



15 August 2006

**Hon. Vu Van Ninh**

Chair, APEC Finance Ministers' Meeting  
Minister of Finance  
Socialist Republic of Vietnam

Dear Minister:

On behalf of ABAC, we are pleased to provide the attached report on business perspectives on financial sector reforms and related financial matters, key aspects of which we will present to Ministers at the 13<sup>th</sup> APEF Finance Ministers' Meeting in Hanoi, 7/8<sup>th</sup> September. We are honoured to be invited to the formal session of your meeting and we deeply appreciate the opportunity you are providing to us to meet with you and your colleagues during the Ministerial retreat.

Of immediate and urgent concern is the prospect of the WTO Doha Round failing. ABAC will be providing advice to Leaders on actions they could take over the remainder of this year to find a workable agreement. However distant that may seem at this point, business feels deeply that every effort should be employed to reach an agreement before the US President's fast track authority expires in July 2007.

We in the ABAC Finance Working Group have revised the check-lists we developed last year to support improved offers in the WTO Doha round negotiations on financial services, and to help in reducing or removing impediments to foreign investment in financial services. We have also proposed support for "plurilateral requests" in financial services to improve the prospect of progress in this area of WTO Activity. The lists and the template for plurilateral requests are attached to our report.

We urge Finance Ministers, as a matter of priority, to actively support your Ministerial colleagues in the WTO negotiations to reach agreement on the Round and to promote the check-lists and plurilateral requests as a positive contributions to the negotiating process. We believe that every effort should be made to promote liberalisation of trade and investment through the WTO Doha Round; success would deepen the prospects for growth and enduring prosperity through the region.

The revised check-list on impediments to investment has been broadened to apply to all service and other sectors. Arguably, this should become even more relevant to APEC if the Doha Round does end in failure. Whether or not that occurs, APEC should intensify its efforts to improve the investment environment within member economies. ABAC will work with the Investment Experts Group on improving investment policy coherence in developing member economies, using the OECD's Policy Framework on Investment (PFI) as an investment benchmarking tool.

Our report incorporates ABAC's views and recommendations on a major theme on your agenda, and summarises our work and recommendations on strengthening and deepening financial systems, along with related capacity building initiatives. We propose that our contribution to your theme "Financial Market Reform to Attract Capital Flows" be the dominant issue in our dialogue with Ministers at the Retreat. Our contribution to this theme is attached to our report.

Our key observations are that foreign direct investment can play a critical role in the restructuring of banking and other financial sectors, the value of open and liberal investment policies in increasing investment flows, the

importance of deepening the region's capital markets, particularly bond markets, and the continuing need for capacity building to strengthen financial systems.

In the Jeju Declaration last year, Ministers requested a private sector input into the Expert Study on coping with the challenges of population ageing. There are many social and financial policy issues in this subject, not least of which is the role of private financial institutions in health and retirement security. These issues will require constant policy development in all APEC economies and ABAC offers its full support to Ministers in this work. In response to the request for an input to the current study, ABAC commissioned a comprehensive analysis of developments in some member economies. The report is attached, and our major recommendations, are based on that report. Economies should give priority to developing options to deal with increasing health expenditures as dependency ratios increase in the region. Options should include privately funded contributions to health care. Increasing levels of privately funded resources for health will call for efficient asset management and prudently managed investment arrangements. Properly supervised private sector participants should be encouraged to participate in developing this part of the capital market system. Core principles of the IAIS should be the benchmark for financial supervision of private funds.

Similarly, in response to a request by your Ministry, ABAC has undertaken a study, in conjunction with the Vietnamese Chamber of Commerce and others, a study of SME access to formal finance facilities and measures to develop credit rating agencies in the region. There is a decline in the role of traditional fiscal incentives but where these remain in place, there is a need for good governance arrangements to avoid the misallocation of resources. Region-wide arrangements would help develop credit rating industries and promote initiatives between governments and the private sector aimed at encouraging support by financial institutions for SMEs.

ABAC strongly endorses APEC's integrated approach to structural reform. We note that measures to liberalise financial markets complement structural reform. The various measures we recommend in our report to support financial market opening and deepening support structural change in an economy. However, we are frankly disappointed that insufficient progress has been achieved by some economies in implementing earlier recommendations we have made to Ministers on the development of regional bond markets and on measures to ameliorate the impact of adverse volatile capital flows.

We propose that Ministers adopt the idea of a regional mechanism for the promotion of bond markets, in particular corporate bonds, and the adoption of general principles that would underpin markets, and the promotion of a regional framework for informal work-outs of insolvency. We further propose that ABAC and APEC finance officials working in cooperation with the ADB implement these measures.

We propose that Ministers endorse an initiative of the ADB in developing the concept of an Asian Automated Clearing House to facilitate payments transfers for individuals in making remittances and to make for more efficient business transactions.

