

**Coping with the Challenges of Population Ageing: Policy
Considerations for Private Sector Involvement in a Private Health
Security Pillar in a Universal Health System in APEC Economies**

Final Report
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EXECUTIVE SUMMARY

This report compiles information on health financing concentrating mostly on, but not confined to, seven APEC countries. The information and associated issues considered include:

- trends in the size and public/private mix of health financing;
- the nature of private sector involvement in health financing;
- factors affecting health financing and insurance premiums including ageing, technological change and system design; and
- the extent of competition in private health insurance markets, along with assessments of policies on portability, investment guidelines and prudential regulation.

The size of the health sector in APEC economies (measured by total health expenditure as a percentage of GDP) has generally continued to grow in recent years. In 13/19 APEC economies, the health sector in 2003 was larger than in 1999.

At the same time, the past trend of an increasing share of health care expenditure being publicly financed appears to have dissipated, with the privately financed share in 10/19 APEC economies increasing over the five years from 1999 to 2003. Further, 16/19 APEC economies increased their reliance on prepaid plans for financing private health expenditure over 1999-2003, indicating an increased reliance on private insurance mechanisms for funding private expenditure on health.

More recent activity surrounding the private sector in health in a number of the seven study economies reinforces the perception that private financing of health will grow in importance in the years ahead, e.g. improvements in the portability provisions for private health insurance policies, and loosening of regulatory constraints on investment of reserves held by insurers.

In the short-term, the major factors affecting health care price inflation and insurance premiums are technological change (itself often stimulated by widespread coverage of health insurance), the design of insurance schemes (public and private), and the use of demand- and supply-side cost control levers. In the long-term, an additional factor of considerable importance is the marked increase in the old-age dependency ratio (number of persons aged 65+ per 100 persons aged 15-64) that will occur in many APEC economies. In 2050, the old-age dependency ratio is forecast to be 1.7 (USA) to 6.5 (Korea) times higher than in 2000, with important consequences for the demand for health services.

The rising old-age dependency ratio, the large reliance on public financing of health services in many APEC economies, and the rapid pace of technological change can be expected to place increasing fiscal pressure on governments and stimulate interest in options for increasing the role of private sector financing. The emerging trend towards increased reliance on private insurance mechanisms in health noted above underscores this developing interest. The emergence of moves towards funded schemes for financing health care in the form of medical savings accounts in China and the USA, reflecting the development of this model in Singapore, is of considerable interest in this regard. These schemes essentially either require, or provide incentives to, individuals to save for health over their lifecycle.

Within these broad and emerging trends, there is considerable diversity between the APEC economies in both the size of the health sector and the financing mechanisms employed. Clearly, the financing and provision of health services are intertwined with a country's social policy, resulting in the pursuit of multiple (and often conflicting) policy objectives. Notwithstanding this diversity in health systems and policy objectives, some common issues have emerged from this study of seven APEC economies that may have implications for

financial markets and warrant the attention of APEC ministers. These issues lead to the following suggested recommendations:

- 1) APEC economies should consider alternative long-term health financing options in view of the increasing old-age dependency ratio in APEC economies over the next 40 years. This trend, combined with the relatively large share of public financing of health in many APEC countries, portends a potentially large impact of this trend on government budgets. Options need to be developed to manage or counter this impact.
- 2) Developments in health care financing in the direction of greater reliance on funded schemes (e.g. schemes relying on medical savings accounts) should be monitored by member economies, as these schemes may generate considerable financial reserves and associated funds management issues whether publicly or privately managed. The US experience with Consumer-Driven Health Plans will be of particular interest in this area.
- 3) Regulations governing private health insurance organisations should be comprehensively reviewed by each member economy to ensure that they serve a useful purpose and that if possible they support, rather than conflict with, social policy objectives. Regulation should be aimed at fostering competition in the private health insurance industry as well as its financial stability. Most APEC economies are members of the International Association of Insurance Supervisors (IAIS). The IAIS Core Principles developed in 2003 and the new framework for insurance supervision released in 2005 provide useful benchmarks against which to assess current regulatory environments.

INTRODUCTION

Technological change in medicine (often cost-increasing), population ageing and the growth in publicly funded health insurance plans, often with weak cost-containment incentives, are placing increasing budgetary strains on governments in many countries. Following the APEC Finance Ministers meeting in Jeju, Korea in September 2005, it was noted that unfunded health insurance liabilities are often larger in scope, require more immediate attention, and are more difficult to project than those of the pension systems. This study is designed to assist Ministers in assessing the effect of ageing on societies' health insurance needs and the means of financing them, in particular through private sector involvement in a private health security pillar as part of the national health financing systems in APEC member countries.

Most APEC economies have completed, or are going through, demographic and epidemiological transitions characterised by population ageing and a shifting pattern of disease towards non-communicable chronic illnesses (Heller (1999)). This results in an increase in life expectancy and a shift in the disease burden away from acute and infectious diseases towards chronic disease. The consequent increase in the volume of health services and the change in the mix of health services demanded leads to an increasing economic burden of health care associated with older age. The likely overall effect of ageing on health care expenditure and the sustainability of a health financing scheme depends not only on the demographic factor, but also to a large degree on the current structure of the health financing system including the public-private mix of financing and provision and the contractual arrangements between funders (purchasers) and providers of health services. In many APEC economies, the private sector plays a crucial role as a *co-funder* of health services, and even more often as a *provider* of outpatient, in-patient and ancillary services. We observe a range of relationships between the private and public health sectors, from competition (in quality and price) to complementarities, with direct or indirect public subsidies and transfers to private funders and providers.

This report covers a number of issues of considerable importance concerning the roles, responsibilities and regulation of private health insurance as a health financing mechanism in a sample of APEC member economies (Australia, China, Malaysia, Mexico, New Zealand, Singapore and the USA). The main body of the report provides an overview and discussion of the policies, experiences and lessons learnt across the seven specific areas of interest:

- (i) the role of private funding in the overall/universal health funding of an economy;
- (ii) the nature of private involvement;
- (iii) key factors influencing pricing of health insurance;
- (iv) competition in the health insurance industry, information and consumer protection;
- (v) issues of portability;
- (vi) investment guidelines and policies for private health insurers; and
- (vii) prudential regulations of private health insurance industry and their impact on the financial stability of the health insurance market.

The report identifies important similarities and differences between countries and reviews evidence on the effects of these on the role of the private sector in health financing. The main body of the report is followed by Annexes containing individual summaries for the seven countries included in the study.

THE ISSUES

The report focuses on seven major areas of interest identifies in the introductory section, providing a discussion of cross-cutting issues and policy implications.

i) Private funding contribution to the overall/universal health funding of an economy

In this section, we examine both the relative share of private financing in the health sector and its composition (i.e. the share of out-of-pocket expenses compared to the share of private prepaid (insurance) plans) in 20 APEC economies for which data were available in the WHO World Health Statistics publications.¹

In 2003, the APEC countries with highest percentage of GDP spent on health were the USA (15.2%), Canada (9.9%), Australia (9.5%), New Zealand (8.1%), and Japan (7.9%) (see Table 1). The leaders in population ageing among the APEC economies are Japan, with an estimated 19.7% of population being 65 years of age and older in 2005, followed by the Russian Federation (13.8%), Canada (13.1%), Australia (12.7%) and the United States (12.3%).² Note that the USA share of health in GDP cannot be explained purely on the demographic (ageing) basis - other factors pertaining to the design of the health finance system are involved. Japan has been successful in health care cost containment by implementing a non-distortionary and non-inflationary health services fee structure which prohibits extra billing, i.e. charging above the insurer's scheduled fee (Wagstaff 2005).

Table 1. Total expenditure on health and the share of private financing in total health expenditure, APEC economies, 1999-2003^(a)

Member State	Total expenditure on health as % of GDP					Private expenditure on health as % of total expenditure on health				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Australia	8.7	9.0	9.2	9.3	9.5	30.5	31.1	32.2	31.9	32.5
Brunei Darussalam	3.7	3.4	3.5	3.5	3.5	26.9	16.5	23.0	21.5	20.0
Canada	9.0	8.9	9.4	9.6	9.9	29.7	29.7	29.9	30.3	30.1
Chile	7.1	6.1	6.2	6.2	6.1	61.0	53.6	51.9	52.0	51.2
China	4.9	5.1	5.2	5.5	5.6	59.1	61.7	64.4	64.2	63.8
Indonesia	2.6	2.5	3.1	3.2	3.1	69.6	71.9	64.4	65.5	64.1
Japan	7.4	7.6	7.8	7.9	7.9	18.9	18.7	18.3	18.5	19.0
Malaysia	3.2	3.3	3.7	3.7	3.8	48.8	47.6	44.2	44.6	41.8
Mexico	5.6	5.6	6.0	6.0	6.2	52.2	53.4	55.2	55.1	53.6
New Zealand	7.7	7.8	7.9	8.2	8.1	22.5	22.0	23.6	22.1	21.7
Papua New Guinea	3.5	3.6	3.7	3.5	3.4	10.7	11.7	10.5	10.2	11.1
Peru	4.9	4.7	4.6	4.4	4.4	46.9	47.0	49.0	51.4	51.7
Philippines	3.5	3.4	3.2	3.0	3.2	55.8	52.4	55.8	60.0	56.3
Republic of Korea	4.8	4.7	5.4	5.3	5.6	55.6	53.8	48.1	49.7	50.6
Russian Federation	5.6	5.8	5.7	5.9	5.6	42.2	43.9	41.2	40.6	41.0
Singapore	4.1	3.6	4.3	4.3	4.5	61.6	64.6	63.8	67.6	63.9
Thailand	3.5	3.4	3.3	3.4	3.3	45.2	43.9	43.7	39.8	38.4
United States of America	13.1	13.3	14.0	14.7	15.2	56.2	56.0	55.2	55.2	55.4
Viet Nam	4.9	5.3	5.5	5.1	5.4	67.3	72.0	70.8	71.9	72.2

Note: (a) Excludes Hong Kong and Chinese Taipei. The expenditure estimates for China do not include expenditures of Hong Kong and Macao Special Administrative Regions.

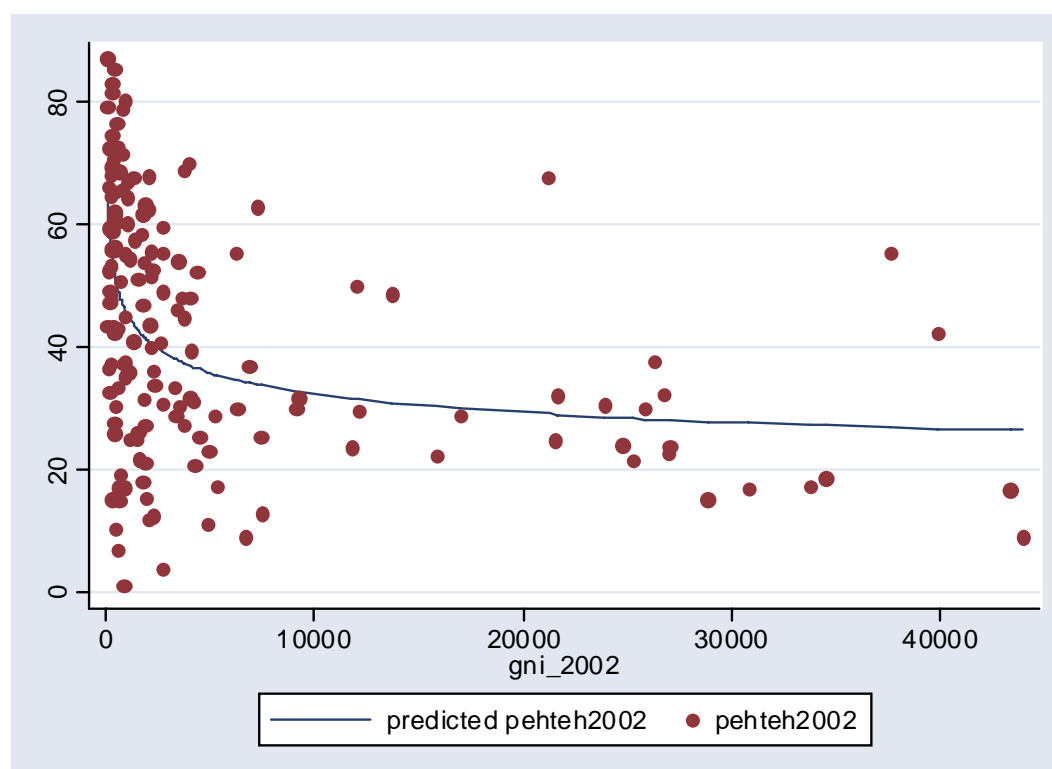
Source: WHO World Health Statistics

¹ All APEC economies excluding Chinese Taipei.

² Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2004 Revision and World Urbanization Prospects: The 2003 Revision, <http://esa.un.org/unpp>

Countries relying most heavily on the private health pillar are Viet Nam, with the share of private expenditure on health in total health spending being 72.2%, Singapore (63.9%), China (63.8%), Indonesia (64.1%), Philippines (56.3%) and the USA (55.4%). The lowest shares of total health expenditure that are privately financed are in New Zealand (21.7%), Brunei Darussalam (20.0%), Japan (19.0%) and PNG (11.1%). This suggests higher income countries tend to have lower proportions of total health expenditure privately financed, a hypothesis that is borne out generally across a large range of countries. Among 162 countries for which data are available, there is a notable tendency for higher income countries to rely less on private expenditure on health in proportionate terms (see Figure 1).

Figure 1. Privately financed health expenditure as a percentage of total health expenditure in 162 countries^(a)



Note: (a) gni_2002 = gross national income in 2002; pehteh = private expenditure on health as a percentage of total expenditure on health

In most of the APEC economies, government expenditure on health is around 10-17% of their total budget outlays, with the exception of several members (Brunei, Indonesia, Philippines, Singapore, and Vietnam) where spending is significantly less (4-8% of total government budget), and the USA where spending is significantly more (17-18%) (see Table 2).

Developing APEC members rely on external sources of health finance (e.g. through international aid) to some degree, with PNG funding from 24-38% of its national health expenditure from external sources in between 1999 and 2003. Indonesia, Mexico, Peru, Philippines and Viet Nam finance between 0.5 and 9 percent of health expenditure from foreign sources (Table 3). In Japan, social security expenditure on health represents about 81% of total public health funding. Social security health finance is also important in Mexico and China, accounting for 55-70% of total public expenditure on health (Table 3).

Table 2. Share of government expenditure on health in total health finance and in total government expenditure, APEC, 1999-2003^(a)

Member State	General government expenditure on health as % of total expenditure on health					General government expenditure on health as % of total government expenditure				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Australia	69.5	68.9	67.8	68.1	67.5	16.9	16.8	16.9	17.7	17.7
Brunei Darussalam	73.1	83.5	77.0	78.5	80.0	4.7	5.1	4.5	4.7	5.2
Canada	70.3	70.3	70.1	69.7	69.9	14.6	15.1	15.5	16.1	16.7
Chile	39.0	46.4	48.1	48.0	48.8	10.0	10.7	11.6	11.8	12.7
China	40.9	38.3	35.6	35.8	36.2	12.5	11.1	9.5	9.4	9.7
Indonesia	30.4	28.1	35.6	34.5	35.9	3.8	3.5	4.7	5.1	5.1
Japan	81.1	81.3	81.7	81.5	81.0	15.9	16.1	16.9	16.8	16.8
Malaysia	51.2	52.4	55.8	55.4	58.2	6.5	6.5	6.4	6.6	6.9
Mexico	47.8	46.6	44.8	44.9	46.4	12.2	11.4	11.9	11.6	11.7
New Zealand	77.5	78.0	76.4	77.9	78.3	14.9	15.6	16.1	17.3	17.2
Papua New Guinea	89.3	88.3	89.5	89.8	88.9	10.3	10.5	11.0	11.4	10.9
Peru	53.1	53.0	51.0	48.6	48.3	12.3	12.1	12.1	12.1	10.7
Philippines	44.2	47.6	44.2	40.0	43.7	6.5	7.1	5.9	4.9	5.9
Republic of Korea	44.4	46.2	51.9	50.3	49.4	9.0	9.1	11.2	10.7	8.9
Russian Federation	57.8	56.1	58.8	59.4	59.0	8.8	9.4	9.6	9.6	9.3
Singapore	38.4	35.4	36.2	32.4	36.1	8.2	6.7	7.0	6.6	7.7
Thailand	54.8	56.1	56.3	60.2	61.6	10.5	10.8	10.3	11.8	13.6
United States of America	43.8	44.0	44.8	44.8	44.6	16.7	17.1	17.7	18.2	18.5
Viet Nam	32.7	28.0	29.2	28.1	27.8	6.7	6.0	6.7	5.1	5.6

Note: (a) Excludes Hong Kong and Chinese Taipei. The expenditure estimates for China do not include expenditures of Hong Kong and Macao Special Administrative Regions.

Source: WHO World Health Statistics

Table 3. External resources for health and social security expenditure on health, APEC, 1999-2003^(a)

Member State	External resources for health as % of total expenditure on health					Social security expenditure on health as % of general government expenditure on health				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Australia	0	0	0	0	0	0	0	0	0	0
Brunei Darussalam	n/a	n/a	n/a	n/a	n/a	0	0	0	0	0
Canada	0	0	0	0	0	1.9	2.0	2.0	2.0	2.1
Chile	0.1	0.1	0.1	0	0	77.2	31.1	31.6	32.2	32.1
China	0.3	0.2	0.2	0.1	0.1	54.2	57.2	55.1	54.8	53.4
Indonesia	8.5	7.3	2.8	1.8	1.4	6.8	6.8	8.0	9.9	9.9
Japan	0	0	0	0	0	81.2	80.9	80.5	80.5	80.5
Malaysia	1.0	0.8	0	0	0.1	0.6	0.6	0.8	0.8	0.8
Mexico	1.2	1.0	0.9	0.8	0.4	69.1	67.6	66.3	66.0	66.9
New Zealand	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	26.2	24.2	25.0	37.7	28.3	0	0	0	0	0
Peru	1.4	1.2	4.6	4.6	3.2	43.5	42.9	42.9	42.9	42.4
Philippines	3.7	3.5	3.7	2.8	3.8	11.4	14.7	18.0	22.6	21.8
Republic of Korea	0	0	0	0	0	78.7	79.6	81.4	81.0	81.7
Russian Federation	0.8	0.2	0.2	0.2	0.2	39.4	40.6	40.7	41.7	43.7
Singapore	0	0	0	0	0	19.0	23.3	20.9	23.1	21.5
Thailand	0	0	0.1	0.2	0.3	29.5	30.2	34.4	30.8	32.0
United States of America	0	0	0	0	0	33.1	33.7	32.5	30.5	28.4
Viet Nam	3.4	2.7	2.8	3.5	2.6	9.5	10.5	13.7	15.8	16.6

Note: (a) Excludes Hong Kong and Chinese Taipei. The expenditure estimates for China do not include expenditures of Hong Kong and Macao Special Administrative Regions.

