4%. The second occasion was the most recent round of premium increases. As of September 2004, Vhi Healthcare's premiums increased by an average of 3%. For the first time, BUPA increased its premiums by more than Vhi Healthcare, with a 6% increase.

Table 6: Average Premium Increase

| Date | Vhi Healthcare | BUPA |
|--------|----------------|-------|
| Sep-98 | 9% | |
| Feb-99 | | 9% |
| Sep-99 | 9% | |
| Feb-00 | | 9% |
| Feb-01 | 6.25% | |
| Mar-01 | | 6.25% |
| Sep-01 | 9% | |
| Mar-02 | | 9% |
| Sep-02 | 18% | |
| Mar-03 | | 14.4% |
| Sep-03 | 8.04% | |
| Mar-04 | | 8.25% |
| Sep-04 | 3% | |
| Mar-05 | | 6% |

5.3: Profits

The financial records of BUPA Ireland are not in the public domain and financial data submitted by BUPA to the HIA is not publicly disclosed. However as BUPA is registered to conduct insurance underwriting business in the UK it must satisfy regulations set out by the Financial Services Authority (FSA). BUPA is thus required to submit returns to the FSA by country of operation. However, detailed analysis of BUPA profits is not possible given the limited data reported on their Irish operations in these returns. From BUPA's returns to the FSA in the UK, and Vhi Healthcare's Annual Report, it is possible to determine the following:

Table 7: Insurer Profitability 2003

| | BUPA | | Vhi | | |
|--------------------|---------|-------|------------|-------|---------------|
| 2003 (€m) | Ireland | | Healthcare | | Total |
| Earned | | | | | |
| Premium | 115.059 | | 803.000 | | 918.059 |
| Claims Paid | 68.331 | 59.4% | 638.400 | 79.5% | 706.731 77.0% |
| Cash Flow | | | | | |
| | 46.728 | 40.6% | 164.600 | 20.5% | |

Source: Financial Services Authority UK, Vhi Healthcare Annual Reports.

In 2003, Vhi Healthcare's claims ratio (i.e. claims paid as a percentage of earned premium) was just under 80%. The equivalent for BUPA Ireland was significantly lower - approximately 60%. The corresponding figures for the UK operations of BUPA were 79% in 2002 and 77% in 2003, very close to the Vhi Healthcare figures in Ireland, but around 20% higher than BUPA's Irish figures.

Table 8: Insurer Profitability 2002

| | BUPA | | Vhi | | | |
|--------------------|----------------|--------------|-------------------|--------------|--------------|--------------|
| 2003 (€m) | Ireland | | Healthcare | | Total | |
| Earned | | | | | | |
| Premium | 81.531 | | 687.583 | | 769.114 | |
| Claims Paid | 45.979 | 56.4% | 559.043 | 81.3% | 605.022 | 78.7% |
| Cash Flow | 35.552 | 43.6% | 128.540 | 18.7% | | |

Source: Financial Services Authority UK, Vhi Healthcare Annual Reports.

In 2002, Vhi Healthcare's claims ratio (i.e. claims paid as a percentage of earned premium) was 81%, while BUPA's was 56%. The average claims ratio for the Irish in 2002 market was 79%.

Section 6: Consequences of Introducing RE

There appears to be a perception that the introduction of the risk equalisation scheme would create a barrier to entry in the Irish health insurance market. In our view, the market is unstable without RE, whose absence creates an incentive to entry as well as excess profits and an overall level of pricing in the market higher (to the extent of these excess profits) than it needs to be.

The two-player market did not produce price competition, since a necessary condition for useful competition (conditions of competitive equality between the players) cannot exist due to risk selection. The second player maximises profits through a price-follower strategy. It is not clear that the recent entrant faces incentives to compete vigorously on price either.

Markets produce price competition of a form which benefits consumers only if the players face conditions of competitive equality. This they cannot do where an incumbent is saddled with a 'book' of legacy clients with high claims potential. The entrant(s) will not compete for these clients, indeed they have powerful incentives not to do so. The size of the MEPs calculated by the HIA for the two periods covered to date is itself testament to this.

In the absence of RE, the inherent instability in the market will manifest itself in a number of ways:

- pressure on the incumbent to raise premiums as its client base ages;
- continuing supernormal profits for the first entrant;
- the attraction of additional entrants;
- absence of useful price competition given the incentives faced by the entrants, in particular the incentive to avoid competing for most of the incumbent's business;
- danger that the incumbent's ability to earn surplus will degrade to the point where it cannot maintain open enrolment;
- an overall level of pricing in the market above what it needs to be.

All of these phenomena can be observed in the Irish market in recent years.

Only the introduction of Risk Equalisation can address the distortions in the market created by the uniformity of premiums which each insurer is permitted to charge, disregarding risk. A market with Risk equalisation will be more competitive, in the sense of economically useful competition, than a market without it.