ABAC remains concerned over the vulnerability of some economies to adverse movements in volatile capital flows. Because of those concerns we commissioned a further report on measures to ameliorate the impact of adverse capital flows; a copy is attached to our report. Our major recommendations focus on the importance of high quality data to facilitate the smooth functioning of markets. This could involve better information disclosure by official statistical agencies and this promoted by a commitment by agencies to a uniform code of conduct concerning the reliability of and quality of data in information releases; economies might also consider establishing investor relations units similar to those in a private firm to explain to current and future investors in an economy, official policy and strategy and being open to queries and discussion. We would also encourage commitment to the data requirements of the IMF's General Dissemination System (GDDS) and the Special Data Dissemination Standards (SDDS).

Hedge funds and derivative markets are highly significant elements of the global financial system; they play crucial roles in providing market liquidity and in supporting restructuring. Nonetheless, there are concerns that these activities are largely outside supervisory arrangements. We encourage APEC financial system supervisors to monitor developments in these parts of the financial system.

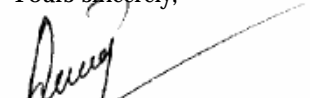
ABAC continues its deep involvement in promoting and participating in capacity building initiatives to support the strengthening of the region's financial systems through the Advisory Group on APEC financial system capacity building. ABAC continues to support measures to implement Basel II in the region's banking systems, the development of bond markets and ways to improve corporate governance in financial institutions in both the public and private sectors. We note the establishment of the Melbourne APEC Finance Centre to promote training and research in financial and regulatory matters for the region's economies, and propose that Ministers endorse this initiative.

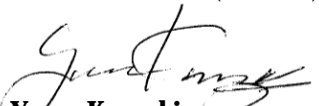
We encourage Ministers to fund the participation of regional regulators and officials in various initiatives and we strongly recommend that those developing member economies which have not yet engaged in the IMF/World Bank Financial Sector Assessment Program do so as a matter of priority. We see a need for greater coordination between national regulators in the region to ensure the smooth implementation of regulatory approaches and to avoid regulatory overlap.

We would like to register with you and your Ministerial colleagues the value we place on the deepening relationship between ABAC and the Finance Ministers' processes; in ABAC's participation in the meetings of the Technical Working Group, the involvement of the Chair of that Group in ABAC meetings and in the meetings we have held with senior officials from finance and regulatory agencies during our meetings through the year in Singapore, Montreal and Cebu.


We respectfully request that as Chair of the Finance Ministers' meeting, you transmit this letter and the attached report and recommendations to your APEC Ministerial colleagues in preparation for our dialogue in September. We look forward to discussing the major issue of Financial Market Reform to Attract Capital Flows in the dialogue and of course we stand ready to discuss other issues and recommendation contained in the attached report.


Yours sincerely,

  
**Hoang Van Dung**  
ABAC Chair 2006 (Vietnam)

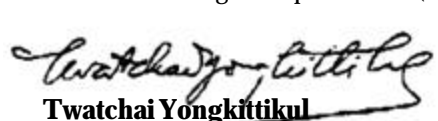
  
**Yasuo Kanzaki**  
Finance Working Group Co-Chair (Japan)

  
**Jeffrey Koo**  
Finance Working Group Co-Chair (Chinese Taipei)

  
**Michael Phillips**  
Finance Working Group Co-Chair (USA)

  
**Mark Johnson**  
ABAC Finance Working Group Chair (Australia)

  
**Azman Hashim**  
Finance Working Group Co-Chair (Malaysia)

  
**Twatchai Yongkittikul**  
Finance Working Group Co-Chair (Thailand)

**APEC Business Advisory Council (ABAC)  
Finance Working Group**

**Report to APEC Finance Ministers'  
13<sup>th</sup> Annual Meeting  
Hanoi, Vietnam,  
7/8<sup>th</sup> September 2006**

**Introduction**

Notwithstanding a period of unprecedented economic growth and a still favourable outlook in the period ahead for the global economy, risks to that outlook have intensified in recent months. Conflict in the Middle-East pose real threats to oil supply security and recent hostilities intensify concerns over oil security and oil prices. The inflation outlook is of increasing concern with the prospect of continuing upward movement in global interest rates and the consequential impact on less developed economies. Global imbalances remain as a potential threat to the global system. While careful management by economies and increased coordination of the policies of major economies could go some important way to ameliorating the risks to the global system, market adjustments in the period ahead could be more pronounced than we have seen over the recent period of high growth and relative stability.

The distinct prospect of the failure of the WTO Doha Round is cause for profound concern in business, reflecting as it does the waning support for multilateralism and the possible abandonment of a movement which over the post war era has contributed so much to world growth and the rise in living standards across all continents.

Global economic integration which has followed as a consequence of earlier successes at multilateral trade liberalisation, supports growth and development but, with the integration of financial markets, comes risks arising from the rapid transmission of financial shocks. While integration will allow markets to adjust more quickly, economies that are only partially integrated are more likely to be adversely affected by major destabilizing events. Against this background, ABAC considers it vital that APEC member economies take action to strengthen their macroeconomic and prudential frameworks so as to increase their capacity to withstand external shocks and to make economies more resilient to the vagaries of the global economic system.