Source: WHO World Health Statistics

The sources of funds for private health spending vary across APEC economies. The share of out-of-pocket (OOP) expenditure in total private health expenditure indicates the extent to which private expenditure on health is covered by private health insurance (or private prepaid plans in WHO parlance). In Brunei Darussalam, China, Mexico, Malaysia and Singapore, OOP expenditure represents more than 90% of total private expenditure on health (Table 4). The proportion is markedly the lowest in the USA (25.4%), compared to the weighted mean share of 83% in the seven APEC study economies in 2003. Coincidentally, the USA has the highest share of prepaid plans in financing private health care (61-66%) compared to the weighted mean of 8.6% in the APEC study economies. The role of prepaid health plans is substantial in New Zealand (27% of private expenditure on health in 2003), Australia (24%), Canada (42%) and Chile (54%). The role of prepaid plans is nil in Brunei Darussalam and Singapore, and minimal in China (0.4%) and Japan (1.5%). The link between the total health care expenditure and the relative role of the private prepaid plans deserves deeper investigation and discussion, but a simple comparison of Table 4 and Table 1 suggests that countries with the highest prevalence of private health insurance are the same that post the highest total health care outlays as a share of GDP. Possible microeconomic explanations for this aggregate outcome are discussed in more detail in the following section on health insurance and moral hazard.

Table 4. Composition of private expenditure on health: out-of-pocket and private prepaid plans, APEC, 1999-2003^(a)

Member State	Out-of-pocket expenditure as % of private expenditure on health					Private prepaid plans as % of private expenditure on health				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Australia	62.5	65.2	65.9	67.6	67.8	21.8	21.9	23.7	23.3	23.9
Brunei Darussalam	100.0	100.0	100.0	100.0	100.0	0	0	0	0	0
Canada	55.0	53.6	51.1	50.4	49.6	37.9	39.0	41.6	42.1	42.3
Chile	60.6	47.1	48.0	47.3	46.2	39.4	52.9	52.0	52.7	53.8
China	94.5	95.6	93.1	90.0	87.6	1.7	1.0	1.9	3.3	5.8
Indonesia	73.6	72.2	75.1	75.3	74.3	5.1	4.7	4.1	5.1	5.4
Japan	90.6	90.1	89.9	93.3	90.1	1.5	1.7	1.5	1.7	1.7
Malaysia	75.0	75.4	73.5	73.6	73.8	12.2	11.9	14.1	14.2	13.7
Mexico	95.9	95.3	95.0	94.6	94.2	4.1	4.7	5	5.4	5.8
New Zealand	70.7	69.9	72.0	72.6	72.1	27.6	28.5	26.5	25.9	26.5
Papua New Guinea	87.0	88.8	87.6	87.1	87.2	9.8	8.7	9.9	10.4	10.1
Peru	82.6	79.4	79.4	78.9	79.0	13.6	17.2	17.2	17.8	17.6
Philippines	77.6	77.2	78.6	78.0	78.2	11.0	11.1	10.1	10.7	10.5
Republic of Korea	85.9	83.5	83.2	84.0	82.8	3.7	5.3	4.4	3.8	4.1
Russian Federation	67.8	71.1	71.9	70.8	71.1	6.3	6.9	6.2	6.9	6.6
Singapore	97.4	97.1	97.1	97.1	97.1	0	0	0	0	0
Thailand	76.4	76.8	75.7	76.3	74.8	12.6	12.8	13.6	13.4	14.6
United States of America	27.0	26.5	25.8	24.9	24.3	61.4	62.7	64.1	65.3	65.9
Viet Nam	86.5	87.1	83.6	80.8	74.2	3.7	4.1	2.2	2.3	3.1

Note: (a) Excludes Hong Kong and Chinese Taipei. The expenditure estimates for China do not include expenditures of Hong Kong and Macao Special Administrative Regions.

Source: WHO World Health Statistics

ii) Broad details of private involvement, including through company and individual health insurance arrangements

This section focuses on private health financing and not on the private provision of health care. Private sector involvement in health care financing comprises individual OOP expenditure, private health insurance and medical savings accounts. The purpose of private

health insurance is to provide a risk protection mechanism against uncertain health care expenses. It achieves this through risk-pooling that allows risk-sharing between individuals. Another option for risk-pooling is life-cycle financing such as individual medical savings accounts that allow an individual to smooth the financial risks of uncertain medical expenditure by self-insuring. Medical savings accounts are used on a national scale in Singapore and are being tested, with varying degrees of success, in various pilot projects in a number of APEC economies including the USA, China and Hong Kong (Hanvoravongchai 2002). In the case of voluntary health insurance, classical insurance market failures are adverse selection and moral hazard (Pauly 2005). To counter the ex-post moral hazard effect, consumer co-payments and front-end deductibles are used in the voluntary insurance markets (counted as OOP expenditure in National Health Accounts statistics). Adverse selection can also plague voluntary health insurance schemes if higher risks are not priced appropriately. Bad risks opting for the higher level of coverage crowd out good risks, with ensuing increases in premiums. A vicious cycle of falling private health insurance memberships and rising premiums is observed in countries where voluntary private health insurance co-exists with the universal public health insurance scheme (e.g. in Australia).

Private health insurance has been playing a marginal role in developing countries but has been growing internationally. Expansion of private health insurance in the lower- and middle-income countries has been associated with an increase in income inequality of access to health care, creation of a dual market and cost escalation across both (Drechsler and Jütting 2005). These challenges remain relevant to the developed countries: the recent study of private health insurance in OECD countries confirms the equity challenges and inflationary pressures that voluntary private health insurance places on national health systems (Colombo and Tapay 2005).

The role of OOP expenditure and private health insurance in funding the health systems in the APEC study countries varies widely, and it is difficult to draw any general inferences about the relationship between this role and GDP. Across all countries in the world, private financing accounts for 29% of total health expenditure and, within that, private health insurance/prepaid health plans underwrite 12% of this expenditure (Table 5). Within APEC countries, private financing assumes a greater role (52% of total health expenditure) but, within that, private health insurance assumes a lesser role (6%). Within the APEC study countries, there is considerable variation in reliance on private financing from 19% of total health expenditure in Japan to 64% in China and Singapore. Japan and the USA stand in stark contrast to one another - the size of the health sector relative to GDP is nearly twice as great in the USA, while the proportion of private health expenditure financed by private health insurance is 66% in the USA and but only 1.7% in Japan.

There is also considerable variation in the role of company health insurance schemes and individual schemes. In the USA, private health insurance is predominantly employment-based, with many companies arranging for the enrolment of their employees in group health insurance plans. The history of this system is embedded in the wage and price controls imposed in the US economy during the Second World War. Unable to entice workers through the offer of higher pay, companies began relying more heavily on other employment benefits to attract workers, including health insurance. The US taxation system also makes this an attractive strategy for companies and employees as health insurance premiums paid by employers are tax-deductible business expenses and employees effectively are able to pay for their health insurance from pre-tax income. Another tax bonus for businesses is that health insurance premiums are not factor payments so are exempt from Social Security taxes on wages and salaries. Pauly (1986) provides an extensive discussion of this feature of health insurance in the USA.

Table 5: Summary of size and financing of health sector by various country groupings, 2003

	Size of health sector ^(a)	Private financing ^(b)	Private financing: OOP ^(c)	Private financing: PPP ^(d)
	(1)	(2)	(3)	(4)
Country groupings:				
All Countries	7.6	28.7	70.2	12.3
APEC countries	4.7	51.9	77.0	5.7
APEC study countries	8.0	21.5	83.3	8.6
APEC study countries (individual):				
Australia	9.5	32.5	67.8	23.9
China	5.6	63.8	87.6	5.8
Japan	7.9	19.0	90.1	1.7
Malaysia	3.8	41.8	73.8	13.7
Mexico	6.2	53.6	94.2	5.8
New Zealand	8.1	21.7	72.1	26.5
Singapore	4.5	63.9	97.1	0
USA	15.2	55.4	24.3	65.9

Notes:

(a) Percentage of GDP spent on health

(b) Percentage of total health expenditure that is privately financed

(c) Out-of-pocket (OOP) expenditure on health as a percentage of total private expenditure on health

(d) Health expenditure sourced from pre-paid plans (PPP) as a percentage of total private expenditure on health

Source: WHO World Health Statistics

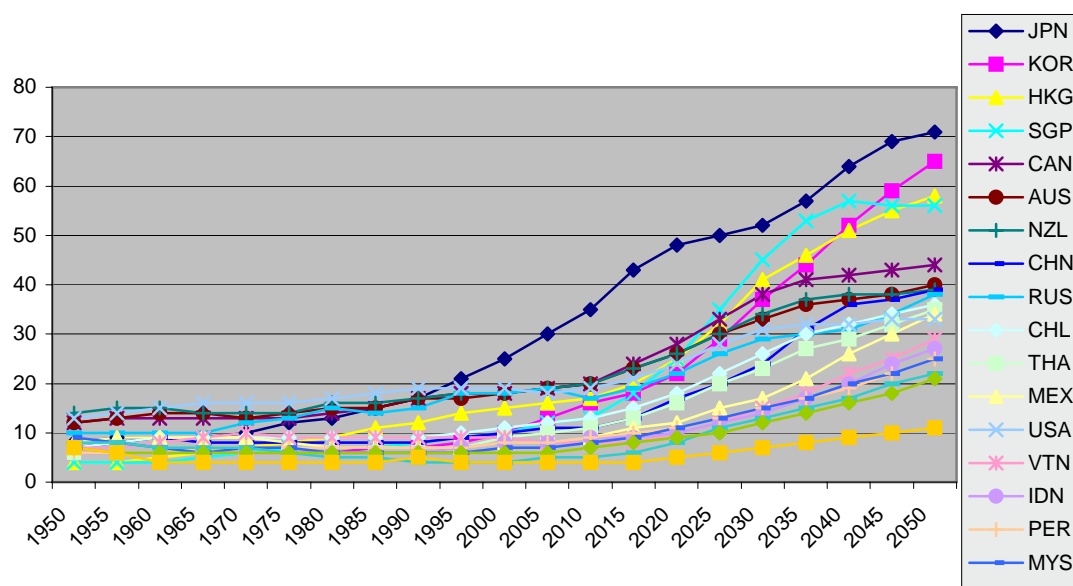
Two other countries that rely relatively heavily on private health insurance are Australia and New Zealand. In contrast to the USA, neither of these countries have employment-based private health insurance arrangements. Private health insurance is offered by private, mostly non-profit, organisations and purchased by individuals outside of any workplace arrangements. The role of private health insurance in these countries also differs markedly from that in the USA, providing extra cover over and above that provided by national public schemes.

In the other study countries, private health insurance plays a marginal role in health care financing although that role is tending to increase. In Malaysia, tax relief for premiums introduced in 1996 has stimulated uptake. Singapore has also experienced moderate growth in private health insurance coverage from a low base, probably hampered by extensive regulation of the private insurance sector. Mexico has only a small private health insurance sector (3% of the population covered) with about half the policies being employer-sponsored group policies. As in the USA, tax incentives play a role here. Coverage by private health insurance is very low but has benefited from the impetus provided by China's entry into the WTO.

iii) Key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

This report was necessitated by the demographic transition in the APEC member economies known as population ageing. As illustrated by Figure 2, the old-age dependency ratio defined as the ratio of population aged 65 and over to the working-age population (aged 15-64) is projected to grow over the next five decades in all member economies. Japan and the "Asian Tigers" (Republic of Korea, Singapore, Hong Kong and Chinese Taipei) will experience the heaviest burden of old-age dependency. The estimated share of those aged 65 and above in total population in 2005 is 19.7% in Japan, compared to 8.5% in Singapore, 9.4% in Korea and 7.6% in China (see Table 5). By 2035, the old-age dependency rates in Singapore, Korea and Hong Kong almost catch up with those of Japan.

Figure 2. Old-age dependency ratio in APEC member economies



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2004 Revision and World Urbanization Prospects: The 2003 Revision, <http://esa.un.org/unpp>, Medium projection. The old-age dependency ratio is the ratio of the population aged 65 years or over to the population aged 15-64 presented as number of dependants per 100 persons of working age (15-64).

Table 5. Percentage population aged 65 or over (%), APEC economies

APEC member	1995	2000	2005	2010
Australia	11.5	12.1	12.7	13.7
Brunei Darussalam	2.7	2.9	3.2	3.4
Canada	12	12.6	13.1	14.2
Chile	6.5	7.3	8.1	9.2
China	6.1	6.8	7.6	8.3
China, Hong Kong SAR	9.7	11	12	12.4
Indonesia	4.3	4.9	5.5	6
Japan	14.6	17.2	19.7	22.4
Malaysia	3.9	4.1	4.6	5.1
Mexico	4.3	4.8	5.3	6.1
New Zealand	11.7	11.9	12.3	13.2
Papua New Guinea	2.4	2.3	2.4	2.5
Peru	4.3	4.8	5.3	5.8
Philippines	3.2	3.5	3.9	4.3
Republic of Korea	5.8	7.4	9.4	11.3
Russian Federation	12	12.3	13.8	12.6
Singapore	6.2	7.2	8.5	10
Thailand	4.8	6	7.1	8
United States of America	12.4	12.3	12.3	12.8
Viet Nam	5	5.4	5.4	5.4

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2004 Revision and World Urbanization Prospects: The 2003 Revision, <http://esa.un.org/unpp>

What impact will population ageing have on aggregate health expenditure? Modern literature suggests that it is not ageing *per se* but rather proximity to death that drives health care expenditure (Zweifel, Felder *et al.* 1999; Zweifel, Felder *et al.* 2004). Thus, cross-sectional studies of the effects of ageing on aggregate health care expenditure over-estimate the effect of ageing.

The aggregate effect on health expenditure per capita will depend on the dynamics of the share of those close to their deaths in total population as life expectancy increases and birth rates decline. Other, perhaps more important factors than ageing, are technological innovations, prevalence of insurance and its funding arrangements, and the use demand- and supply-side mechanisms to control the costs of health care. In the public sector, the health care funding system should move away from pay-as-you-go schemes towards fully funded schemes, to ensure sustainability.

Recent experience of Asian economies that moved to the expansion of private sector's role in the financing and provision of health services suggests that they provide for a weaker mechanism of cost-containment compared to the regulated public sector. In Japan, fees are negotiated on a biannual basis between the insurer and providers for a complete list of services, with monopsonistic power exercised by a purchaser of care and cost-control measures in place (i.e. reimbursement of technology-intensive services below its cost and basic ambulatory care above its cost, to stimulate utilisation of the latter, and an increasing bundling of services in the remuneration package).

Contractual arrangements between the purchaser and provider are important in explaining the dynamics of costs and the quality and scope of services. Different formulas have different cost-containment power: for instance, fixed price contracts such as capitation payment or a casemix (DRG-related) payment provide strong incentives for cost containment, while per diem hospital funding formulas do not. Incentives within HMOs may be limiting on the choice by the members.

Another important determinant of the insurance premium pricing is the regulatory and policy environment. For example, in several member economies, private health insurance providers are not allowed to risk-rate their premiums based on age, health status and known risks (the so-called community rating principle). In other countries, insurance companies are offering risk-rated products that are priced according to the assessed risk. There are issues with both of the systems (dumping, cream-skimming if not enough competition in the market, inequality of access to health insurance by the high risk groups).

iv) Competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

The analysis of the sample of seven APEC economies reveals that private health insurance markets are moderately to highly concentrated in the study countries. This holds true in countries with different public-private health finance mixes and at different levels of economic and institutional development. Countries with a moderate degree of market concentration include Australia and Malaysia. In Australia, the Herfindahl-Hirschman concentration index (HHI) calculated for 38 funds in operation in 2006 was 1,361. Australia's five largest insurers (Medibank Private, MBF, BUPA Australia, HCF and HBF) collected 71% of premiums and issued 72% of policies, with the largest insurer holding a 28% market share. In Malaysia, the medical and hospital insurance market remains largely oligopolistic, with the top three insurers accounting for more than 60% of business during 2000-05. The market share of the ten leading MHI insurers is 83% in 2005.

The degree of market concentration is high in China, Mexico and New Zealand. China's insurance industry was virtually closed to competition for many decades, both to domestic and international competition. Following China's accession to WTO that enabled market access by foreign insurers, the monopolistic position of the domestic state companies has been challenged. Even so, the degree of market concentration remains high, with the top two insurers (China Life and Ping An) accounting for more than 90% of the health insurance market. The relative size of the private health insurance market in total health finance remains small in China, yet it is growing at a fast pace. Similarly small, the Mexican private health insurance market is highly concentrated, with the two largest providers holding a 50% market share. In New Zealand, almost two-thirds of the private health insurance market is

held by a single provider, the Southern Cross Medical Care Society (Southern Cross Healthcare).

Private health insurance development in Singapore must be considered in the context of its relation to the compulsory medical savings accounts system. The degree of competition in the country's private health insurance market is limited by the size of the market and the regulatory framework. The top three insurers in individual Accident and Health business issued 99% of policies and collected 95% of annual premiums. The market share of the three leading group insurers was 77% of all lives covered and 86% of premiums.