Section 7: Conclusions

Health insurance in Ireland was, until 1997, provided by a State-owned monopoly insurer which operated open enrolment and community rating. Health insurance is seen as a voluntary top-up to the free, tax-financed State health system, entitling insured persons to choice, priority admission to hospital care and other additional benefits. Hospitalisation costs are the principal risk covered. Aside from tax-deductibility of premiums, the State monopoly insurer was expected to operate without subsidy, and has done so. Approximately 50% of the population, drawn mainly from the middle and upper income groups, have chosen to pay for private health insurance, which is marketed mainly through places of employment. Coverage has risen steadily over the years, and was only about 35% in 1990. Premiums paid to private health insurers account for roughly 7% of total health expenditure in Ireland, underlining the supplementary nature of the system.

Community rating means that insurers must charge the same premiums to clients with hugely varying likelihood of claims. Elderly people could face premiums 7 or 8 times those quoted to the younger age groups, if premiums reflected risk, as they do with motor insurance. It is Government policy to equalise the premiums, and also to insist on open enrolment: clients cannot be refused on risk grounds. While these arrangements may find justification in social policy, they create an anomalous market. The incumbent is saddled with a legacy of higher-risk clients, while the entrants will tend to recruit in the younger age groups. A stable market requires arrangements which offset the differences in costs faced by the players, since differential pricing (the solution in normal insurance markets) is forbidden.

The largest player is the former State monopoly, Vhi Healthcare, with almost 80% of premium income. There are now two further players, BUPA, which is believed to have almost 20% of the market, and Vivas, a very recent entrant. Risk equalisation has *not* been introduced, although it is provided for in the legislation and a formal scheme has been designed and published. The introduction of risk equalisation, which would involve cash transfers between insurers, ultimately rests with the Minister for Health and Children. The size of the transfers in question determines whether the regulator, the Health Insurance Authority, can make a recommendation to the Minister to introduce such a scheme, since upper and lower bounds have been specified. While the size of the transfers calculated in the two six-monthly reviews thus far undertaken have permitted this possibility, the regulator has declined to recommend the introduction of risk equalisation.

In order to comply with an EU directive (the Third Non-Life Insurance Directive, 92/49/EEC), the Irish Government enacted the 1994 Health Insurance Act and a regulatory structure was put in place in 1996, amended in 2001. The UK-based company BUPA entered the market in 1997, and a second entrant, an Irish firm Vivas entered in 2004. BUPA has built a market share of roughly 20%, while the recent entrant has a negligible share at this stage. There are also some small employer-operated schemes not open to the public.

It is argued in this report that, unless insurers are allowed to charge differentiated premiums based on risk assessment, a competitive health insurance market with community rating and open enrolment *but without Risk Equalisation* will prove to be unsustainable. Some players, specifically the large incumbent(s) with a preponderance of inherited high-risk clients, are likely to become progressively unable to compete, and ultimately to go bust.

The remedy is a risk equalisation fund or some equivalent compensating mechanism. In the absence of some such mechanism, insurers will have incentives to market aggressively at those market segments believed to be low risk. Recruitment to private health insurance plans in Ireland is typically in the younger (and healthier) age groups, often on commencing employment. This increases the likelihood that the incumbent insurer will retain higher-risk clients, due to client inertia, while entrants will recruit mainly healthier clients and will thus enjoy lower claims costs. Market instability is inevitable, in the absence of risk equalisation.

Since 2003 the regulator, the Health Insurance Authority, is required under the legislation to determine once every six months whether to recommend that the Risk Equalisation scheme be triggered. In two determinations to date, the regulator has not made a recommendation to trigger the scheme, arguing that there is insufficient evidence of market instability.

This report examines the basis for these regulatory determinations. It considers also the trends in market shares since the end of the monopoly in 1997, and patterns of switching between insurers. It reviews the pricing strategy of the players and the available evidence on claims experience.

The paper also examines the question of market stability. It concludes that

- A health insurance market with open enrolment and community rating, but without risk equalisation, cannot be dynamically stable in real-world circumstances;
- Any snapshot appearance of stability is deceptive;
- The incumbent will face progressively more serious financial difficulties, including pressure to raise premiums as its client base ages;
- Given solvency rules, the incumbent may be unable to generate the reserves needed to maintain open enrolment;
- The first entrant is likely to earn supernormal profits;
- There will not be meaningful price competition, since the entrant has no incentive to compete for most of the incumbent's clients;
- Overall market pricing will be higher than it needs to be;
- There are artificial incentives to entry in the Irish system.

The overall conclusion is that the Irish regulator should move now to trigger the commencement of the risk equalisation scheme. This is essential in order to create

conditions of *competitive equality* between market participants, a precondition for socially beneficial competition between them.

It is difficult to achieve normal competitive conditions in a community-rated market, even with risk equalisation, given the pricing uniformity imposed on the insurers. Many analysts and commentators oppose community rating for this reason. However it is a serious confusion to oppose the introduction of risk equalisation into a community rated market on the basis of perceived shortcomings in the community rated model. The choice is between community rating with risk equalisation, and community rating without it.

Appendix 1: The Health Insurance Market and Propensity to Switch

Research has been undertaken to establish the nature of Irish consumers' willingness and tendency to switch health insurance providers and the factors which influence their decision.