Necessary measures include improving risk management and governance in the region's banking system and in other financial sectors, strengthening financial regulatory capacities and in promoting greater cooperation between national regulatory authorities and regional and international agencies aimed at limiting risk to the global financial system and the smooth implementation of supervisory arrangements as they apply to internationally active banks and other financial institutions.

ABAC is deeply concerned at the real prospect of the failure of the WTO Doha Round. Failure would be a major setback to growth and development. We will urge APEC Leaders to take steps to reinstitute negotiations and we will recommend ways Leaders might consider to bring about a successful conclusion. We strongly urge Finance Ministers to engage in and support the negotiating process. In the event that the current impasse continues beyond the expiry of the US President's fast track negotiating authority – which would stall the negotiations and perhaps signal the end of the WTO - ABAC will be recommending options that APEC economies could pursue to improve the prospects for continuing strong growth in the region's economies. The Busan Road Map highlighted agreement to promote the removal of behind the border impediments to growth, including measures to promote investment flows.

ABAC has provided an input into one of the themes on your agenda, “Financial Market Reforms to Attract Capital Flows”, and we have commissioned work on other topics and completed an extensive work program.

Our major recommendations for Ministers’ consideration are:

- Make every effort over the short period ahead to promote engagement in and a successful conclusion to the WTO Doha Round and promote the ABAC checklists and the template on “plurilateral requests” as a significant contribution to that effort
- Continuing work to strengthen and deepen the region’s financial systems as a matter of priority, taking advantage of the present favourable growth environment but one in which risks are increasing
- focus on removing impediments to and improving investment flows, both domestic and external, to contribute to economic and financial system restructuring and to promote growth, income and employment

**Our review of key issues and specific recommendations are as follows:**

***1. Contribution to Policy Theme “Financial Market Reforms to Attract Capital Flows***

Market reforms to attract capital is a vitally important aspect of the agenda to promote sustainable economic growth in the region and to promote business and employment. Open and liberal investment policies have been demonstrably successful in increasing investment flows in the region; more work is needed to provide for the integration of economic activity in the region. Unilateral and collective action by members to promote investment liberalization is vital in attracting capital to the region. Policies to deepen capital markets, in particular corporate bond markets, would be a major step forward in those economies where markets are underdeveloped, in attracting long-term capital. Additionally, capital will be attracted to economies which are resilient to shocks because of solid economic and financial frameworks, including best practice prudential supervisory systems, and good data information and dissemination to inform policy makers of pending problems. Regional and international cooperation should be intensified if these outcomes are to be achieved. The emergence of flexible exchange rate systems and more open capital accounts will reduce the risks faced by foreign lenders and by domestic investors. These and related matters are discussed in the attached report (Annex A) which we provide as ABAC’s contribution to this important theme.

***Recommendations:***

- take unilateral and collective action, utilizing APEC arrangements such as IAPs and CAPs to promote the removal of investment impediments and to improve investment flows and note that ABAC will cooperate with the Investment Experts Group to develop a policy framework
- agree to implement measures, recommended elsewhere in this report, to develop regional arrangements for bond markets, the adoption of general principles and a regional framework for informal work-outs of insolvency
- implement measures recommended elsewhere in this report to strengthen the capacity of individual economies and the region to improve data collection and dissemination to

better equip economies to withstand shocks arising from volatile short-term capital movements

## ***2. Measures to promote financial services in the WTO Doha Round***

ABAC is deeply concerned at the prospect of the WTO Doha Round failing. In the few remaining months ahead in which an agreement could be reached, we believe that Finance Ministers should lend their weight to the work of their Ministerial colleagues involved in the WTO negotiations to try to find ways to resolve the present impasse. ABAC has revised the check-list we presented to Ministers last year to support improved offers on financial services in the Round. The revised list, which is attached to this report (Attachment 1), sharpens the definition of some financial services. The list could serve as a useful tool to assess the quality of offers and to raise the quality of offers in the Doha Round. The list should also serve as a guide in other negotiations relating to services liberalisation, including FTAs and RTAs and in work APEC is undertaking to develop model chapters to incorporate in future agreements and against which existing agreements may be assessed. ABAC sees value in the promotion of the use of collective or “plurilateral requests” as an efficient mechanism for progressing the WTO negotiations in financial and other services. A template outlining a request in financial services is attached to this report (Attachment 2).

### ***Recommendations:***

- promote the check-list as a best practice guide for APEC negotiators involved in the WTO Doha negotiations on trade in services and to those involved in liberalising financial services in new FTAs and RTAs and in assessing the quality of existing agreements which include financial services
- promote the use of “plurilateral offers” as an efficient mechanism for progressing negotiations in the WTO on financial and other services.