In the USA, a comprehensive AMA study of competition in the health insurance market found a limited degree of competition, with certain major health insurers having amassed significant market power through mergers and acquisitions but received minimal (regulatory) scrutiny. In 96% of MSAs (metropolitan statistical areas), one insurer had an HMO market share of 30% or more. In 17% of the MSAs, at least one insurer had a HMO market share of 90% or more. The industry HHI exceeded 1,800 in 86 out of 92 metropolitan areas, signifying a high degree of market concentration.

The actual impact of market structure on the prices (premiums) charged to the consumers, as well as potential effects of changes in market structure (such as mergers and acquisitions between health funds and health maintenance organisations) on the state of competition is within the jurisdiction of national anti-trust/competition laws. In Australia, registered health benefits organisations (private health insurers) are subject to the *Trade Practices Act 1974* that handles competition issues. The Australian Competition and Consumer Commission (ACCC) is the competition watchdog that monitors the state of competition in PHI industry among other sectors. In the USA, ensuring competition in health insurance industry is within the jurisdiction of the Federal Trade Commission (FTC) and is subject to the antitrust law. It is noteworthy that anti-trust cases have rarely been successful in the health insurance area, due to the non-profit nature of many health insurers/HMO networks. Where health insurers provide third-party funding only, the market structure of the health providers market becomes relevant. If provider markets are concentrated, then insurers have only a limited power to influence the fees charged for services by hospitals/providers.

Given information asymmetry in health insurance markets, provision of adequate information to consumers through product disclosure requirements becomes an essential component of the consumer protection mechanism. The Australian Private Health Insurance Administration Council (PHIAC) has been established as a government body vested with the consumer protection powers. In Malaysia, where the supervision of the life insurance industry (including health) is conducted by the Central Bank, or Bank Negara Malaysia (BNM), a division of the Ministry of Finance, a special consumer education program *InsuranceInfo* has been undertaken to increase transparency and improve disclosure requirements. In the USA, where insurance companies are regulated by States, the National Association of Insurance Commissioners (NAIC) – a voluntary association of state insurance regulators – consolidates the consumer information resources. In Mexico, the insurance markets are supervised by the Comisión Nacional de Seguros y Fianzas (CNSF), a National Commission of Insurance and Guarantees. The CNSF handles consumer protection issues and regulates Specialised Health Insurance Institutions (ISES) that were brought under its jurisdictions following consumer protection complaints.

In countries like Singapore and New Zealand, professional bodies rather than government agencies play the leading role in correcting information asymmetries. For example, the Life Insurance Association (LIA) of Singapore released guidelines on needs-based sales processes for individual and group life and health insurance products, as well as consumer publications. There are also industry guidelines on disclosure requirements for Accident & Health products stipulating minimum information requirements on insurance product, as well as marketing guidelines.

Complaints bodies also differ depending on the particulars of the private health insurance system in the study APEC economies. Where there are designated government bodies to oversee the industry, it is more likely to have a designated government dispute resolution body as well (for example, the Private Health Insurance Ombudsman in Australia). In Singapore, the Financial Industry Disputes Resolution Centre Ltd (FIDReC) was established to handle financial sector disputes, taking over the insurance industry's Insurance Disputes Resolution Organisation (IDRO).

In other countries, industry self-regulation and professional bodies take a leading role in maintaining industry standards and consumer protection issues. In Malaysia, for example, all life insurers must be members of the Life Insurance Association of Malaysia (LIAM), an industry body focusing on self-regulation, continuing education and professional skills development. Each of the LIAM's 18 members has established complaints unit to handle complaints from customers. Only if the complaint fails to be resolved internally, it is taken to the government Customer Service Bureau of the BNM, an insurance regulator.

New Zealand provides an example of light-handed regulation, with the leading role of the Health Funds Association of New Zealand (HFANZ) – the industry body representing health insurers in New Zealand and promulgating industry guidelines. Consumer protection in private health insurance industry in New Zealand is mostly unregulated. At present, customer complaints are handled by the Insurance and Savings Ombudsman (ISO) through an independent dispute resolution mechanism. Currently only 7 out of 11 HFANZ members support the ISO – an important limitation to the consumer's access to dispute resolution and protection mechanism.

v) Issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

There are several types of portability of benefits that can be considered, depending on the public-private structure of the particular health finance system. Firstly, there can be portability between public and private sectors such as portability of public subsidies to be used in private sector. An example is provided by Australia where the individual lifetime community rating loading (penalty for joining health insurance fund later in life, within the general community rating principle) is portable across PHI funds. This provision fosters competition between the funds as it encourages switching the fund in response to the premium/coverage changes.

The possibility of switching private funds without penalty or loss of coverage is the second type of portability of benefits. It is greatly facilitated in the regulated systems with community rated premiums such as Australia. Funds often engage in aggressive marketing campaigns offering waivers of waiting periods and other incentives to join. Private health insurance reimburses for inpatient services as a private patient in a public hospital, hence there is one-way portability of private finance between the private and public sectors. In the current structure of the health system, with no HMO-type operators and insurers negotiating their contracts with providers of services, lack of portability of benefits does not impede the functioning of the domestic private health sector in Australia. In countries where premiums are risk-rated, switching between funds may lead to the loss of benefits due to pre-existing conditions and exclusions based on the medical history. Private funds compete for the better risk and are engaged in cream-skimming activities. Portability of benefits is rarely observed in unregulated markets. We have not identified any portability of benefits identified in the countries where health insurance is based on risk-rated products, such as in China, Malaysia, Mexico, and New Zealand.

Portability of benefits provided through employer-sponsored group policies is the third type of portability issue, particularly important for those APEC members with a high proportion of group coverage in the total. Establishing such a mechanism requires government intervention through legislation and regulation. In the USA, the Health Insurance Portability and

Accountability Act of 1996 (HIPAA) was signed into law in 1996. HIPAA provides some degree of protection for Americans employees and their families by: limiting the use of pre-existing condition exclusions; prohibiting group health plans from discriminating by denying coverage or charging extra for coverage based on health history; guaranteeing certain small employers, and certain individuals who lose job-related coverage, the right to purchase health insurance; and guaranteeing, in most cases, that employers or individuals who purchase health insurance the renewal of the coverage regardless of any health conditions of individuals covered under the insurance policy. In Singapore, a tripartite cooperation between employers, insurers and unions is developing of a portable medical benefits scheme known as the Transferable Medical Insurance Scheme (TMIS). Employers enjoy tax deductibility for medical expenses of up to 2% of payroll if they adopt TMIS. Individuals who are currently insured under an employer sponsored TMIS plan will retain their insurance coverage when they switch to another employer who offers a group plan under the TMIS. This transfer of coverage is permitted even when the employers subscribe to TMIS plans from different insurers as the scheme will be offered by a consortium of 13 insurance companies. Individuals who are retrenched will be able to retain insurance coverage for a maximum of 12 months if the TMIS premiums are paid. Premiums of TMIS plans are expected to be 5% to 20% more than existing group insurance plans. TMIS is expected to be launched in July 2006.

The fourth kind of benefit portability is international, for treatments obtained overseas. This kind of portability becomes important with globalisation of health services provision and growing trade in health services among APEC economies. While some insurers provide limited portability of benefits for emergency treatment abroad, we have not identified private insurance products offering portability of benefits for pre-existing conditions.

vi) Investment guidelines for private health insurers and asset allocation policies

The degree of investment regulation differs by country, broadly following the pattern of financial market development. Countries with emerging financial markets (e.g. China) tend to have the most stringent regulation on types of admissible assets and allocation of investments across types. Until recently, insurance companies were only allowed to channel their funds into severely restricted investment options, choking off sustainable growth. A significant share of insurance premiums was invested in cash or bank deposits, severely impeding investment in commercial papers. Recent steps by the China Security Regulatory Committee (CSRC) to allow insurance funds to enter share market have not led to an immediate change with only limited investment opportunities provided by the under-developed domestic financial markets. Foreign investment activities of insurers are heavily regulated by the State Administration of Foreign Exchange (SAFE). Government bonds also dominate investment portfolio of life insurers in Mexico.

In Singapore, more than a half of investment portfolios are allocated to equities. At the same time, there was also an increase in the share of government securities to almost a quarter of the portfolio in 2004. Malaysia has recently moved to introduce a risk-based capital regulatory framework (planned to become effective in 2008), which allows insurers greater investment flexibility. The investment limits were increased for high-quality public and private bonds, and the scope of admitted property assets was extended from direct investment in completed and near completed properties to indirect property investments, including real estate funds.

Australia's regulatory framework does not impose any restrictions on the investments by registered health benefits organisations as insurers manage their investments in a prudent manner. In the Australian context, this includes satisfying the tests of assets concentration and counterparty risks, market fluctuation risks and capital reserve requirements. Investment assets include cash, property portfolios, stock, bonds, derivative instruments, currency swaps and other financial instruments. Asset concentration risk is mitigated by establishing reserves that depend on the type of the asset. Similarly, the risk-based capital formula applied in the

USA encompasses four major categories of risk: 1) asset risk; 2) insurance or pricing risk; 3) interest rate risk; and 4) business risk. Asset risk is related to the risk of default and market value declines of an insurer's investment portfolio, and the portfolio allocation is chosen to comply with the assets concentration and other relevant tests. In New Zealand, there are no specific investment guidelines and policies related to the private health insurance industry.

Note that all seven economies covered in this report, and most of the APEC member economies, are also members of the International Association of Insurance Supervisors (IAIS), established in 1994 and comprising insurance regulators and supervisors from some 180 jurisdictions.³ A set of supervisory standards was developed by the IAIS to form the IAIS Insurance Core Principles. IAIS (2003) contains the revised version of the Core Principles covering the supervisory system, operations of the supervised entity, on-going supervision principles, prudential requirements, market structure and consumer protection issues, as well as anti-money laundering provisions. The chapter on prudential requirements contains a section in investments. Most of the health insurance supervision in study countries aims to comply with the IAIS core principles on investment including conditions on the mixture and diversification by type of assets; limits on exposure to a particular financial instrument; the appropriate matching of assets and liabilities; and rules for valuation of assets. The overall strategic investment policy by an insurer should take into account insurer's risk profile, the rules for long-term (strategic) asset allocation, limits to risk exposure by geographic area, markets, sectors, counterparts and currency, definition of disallowable assets, etc. Risks associated with investment activities that need to be considered as part of the risk management system include market risk, credit risk, liquidity risk and failure in safe keeping of assets. Investment guidelines in the study economies broadly follow the IAIS principles for investments.

vii) The regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

Regulatory prudential arrangements differ by country but, like its investments component, are formulated within the IAIS Insurance Core Principles framework (IAIS, 2003). The new framework for insurance supervision formulated in (IAIS, 2005) emphasises the need to develop common standards for assessment of insurer solvency. In line with the developments of other financial sectors' supervisory framework, the insurance industry has moved to the risk-based capital standards. Expanding the application of the IAIS Core Principles for insurance supervision into emerging markets has been achieved through the regional training seminars for insurance supervisors, conducted by the IAIS in a number of countries including Mexico and Singapore (our study countries) over 1997-1999. The state of the prudential regulation in the study economies is discussed in the remaining part of this section.

In Australia, the Solvency Standard guiding private health insurers' operations from January 2006, is based on a two tier capital requirement, with the first tier needed to ensure basic solvency (in the run-off perspective), and second tier necessary to secure financial soundness of the health benefits fund (in the going concern perspective, i.e. in the context of the current balance sheet and future business objectives). The Solvency Standard addresses the first tier capital requirement, and defines Solvency Reserve as the amount by which the Solvency Requirement exceeds the Reported Liabilities. The purpose of the Standards is "to ensure, as far as practicable, that at any time the financial position of the health benefits fund conducted by a registered organisation is such that the organisation will be able, out of the assets of the fund, to meet all liabilities referable to the health insurance business of the organisation as those liabilities become due".

³ http://www.iaisweb.org/132_ENU_HTML.asp

The Standard prescribes the minimum capital requirement which would be sufficient to meet obligations to members and creditors under a range of adverse conditions. The Solvency Requirement has to be disclosed in the financial statements of the company. The Standard provides principles for calculation of Solvency Requirement, taking into account Liability Risks, Assets Risks (including Inadmissible Assets and Resilience Reserve), and Additional Risks (Expense Risks and Management Capital). The Health Benefits Fund Solvency Requirement (HBFSR) is defined as a sum of Solvency Liability, Expense Reserve, Inadmissible Assets Reserve, Resilience Reserve and Management Capital Account.

The Capital Adequacy standard addresses the second tier capital requirement, and defines the Capital Adequacy Reserve as the amount by which the Capital Adequacy Requirement exceeds the Reported Liabilities. The Standard prescribes the capital requirement which would be sufficient to meet obligations to members and creditors under a range of adverse conditions, in the context of viable ongoing operations. The Standard provides principles for calculation of the Capital Adequacy Requirement, taking into account Liability Risks (including Capital Adequacy Liability and Renewal Option Reserve), Assets Risks (including Inadmissible Assets and Resilience Reserve), and Ongoing Fund (including Business Funding Reserve and Management Capital). The Health Benefits Fund Capital Adequacy Requirement (HBFCAR) is defined as a sum of Capital Adequacy Liability, Renewal Option Reserve, Business Funding Reserve, Inadmissible Assets Reserve, Resilience Reserve and Management Capital Account. The Capital Adequacy Requirement is calculated as a difference between HBFCAR and Approved Subordinated Debt.

In the USA, Risk-Based Capital Requirements capital standards are at the core of solvency regulation. Regulation differs by State. Most state laws require annual statements to be filed with state insurance departments and the NAIC by March 1 of the year following the statement year. The annual financial statement filed by insurers is the primary tool in regulatory monitoring. Most states also require insurers to file quarterly statements which contain key information on assets and liabilities, income, changes in investment holdings, premiums written, losses and reserves. The NAIC promulgates a detailed set of instructions to accompany the statement to guide insurers and regulators on proper reporting. Insurers are required to report their financial information according to statutory accounting principles (SAP) which differ from generally accepted accounting principles (GAAP) in, among other things, more conservative valuation of assets.

Singapore also has moved to a risk-based capital (RBC) framework. The new 2003 Insurance (Amendment) Act introduced a RBC framework that reflects relevant risks to ensure capital adequacy. Improved prudential standards and financial reporting facilitates early progressive prudential intervention by Monetary Authority of Singapore.

Similarly, Malaysia is moving to the RBC for capital adequacy from 2008. Improved standards include better institutional risk management procedures and corporate governance. The prudential regulation of the health insurance industry is in the process of the reform aimed to align the solvency regime with actual risk exposure of insurers. The current margin of solvency for life insurance businesses (based on the existing Regulations) is the aggregate of a specified percentage of the actuarial valuation of liabilities, sums at risk and net premiums on all life policy extensions, plus total liabilities of the life insurer as of the end of financial year.

In Mexico, the solvency margin is determined by the Assets Counted Towards Minimum Guarantee Capital (ACTMGC) minus the Minimum Guarantee Capital (MGC) required. The ACTMGC correspond to the assets capable of covering the MGC required. The MGC is equal to the Gross Solvency Requirement (GSR) minus deductions. Deductions are determined (mainly) by the balances of the equalization reserve and the catastrophic risk reserve. The GSR is equal to the capital required for probable deviations in the retained losses and/or adverse fluctuations in the price of those assets in which the technical reserves are invested.

Since 2000, the China Insurance Regulatory Commission (CIRC) has been considering adopting the main elements of the EU solvency standards, although features of other states' models were also being considered. Solvency Regulations are still under development. In New Zealand, the existing light-handed regulatory approach, in particular with respect to solvency standards, has resulted in the industry self-push to develop core standards. The Health Funds Association of New Zealand (HFANZ) is in the process of development of solvency standards similar to those developed by the Australian Private Health Insurance Administration Council (PHIAC) and described earlier in this section.

CONCLUSIONS AND SUGGESTED RECOMMENDATIONS TO APEC MINISTERS

The size of the health sector in APEC economies (measured by total health expenditure as a percentage of GDP) has generally continued to grow in recent years. At the same time, the past trend of an increasing share of health care expenditure being publicly financed appears to have dissipated, with the privately financed share in 10/19 APEC economies increasing over the five years from 1999 to 2003. More recent activity surrounding the private sector in health in a number of the seven study economies reinforces the perception that private financing of health will grow in importance in the years ahead.

Within these broad trends, there is considerable diversity between the APEC economies in both the size of the health sector and the financing mechanisms employed. Clearly, the financing and provision of health services are intertwined with a country's social policy, resulting in the pursuit of multiple (and often conflicting) policy objectives. Notwithstanding this diversity in health systems and policy objectives, some common issues have emerged from this study of seven APEC economies that may have implications for financial markets and warrant the attention of APEC ministers. These issues lead to the following suggested recommendations:

- 1) APEC economies should consider alternative long-term health financing options in view of the increasing old-age dependency ratio in APEC economies over the next 40 years. This trend, combined with the relatively large share of public financing of health in many APEC countries, portends a potentially large impact of this trend on government budgets. Options need to be developed to manage or counter this impact.
- 2) Developments in health care financing in the direction of greater reliance on funded schemes (e.g. schemes relying on medical savings accounts) should be monitored by member economies, as these schemes may generate considerable financial reserves and associated funds management issues whether publicly or privately managed. The US experience with Consumer-Driven Health Plans will be of particular interest in this area.
- 3) Regulations governing private health insurance organisations should be comprehensively reviewed by each member economy to ensure that they serve a useful purpose and that if possible they support, rather than conflict with, social policy objectives. Regulation should be aimed at fostering competition in the private health insurance industry as well as its financial stability. Most APEC economies are members of the International Association of Insurance Supervisors (IAIS). The IAIS Core Principles developed in 2003 and the new framework for insurance supervision released in 2005 provide useful benchmarks against which to assess current regulatory environments.