Amarach Consulting were commissioned by the HIA in 2002 to conduct a comprehensive research study of the PHI market in Ireland, and published their findings in April 2003.

Based on a survey of 1,001 adults, Vhi Healthcare has an estimated market share of 82% of Ireland's PHI market. Bupa's share is estimated to be 13%, with 5% covered by other schemes. Almost 50% of consumers are on group schemes, and a majority of these group schemes are work-related.

The vast majority of consumers have not switched health insurance provider. Only 6% of consumers sampled have switched insurer. Most of these involved a switch from Vhi Healthcare to BUPA, implying that most of Bupa's consumers were not previously health insurance consumers. Of these switchers, 49% are aged between 25 and 34. Twenty-three percent of all consumers are in this age cohort. One quarter of switchers (24%) were aged over 44, three quarters (76%) were aged under 44 when they switched, with an average age of 34. Nobody surveyed with PHI aged 65 or over was found to have switched or to have ever considered it.

Cost savings is the key motivator to switch insurance provider among both existing and potential switchers. A cost saving of at least 26% would be required to encourage significant numbers of consumers to switch. This level of savings is consistent across all age bands, except for those aged 65+, who would require a significantly higher cost saving to switch. Given that cost is the main motivating factor, it is unsurprising that most switchers say they would switch again if they thought financial or other gains could be made. In reply to the question "would you switch again if you thought financial or other gains could be made", 46% replied yes definitely, 23% replied yes probably, 13% replied no and 18% did not know. Switchers would switch again for a lower level of cost savings than non-switchers – the average amount cited among switchers was 17%. Although cost is the most important motivating factor it is clear from the low level of movement between the two main health insurers that consumers price sensitivity in relation to PHI is relatively weak and/or there is a significant degree of inertia among consumers.

Only a small minority of consumers (12%) who have never switched PHI provider have seriously considered switching. Of these, 23% said that they were still considering it and had not made up their mind. In the 65+ age group, 46% of consumers said they would never switch insurer. The most commonly cited reason for not switching was satisfaction with their current PHI provider (mentioned by 27% of consumers). Another important factor was the perception that no significant cost savings could be made, which was particularly evident among Bupa consumers. Another reason cited was the fact that the consumer had been with his/her existing provider for a long time suggesting that customer loyalty is quite an important factor.

Aside from cost issues, changing employment and group schemes switching were also important factors in determining whether a consumer had switched health insurer.

Behaviour & Attitudes (B&A) carried out a telephone survey on behalf of Vhi Healthcare. The survey comprised 450 people who had ceased to be members of Vhi Healthcare in the previous 12 months. The objective was to establish why they had left and whether they had switched cover to another provider. The fieldwork was carried out in three bursts:

1. April 1-9, 2003
2. July 29 – August 12, 2003
3. March 10-30, 2004

This survey reveals some important information that did not come through from the HIA's commissioned study, particularly in relation to the degree of lapsed consumers. Approx. 50% of private health insurance customers who left Vhi Healthcare took out insurance with another provider (the vast majority went to Bupa), with the other 50% ceasing to hold any form of health insurance.

| | Lapsers | Switchers | Respondents |
|----------------|----------------|------------------|--------------------|
| Wave 1 | 49% | 51% | 150 |
| Wave 3 | 52% | 48% | 150 |
| Wave 5 | 51% | 49% | 150 |
| Average | 51% | 49% | 450 |

This survey also highlighted the importance of cost as the main factor in the decision to switch/lapse. Other important factors are shown in the table below, ranked in order of importance by customer type.

| | Lapsers | Switchers |
|-------------------------------------|----------------|------------------|
| Cost | 1 | 1 |
| Quality of service inadequate | 2 | 5 |
| Cover does not suit needs | 3 | 2 |
| Paying for years with no claims | 4 | 3 |
| Change of job | 5 | 4 |
| Dissatisfaction with claim handling | 6 | 6 |

Respondents were questioned about whether there was a lift event linked to their decision to switch/drop cover (Wave 5 only). In the case of switchers, 18% indicated that their decision was linked to a change in job. In the case of lapsers, 15% said there was a link with a change in job and 14% mentioned redundancy.

B&A compared the demographic profile of leavers to Vhi Healthcare's existing members.

| Age | Leavers | All Members |
|------------|----------------|--------------------|
| 18-24 | 6% | 4% |
| 25-34 | 35% | 23% |
| 35-44 | 27% | 26% |
| 45-54 | 21% | 28% |
| 55-64 | 11% | 17% |
| 65+ | 0% | 1% |

This indicates that 62% of those surveyed who had left Vhi Healthcare were in the 25-34 year old age group, compared with 23% in the overall structure of Vhi Healthcare's members.

The survey revealed the following reasons for canceling Vhi Healthcare membership:

| | Wave 1 | Wave 5 |
|--------------------|---------------|---------------|
| Discontinued | 27% | 34% |
| Unpaid | 43% | 37% |
| Gone to competitor | 30% | 29% |

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