## ***3. Measures to promote investment liberalization***

As noted in our contribution to the Policy Theme, ABAC believes that measures to remove impediments and to promote investment in the region (both domestic and cross-border) should be a major objective of APEC, and a priority for Finance Ministers. Maintaining global competitiveness is a major objective of regional economies. Foreign direct investment can support the achievement of this objective; it can provide new capital for restructuring, new technology, new products and improve the skills base in key sectors, in particular in finance sectors. These benefits were outlined in the report we presented to Ministers in 2004. Improving the environment for the promotion of investment can be achieved through positive action in the WTO Doha Round – by encouraging liberalisation of investment in the physical presence of firms which is the objective of Mode 3 of the WTO GATs (General Agreement on Trade in Services).

In 2005, ABAC presented a check-list of major impediments to investment in financial services and policy guidance on the best ways to deal with those impediments. Our objective then was for the list to provide both guidance and to be a useful tool to WTO negotiators in promoting financial services liberalization in the WTO. This year we have revised the list and a copy attached to this Report (Attachment 3). The revisions clarify certain definitions and broaden the list to apply to all services and to all non-service sectors. It is a comprehensive guide to improving the investment environment in all sectors in all economies.

Allied with this work, ABAC is working closely with the APEC Investment Experts Group. With that Group we propose to promote the list and the Policy Framework for Investment (PFI), initiated recently by the OECD Ministers. Around 60 countries were involved in preparing the PFI, including a number of non-OECD countries and 15 APEC economies, including Chile, China, Indonesia, Malaysia, Philippines, Russia, Chinese Taipei and Vietnam. OECD APEC members involved were Australia, Canada, Japan, Korea, Mexico, New Zealand and the US. Seminars have already been conducted in Japan, China and one is planned for Vietnam in September to demonstrate how the PFI might assist developing economies create the environment conducive to investment. APEC is proposing to conduct a symposium in 2007 in Australia in conjunction with the OECD and the business arm of OECD, the BIAC. ABAC proposes to associate strongly with that symposium and in on-going work to promote investment flows in the region.

***Recommendations:***

- actively promote the ABAC check-list on investment impediments and policy responses with your Ministerial colleagues responsible for the WTO Doha round negotiations on trade in services and request those Ministers to use the list as a guide for improving investment opportunities in financial and other sectors (services and non-services)
- endorse the collaboration between officials, (the IEG), ABAC and the OECD in bringing to the attention of developing member economies to the OECD Policy Framework for Investment in developing a coherent approach to investment policy to encourage both domestic and foreign investment, and the symposium proposed for Australia in early 2007 as a key initiative to promote this endeavour

***4. An Integrated Program of Structural Reform Issues***

The Busan Road Map endorsed by APEC Leaders last year calls for an integrated approach to structural reform in APEC economies. ABAC strongly endorses that concept as a constructive way of approaching reform, noting that measures to encourage financial market liberalisation complement structural reform, as do other measures we propose elsewhere in this report. These include for example, measures to ameliorate the impact of adverse capital flows, policies relating to health costs and pensions in ageing societies, arrangements for the promotion of regional bond markets, and measures to liberalise investment. If implemented, these would contribute to reform objectives such as market openness and competition and to the capacity of economies to withstand financial shocks. However we believe that greater commitment by economies is needed to implement reform. Frankly, we are disappointed that insufficient progress has been achieved by some economies in implementing earlier recommendations for the development of regional capital markets and in action by economies and relevant international and regional agencies to deal with the impact of adverse volatile capital flows.

***Recommendation:***

- endorse ABAC's involvement in promoting and supporting structural reform and implement measures to improve market openness, intensify action to deepen regional capital markets, and in particular corporate bond markets, and adopt measures to improve data collection and dissemination on capital flows, aimed at ameliorating the impact of adverse volatile capital flows – specific recommendations are shown below

#### ***4. Supporting SMEs Access to formal finance***

SMEs are a critically important sector in all APEC economies in terms of employment, income, trade, global and regional production networks and in reducing poverty. Constraints on access to formal finance systems can be a major impediment to the growth of SMEs, particularly in some emerging economies. The under-development of credit rating agencies is also a barrier to SME growth. Work undertaken by ABAC this year highlights obstacles to SME access to finance. The survey points to a wane in the importance of traditional fiscal incentives to promote SMEs yet, where such incentives are in place, it points to the importance of appropriate governance arrangements to avoid resource misallocation. Region-wide efforts are needed to promote credit rating agencies and to encourage the development of business associations and network linkages between banks, SMEs and associations. Such measures would encourage information dissemination, and encourage banks and financial institutions to develop policies which reflect the importance of SMEs in their client base. Where guarantee schemes exist, policies which would encourage financial sector participation to support the commerciality of such schemes would be beneficial. The survey notes the importance of policies to encourage the development of credit evaluations capacities in financial institutions as they relate to SMEs. The promotion of credit rating firms within the region's economies would strengthen the region's financial capacities and promote the SME sector.