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Country Annexes

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Australia

i) Private funding contribution to the overall/universal health funding of an economy

In 2002, total expenditure on health was 9.5% of GDP, with about a third (32%) funded by private sources. Prepaid plans financed 22.7% of private health spending, with 61% being OOP. Outpatient services are financed mostly through the universal public health insurance, Medicare, established in 1984, with patient co-payments. Inpatient services in public hospitals are free to patients and are financed by the States (with transfers from the Commonwealth). Medicare is funded through general taxation and through the Medicare levy (1.5% of taxable income (low income earners exempted)). Private hospital services are financed on a FFS basis by private health insurance funds and individuals. Government policies to support private health insurance (PHI) include the 30% rebate on PHI premiums available on hospital, ancillary or combined cover without a means test. To relieve the pressure on public health finance and encourage taking up PHI cover, a Medicare levy surcharge was introduced from 1997-98, in the amount of one percent of taxable income, payable by high income individuals and families without PHI (income threshold of \$50,000 for individuals and \$100,000 for families). The PHI reform since 2000 allowed the industry to offer better protection against uncertain medical expenditure, through Gap Cover Schemes – “no gap” or “known gap”. A “no gap policy” covers the full cost of particular hospital treatment and medical services, including medical service fees in excess of the Schedule Fee, even when there is no hospital or medical purchaser-provider agreement between the insurance company and the hospital/practitioner). The “known gap” policies usually involve deductible and co-payments by the insured. The newest policies to support PHI are higher rebates to older Australians and prostheses reform. For a review of the Australian health finance system including PHI reform see Mooney and Scotton (1999), Industry Commission (1997), Hall, De Abreu Lourenco *et al.* (1999); Butler (1999, 2002) and Ellis and Savage (2005).

ii) Broad details of private involvement, including through company and individual health insurance arrangements

Health insurance business in Australia is limited to registered organisations only. The scope of health insurance regulations excludes accident and sickness insurance (providing a lump-sum payment) and liability insurance business. Health insurance business is defined as undertaking liability with respect to loss arising out of fees or charges in relation to the provision in Australia of hospital treatment or an ancillary health benefit. The PHI industry is regulated by the Private Health Insurance Administration Council (PHIAC)⁴ under the *National Health Act 1953*.

The PHI industry operates under the community rating principle (*National Health Act 1953* Section 66 and Section 73ABA), meaning that the funds cannot discriminate on the grounds of medical conditions, age, frequency of claims, and the amount of benefits purchased. All persons insured under the same table (contract) have to be eligible for the same type of premium. From 1 July 2000, the community rating principle was modified to impose penalties for first joining private health insurance after age 30 years. The purpose of the policy was to stabilise health fund membership numbers and improve the membership profile of health funds by providing incentives for consumers to take out private hospital cover early in life and maintain this cover throughout their lifetime. The penalty of 2% increase in base premium for each year of age above 30 is imposed for those who did not have private hospital cover by 1 July 2000 and for those 31 years of age and above who want to join the funds in the future. People born on or before 1 July 1934 are exempt from this rule. The maximum

⁴ <http://www.phiac.gov.au>

amount of any increase in premiums for private hospital cover is set to be 70% of the base rate. Transferring to a different fund does not affect the continuity of coverage for Lifetime Health Cover premium calculation purposes.⁵

iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

Premium increases in PHI must be approved by the Health Minister. PHIAC has a statutory obligation to foster an efficient and competitive PHI industry, protect interests of consumers, minimise the level of health insurance premiums and ensure prudential soundness of the Registered Health Benefits Organisations (RHBOs). In making a recommendation about allowing or disallowing a change, PHIAC assesses whether the proposed changes might adversely affect the financial stability of PHI funds, taking into account factors such as: prices below or above the market level; capital position of the fund; market in which it operates; strategic objectives; investments mix; and membership profile and demographics (Groenewegen 2006a).

Industry average premium increases over 2003-2005 were 7.4-8.0% per annum, outstripping the CPI. Pricing components include expected claims, administrative expenses, net reinsurance payments, and profit/contingency margin. Expected claims are estimated based on the product design, demographic profile, selection/ anti-selection effect, and projected claims growth rate (including increase in benefit utilisation/ number of services, increase in average benefit/ price of services, provider price increases, casemix changes, and ageing (Gale 2006). Changes in age profile of the insured population alone have produced an 1.9% per annum increase in hospital benefits during 2001-2005 (the rest of benefits growth was due to the increases in provider prices and utilisation).

The industry identifies the need to improve reinsurance arrangements that currently lead to unintentional outcomes. The major challenges are the allocation of reinsurance experience to products and a deficit pricing of a product (below or close to reinsurance levy) (Gale 2006).

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

As of December 2005, the Australian PHI industry comprised 38 RHBOs including friendly societies and foreign-owned funds. In 2005, health insurers issued 4.7 million policies and collected A\$9.4 billion in premiums. The private health insurance market is moderately concentrated, with the five largest insurers (Medibank Private, MBF, BUPA Australia, HCF and HBF) collecting 71% of premiums and issuing 72% of policies. Medibank Private is the market leader (28% of premiums), followed by MBF (17%), based on (PHIAC 2005) data. Industry's Herfindahl-Hirschman Index (HHI) is calculated to be 1,361 corresponding to a moderate degree of concentration.

RHBOs (private health insurers) are subject to the *Trade Practices Act 1974* that handles competition issues. The Australian Competition and Consumer Commission (ACCC) is the competition watchdog that monitors the state of competition in PHI industry among other sectors.

Professional bodies play a decisive role in developing appropriate industry standards which ensure high level of consumer satisfaction with the insurance products. The Institute of Actuaries of Australia (IAAust) is the sole professional body responsible for development of professional standards, pre-qualification and continuing education of actuaries, contribution to policies and public debate relevant to actuarial profession, and to research in actuarial science

⁵ <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-privatehealth-lhc-consumers-elements.htm>

in Australia. The Code of Conduct was developed by the IAAust to develop and review Professional Standards.

The Private Health Insurance Ombudsman is a complaint body established under the *National Health Act 1953*. The PHI Ombudsman is appointed by the Minister of Health and Aged Care. Its primary functions include handling the complaints made by private health insurance policyholders, as well as medical practitioners, hospitals and health funds themselves, with regard to health insurance arrangements. The Ombudsman also provides advice about private health insurance, gives feedback to the Government and health funds on the issues of concern, and disseminates other relevant information. The Ombudsman may refer the matter to the Australian Competition and Consumer Commission (ACCC) if it involves anticompetitive practices and behaviour. Most of the complaints are lodged by policyholders (about 90%).

All competition and consumer protection bodies involved in PHI industry regulation have web sites and provide information to the public on the relevant issues.

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

The individual lifetime community rating loading is portable across PHI funds. Funds often engage in aggressive marketing campaigns offering waivers of waiting periods and other incentives to join. Private health insurance reimburses for inpatient services as a private patient in a public hospital, hence there is one-way portability of private finance between private and public sectors. In the current structure of the health system, with no HMO-type operators and insurers negotiating their contracts with providers of services, lack of portability of benefits does not impede the functioning of the domestic private health sector.

vi) investment guidelines for private health insurers and asset allocation policies

RHBOs are allowed to disburse money only for the benefits, reinsurance (through the Health Benefits Reinsurance Trust Fund, HBRTF), investments, dividends to shareholders (of for-profits), and other purpose directly related to health insurance business. RHBOs are not restricted in the types of investment they are allowed to make, as long as they apply the tests of assets concentration and counterparty risks, market fluctuation risks and capital reserve requirements. Investment assets include cash, property portfolios, stock, bonds, derivative instruments, currency swaps and other financial instruments. Asset concentration risk is mitigated by establishing reserves that depend on the type of the asset (*HBO - Interpretation Standard 2005*)

vii) the regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

PHIAC has developed the Solvency and Capital Adequacy Standards for health benefits funds, as stipulated in the *National Health Act 1953*.

*Health Benefits Organizations – Solvency Standard 2005*⁶ is based on a two tier capital requirement is formulated in the *Act*, with the first tier needed to ensure basic solvency (in the run-off perspective), and second tier necessary to secure financial soundness of the health benefits fund (in the going concern perspective, i.e. in the context of the current balance sheet and future business objectives). The Solvency Standard addresses the first tier capital requirement, and defines Solvency Reserve as the amount by which the Solvency Requirement exceeds the Reported Liabilities.

The purpose of the Standards is “to ensure, as far as practicable, that at any time the financial position of the health benefits fund conducted by a registered organisation is such that the

⁶ <http://www.phiac.gov.au/circulars/0511/solv.pdf>

organisation will be able, out of the assets of the fund, to meet all liabilities referable to the health insurance business of the organisation as those liabilities become due”.

The Standard prescribes the minimum capital requirement which would be sufficient to meet obligations to members and creditors under a range of adverse conditions. The Solvency Requirement has to be disclosed in the financial statements of the company.

The Standard provides principles for calculation of Solvency Requirement, taking into account Liability Risks, Assets Risks (including Inadmissible Assets and Resilience Reserve), and Additional Risks (Expense Risks and Management Capital). The Health Benefits Fund Solvency Requirement (HBFSR) is defined as a sum of Solvency Liability, Expense Reserve, Inadmissible Assets Reserve, Resilience Reserve and Management Capital Account. The standard allows organisations to subtract Approved Subordinated Debt from HBFSR to calculate the Solvency Requirement. The Standard was to be met by 1 January 2006, following the transitional phase over 2001-2005.

*Health Benefits Organizations – Capital Adequacy Standard 2005*⁷ addresses the second tier capital requirement, and defines the Capital Adequacy Reserve as the amount by which the Capital Adequacy Requirement exceeds the Reported Liabilities. The purpose of the Standards is “to ensure, as far as practicable, that there are sufficient assets in the health benefits fund conducted by a registered organisation for the conduct of the health insurance business in accordance with this Act and in the interests of the contributors to the fund” (Section 73BCH of the Act).

The Standard prescribes the capital requirement which would be sufficient to meet obligations to members and creditors under a range of adverse conditions, in the context of viable ongoing operations. The Capital Adequacy Requirement is not disclosed in the financial statements of the company, and is used by PHIAC on a confidential basis to assess the longer term financial prospects of the registered health fund.

The Standard provides principles for calculation of the Capital Adequacy Requirement, taking into account Liability Risks (including Capital Adequacy Liability and Renewal Option Reserve), Assets Risks (including Inadmissible Assets and Resilience Reserve), and Ongoing Fund (including Business Funding Reserve and Management Capital). The Health Benefits Fund Capital Adequacy Requirement (HBFCAR) is defined as a sum of Capital Adequacy Liability, Renewal Option Reserve, Business Funding Reserve, Inadmissible Assets Reserve, Resilience Reserve and Management Capital Account. The Capital Adequacy Requirement is calculated as the difference between HBFCAR and Approved Subordinated Debt. The Standard has to be met by 1 January 2006 and provides transitional rules for the established funds over 2001-2005.

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China

i) Private funding contribution to the overall/universal health funding of an economy

In 2002, total expenditure on health was 5.8% of GDP, with about two-thirds (66.3%) funded by private sources. Prepaid plans financed less than 0.5% of private health spending, with 96.3% being OOP. The majority of the population remains uninsured, especially in rural areas where only 9% of residents are covered by the rural Community Medical Scheme.

Urban Employee Basic Health Insurance System was designed to replace the Labour Insurance scheme (LIS) and the Government Insurance Scheme (GIS), both of which faced increasing challenges during the course of economic reform (Hu *et al.* 1999). One of the most important features of the new program is the integration of personal medical savings accounts (MSAs) with a social-risk pooling account (SPA). MSAs are established for individual insured employees to smooth their lifecycle health costs, while the social account pools catastrophic risk among all insured employees within a city at prefectural level. By the end of 2003, most large cities had established the new insurance program, covering over 110 million beneficiaries (Yi *et al.* 2005)

The social pooling fund is managed by each municipal labour bureau to insure the entire employed population within its jurisdiction. The fund provides benefits for hospital inpatient and a few high-cost outpatient services, and is financed by employers contributing 4.2% of the employee's salaries. The employee makes additional payments in an Individual Health Savings Account (IHSA) used to finance outpatient services and inpatient co-payments. The IHSA is financed by a contribution of 2% of salary by each employee and 1.8% by the employer. The IHSA balance can be transferred to close relatives. The interest paid on the balance is determined by the government. OOP expenditure under the scheme include front-end deductibles and co-payments. The government provides limited subsidies to cover administration costs of the scheme by Municipal Labour Bureaus. The annual maximum benefit offered through this insurance scheme is capped at 4 times the annual employee wage (about 70,000 RMB in Shanghai or 40,000 RMB in Chengdu), hence the scheme provides only limited protection against financial risk (Hindle 2000)

The Chinese government is moving forward in an attempt to establish some new forms of a Cooperative Medical System (CMS) to cover the rural population and Medical Financial Assistance systems (MFA) for the poor, but private OOP expenditure still remains the major source of health care finance in rural areas, and the incidence of catastrophic health expenditure associated with illness is high (Yi *et al.* 2005).

ii) Broad details of private involvement, including through company and individual health insurance arrangements

Urban Employee Basic Health Insurance System including the social pooling fund and the individual health savings accounts is insufficient to cover expensive treatments. Employees often take out supplementary insurance offered commercially. Some enterprises have supplementary group insurance for their employees (Hindle 2000). Private health insurance penetration in China is still low but the rates of growth are very rapid, especially with the entry of foreign health insurers into domestic market following China's entry to the WTO. Private health insurance is regulated by the Chinese Insurance Regulation Committee (CIRC). According to the old *Insurance Law of 1996*, health insurance business can only be operated by life insurance companies. The 2002 revised Chinese insurance law now allows property insurers to also operate short term health insurance businesses after obtaining authorisation from the regulator.

iii) Key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

Informal estimate of volume of private health insurance market in China was 300 billion RMB in 2001 (Tao 2004), however, official CIRC data reports premium incomes of 22.27 billion RMB in 2001. If the premiums from the critical illness products are excluded, premiums collected for hospital indemnity and medical insurance amount to about 6.5 billion RMB (Tao 2004). The critical illness products typically offer a lump-sum payment for a list of critical illnesses or disability condition (2-3 times the insured amount) in exchange for a premium that can be paid either as a lump-sum for the term of a policy (e.g. 20 years), or on an annual basis. Applicants undergo initial selection, and the premiums are risk-rated. Another type of product includes hospital and medical insurance, typically with a deductible and a consumer co-payment. These policies are often offered as a top-up to an urban employee basic scheme as a group policy funded by an employer. Due to a lack of professional experience in health insurance business, unregulated health service markets and lack of insurance experience data, most products tend to be priced conservatively.

An increase in the share of medical and hospital insurance in the total health insurance portfolio will lead to the same pressures on the private health insurance industry as in the other APEC study economies. While ageing is less of a problem in China than in Japan or Australia, an increase in medical costs due to more intensive technologies has been prominent. Tao (2004) reports that while the average length of stay in hospital fell from 13.3 days in 1995 to 10.1 days in 2002, the average charge for the hospital stay has increased from 1,668 RMB to 3,600 RMB. The health actuaries have been using a medical expense trend factor of 10-15%, which outpaces both the inflation and the ageing effects.

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

China's insurance industry was virtually closed to competition for many decades, both to domestic and international competition. The state owned People's Insurance Company of China (PICC) monopolised the industry until 1992 when as part of China's negotiation to join the GATT the market was opened up to foreign companies (AAR, 2003a). Today foreign insurers account for more than half of registered insurers in China, but they only make up a small market share. Their growth has been hindered by geographic, regulatory and product restrictions. Foreign insurers and reinsurers continue to increase participation in the Chinese insurance market with entries from General Re Corp, Munich Re, Swiss Re etc (Lim 2006).

The degree of market concentration is high, with top two insurers (China Life and Ping An) accounting for more than 90% of the health insurance market (Tao 2004). In 2002, 29 life and 8 property insurance companies provided over 300 health insurance products, with critical illness insurance, hospital indemnity insurance, supplementary major medical insurance being the leading products. There are no real long-term care and disability income products, and the regulation in the health insurance industry is yet to be developed (AAR 2003b).

The 2002 amendments to the 1996 Insurance Law now provide consumers with some protection by, for example requiring the insurance companies to train their agents.⁸

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

No portability of benefits identified.

⁸ Source: CIRC "Regulations on Administration of Insurance Companies" effective June 15 2004 (http://www.circ.gov.cn/Portal45/InfoModule_5501/21575.htm)

vi) investment guidelines for private health insurers and asset allocation policies

Until recently, insurance companies were only allowed to channel their funds into severely restricted investment options, choking off sustainable growth (AAR 2003b). These restrictions have resulted in a significant proportion of insurance premiums being invested in either cash or bank savings, severely impeding investment in commercial papers. In an attempt to rectify this problem, the China Security Regulatory Committee (CSRC) has taken steps to allow insurance funds to enter share market. However, the under-developed domestic financial markets provide limited investment opportunities. The entry of foreign insurers facilitates adoption of better business practices and improvement in quality of service.

Investment in foreign assets is heavily regulated (CIRC “Temporary Measures on Overseas Use of Foreign Exchange Insurance Funds”⁹). Overseas investment by proven and registered insurance companies (domestic, foreign including branch, Sino-foreign Joint Venture, etc) can be made only out of ‘foreign exchange insurance funds’ defined as the aggregate capital, common reserve, undistributed profit, reserves and guarantee deposits received by an insurance company that are denominated in foreign exchange. To invest overseas, the insurer must demonstrate total assets of no less than RMB 5 billion, and foreign exchange funds no less than USD 15 million (or equivalent) in convertible currency.

Investment assets types are restricted to: bank deposits (rating A or above); bonds of foreign governments, international financial organizations and foreign companies (rating A or above); bonds that the Chinese government or Chinese enterprises issue overseas; money market products including bank bills and negotiable certificates of deposit (rating AAA or above); other investment objects and instruments within the scope specified by the State Council.

There are also limits on the total amount of investment equal to 80% of the aggregate of the balance of foreign exchange funds, or the amount approved by the State Administration of Foreign Exchange (SAFE). There are asset concentration risk criteria applied to the bonds depending on the issuer.

vii) regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

Following the WTO accession in 2002, China has been conducting regulatory reform in the insurance market under the *China Insurance Law 1996* (amended 2002), *Regulations on Administration of Insurance Companies* (effective June 15 2004) and a suite of other legislative instruments.

The main regulatory body for the insurance sector is the China Insurance Regulatory Commission (CIRC). Insurance companies in China must be issued licences by the CIRC which is both a market regulator and a solvency regulator. Foreign investment activities of insurers are also regulated by State Administration of Foreign Exchange (SAFE).

Insurance companies partially or fully foreign-owned (including joint ventures and Chinese branches of foreign insurance companies) are governed by the Regulation for the Administration of Foreign-invested Insurance Companies (the FIIC Regulations), first promulgated on 12 December 2001. The associated Implementing Rules were issued on 13 May 2004, clarifying and supplementing the previous regulations. Initial foreign equity in a joint venture is limited to 50%. Fully foreign owned FIIC are allowed within 2 years. Foreign participation is allowed in property insurance, personal life insurance, large-scale commercial risk insurance and reinsurance. At the same time, FIICs are not allowed to engage in both property insurance and personal life insurance (including health) at the same time.

⁹ Source: http://www.circ.gov.cn/Portal45/InfoModule_5501/21582.htm

To operate in China, an insurer with foreign participation must have registered capital of no less than RMB 200 million, fully paid up in cash. In the case of a Chinese branch of a foreign insurance company, RMB 200 million is allocated to the Chinese branch in freely convertible foreign currency. FIIC should have: more than 30 years experience overseas, with a representative office in China for at least 2 years; total assets no less than US \$5 billion; and satisfy other regulatory requirements at home and in China.

Solvency Regulation

Based on ADB (2001), in 2000 CIRC decided to adopt the main elements of the EU solvency standards, although features of other states' models were also being considered. As of 2000, there were extensive market regulation controls, including setting of policy terms and premiums, which have now been somewhat relaxed. Such regulation inevitably introduced a tension between aggregate premium-based policy and individual policy premium controls. Since 2000, CIRC has adapted to a more liberalised market in a slow, controlled manner.

Assessment of Financial Stability

According to AAR (2003b), "company solvency is a major issue in China's insurance industry, with the current level of capital funds held by domestic insurers being low. The lack of solvency has been exacerbated by insurers' restricted investment options. Recent changes in the law require greater transparency in regard to holdings and permit greater diversity of investment.

Analysis by ADB (2001) suggests that many Chinese insurance companies, including the three largest state-owned insurers - PICC, China Life, and China Re - would find it difficult to meet the new EU-type solvency standard and are in need of capital injections. Currently the options to attract new capital are limited to direct state injections. Other options being discussed are introducing privatisation through a sale of shares in state-owned insurers, or creation of a joint-venture with a foreign insurer. The technical and regulatory capacity of Chinese insurers needs to be strengthened in order to ensure financial health and stability of the industry.

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Malaysia

i) Private funding contribution to the overall/universal health funding of an economy

In 2000, total expenditure on health constituted 3.8% of the Malaysian GDP. Malaysia has built its health system using a universal welfare model (Barraclough 1999). Publicly provided health care is highly subsidised with outpatient treatment at a public hospital priced at a nominal amount.¹⁰ User fees collected in public hospitals represent only about 3-5% of the Ministry of Health budget (WHO 2002). The costs of drugs and medical supplies are not included in the subsidised service. Government provided 53.8% of national health finance, and the remaining private contribution was financed mostly out-of-pocket (92.8% of private spending), with the balance of 7.2% of private funding provided through pre-paid plans.

Several government programs have been implemented recently in Malaysia to improve access to health care and increase efficiency of the health care provision. Corporatisation and privatisation of health facilities and services has started during the Seventh Malaysia Plan, 1996-2000, with corporatisation and privatisation of the Kuala Lumpur Hospital becoming arguably the biggest healthcare facility privatisation project in the world (Barraclough 2000). Corporatised hospitals have tested the managed care organisational model with some limited success (APHM 2001). The Ministry of Health (MOH) is responsible for the public provision of health care through a network of hospitals, clinics and healthcare programs. The public sector accounts for about three-quarters of hospital beds and 80 percent of hospital admissions in the country, but employs only about a third of physicians and specialists. The private sector is much more attractive to specialists through lower workloads and higher incomes (Netto 2005). Public health care expenditure in 2002 stood at approximately 2 percent of the GDP and total health care expenditure about 3.8 percent (WHO 2002).

Existing health insurance schemes include a compulsory Employees Provident Fund (EPF) – a retirement fund of which 10% of the EPF contribution is used for health benefits. The fund enrolls mainly private sector workers and the self-employed, with some government employees also contributing to this fund. A Social Security Organisation (SOCISO) manages a social security system covering all working Malaysian citizens and their dependants. There are also commercial providers of private health insurance, and their penetration has been growing. Life insurance premium income constituted 3.4% of GNP in 2005.

In 2004 the decision was made to implement the National Health Insurance Scheme (NHIS) based on a community rating model (Daily Express 2004). The National Health Financing Authority is to be set up under the Ministry of Health to administer the scheme and be a single purchaser of services. The mechanisms of the new scheme, expected to take effect by the end of 2006, are still in the process of development. So far it has been announced that public servants, the disabled, the elderly, pensioners, the unemployed and the indigent will be exempted from mandatory contributions to the scheme. Other households will be paying mandatory community-rated premiums and a co-payment for use of the services (with the fees to be increased to improve cost recovery) (Malaysia Today 2005)

ii) Broad details of private involvement, including through company and individual health insurance arrangements

The private health insurance sector (called Medical and Health Insurance, MHI) has been expanding in Malaysia due to greater numbers of the population utilising private health facilities. The growth in MHI was stimulated by the personal income tax relief for MHI premiums since 1996 and by changes in regulation permitting life insurers issuing standalone

¹⁰ RM1 for an outpatient visit, and RM5 for a specialist consultation. Official exchange rate during 2001-2004 is 1US\$=RM3.8 (WDI, World Bank).

health cover since 1997. There is also a Medical Expenses and Personal Accident cover offered by general insurers. According to BNM (2005), annual premium income from renewable MHI policies has increased from RM433 million in 2000 to RM1.47 billion in 2005, with an average annual growth rate of 28%. Including long-term MHI policies, total premiums income in 2005 was 2.4 billion RM or about 10.2% of total insurance premium incomes.

About 80% of MHI business was written by life or composite insurers, mainly through extensions to life insurance policies. Individual policies accounted for 80% of MHI policies in 2005. Managed Care Organisations (MCOs) have made an entrance to the Malaysia market – in 2005 there were 22 insurers engaged with MCOs to administer MHI claims.

The survey conducted by the BNM revealed that in 2005, about 15% of the total Malaysian population have private health insurance coverage. The insured pool is young, with the share of those aged 55+ being less than 4% (compared to the 8% share in general population).

Major types of MHI products offered are hospital and surgical insurance providing reimbursement of medical, hospitalisation and surgical expenses (63% of premiums), critical illness which pays a lump sum upon the diagnosis of an illness on the approved list (28% of premiums), followed by long-term care (disability) and hospital income (providing specified per-diem benefits) products (LIAM 2005).

An interesting phenomenon in the Malaysian market is the takaful (Islamic insurance) industry. *The Takaful Act 1984* provides the legislative basis for the registration and regulation of takaful business. "Takaful" in this context means a scheme based on brotherhood, solidarity and mutual assistance. There has been an increased activity in this sector including formation of international alliances between takaful operators in Southeast Asia and Middle East (Hussin 2001).

iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

Malaysia is among the slowest ageing populations within the APEC group, with the percentage of those aged 65 and above projected to increase from 4.1% in 2000 to 5.1% in 2010. Even so, pension and health care costs of the elderly will increase with time, hence the need to encourage private sector involvement in providing means of health care financing for the future elderly. Based on BNM (2005), increased competition in the MHI industry has led to the broader scope of coverage: a maximum insurable age increased from 60 to 70 years for hospital policies and from 70 to 100 years for catastrophic illness policies. New products emerged tailored to specific sub-populations (e.g. women's products). There was a pronounced move away from the guaranteed premium rates, to improve claim risk management, and a wide-spread use of cost-sharing in the form of deductibles and co-payments. The pricing of health insurance is influenced by medical inflation, accelerated by Malaysia's program to attract foreign patients and retirees.

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

The principal legislation governing the life insurance business is the *Insurance Act 1996* (replacing the previous *Insurance Act 1963*) which came into force on 1 January 1997. The *Insurance Regulations 1996* supplement the Act, prescribing the details of mandatory requirements including prudential standards. The supervision of the life insurance industry is conducted by Bank Negara Malaysia (Central Bank of Malaysia), a division of the Ministry of Finance. The Minister of Finance is the licensing authority for insurers and professional reinsurers. Under the Act, all life insurers must be members of the Life Insurance Association

of Malaysia (LIAM)¹¹, an industry body focusing on self-regulation, continuing education and professional skills development.

Each of the LIAM's 18 members has established complaints unit to handle complaints from customers. The unresolved complaints can be taken to the Customer Service Bureau of the BNM, or alternatively to the court system. Industry self-regulation measures aimed at consumer protection include Code of Good Practice for Life Insurance Business (1998), Code of Ethics and Conduct (2000), and Guidelines on Unfair Practices in Insurance Business (2003).

Increased transparency and improved disclosure requirements have been in place since 2003, including a consumer information program *InsuranceInfo* launched by the BNM. *InsuranceInfo*¹² published a *Guide to Medical and Health Insurance* educating consumers about the types and structure of the product. Insurers are required to file product information, including sales and marketing material on new MHI products with the BNM prior to sale. In 2005, BNM issued the *Guidelines on Medical and Health Insurance Business* to define the basic terms and conditions of MHI in order to protect policy-holders. New requirements include: a mandatory 'free-look' (cool-off) period of 15 days; standardisation of key policy terms and definitions; prohibition for insurers to unilaterally terminate coverage during period of insurance; reduction in waiting periods; and setting limits on the exclusion of coverage for pre-existing conditions to those for which a policy owner must have been reasonably aware of at the time of purchase. Premium increases for high-risk individuals must be suitably moderated based on aggregate experience of the portfolio. Cost-sharing provisions are not mandatory and should be limited to the lower of 20% (excluding deductible) or RM3,000 (including deductible) on every claim (BNM 2005:61).

The MHI market remains largely oligopolistic – the top 3 insurers in this sector have continued to account for more than 60% of business during 2000-05. The market share of 10 leading MHI insurers is 83% in 2005. Competition in the life insurance market has been facilitated by a significant foreign presence: out of 18 life insurers on the market, seven are majority foreign-owned (LIAM 2006). The state of competition in the MHI market was improved with the legislative change introducing financial advisers, and facilitating direct distribution channels. A greater degree of product differentiation followed (BNM 2005).

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

There is no automatic portability of benefits between private MHI providers. Claims made under one cover may prevent a consumer from obtaining a new cover from an alternative provider, because the previous sickness has to be reported and may constitute an exclusion on the grounds of pre-existing conditions.

The *Insurance Regulation 1996* S125 stipulates that on winding up of the life insurance business, the administrator may carry on life business with a view to transfer it as ongoing concern to another insurer, but cannot effect new policies. Any scheme to transfer business to another insurance company must be confirmed by the court.

vi) investment guidelines for private health insurers and asset allocation policies

Pending implementation of a risk-based capital regulatory framework (planned for 2008), insurers will be allowed greater investment flexibility. As summarised in BNM (2005), the admitted assets requirements to support a margin of solvency were revised in several ways.

¹¹ www.liam.org

¹² www.insuranceinfo.com.my

The investment limit for credit facilities of life funds was increased from 50% to 70% of the margin of solvency, to facilitate investment in high quality long-term bonds. Investments in private debt securities rated 'AA' or below are capped at 30% of the insurers margin of solvency. Aggregate direct loans are not to exceed 20% (Hardy 2006). The scope of admitted property assets, previously confined to direct investment in completed and near completed properties, was extended to include indirect property investments, including investments in private real estate funds and unlisted single-purpose property holding companies. Several classes of assets (backed by the Federal Government of Malaysia and the Federal Government of Germany) were classified as low risk assets.

Additional relaxation of the investment regime was due to the increase in the investment limit for foreign assets of investment-linked funds (from 10% of total net asset value to 30%). With this revision, the flexibility of insurers to hedge currency risks has improved. Under the Guidelines on Derivatives (2000), insurers are allowed to use exchange-traded derivatives and common non-exotic over-the-counter derivative contracts for hedging purposes.

vii) the regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

The prudential regulation of the industry is in the process of the reform aimed to align the solvency regime with actual risk exposure of insurers. The current margin of solvency is prescribed by Part IX of the Regulations. For life insurance business, it is the aggregate of a specified percentage of the actuarial valuation of liabilities, sums at risk and net premiums on all life policy extensions, plus total liabilities of the life insurer as of the end of financial year (BNM 2005:3). The risk-based capital (RBC) framework, to be implemented in 2008, will require an insurer to calculate its own capital adequacy level using a prescribed formula (BNM 2005:9). The concept paper envisages improved institutional risk management procedures and better corporate governance.

An additional mechanism to ensure protection of policy-holders in case of a financial failure of their insurer is provided by an Insurance Guarantee Scheme Fund (IGSF) established by the BNM under the *Insurance Act 1996*. The scheme covers general insurance business and is financed by levies, fines, and donations. The fund may be used to meet the liabilities of an insolvent insurer to policy holders (S178 of the Act).

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Mexico

i) Private funding contribution to the overall/universal health funding of an economy

The Mexican national health system relies on a combination of public vertically integrated schemes and a large private market. In 2002, the country spent 6.1% of GDP on health, with government providing 44.9% of the total. Private funding of health services is mostly through out-of-pocket payments which constitute 94.6% of the total. Prepaid plans are 5.4% of total private health expenditure, or about 3% of the national expenditure on health.

The oldest social insurance schemes covering health expenses are Instituto Mexicano del Seguro Social (IMSS) created to cover workers in unions and individual sectors. The public service social security scheme, the Institute of Security and Social Services for State Workers (Spanish acronym ISSSTE) covers the health needs of public servants (OECD 2005). These major social security schemes are funded by employer, employee (through payroll tax) and legally mandated government contributions. Depending on the source of the estimate (administrative data or population surveys), between 49-59% of the Mexican population are not covered by any social security or other health insurance schemes. The uninsured rely on the State Health Services (SHS) system provided by the Federal and state departments of health. Recent reforms of the Mexican health finance system, as part of the 2001-2006 National Health Program, are aimed at establishing the System of Social Protection in Health, as a move towards universal health coverage. The major component of the reform is the establishment of a voluntary health insurance system (the "Seguro Popular", or Popular Health Insurance) to cover against a defined package of essential interventions and selected catastrophic conditions (OECD 2005:12). Comprehensive federal funding of a core package of services across all social groups is seen as the basis of universal health care, to tackle a significant income and geographic inequality in access to health services and in health outcomes existing in Mexico (Llorens *et al.* 2002).

ii) Broad details of private involvement, including through company and individual health insurance arrangements

Based on the OECD report (OECD 2005:38-39), only a minor proportion of the Mexican population (3%) have private health cover, most of them from the highest income group. Private health cover premiums are prohibitively high for the majority of Mexican population. About a half of the privately insured hold employer-sponsored group policies, with the premium paid before tax.

There are two major types of private health insurance: Gastos Medicos Mayores (GMM), or catastrophic health expenditure cover; and integrated managed care products offered by Specialised Health Insurance Institutions (ISES). The catastrophic cover GMM products are risk-rated and often include a front-end deductible that can be reduced by choosing a provider from an approved network (similar to the Preferred Provider Organisations in the US). GMM products, offered by general insurers, dominate the private health insurance market, with the alternative ISES cover purchased by less than 3% of those privately insured. Previously unregulated, the HMO-type ISES products were brought into the insurance regulatory framework in 1999 on the grounds of the rising consumer protection concerns. In 2004, 12 ISES providers offered the HMO-type products including preventive and health promotion services, outpatient and inpatient services through a network of providers. ISES premiums are on average a factor of three higher than those for the catastrophic GMM products (OECD 2005).

It is noteworthy that secondary and specialised tertiary hospitals in Mexico predominantly belong to the public system or are funded directly through the social security system (IMSS). Private hospitals account for 34% of hospital beds mostly in the small facilities providing ambulatory care, basic surgery and maternity services (OECD 2005). The private health

sector is largely unregulated and uses the fee-for-service payment system. There is a growing interest from multinational corporations involved in managed care in the Mexican urban market: a joint venture with Aetna, Meximed, provides services along the United States - Mexico border; there are also joint HMO operations with CIGNA and The Principal Financial Group in Mexico (Stocker *et al.* 1999). The growth of this segment depends on the growing demand from the wealthier component of the Mexican population.

iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

By OECD and APEC standards, the Mexican population is young, with the share of 65+ in total population of 4.8% in 2000 projected to increase to 6.1% in 2010. The structure of the outlays by private health insurance includes a 37% share of health administration and insurance expenses, an inefficiency that can be reduced only when the private health insurance market expands. Inpatient services represented 59.5% of expenditure by private insurers (OECD 2005:57). The level of high-technology medicine use is much lower in Mexico compared to other OECD countries. As a result, the health cost differential by age is not as large, with those aged 65+ costing 1.7 more than those in 15-64 age group, compared to the 3.8 average of eleven European economies (OECD 2005:96). The overall impact of ageing on the costs of health care is projected to be relatively small (OECD 2005:98).

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

The General Law of Insurance Institutions and Mutual Societies was modified in 1999 to cover the Specialised Health Insurance Institutions (ISES). The insurance markets are supervised by the Comisión Nacional de Seguros y Fianzas (CNSF), a National Commission of Insurance and Guarantees. The CNSF handles consumer protection issues and regulates ISES that were brought under its jurisdictions following consumer protection complaints. Medical errors or malpractice arguments are brought to the National Commission for Medical Arbitration. Regulation of private health insurance and managed care organisations is to be strengthened so as to improve accountability mechanisms and monitoring and evaluation culture (Homedes 2005).

The market for private health insurance is highly concentrated, with the two largest providers holding a 50% market share (OECD 2005:38). Development of the private health insurance market may be facilitated by a proposed reform of the social security system, following the decentralisation of the vertically-integrated purchaser-provider network and making the money follow the patient.

General insurers collected US\$1.4 billion in 2004 in catastrophic health cover (GMM) premiums, and paid US\$989 million in claims (ASSAL 2006: Tables 4, 6). Data on the operation of ISES were not available.