#### ***Recommendations***

- APEC economies adopt a holistic approach to policy formulation for promoting access to financial systems, involving official agencies, public and private financial institutions and industry associations and involving regional groups, including where appropriate, IFIs, with the following objectives:
  - improving credit services and evaluation capacities in financial institutions and in SMEs and raising skills in these areas in both service providers and in SMEs
  - the promotion and dissemination of information on services that are available from financial service providers
  - the development of region-wide initiatives to develop credit rating firms

#### ***5. Strengthening and deepening the region's financial systems***

##### ***(a) capacity building***

The Asian financial crisis demonstrated the need for robust and resilient financial systems in dealing with financial shocks, and supporting economic growth and development. Increasing imbalances in the major economies point to the prospect of future shocks to the region. More efforts are needed in some economies to strengthen the regulatory and supervisory frameworks. The IMF/World Bank Financial Sector Assessment Programs can be extremely useful in assessing an economy's prudential strengths and weaknesses. Globalisation of financial markets requires more intensive cooperation among the financial supervisory authorities both within and between jurisdictions. Capacity building helps institutions, in both the public and private sectors, in strengthening their managerial and technical capacities to effectively undertake critical finance functions, thereby buttressing economies against shocks. The Advisory Group on APEC Financial System Capacity Building, initiated by ABAC and PECC, is continuing its support for the implementation of Basel II in banking, in improving risk management and governance, and in the development



of bond markets in the region, through public private partnerships with IFIs and regional agencies. There would be value in improved coordination in the work of the Advisory Group with APEC agencies responsible for implementing financial system reforms and for supervisory oversight.

### ***Recommendations***

- APEC economies should continue to give priority to strengthening their financial systems and those emerging economies which have not participated in a IMF/World Bank Financial Sector Assessment Program, should do so as a matter of priority
- financial supervisory authorities in the region should cooperate in undertaking their financial supervisory functions – both in their own jurisdictions and within and beyond the region - to minimize overlap in functions and risks to financial sector institutions arising from discordant supervisory standards and practices
- take measures to provide for a more coordinated and targeted approach between APEC officials and the Advisory Group and IFIs in the development of capacity building initiatives to strengthen financial systems

### **(b) promoting the region's bond markets**

Over recent years ABAC and PECC have provided extensive advice to Ministers on ways to promote the development of bond markets in the region. The development of capital markets particularly long-term local-currency bond markets is crucial to promoting financial stability and economic growth, as we note elsewhere in this report. A number of initiatives have been launched to foster bond market development and in expressing support for them, the private sector has underscored the need for effective mechanisms to promote regulatory reform, the growth of the region's investor and issuer base, and region-wide convergence toward global capital market standards and practices. Such mechanisms involve cooperation between the public and private sectors – particularly given the importance of developing robust corporate bond markets. For further progress in these areas, measures are required that will effectively enable the private sector to expand commercial activity and to play a significant role in the development of financial markets. For this to occur we propose initiating a mechanism through which the public and private sectors would work together to accelerate the development of corporate bond markets, in support of current domestic and regional efforts by economies in the region to develop market infrastructure and the demand and supply for bonds in emerging local currency bond markets. The mechanism would be designed in such a way as to:

- (a) take the form of policy dialogues in individual developing member economies
- (b) involved both developed and developing economies to share insights and experiences and possible options to deal with challenges
- (c) utilize the Advisory Group (referred to under 5(a) above) to provide advice based on inputs from public and private institutions, including IFIs
- (d) provide a report of each policy dialogue to share experience and information

### ***Recommendations***

- endorse the establishment of the mechanism to develop the functions outlined in (a) to (d) above, with initial activities in 2007 being undertaken in collaboration between

the official APEC Finance Ministers' processes and the Advisory Group and with the support of the ADB

- adoption of proposed general principles for bond market development corporation and endorse proposals for a regional framework for informal workouts.

### **( c ) measures to ameliorate the impact of adverse volatile capital flows**

Last year, ABAC drew attention to its concerns about the decline in interest in international agencies in improving surveillance and monitoring on volatile capital flows. This year we commissioned a report on the data requirements to support early warning systems in ameliorating the impact of adverse volatile capital flows. The report is attached, (Annex B). It provides a detailed assessment of issues relating to official data on international capital flows and related economic statistics, the importance of the value of the IMF's General Data Dissemination System (GDDS) and the Special Data Dissemination Standard (SDDS), and of timely disclosure and the fact that notwithstanding improvements in official data, there are limitations on its usefulness – particularly as seen through the eyes of private sector financial market analysts. There are lags in data dissemination and the quality of data on some economies is in doubt, thereby limiting its value in throwing light on emerging trends on flows. The report points to the value of “balance sheet” data as being of greater relevance than “flow” data, and provides a valuable insight into developments in hedge fund and derivative activities and the constraints on attempts by major capital market regulators to devise supervisory arrangements. Market participants would benefit, as would economies generally through better and smoother functioning markets, by better and more reliable and timely data.