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

No information on portability of benefits was available.

vi) investment guidelines for private health insurers and asset allocation policies

Based on (Sinha and Condon 2001), among the restrictions imposed by the CNSF on the investments by insurance companies is the mandated share allocated to the government bonds: at least 40 percent of total assets have to be invested in government securities. For example, in 1999, more than 50 percent of portfolio was invested in (short-term) government bonds. Investments in foreign currency were allowed only to the extent the policies were written in foreign currencies (almost exclusively in US dollars). The "Rules for the Investment of the Technical Reserves of the Insurance Institutions and Mutual Societies" are

provided by the CNSF Circular S-11.2 (2000)¹³. Based on CNSF (2006), Mexican insurers invest most of their portfolio in government bonds (78.5%), followed by fixed rate commercial papers (11.6%), variable rate papers (4.4%) and other assets (5.5%).

vii) regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

Regulation of ISES is performed by the National Commission of Insurance and Guarantees (CNFS) responsible for formulating and enforcement of the standards for solvency, capital adequacy and risk management.¹⁴ Insurers are required to lodge an annual return, complemented by quarterly returns, with the CNSF, using the Generally Accepted Accounting Standards (GAAP). Only the annual return is generally audited.

The solvency margin is determined by the Assets Counted Towards Minimum Guarantee Capital (ACTMGC) minus the Minimum Guarantee Capital (MGC) required. The ACTMGC correspond to the assets capable of covering the MGC required. The MGC is equal to the Gross Solvency Requirement (GSR) minus deductions. Deductions are determined (mainly) by the balances of the equalization reserve and the catastrophic risk reserve. The GSR is equal to the capital required for probable deviations in the retained losses and/or adverse fluctuations in the price of those assets in which the technical reserves are invested (Sinha and Condon 2001)

The financial stability of the public social security schemes (IMSS and ISSSTE) requires immediate reforms of the pension component, provided historically as an unfunded PAYG system. Data on financial performance of individual insurers is available from CNSF (2006).

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New Zealand

i) Private funding contribution to the overall/universal health funding of an economy

New Zealand has a taxpayer-funded public system and lightly regulated private health insurance industry. Public and private systems complement each other. The public sector provides high level emergency or acute care and non-urgent elective surgery; the private sector provides semi-acute and non-urgent but necessary health care assessment and treatment. Health insurance covers the costs of many non-urgent health care procedures (e.g. orthopaedic surgery) and semi-acute health care procedures (e.g. removal of cancers and cardiac surgery).

In 2002, total health expenditure represented 8.5% of New Zealand GDP. The country's health system is predominantly publicly funded, with 78% of total health expenditure financed by the public sector. The estimated share of government expenditure on health is approximately 20% of total budgeted expenditure for 2003-04 (Ministry of Health 2003). Private sources of funding consist of household out-of-pocket expenditure (72.6% of total private expenditure on health) and prepaid plans (25.9% of private expenditure in 2002).

ii) Broad details of private involvement, including through company and individual health insurance arrangements

By the end of 2003, approximately a third (32.1%) of New Zealand population was covered by private health insurance. The data for Southern Cross Medical Care Society¹⁵ - New Zealand's largest health insurer with 67% market share in 2002 (Econtech 2004) - demonstrate the declining trend in the coverage over time. During the 1990s, the share of population insured with Southern Cross fell from 30% to 20%. National private health insurance coverage reduced from around 45% in the late 1980s to about one third currently (Ashton 2005). While the role of private insurance has been in decline since the mid-1990s, the share of public funding remained stable at around 78% (down from 88.1% in 1981-82) (Ashton 2005).

Declining private health insurance coverage has triggered an extensive debate over the introduction of incentives to support the industry. The Australian experience with the 30% rebate mechanism received particular attention. Various estimates (by different members of Health Fund Association of New Zealand Inc [HFANZ]) show that in the absence of incentive mechanisms, the private sector contribution to health finance will deteriorate even further.

The major focus of private health insurers is on the elective, non-acute surgeries (based on the public health booking system). In 2002-03, 97.7% of total private health insurance funding was directed to surgical and medical expenses, with 50.5% of surgical and medical care provided in the private health system financed through private health insurance (Ministry of Health 2005). The costs of surgery (and other procedures) are covered to the extent defined by the insurer, with no formal regulation applied. The same pertains to the health insurance premiums set by the insurers.

iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

Under the *Human Rights Act 1993*, health insurers are explicitly permitted to set different terms and conditions of premiums on the basis of gender, disability, and age. Different treatments must be justified based on actuarial or statistical data. In practice, health insurance policies are priced either by age-banded risk rating or by a community rating type approach, or a combination of both (HFANZ Guidance Note). Under a community rating scheme, the

¹⁵ Consistent industry data are not available prior to 2000.

premium is typically not adjusted according to the insured customer's age or medical condition (restricted membership funds or group schemes fall into this category). The nature of the community rating scheme causes an adverse selection problem, with younger members subsidising the older ones and dropping their coverage as a result.

Under the age-banded risk scheme, premiums vary by age, gender and other characteristics. In practice, insurers offer a yearly or five-yearly age-banded premium, with the exception of children (0-18 years age group) and older customers (65+ years). There is no regulatory body responsible for an approval of proposed premium changes.

Affordability of private health insurance has been a major issue. Over 2000-2004, the nominal annual premiums (per insured person) increased from \$270 to \$389 (or by 44%) for Major Medical, and from \$439 to \$607 (or by 38%) for Comprehensive Care. At the same time, there was a sharp increase in benefits per insured under hospital (Major Medical) cover, from \$175 to \$301 (or by 72%), and a slight increase in per capita benefits payable under Comprehensive Cover (from \$432 in 2000 to \$450 in 2004, or a 4.2% increase) (Econtech 2004). Extended scope of coverage, increased utilisation, ageing insured pool and rising costs of medical care have all contributed to the premium increase. There was a fall in comprehensive (both hospital and ancillary) cover from 20% in 2000 to 14% in 2004, with a partial switch into hospital only (Major Medical) cover which increased from 14% to 18% over the same period (Econtech 2004).

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

As of May 2004, there are 15 private health insurers operating in the New Zealand market. Ten health insurers and one accidental life insurer are members of the Health Funds Association of New Zealand Inc (HFANZ) – the industry body representing health insurers in New Zealand and promulgating industry guidelines. HFANZ was established in 1989 and incorporated in 1995 under the Incorporated Societies Act.

The private health insurance market is concentrated, with almost two-thirds of the market taken by the Southern Cross Medical Care Society (Southern Cross Healthcare), New Zealand's largest private health care not-for-profit organization established in 1961. The rest of the market is represented by a mix of small non-for-profit and corporate niche health insurers.

Consumer protection is largely unregulated. At present, customer complaints are handled by the Insurance and Savings Ombudsman (ISO) through an independent dispute resolution mechanism consisting of insurance and savings services providers, but excluding brokers. The ISO's decisions are binding on the participants, however, ISO is not able to prosecute and/or fine any of its members for the failure to comply with industry codes or the provisions. It is not attached to the Government and does not operate by statute.

The ISO services to resolve a dispute with a participating insurance company are free to consumers provided that the disputed amount does not exceed \$100,000. ISO maintains online information services (FAQs) for health, life and income protection insurance, and a range of other public information documents.¹⁶

The ISO Commission includes consumer and industry representatives, and has an independent chairperson. The Commission funds the Ombudsman, so ISO does not need to obtain funding directly from participants. ISO cannot deal with complaints related to the insurer's assessment of risk, setting premiums, acceptance, renewal, cancellation or imposition of conditions or exclusions on the cover.

¹⁶ www.iombudsman.org.nz

According to the HFANZ Code of Practice, the initial complaints are brought to the insurer and if unresolved, proceed to the ISO. Insurance companies pay fees for every complaint lodged with ISO, hence there are strong incentives for resolving a dispute at the consumer-insurer level. Currently only 7 out of 11 HFANZ members support the ISO – an important limitation to the consumer’s access to dispute resolution and protection mechanism. The HFANZ Code of Practice sets out the marketing and distribution rules compulsory for members.

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

No information was available on portability of benefits.

vi) investment guidelines for private health insurers and asset allocation policies

There are no investment guidelines and policies outlined for the New Zealand private health insurance industry.

vii) the regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market.

The private health insurance industry in NZ is largely unregulated in comparison with other jurisdictions and can be characterised as a mixture of loose government supervision and self regulation. No specific regulatory regime for health insurance exists. Current regulation of health insurers is based on:

- Statutes governing health insurers: *Companies Act 1993, Friendly Societies and Credit Unions Act 1982, Industrial and Provident Societies Act 1908 and Incorporated Societies Act 1908*;
- *Insurance Companies’ Deposits Act 1953* that requires health insurers to lodge a \$500,000 deposit in the form of “approved securities” with the Public Trustee, unless the business had been commenced before August 26, 1974, where the deposit amount might be less;
- Potential application of inspection provisions of the *Corporations (Investigation and Management) Act 1989* and the *Insurance Companies (Ratings and Inspections) Act 1994*. Under this regulation health insurance companies are not required to obtain financial ratings. Currently there is a debate over the desirability of compulsory ratings for the health insurer, with HFANZ objecting on the grounds of prohibitively high costs of this measure;
- Consumer legislation such as the *Fair Trading Act 1986* and *Consumer Guarantees Act 1993*.
- Human Rights Act 1993 which outlines the basis for premium pricing;
- Industry standards under the HFANZ including the Code of Practice.

The current focus of the Code of Practice is on marketing and sales of the private health insurance products, with some limited attention to the complaints process. The Code outlines: awareness advertising requirements; promotional brochure requirements; direct marketing and telemarketing; the proposal process; free look requirement (14 days); claims and complaints procedures; and financial disclosure principles.

The health insurance industry is outside the scope of both life and general insurance regulations, with no formal framework governing disclosure, corporate governance and solvency issues in the health insurance industry. The industry itself recognises the risks arising from the lack of consistent regulation, in particular with respect to solvency standards. Under the current regulatory framework, customers are not notified about the potentially

insolvent insurer, nor the insurer is required to undertake early remedial actions to ensure a good risk profile. The HFANZ is in the process of development of solvency standards similar to those developed by the Australian Private Health Insurance Administration Council (PHIAC). As the means to strengthen financial standing of the private health insurance industry, the NZ Government is considering an extension of a rating regime to health insurers that would require health insurers to obtain a financial rating from an approved rating agency.

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Singapore

i) Private funding contribution to the overall/universal health funding of an economy

In 2002, total expenditure on health in Singapore was 4.3% of GDP, most of it (69.1%) funded by private sources, and overwhelmingly through out-of-pocket (OOP) expenses (97.3% of private expenditure on health). Prepaid plans in the National Health Accounts definitions reported by WHO did not contribute to the overall health expenditure, despite the fact that private health insurance products were offered in Singapore by eleven domestic and two foreign insurance companies (as of December 2003). The reason for the discrepancy is the WHO definition of prepaid plans as “outlays of private health insurance schemes and social insurance schemes with no government control over payment rates and participating providers but with broad guidelines from government”. As we will see, the institutional arrangements of health care finance in Singapore are such that the offered private insurance products do not satisfy this definition.

Singapore’s health care system started as a publicly financed scheme funded through general taxation. A major reform of health care finance was implemented with the introduction of: the National Health Plan in 1983; the compulsory medical savings scheme (Medisave) in 1984; catastrophic illness insurance (Medishield) in 1990; and a means-tested Medical Endowment Fund (Medifund) in 1993 to protect those unable to pay their medical expenses. The *Central Provident Fund Act 1953* is the legislative basis for the Medisave, Medishield, and Medifund, or so-called “3Ms” of the Singaporean integrated system of compulsory saving accounts (Chia and Tsui 2005). Currently, contributions to the Central Provident Fund (CPF) amount to 40% of gross salary, shared between the employee and the employer (6-8% are contributed to the Medisave accounts). It should be noted that payments from Medisave account for 8% of the Singapore’s total health expenditure, with an additional payments from Medishield and Medifund combined being less than 2% (Lim 2004).

Medisave funds can be withdrawn when required to meet hospitalisation and selected out-patient medical expenses. Medishield is a catastrophic insurance scheme with user co-payments and high deductibles designed to limit over-utilization of medical services that might arise from moral hazard behaviour. Medishield benefits are payable if the length of hospital stay exceeds 150% of the ALOS. Medifund is a means-tested assistance programme for those who are needy and cannot afford their medical bills. Inpatient hospitalization are subsidised by the state at the point of usage, with the level of subsidies varying according to the patient’s choice of hospital ward type.

In late January 2005, the Ministry of Health declared their vision for a competitive and dynamic catastrophic medical insurance sector and announced details of the Medishield reform under which the necessary measures required would take place.¹⁷ Greater market competition is expected to encourage innovative and competitively priced products to cater to the diverse catastrophic insurance needs of the Singapore population. Under this initiative, private insurers will be allowed to provide enhancement packages to the national catastrophic insurance scheme Medishield, with an expected patient’s OOP for a large Class B2/C hospital bill being 30% on average (Chua 2005). Potential new entrants into this market are subjected to a set of requirements regulating the minimum co-payment rate and deductible level.

As part of the Medishield reform, Medishield Plus – the publicly managed enhanced catastrophic insurance scheme – was sold to a private insurer by means of a competitive tender. Amongst the conditions spelled out under the tender includes those that require the successful bidder to enhance the benefit package by increasing the claim limits and

¹⁷ Ministry of Health, 2005. *Transitioning to a competitive and dynamic private medical insurance market*. Press release dated 3 Feb 2005. Available at: <http://www.moh.gov.sg/corp/about/newsroom/pressreleases/details.do?id=30244970>

decreasing the co-payment rate, and those that ensure the continuation of coverage for all existing Medishield Plus policy holders.¹⁸ The new insurer also is required to honour its proposed premium charges for at least 3 years.

ii) Broad details of private involvement, including through company and individual health insurance arrangements

The public sector provides three-quarters of hospital beds in Singapore: out of 29 Singaporean hospitals (11,840 beds in 2004), 13 are operated by the Ministry of Health (8,813 public beds) and 16 belong to the private sector (3,027 beds).¹⁹ In 2002, 84% of patient discharges were from public hospitals (Khoo 2003). At the same time, almost a half of practicing physicians are in private sector. Public patient beds in public hospitals are subsidised and account for 79% of public beds. The remaining 21% of beds in public hospitals are either private or semi-private²⁰. There is a range of accommodation options offered in public hospitals, ranging from a private A room, semi-private (B1, B2+, B2 with 3-4 beds) to an open ward of 10+ patients (Class C). The cost of treatment and accommodation in the Class C room is 20% that of the full cost-paying A room, and 27% that of the B1 room. Singapore consciously structures competition between public and private hospitals. Patients are informed of price differentials so they can make informed decisions between public and private providers.

There are limits on the benefits payable under the compulsory insurance scheme through both Medisave and Medishield, with large OOP expenditure for ward classes above B2+ and private hospital admissions. CPF/Medisave-approved supplementary private health insurance is offered commercially, including HMO-type products. Private health insurance accounts for 5% of total health expenditure, but is not classified as “prepaid plans” for the WHO/ NHA purposes, as the premiums for an additional cover under the Medisave-approved private health insurance fund are drawn from the Medisave accounts, up to an annual limit of S\$800²¹. A comparison of benefits provided by 18 Medisave-approved private integrated plans reveals that there is an extension of coverage in terms of maximum age (increase from 85 to lifetime) provided in most of the private products. The limit on the day charges and surgery is significantly higher, as well as provisions for outpatient treatment of catastrophic chronic diseases.²² The co-payment rate of 10% and fixed deductibles for B2/C wards (\$1,500 and \$1,000, respectively) are listed in all private schedules. Deductibles for Class A wards are in the \$3,000-4,000 range.

In accordance with the *Insurance Act 1966* amended by the *2003 Insurance (Amendment) Act*, Accident and Health (A&H) policies are classified under life business (Art 2(a)). Art 24 on regulation of premiums under life policies and long-term accident and health policies stipulates that premiums must be approved by the appointed actuary.

The life insurance industry sold 700,077 new individual policies in 2004, providing life insurance coverage of S\$29.4 billion. Of these policies, 27.7% were health policies. Domestic life premiums constituted 6.6% of GDP in 2004, while domestic life fund assets contributed 39.8% of GDP. Per capita spending on life insurance in 2004 was S\$2,801 (MSA Insurance Report 2004). The distribution of group business has changed following re-

¹⁸ Ministry of Health, 2005. Privatisation of Medishield Plus. Press release dated 21 June 2005. Available at <http://www.moh.gov.sg/corp/about/newsroom/pressreleases/details.do?id=32014359>

¹⁹ Ministry of Health, 2006. <http://www.moh.gov.sg/corp/publications/statistics/facilities.do>

²⁰ <http://app.internet.gov.sg/scripts/moh/newmoh/asp/our/our01.ap>

²¹ Exchange rate: 1.00 Singapore Dollar = 0.84 Australian Dollar (29th May 2006)

²² Ministry of Health, 2006: http://www.moh.gov.sg/cmaweb/attachments/topic/36a42956fapD/Comparison_of_IPs_0.pdf

classification of A&H policies: in 2003, 38.9% of group business was in Accident & Health, compared to 52.7% in 2004.²³

There were nine domestic direct life insurers and two foreign insurers operating in Singapore as of end 2004. In A&H individual life business, the foreign provider AIA has underwritten 34% of all new policies in 2004 and 31% of annual premiums. The two largest domestic providers were Great Eastern Life (25% of new policies and 27% of premiums) and NTUC Income (37% and 24%, respectively). Top three insurers in A&H issued 97% of policies and collected 82% of annual premiums. There were 192 thousand new policies issued generating S\$41 million in premiums.

In terms of total A&H policies in force in individual business, the market leader is NTUC Income (46% of policies and 36% of premiums) followed by AIA (28% and 30%) and Great Eastern Life (25% of all policies and 29% of premiums, respectively). Top three insurers in A&H issued 99% of policies and collected 95% of annual premiums. There were 1.78 million policies outstanding generating S\$451 million in premiums.