#### ***Recommendations***

- commit to a uniform code of conduct which would seek to promote reliable data to ensure high quality, timely and impartial data reporting and dissemination, and form units similar in purpose to investor relations units in private firms to engage with current and future investors in an economy in explaining official policy and strategy
- support efforts by the IMF by actively improving data disclosure, commit to the highest SDDS data quality standards and urge statistical agencies to work toward improved data disclosure under the SDDS and to further develop a balance sheet approach to data reporting
- publish on a timely basis the complete IMF surveillance reports and encourage officials to engage in discussions with market participants on their content

### **(d) Asian Automated Clearing House**

The Asian Development Bank is promoting the concept of an Asian Automated Clearing House – a payments system which would expedite the inter-country movement of funds, in particular funds at the retail level and which if implemented would support the efficient transfer of individual remittances through the official financial system. It would also increase efficiencies in business transactions and would be a significant contribution to the region's financial system architecture. Central banks that are involved in considering this with the ADB are enthusiastic.

#### ***Recommendation***

- APEC economies endorse and support this ADB initiative

## **5. Contribution to Experts' Study on Coping with the Challenges of Population Ageing: Private sector involvement in health security pillars in APEC economies**

In response to Ministers' request last year in the Jeju Declaration, for a private sector input to the Experts' Study, ABAC commissioned a report from health finance experts. That report is attached, (Annex C). It notes that the size of the health sector in APEC economies has generally continued to grow (total health expenditure as a percentage of GDP); in 10 APEC economies, the share of public finance is declining; there is a perception that private financing will grow in importance. Within these broad trends, there is considerable diversity between APEC economies in both the size of the health sector and the financing mechanisms employed. Some common issues are likely to have implications for financial markets. Long-term health financing options need to be considered in view of the increasing old-age dependency ratio. This factor, combined with the relatively large share of public financing of health in many APEC economies, points to a potentially large impact on budgets. Developments in health care financing toward funded schemes (eg. relying of medical savings accounts) will generate large accumulations of financial reserves and associated needs for funds management. The private sector, properly supervised, should be encouraged to play a major role in these developments. The IAIS core principles for insurance supervision of private health funds provide a useful benchmark against which to assess regulatory arrangements.

### ***Recommendations***

- review as a matter of priority, the growth in health budgets, particularly in emerging economies of APEC, and develop policy options which should include promoting privately funded health arrangements
- encourage the participation of private sector funds managers in the development of the health funds markets under appropriate supervisory arrangements
- the IAIS core principles should be the basis of supervisory arrangements for health insurance companies

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### **NOTE:**

**The following attachments to this report:**

- **FWG contribution to FMM Theme “Financial Reforms to Attract Capital Inflows” (Annex A)**
- **the two check-lists (Attachments 1 & 3)**
- **the template on “plurilateral requests” (Attachment 2)**
- **report on data requirements to support early warning systems to (Annex B) ameliorate the impact of adverse volatile capital flows**
- **ABACs' contribution to the Experts' Study on 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 (Annex C)**

## **ABAC'S REPORT TO APEC FINANCE MINISTERS ON THE POLICY THEME FOR 2006 "FINANCIAL MARKET REFORM TO ATTRACT CAPITAL FLOWS"**

### **Executive Summary**

ABAC greatly appreciates the opportunity to provide a business input into this theme. We think market reforms to attract capital is a vitally important aspect of the agenda to promote sustainable economic growth in the region and to promote business and employment. Earlier work we have undertaken and which has been made available to Ministers, demonstrates the critical role that foreign direct investment made to supporting the restructuring of banking and other financial sectors in economies seriously impacted by the Asian financial crisis. Open and liberal investment policies have been demonstrably successful in increasing investment flows in the region; but much more is needed to provide for the integration of economic activity right across the region.

We also believe that policies to deepen capital markets, in particular by developing bond markets in the region, would be a major step for economies to take in attracting long-term capital flows – from within and without the region.

Measures which help make economies more resilient and less vulnerable to the vagaries of volatile short-term capital flows should, we think, be an important component of reform programs in the region. We are not here advocating capital controls, rather we argue for a more concerted effort to build useful early warning signals to better alert economies to pending problems. We note that the emergence of more flexible exchange rate regimes and financial market innovation will reduce the risks faced by foreign lenders and by domestic borrowers in the region.

Participation in Financial Sector Assessment Programs by those APEC economies which have not so far joined the program would represent a highly constructive step in building an environment attractive to foreign capital.

In summary, and noting the crucial role of capital flows to economic development, ABAC strongly advocates reforms to deepen the process of capital flows. Our report draws heavily on previous work we have undertaken and which we have conveyed to Ministers under separate issues and headings. We appreciate this opportunity to present you with a lateral view of our previous work and advice on these matters of high importance to business.

### **Introduction**

This report addresses key aspects of the Terms of Reference under three sections, as follows:

- market liberalisation aspects of FDI
- reforms of capital markets
- reforms to promote capital market stability

## ***Section 1 - Market liberalisation aspects of FDI***

ABAC views the efforts so far achieved in the WTO Doha Round as falling very far short of what is needed if the Round is to contribute to a new wave of sustained growth in foreign direct investment (a key component of capital flows) and in the development of the global economy and the APEC region. APEC must take two key approaches: one is to reinforce the importance of the WTO and to do that to engage as a group in promoting solutions to promote serious liberalisation – particularly in the area of trade and investment. The other is to take serious measures to implement the Busan Road map, again in the area of foreign direct investment in goods and services – and in particular in financial services.

Business is wholly confident about the benefits that would derive from further liberalisation in foreign direct investment, particularly in financial services but economy wide. In our report to you last year, based on a study by Professor Dietrich of the University of Southern California, we noted the critical importance of a comprehensive approach to the liberalisation of investment across the finance system. This would yield greater flexibility and resilience in economies than would occur from action on just one or two financial sectors.

We pointed to the benefits of liberalising foreign direct investment, including the contribution to deepening financial markets, to employment and growth, to greater economic resilience, to improved skills and technology and, as experienced through the Asian financial crisis, to the revitalisation and the recapitalisation of domestic banks and non-bank institutions. Empirical evidence by the World Bank and the IMF and other international agencies emphasise these benefits.

Financial sector restructuring, accelerated by foreign direct investment, would lead to a more efficient and internationally integrated financial systems. Importantly, such an environment would require close cooperation across borders by regulators to maintain discipline and to ensure sophisticated international groups respected the supervisory requirements of emerging market supervisors.

To support liberalisation in the WTO, ABAC produced two check lists which we presented to you last year. One set out business views on what the "best" offers should cover in the WTO GATs in four areas of financial services, banking, insurance (life and general) and asset management. We see this list as a useful benchmark to evaluate offers and to enhance the quality of offers. The other list outlined business views on key barriers and impediments to foreign direct investment in financial services, and it proposed policy responses to those impediments. (We note that FDI falls primarily under Mode 3 of the WTO GATs dealing with the physical presence of foreign firms in a WTO member economy supplying goods and services). Barriers can take the forms both of express restrictions on FDI, such as quantitative limits on foreign investment or foreign ownership caps in designated financial sectors, or local participation requirements, or structural restrictions, such as lack of regulatory transparency or lack of a level playing field between domestic and foreign invested entities. Both forms of restrictions negatively affect capital flows and market competition, as well as reduced benefits to local customers, and should be addressed.

Last year we presented both lists to APEC negotiators in Geneva and to the WTO. They were well received. We have recently updated both lists, mainly to broaden definitions in the financial services offers, list and to widen the use of the investment list to other services and economic sectors. (The revised lists are attached to this report). We strongly encourage Finance Ministers and their ministries and related agencies responsible for investment policies to use the lists and to become engaged in the WTO negotiating process in the critical period ahead. This would help

ensure that serious attention is brought to the negotiations on the importance of the liberalisation of foreign direct investment.

Within APEC itself, ABAC proposes to work with the Investment Experts Group and the Committee on Trade and Investment to promote measures to encourage investment liberalisation. While significant progress has been achieved in global efforts toward liberalisation, this has occurred mainly as a consequence of the legacy of the Uruguay Round and the development of the GATs thereafter. Some economies have taken significant unilateral action and there has been action of varying quality, in terms of liberalising investment, through FTAs and RTAs. But much more can be achieved within APEC itself. We share the view, expressed in the Busan Road map, that much greater emphasis should be given to investment liberalisation. While we commend further actions to promote unilateral action by member economies, we also see the opportunity through APEC to take action to deepen the awareness of the benefits of investment liberalisation and to promote its implementation through meaningful Individual Action Plans and Collective Action Plans. We regard the updated check lists as a vital business input to investment liberalisation and to the implementation of the Busan Road map.

### **Recommendations**

- We encourage Finance Ministers to promote the use of the updated check lists with their Ministerial counterparts and with officials responsible for the WTO negotiations. We further strongly encourage Finance Ministers, their ministries and related agencies responsible for investment policy, to themselves engage in the negotiating process.
- We recommend further efforts to encourage unilateral and collective action by APEC member economies through the development of meaningful IAPs and CAPs. ABAC will strongly support such measures and we will work with the IEG and the CTI to these ends.

### ***Section II – Reforms to capital markets***

Business confidence is enhanced by stable and deep capital markets. An environment with these characteristics as the norm, underpins savings and investment functions, consumer and business confidence, and gives depth to a firms' capacity to raise and invest funds. The lack of stable and deep capital markets in some emerging economies accounts for the phenomenon of capital flowing from developing economies (where savings are high but investment is often lagging) to developed economies.