The group insurance market in A&H is smaller than individual market, with total of 3 thousand new policies issued covering 162 thousand lives, for the annual premiums of S\$20 million. The market is marginally less concentrated than individual market, with top three insurers (AIA, Aviva and NTUC Income) underwriting 84% of new premiums. In terms of total group A&H policies outstanding in 2004, 1.25 million lives were covered at S\$152 million in premiums. Three leading insurers were covering 77% of all lives and collected 86% of premiums.²⁴

iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

The degree of financial protection provided by compulsory medical savings accounts scheme is limited, with patients paying large portion of medical expenses directly out of pocket and only small portion from MSA. Design of Medisave and Medishield employs high deductibles, exclusion of most outpatient services, and caps on benefits according to the category of service. Among the limitations of the Medisave accounts is a limited degree of risk-pooling (only intertemporal and within the immediate family). Asher and Nandy (2006) argue that the current level of risk protection against uncertain medical expenditure remains low compared to the OECD standards.

To address the growing need for long term care by the elderly in the gradually ageing Singapore population, the government introduced in 2001 a severe disability insurance scheme.²⁵ Under the Eldersshield scheme, members who suffer from severe disabilities are entitled to a cash benefit which can be used to pay for institutional-based or home-based long term care. With the objective of increasing private sector's involvement in the severe disability insurance market, the government initiated Eldersshield scheme was tendered out to private insurers through a competitive bidding process. Up to four insurers can be contracted to offer Eldersshield. Through this tender, insurers are required to adhere to government specifications on the structure of the scheme, amongst which include the incorporation of a premium rebate feature and regulations on how often and by how much premiums can be adjusted.²⁶ Premiums payments to approved insurers can be made using funds from

²³ MSA Insurance Report 2004: Table AL 3.4

²⁴ MAS Insurance Report 2004: Table L9

²⁵ Ministry of Health, 2001. *Eldersshield*. Press release dated 24 August 2001. Available at: <http://www.moh.gov.sg/corp/about/newsroom/pressreleases/details.do?id=10092910>

²⁶ Ministry of Health, 2001. *Tenders for Eldersshield and the interim disability assistance programme for the elderly*. Press release dated 4 December 2001. Available at: <http://www.moh.gov.sg/corp/about/newsroom/pressreleases/details.do?id=10092894>

individuals' Medisave accounts. Barr (2001) finds that the 3Ms leave substantial portions of population (in particular, poor and chronically sick, especially women without own Medisave accounts) vulnerable in face of the health care costs. These vulnerable groups rely on the lowest class public wards and charity for their medical needs. The overall efficiency of the Singapore MSA health finance system remains a subject of intense debate (see e.g. Hsiao 2001, 1995 vs Pauly 1995, 2001; and Massaro and Wong 1995, 1996).

Chia and Tsui (2005) study the adequacy of medical saving accounts in Singapore to cover lifetime healthcare expenditure of retirees aged 62 and above, by gender and income group. They find that the required minimum balance of S\$25,000 is adequate for less well-off members under a range of assumptions about medical technology growth and future interest rates. However, Medisave accounts become inadequate for the better-off females, and more so under the more rapid change in medical technology. Combined with the fact that MediShield catastrophic insurance plan does not cover those above 80 years of age,²⁷ the adequacy of this finance mechanism for long-term care is also questioned. In 2001 a special Eldercare Fund was set up by the government to finance long-term care of the aged through subsidies to voluntary welfare providers of such care, with the total amount to reach S\$2.5 billion by 2010 (Lim 2004). To address a deficiency of the MediShield program, an ElderShield severe disability insurance scheme was set up in 2002 to provide a fixed monthly coverage of S\$300 for up to 5 years, with premiums deductible from Medisave accounts.

Lim (2004) discusses the proposed revisions to the Medisave rules including raising the withdrawal limits based on DRGs (and reducing the required OOP payments), and introducing a Portable Medical Benefits Scheme to increase the role of a supplementary private health insurance, funded by an additional 1% contribution by employers.

Total accumulated Medisave balances in 2004 were S\$32.1 billion, with an average balance in active accounts of S\$17,321 (Chua 2005). As of end-December 2004, more than a third (478 thousand out of 1.3 million) active Medisave accounts have balances in excess of S\$25,000 (Chua 2006). While at present the combination of government subsidies, Medisave and Medishield accounts make the basic hospital care in lower class wards affordable by the majority of population, the effect of ageing and the rising probability of hospitalisation will draw down accumulated Medisave balances. The hospital day withdrawal limit of S\$300 has been recently increased to S\$400 to reduce out-of-pocket expenditure by those in higher class wards (Chua 2006).

The premiums of the MedisavePlus insurance contracts are age-dependent, with a rapid increase in premiums for those aged 65 and above²⁸. As the share of 65+ in total population is projected to grow in Singapore, and the old-age dependency ratio is projected to increase from 10 in 2000 to 56 in 2050 (see Figure 1 in main report), there will be additional pressures on benefits and premiums. Additional cost pressures arise from active promotion of Singapore as a health services hub in Asia to attract patients and export health services in "Mode 2" in the terminology of General Agreement on Trade in Services (GATS). Concerns have been raised about the impact of a technologically intensive health tourism sector on the costs across the system and on the demand for medical workforce.

²⁷ As of 2006, maximum coverage age under Medishield is 85, and the last entry age is 75. See: http://www.moh.gov.sg/cmaweb/attachments/publication/36fe30976911/Comparison_of_IPs_wef_1_May_2006_0.pdf

²⁸ Ministry of Health, 2006. http://www.moh.gov.sg/cmaweb/attachments/topic/36a42956fapD/Comparison_of_IPs_0.pdf

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

The degree of competition in the private health insurance market is limited by the size of the market and the regulatory framework. The market shares of the leading health insurance providers are discussed in section (ii) above. The top three insurers in individual A&H business issued 99% of policies and collected 95% of annual premiums. The market share of the three leading group insurers was 77% of all lives covered and 86% of premiums.²⁹

General responsibilities for developing a sound and competitive insurance market are vested with the Monetary Authority of Singapore (MAS) responsible for supervising and developing the insurance industry, with dual objectives of fostering a sound insurance industry and developing a competitive and progressive market (AAR 2003).

Consumer information is provided by the life and general insurance industry groups. The Life Insurance Association (LIA) of Singapore released guidelines on needs-based sales processes for individual and group life and health insurance products, as well as consumer publications. There are also industry guidelines on disclosure requirements for Accident & Health products stipulating minimum information requirements on insurance product, as well as marketing guidelines.³⁰

In August 2005, the Financial Industry Disputes Resolution Centre Ltd (FIDReC)³¹ was established to handle financial sector disputes, taking over the insurance industry's Insurance Disputes Resolution Organisation (IDRO).³² FIDReC mediation services are free for individuals or sole-proprietors. If no resolution is found, the issue is referred to a panel of adjudicators for a nominal fee of S\$50. Insurance cases within FIDReC's jurisdiction are up to S\$100,000. Other ways to resolve dispute include Consumer Association of Singapore, Singapore Mediation Centre or Small Claims Tribunal.³³

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

The issue of portable medical benefits has been of recent interest in Singapore. The country's largest workers' union, the National Trade Union Congress (NTUC), have been advocating for greater portability in medical benefits to allow employees to continue insurance coverage when they switch employers and change group insurance plans. Portable medical benefits are of particular importance to older workers, who may only be offered insurance that excludes pre-existing conditions (especially when the onset of illness occurred during the individual's previous employment) or may not be able to obtain coverage at all when they join the group plans under the new employer.

A tripartite cooperation between employers, insurers and unions is spearheading the development of a portable medical benefits scheme known as the Transferable Medical Insurance Scheme (TMIS).³⁴ Employers enjoy tax deductibility for medical expenses of up to

²⁹ MAS Insurance Report 2004: Table L9

³⁰ http://www.lia.org.sg/ftp/site/guide/LIA_GIADisclosure.pdf

³¹ <http://www.fidrec.com.sg>

³² http://www.mas.gov.sg/masmcm/bin/ptIConsumer_Portal_Dispute_Resolution.htm

³³ See MAS. *Getting it right: how to resolve a problem with your financial institution* http://www.mas.gov.sg/masmcm/upload/mm/MM_47DD8AAF_6295_5312_480AD65365FCF45B_ADC6044B_D606_F5E9_60046C3C1DB18594/Brochure%20English.pdf

³⁴ NTUC, 2006. *Portable medical benefits on the way*. Available at: http://www.ntuc.com.sg/ntucunions/news/news_110403e.asp. See also MAS Annual Report 2003-2004.

2% of payroll if they adopt TMIS.³⁵ Individuals who are currently insured under an employer sponsored TMIS plan will retain their insurance coverage when they switch to another employer who offers a group plan under the TMIS. This transfer of coverage is permitted even when the employers subscribe to TMIS plans from different insurers as the scheme will be offered by a consortium of 13 insurance companies. Individuals who are retrenched will be able to retain insurance coverage for a maximum of 12 months if the TMIS premiums are paid. Premiums of TMIS plans are expected to be 5% to 20% more than existing group insurance plans. TMIS is expected to be launched in July 2006.

The Government purported that the new developments under the MediShield reform supports private sector initiatives to enhance the portability of employer sponsored medical benefits.³⁶ Employers may consider providing supplementary financial assistance to encourage their employees to participate in the national catastrophic insurance scheme MediShield as a basic hospitalisation insurance package and provide enhanced benefits through the corporate insurance schemes, new MediShield-Plus plans or otherwise.

vi) investment guidelines for private health insurers and asset allocation policies

As of the end of 2004, total assets of the Singapore life insurance funds increased by 12.2% to S\$58.8 billion comprising mostly “admitted assets”. This compares to S\$31 billion in total assets in 2000. Investments in equities and other securities accounted for 19.8% and 36.9% percent of total admitted assets respectively. Loans (comprising mortgage loans, policy loans, and other secured loans) accounted for 6.3% while cash and deposits accounted for 7.9%. Investments in government securities and public authority securities rose by to S\$13.9 billion accounting for 23.6% of total admitted assets. Land and buildings and other assets accounted for 5.6% of total admitted assets. The composition of assets demonstrates an increased share of government securities (from 12% in 2000 to 23.6% in 2004), and a reduction in loans holdings (from 15.1% in 2004 to 6.3% in 2004). The share of equities shares and other securities remained relatively stable at 52-57% of the total assets portfolio (MAS Insurance Report 2004). Note that assets of both statutory funds (Medisave and Medishield) are administered by the Government that makes the decision on their investment in the capital market, guaranteeing a minimum 2.5% return. State investment decisions are not very transparent and the official preference is for infrastructure projects (Schreyogg 2004).

vii) the regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

Insurance Act 1966 provides integrated regulatory framework for insurance business and insurance intermediaries in Singapore. The MAS supervises the Act and has power to regulate all elements of monetary, banking and financial aspects of Singapore (AAR 2003).

The new 2003 Insurance (Amendment) Act introduced a risk-based capital framework that reflects relevant risks to ensure capital adequacy. Improved prudential standards and financial reporting facilitates early progressive prudential intervention by MAS.³⁷ S 17(6) of the Act introduces ‘surplus account’ to participating fund of direct life insurers. S 18(4) gives discretionary power to direct insurers to satisfy fund solvency and capital requirements other than those required under S 18 as it considers relevant.

³⁵ Life Insurance Association, Transferable Medical Insurance Scheme (TMIS). Available at: http://www.lia.org.sg/ftp/site/guide/TMIS_Mkt.pdf

³⁶ Business Times. Singapore. 2005. *MediShield reform can help achieve portability*. 1 March 2005.

³⁷ For details on prudential standards, see: [http://www.mas.gov.sg/masmcm/upload/mm/MM_9919E99D_6295_5312_4D98573BA5A29E77_9919E9AD_6295_5312_43247D1E06915A58/Insurance%20\(Valuation%20and%20Capital\)%20Regs%202004.pdf](http://www.mas.gov.sg/masmcm/upload/mm/MM_9919E99D_6295_5312_4D98573BA5A29E77_9919E9AD_6295_5312_43247D1E06915A58/Insurance%20(Valuation%20and%20Capital)%20Regs%202004.pdf)

The new Act proposed a framework to govern both underwriting and distribution of policies containing 'Accident and Health benefits'. The products are classified into long term (duration > 5yr) and short term. Short term can be underwritten by both life and general insurers; long term can only be written by life insurers. Intermediaries are prohibited from advising or arranging health insurance products, unless they have the required qualifications. There is an enhanced level of information disclosure that allows consumers to make an informed buying decision.

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USA

i) Private funding contribution to the overall/universal health funding of an economy

Total national expenditure on health in the USA has risen from 14.6% of GDP in 2002 to 16% in 2004, with 55% of total expenditure financed from private sources.³⁸ Over 2000-2004, the growth rate in national health care costs outstripped the annual growth rate of GDP by about 3% on average. The share of out-of-pocket expenses in 2002 represented 25.4% of private expenditure on health, while private prepaid plans contributed 65.7% of private expenditure.

The role of private sector in health finance and provision is high in the USA. In 2004, private health insurance was the largest single source of health funding providing for 35% of the national health care expenditure. Other major components are: 17% contribution from publicly funded Medicare program; 16% from publicly funded Medicaid and SCHIP (State Children's Health Insurance Program); 13% of other government programs; 13% contribution from OOP; and 7% other private expenses.

Publicly funded Medicare provides almost a universal coverage of older Americans. Part A covers most Americans over 65, and provides hospital insurance coverage. Medicare Part B provides supplementary medical coverage for outpatient services and, although optional, covers almost all eligible parties. Medicare + Choice (M+C) program enacted in 1997 encouraged Medicare beneficiaries to join privately operated managed care plans, offering greater range of benefits (e.g., prescription drug coverage) in exchange for accepting limits on choice of providers. In 2003, Congress renamed M+C into Medicare Advantage, and enacted prescription drug benefits for Medicare beneficiaries. There were 41.7 million aged and disabled enrollees in Medicare in 2004, most members (85%) falling into aged category. Within the enrolled pool, spending per beneficiary rises with age, and it is projected that the total number of Medicare enrollees will nearly double between 2000 and 2030, from about 40 million to 79 million beneficiaries.³⁹ Many Medicare beneficiaries also purchase private Medicare Supplemental Insurance (Medigap) policies or have coverage from a former employer. Medigap policies are federally regulated and must include specified core benefits.

Publicly funded Medicaid provides coverage for approximately 37.5 million Americans in 2004, with an additional 10.7 million covered through public military health care program (DeNavas-Walt *et al.* 2005). Although the federal government sets eligibility and service parameters for the Medicaid program, the states specify the services they will offer and the eligibility requirements for enrollees. Medicaid programs generally cover young children and pregnant women whose family income is at or below 133 percent of the federal poverty level, as well as many low income adults. Most states have most of their Medicaid population in some form of managed care. Medicaid pays for a majority of long term care in the United States (FTC & DOJ 2004).

A significant proportion of American population is uninsured. In 2004, 245.3 million (84.3 percent of the US population) were covered by a public scheme or private health insurance, while 45.8 million (15.7%) remained uninsured, up from 45.0 million people in 2003 (DeNavas-Walt 2005). Analysis of 1998-2000 health insurance data from the Medical Expenditure Panel Survey shows that almost a third of respondents aged under 63 years were uninsured or had unstable insurance coverage in a two-year period. Young adults, Hispanics, people with low levels of education, those who transition into and out of poverty, and those with private non-group insurance were most likely to have unstable coverage (Klein *et al.* 2005).

³⁸ http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp

³⁹ http://www.medpac.gov/publications/congressional_reports/Jun04DataBookSec1.pdf

ii) Broad details of private involvement, including through company and individual health insurance arrangements

Private sector is a major player in both funding and provision of health care, including through the managed care organisations. Major types of health insurance products offered by private sector include individual plans, Medigap, small group major medical, large group major medical, disability income, hospital indemnity, hospital-surgical only, short-term major medical, limited-benefit and long-term care policies. Almost 60% of insurance coverage is provided through employment-based group contracts (DeNavas-Walt *et al.* 2005).

Employment-based health insurance

The federal government subsidizes employment-based health insurance through the tax code. Employer contributions for health insurance coverage are deductible to employers and are excluded from employees' and retirees' taxable income (FTC & DOJ, 2004).

Employers offer insurance to their employees and retirees through various sources, including commercial insurance companies, employers' self-funded plans, or various combinations of the two. Employers that offer health insurance through commercial insurers usually negotiate on behalf of their employees for a package of benefits at a specified monthly premium per person or per family. Some employers choose to self-fund (self-insure) by assuming 100 percent of the risk of expenses from their employees' health care coverage.

Some employers create self-insured plans, but contract with commercial insurance companies to act as a third-party administrator for claims processing, for access to a provider network, or to obtain stop-loss coverage. Not all employers offer health coverage, and some employers offer coverage only to full-time employees. In some sectors of the economy, employment based health insurance is less common. The larger the employer, the more likely it is to offer health insurance. Premiums and coverage vary widely. The number of people with employment-based insurance fluctuated throughout the 1990s but has currently stabilized at approximately 61 percent of the U.S. population.

The recent economic contraction led to the reduction in benefits provided through employment-based insurance, either through the decreased coverage of dependants, limiting benefits in retirement, or increased co-payments/premium contributions by employees (Boushey and Wright 2004 a-c). Much of the switch from employer-provided health insurance to Medicaid/ State Child Health Insurance Program (SCHIP) has been among children.

Managed Care

Managed care organizations (MCOs) integrate the financing and delivery of health care services, albeit to varying degrees. In global terms, managed care offers a more restricted choice of (and access to) providers and treatments in exchange for lower premiums, deductibles, and co-payments than traditional indemnity insurance. Three main strategies to control costs within MCOs include: selective contracting with providers included in the provider network; financial risk-sharing with providers (including through capitation payment for e.g. physician services); and utilization review of proposed treatments and hospitalizations.

In response to growing dissatisfaction with restricted choice, limited access to necessary medical care and insufficient quality of MCOs' services, a number of federal and state legislative and regulatory initiatives stimulated growth in more flexible arrangements. These include Point-Of Service (POS) plans (with a primary care gatekeeper, but also offering the use out-of-plan specialists) and Preferred Provider Organizations (PPOs) (based on a panel of "preferred providers" who agree to accept discounted fees for service), with more than 100 million Americans receiving their health care benefits through a PPO (FTC & DOJ 2004). Proliferation of PPOs has been attributed to the providers' defensive reactions to the growth of HMOs, and consumer and employer preferences for greater choice in selecting primary

care and specialized physicians than many HMOs offered. Other cost-controlling measures include Payment for Performance (P4P) initiatives by public and private payers (FTC & DOJ 2004).

A new cost-containment strategy adopted by MCOs and large self-insured employers is an increased cost-sharing discussed in the following section.

Cost-sharing incentives through Consumer-Driven Health Plans

In a move to change patients' incentives through cost-sharing and larger deductibles, Consumer-Driven Health Plans (CDHP) were introduced, with cost savings deposited into special Health Savings Accounts (HSAs) (GAO, 2006). Following a 2003 Medicare legislation tax change, an individual buying health insurance plan with a high deductible (at least \$2,100 for a family) can put the equivalent amount of money into tax-free accounts, whose balances can accumulate over years. Tax advantaged savings accounts (Health Savings Accounts, Health Reimbursement Arrangements, and Flexible Spending Accounts) can be used to pay for out-of pocket health care expenses with pre-tax dollars. A survey by Deloitte Development LLC (2005) reveals that CDHC becomes increasingly popular with both employers and employees, with 43 percent of companies surveyed in 2005 offering, or planning to offer, a consumer-driven health plan, compared to just 19 percent in 2003. Sixty-three percent of the respondents offer a Health Reimbursement Account plan, and 31 percent offer a high-deductible managed care plan with a Health Savings Account (HSA).

Deloitte Consulting LLP and the Deloitte Center for Health Solutions (2006) estimate that CDHPs will be effective in containing health care costs. In 2005, PPOs and HMOs plans in the survey experienced 8.0-8.5% percent average increase in costs, compared to an 2.8% increase for a CDHP. Respondents that offer or plan to offer a CDHP are rapidly shifting their approach to funding the "benefit bank" component of their plans from a traditional employer-funded Health Reimbursement Account (HRA) to the newer Health Savings Account (HSA). Unlike HRAs, employees "own" their HSA and can carry the account from one job to the next. HSAs can be funded by both the employer and the employee, thus offering the plan sponsor much more flexibility in their design.

Individual Insurance

The individual (non-group) insurance market is relatively small (with about 16 million enrollees in 2000), due to the strong tax incentives provided for employment-based coverage. Academy Health (2006a) finds that the individual insurance market is relatively heterogeneous, with most individual coverage used to bridge gaps in employer-based coverage. Individual insurance policies are generally more expensive and less comprehensive than group policies, because of the adverse selection and relatively higher marketing and administrative expenses (FTC & DOJ 2004). Individual health insurance products are risk-rated. Those unable to obtain individual cover due to health conditions may be eligible to be insured within the state-operated high-risk health insurance pools with premiums capped by state law. Despite collecting somewhat higher premiums from enrollees, high-risk pools are subsidized through federal grants to remain solvent. The 2003 enrolment was 178,000 individuals, or less than 2 percent of individual market participants (Academy Health 2006b). AHIP Centre for Policy and Research (2005) provides results of the survey on the US individual health insurance market including premiums, underwriting and benefits.

iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums

In the survey of health insurers, Deloitte Consulting LLP and the Deloitte Center for Health Solutions (2006) find increased utilisation of services, more generous plan design and the costs of prescription drugs have been the major cost drivers in 2006. Pricewaterhouse Coopers (2006) estimate that the overall increase in premiums between 2004 and 2005 was 8.8 percent (compared to 13.7 percent annual increase in 2002). Based on their estimates,

general inflation accounted for 27 percent of the 2005 increase in health insurance premiums. Increased utilization of services accounted for an estimated 43 percent of the increase. Price increases in excess of inflation for healthcare services accounted for the remaining 30 percent of the increase in health insurance premiums.

Pricewaterhouse Coopers (2006) further decomposed the 8.8 percent annual increase in premium costs by component and find that ageing per se contributes only 0.5 percentage points out of 8.8 total, with more important cost drivers being general inflation (2.4), increased consumer demand (1.2), broader-access plans/provider consolidation (1.1), new treatments and higher priced technologies (1 percentage point each), lifestyle changes (0.3), more intensive diagnostic/ defensive medicine (0.8) and cost-shifting (0.5).

They also estimate the premium increases due to cost increases by type of service and find that the estimated increase in outpatient costs (13.6 percent) contributed to almost a quarter of overall premium increases in 2005. Other services such as physician, inpatient hospital, prescription drugs, and other medical services contributed to the balance of premium increases fairly evenly. In the other direction, widespread adoption of multi-tiered pharmaceutical benefits and generic drugs has helped slow the rate of increase in prescription drug spending.

The study found that 86 cents out of every premium dollar go directly towards paying for medical services such as hospital care, physician care, medical devices and prescription drugs. Of the remaining costs, five cents go to other consumer services, provider support, and marketing (including prevention, disease management, care coordination, investments in health information technology and health support). Costs associated with government payments, regulation and other costs associated with administration (e.g., claims administration) comprise an estimated six cents. Health plan profits represent three cents of the premium dollar.

Finally, they found that premium increases follow healthcare spending increases closely over time. Over the most recent ten-year period (1993-2003) for which data are available,⁴⁰ premiums grew at an annual rate of 7.3 percent, while the cost of healthcare services grew at an annual rate of 7.2 percent.

iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection

Ensuring competition in health insurance industry is within the jurisdiction of the Federal Trade Commission (FTC) and is subject to the antitrust law. There are some features of the health market which limit competition, such as information asymmetry about price and quality of services, as well as treatment options. Information technology application in health care is still insufficient to ensure efficient information flows (FTC & DOJ 2004).

A comprehensive study of competition in the US health insurance market (AMA 2005) finds that there is a limited degree of competition, with certain major health insurers having amassed significant market power through mergers and acquisitions but receive minimal [regulatory] scrutiny. Recognising the monopsony power health insurers over the purchase of physicians' services, the US Department of Justice oversaw more than 400 mergers in health insurance and managed care sector over 1995-2004, challenging only two. The FTC has lost a series of cases with respect to hospital mergers, with appellate courts failing to agree that hospitals as non-profit corporations would exercise market power following acquisitions (Nichols, Ginsburg *et al.* 2004). Over the period of market consolidation, health insurance premiums have been rising without expansion of benefits, with most gains accruing to the share-holders and not policy holders.

⁴⁰ <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf>

The American Medical Association expressed its concern that the United States is heading towards a commercial health insurance system dominated by a few publicly-traded companies that operate in the interest of share-holders (AMA 2005). In support of this statement, the AMA study constructed the Herfindahl-Hirschman Index (HHI) in reviewing the competitive impact of mergers. It found that for the combined HMO (Health Maintenance Organisation) and PPO (Preferred Provide Organisation) markets, 86 of the 92 metropolitan areas had an HHI that exceeded 1800 (deemed “highly concentrated” by Federal regulators). In 96% of MSAs (metropolitan statistical areas), one insurer had an HMO market share of 30% or more. In 17% of the MSAs, at least one insurer had a HMO market share of 90% or more. In 9% of MSAs, at least one insurer had a PPO market share of 30% or more. In 9%, one insurer had a market share of 90% or more.

In particular the aggressive acquisition of WellPoint, Inc and UnitedHealth Group seems unabated. Wellpoint now covers approximately 34 million Americans; Wellpoint and United control 33% of the US Commercial Health Insurance Market.

Centers for Medicare & Medicaid Services (CMS), formerly known as the Health Care Financing Administration (HCFA), is the federal agency responsible for administering the public insurance schemes such as Medicare, Medicaid and SCHIP (State Children's Health Insurance), including consumer protection issues.

The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans. ERISA requires plans to provide participants with plan information including important information about plan features and funding; provides fiduciary responsibilities for those who manage and control plan assets; requires plans to establish a grievance and appeals process for participants to get benefits from their plans; and gives participants the right to sue for benefits and breaches of fiduciary duty.

v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) was signed into law in 1996. The law included new protection for those switching jobs and / or between plans. HIPAA amends Title 1 of ERISA (Employee Retirement and Income Security Act 1974).⁴¹

The Health Insurance Portability and Accountability Act of 1996, (HIPAA) provides some degree of protection for Americans employees and their families by limiting the use of pre-existing condition exclusions; prohibiting group health plans from discriminating by denying coverage or charging extra for coverage based on health history; guaranteeing certain small employers, and certain individuals who lose job-related coverage, the right to purchase health insurance; and guaranteeing, in most cases, that employers or individuals who purchase health insurance the renewal of the coverage regardless of any health conditions of individuals covered under the insurance policy.

At the same time, HIPAA does not impose the requirement on employers to provide health insurance coverage, does not control premiums or require group health plans to offer specific benefits. States remain the primary regulators of health insurance.

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http://www.cms.hhs.gov/HealthInsReformforConsume/_02WhatHIPAADoesandDoeSNotDo.asp

The Administrative Simplification provisions of HIPAA require the Department of Health and Human Services (HHS) to establish national standards for electronic health care transactions and national identifiers for providers, health plans, and employers. It also addresses the security and privacy of health data.⁴²

Another important piece of federal legislation on health insurance is the Consolidated Omnibus Budget Reconciliation Act (COBRA), an amendment to ERISA, expanding the protections available to health benefit plan participants and beneficiaries. The Consolidated Omnibus Budget Reconciliation Act (COBRA) gives workers and their families who lose their health benefits the right to choose to continue group health benefits provided by their group health plan for limited periods of time under certain circumstances such as voluntary or involuntary job loss, reduction in the hours worked, transition between jobs, death, divorce, and other life events. Qualified individuals may be required to pay the entire premium for coverage up to 102 percent of the cost to the plan.

COBRA generally requires that group health plans sponsored by employers with 20 or more employees in the prior year offer employees and their families the opportunity for a temporary extension of health coverage (called continuation coverage) in certain instances where coverage under the plan would otherwise end.⁴³

vi) investment guidelines for private health insurers and asset allocation policies

Unlike banking and securities sectors, financial regulation of insurance industry is conducted by the States, with assistance the National Association of Insurance Commissioners (NAIC), a voluntary association of state insurance regulators.⁴⁴ Currently, responsibility for regulating health plans is divided between the Federal Government and the States. Under the Employee Retirement Income Security Act [ERISA], the Federal Government regulates private health plans offered by employers and unions. The States are responsible for regulating health coverage sold by insurance carriers (GAO 2000). The oversight activities of state insurance regulators may typically vary, but all include oversight of chartering and change in ownership approvals; routine financial analyses, and periodic on site examinations.

The NAIC's Securities Valuation Office (SVO) is responsible for day-to-day credit quality assessment and valuation of securities owned by state regulated insurance companies. NAIC's Risk-Based Capital (RBC) standards impose a minimum level of capital and surplus on insurance companies based on a complex set of rules that are designed to increase minimum surplus requirements commensurate with an increase in risk. When insurers drop below the minimum requirements, they are subject to an increasingly stringent set of regulatory responses, depending on the degree to which they fail to meet the minimum standards (Klein and Barth 1995).

Risk-Based Capital Requirements Capital standards are at the core of solvency regulation. Current fixed minimum capital and surplus standards, which typically are in the area of \$2 million for a multi-line insurer, are more appropriate for start-up operations than they are for established companies with significant premium volume and risk exposure (Klein and Barth 1995). Fixed minimum capital standards become inadequate for many large multi-line insurance companies.

The NAIC's life/health RBC formula encompasses four major categories of risk: 1) asset risk; 2) insurance or pricing risk; 3) interest rate risk; and 4) business risk. Asset risk encompasses the risk of default and market value declines of an insurer's investment portfolio. Insurance risk refers to the potential that premiums and reserves are inadequate to cover

⁴² <http://www.cms.hhs.gov/HIPAAGenInfo/>

⁴³ <http://www.dol.gov/dol/topic/health-plans/cobra.htm>

⁴⁴ <http://www.naic.org/svo>

benefit payments. Interest rate risk addresses the possibility that an insurer will have liquidity problems from disintermediation due to interest rate changes. Business risk, in the context of RBC, refers to an insurer's potential obligation for guaranty fund assessments.

vii) the regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

Regulation can be divided into market regulation and solvency regulation. The discussion in the following section is based on Klein and Barth (1995).

The annual financial statement filed by insurers is the primary tool in regulatory monitoring. Most states also require insurers to file quarterly statements which contain key information on assets and liabilities, income, changes in investment holdings, premiums written, losses and reserves. The NAIC promulgates a detailed set of instructions to accompany the statement to guide insurers and regulators on proper reporting. Most state laws require annual statements to be filed with state insurance departments and the NAIC by 1 March of the year following the statement year. Insurers are required to report their financial information according to statutory accounting principles (SAP) which differ from generally accepted accounting principles (GAAP) in, among other things, more conservative valuation of assets. The NAIC maintains an extensive financial database on insurance companies accessible to state insurance departments, which serves as the core of the solvency surveillance and other analysis activities of state insurance regulators and the NAIC.

Financial Stability of Health Insurance Market (based on aggregated life/health insurance industry data)

Source: <http://www.financialservicesfacts.org/financial2/insurance/lhfinancial/>

LIFE/HEALTH INSURANCE INDUSTRY: SELECTED OPERATING DATA, 2002-2004

(\$ millions)

	2002	2003	2004
Premiums and annuity considerations (1)	510,876.60	500,237.00	531,234.50
Net investment income	141,647.70	142,926.90	145,554.50
Net gain from operations (2)	23,396.80	39,117.90	41,150.90
Federal and foreign income taxes (3)	3,714.00	7,891.60	10,007.60
Net realized capital gains/losses	-15,643.70	-4,668.30	1,093.20
Net income	4,039.20	26,558.00	32,236.50
Dividends to stockholders	-12,872.60	-10,961.20	-13,060.80
Capital and surplus (end of year)	205,591.60	223,825.00	237,066.70

(1) Life and accident and health policies and contracts.

(2) After dividends to policyholders and before federal income taxes.

(3) Incurred (excluding tax on capital gain).

Source: NAIC Annual Statement Database, via National Underwriter Insurance Data Services/Highline Data.

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Terms of Reference

ABAC 2006 – FINANCE WORKING GROUP**9th March 2006****TERMS OF REFERENCE:****FOR WORK COMMISSIONED BY THE APEC BUSINESS ADVISORY COUNCIL:*****COPING WITH THE CHALLENGES OF POPULATION AGEING; POLICY CONSIDERATIONS FOR PRIVATE SECTOR INVOLVEMENT IN A PRIVATE HEALTH SECURITY PILLAR IN A UNIVERSAL HEALTH SYSTEM IN APEC ECONOMIES*****BACKGROUND**

APEC Finance Ministers at their meeting in Jeju, Korea in September 2005 agreed, in the Jeju Declaration, to establish an Expert Group to Study Ways to Cope with the Challenges of Population Ageing and Possible Policy Recommendations. The scope of the study has since been determined to focus on the impact and implications of ageing on economic growth, fiscal and monetary policies *and financial market developments*. Ministers noted that the study should consider the effect of ageing on societies' health insurance needs and the means of financing them. They observed that unfunded health insurance liabilities are often larger in scope (and in need of more immediate attention) than those for pensions, and at the same time costs for health insurance needs are more difficult to estimate and project. They asked that ABAC's work on pensions (see ABAC Report of 2005) should be expanded to include health insurance as part of the 2006 work program. Ministers asked that ABAC make an input into the experts study.

At the ABAC meeting in Singapore (22/25th Jan), ABAC agreed to make an input to the Expert Study although it may well make a summary report and recommendations separately to Ministers. Noting Ministers' emphasis on health insurance liabilities and that one aspect of the Experts Study will be on financial market developments, ABAC agreed that its work would be confined to assessing aspects of private sector involvement in health security. Members noted the complexity of the issues involved with quite different conditions and policies across different APEC economies. They agreed that while ABAC should focus on private health insurance matters, the reality is that a private health pillar is but just one component of a total health system. Any conclusions and policy options would need to be seen in the context of a universal health system. Members agreed that ABAC might best approach this work by surveying or reviewing any surveys of work that might have been undertaken on the private sector role in health systems in selected APEC economies – perhaps drawing out some key conclusions on preferred/or not preferred policies that Ministers might find of value. The following economies might usefully be covered in this work; Australia, China, Malaysia, Mexico, New Zealand, Singapore and the USA. This list is not exclusive and other APEC economies could be included or substituted.

SPECIFIC TERMS OF REFERENCE AND COVERAGE OF THE REPORT

- the study should be undertaken by one or two specialist/s in finance and health, familiar with APEC economies, perhaps associated with PECC, and should draw on work already conducted in selected economies and draw out major issues, conclusions and recommendations. Where necessary, experts in selected economies could be tasked to support the project by providing advice and assessments to the project group/team.

ABAC and PECC would assist in seeking support for the project through their members - the primary focus should be the private sector contribution to a health security pillar and the major chapters should draw out key issues by way of comparison – reports on individual economies should be concise and could be summarised in one annex.

Major sections of the report should include discussion/assessment of the following issues:

- i) private funding contribution to the overall/universal health funding of an economy – this could be expressed as a percentage of total expenditure on health – and a description of the way/s in which the private sector contributes
- ii) broad details of private involvement, including through company and individual health insurance arrangements
- iii) key factors influencing pricing of health insurance, including ageing, the costs of technology, rising provider costs and trends in health insurance premiums
- iv) competition in the health insurance industry; information dissemination on private systems; the form of access to benefits and issues relating to consumer protection
- v) issues of portability, if any, between companies and the protection of benefits to consumers; an assessment of whether these are regarded as critical factors in the system
- vi) investment guidelines for private health insurers and asset allocation policies
- vii) the regulatory prudential arrangements for private health insurers and an assessment of the financial stability of the health insurance market

The report should draw out views, conclusions and make recommendations on the various issues noted above. In requiring this, ABAC recognises the differences in approaches and that no one model will be relevant to all economies. Rather, recommendations should be cast in terms of highlighting benefits and perhaps disadvantages of particular arrangements. However, if concerns about particular policies appear to be common across economies these should be clearly outlined. Similarly, any universally sound policies should be highlighted.

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