Vibrant domestic bond markets will add strength to overall financial structures and provide greater opportunities for investors to invest their savings in the region. Borrowers' access to long-term funding in their own currencies will reduce the risk of double mis-match – both in maturities and in currencies. Robust consumer and commercial credit sectors, with appropriate, market-based regulatory supervision, will promote domestic demand and stimulate economic growth. Recognizing these factors and the importance of the region's local currency bond markets for sustained economic growth, ABAC has undertaken significant work and we have set out well-defined business views on the development of bond markets. The recommendations we have made on bond markets have great relevance also to capital markets more generally and to promoting an environment which will encourage savings and investment in the emerging markets of the region.

The reports of two conference\* have organised, involving businessmen, investors, market makers, officials and regulators provide insights and recommendations that broadly reflect the combined views of these groups on major issues that need to be addressed to facilitate expanded domestic and cross-border investment and issuance in the region's local currency bond markets.

We highlight below our assessment of the present situation of local currency bond markets in the region's developing economies:

- There are wide disparities among developing APEC economies, which may be broadly classified into two groups – a number of more developed emerging markets that have made significant advances, and a second group of markets that are still in the early stages of development. For the first group, the main focus of concern is on enhancing market depth and liquidity. For the second group, the focus is on fundamental issues and the regulatory framework.
- At present, intra-regional cross-border investment and issuance in emerging local currency bond markets are insignificant, owing to various restrictions, omissions of law or practice and legal, fiscal and regulatory discrepancies. Restrictions that impede foreign firms' participation in market making processes also contribute to the insignificant flow of investor funds and issuance. Where they are maintained, capital controls severely impact cross border investment and market liquidity.

The underdevelopment of the local and regional institutional investor base is a major obstacle to the growth of local currency bond markets in a number of developing economies, particularly in Asia. Various long-term issues need to be addressed, including the underdevelopment of the private pension and mutual fund industries and limits on life insurance fund investment activities.

- While markets evolve naturally, there is wide scope for accelerating their development through efforts of individual economies or regional initiatives. Markets have developed more rapidly where the private sector has been involved in the design of regulation and market infrastructure, in promoting efficient practices and conventions, and in providing physical infrastructure. As the experiences of advanced economies provide useful lessons and a body of continuously evolving international best practice, their participation in collaborative efforts is crucial.
- Notwithstanding the above observations, investor behaviour is still driven by perceptions, and excessive risk aversion among investors in the region is reflected in portfolios that remain sub-optimal in relation to stated objectives for long periods of time. While addressing systemic limitations will produce significant results, the more subtle and intractable challenge of investor behaviour should also be addressed.
- Regulations should provide protections to investors and borrowers by ensuring clear, transparent disclosure of financial product terms. Regulations should be crafted to promote new financial product introduction, and avoid artificial, non-market based requirements such as interest rate ceilings, limits on payment or credit terms, or similar restrictions that discourage new products, and may unduly exclude borrowers from the formal credit sectors.

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\* These two conference reports submitted by ABAC to APEC Finance Ministers in 2004 and 2005 are: *Developing Bond Markets in APEC: Moving Forward through Public Private Sector Partnerships* (Chinese Taipei, 10/11 May 2004) and *Developing Bond Markets in APEC: Toward Greater Public-Private Sector Regional Partnership* (Tokyo, 21/22<sup>nd</sup> June 2005)

Our recommendations are wide-ranging and they contain our advice on measures that if implemented, would represent a sustainable program for moving forward. Key recommendations are summarised below and detailed in an attachment to this note:

## Recommendations

- **Wide-ranging policy reforms** should be given priority, including facilitating market participation, the introduction of new products; reforms to accounting standards and tax and insolvency law and pension systems and procedures
- **Important capacity building measures** should be implemented with the following objectives
  - expanding the region's institutional investor base
  - developing a strong regional credit rating agency
  - promoting effective domestic and region-wide insolvency and creditor rights
  - promoting region-wide convergence toward robust international accounting standards
  - promoting market-based regulation of financial products
  - promoting modern, full- file, accessible credit information systems, to foster prudent risk management and level playing fields.
- **to move forward**
  - endorse a mechanism through which APEC economies, the private sector and key international institutions could work together to help accelerate the development of local-currency bond markets, especially those for corporate bonds, in the region's developing economies, in particular through the identification of measures to facilitate greater private sector activity and cross-border transactions in these markets.
  - agree to the development and adoption of a set of general principles for Asia-Pacific bond market development cooperation (this would ensure consistency among various initiatives in the region and consistency of outcomes. Official endorsement of principles throughout the region would underscore to market players and all relevant institutions the serious commitment of economies to pursue capital market reforms).

In making these recommendations, ABAC undertakes to work assiduously with others in the APEC family and with relevant regional and international groups to promote deliverable outcomes in reasonable time-frame.

### ***Section III – Reforms to promote capital market stability***

Promoting capital market stability is a prerequisite to sustainable long-term capital flows and, given the fact that the investment needs of some developing economies in APEC are not being met, ABAC believes that action to increase investment flows is a critical challenge for APEC over the next two decades or so. Action to enhance stability complements and can be viewed as the other side of the coin of reforms to deepen capital markets.



ABAC is of the view that minimising risks associated with volatile capital flows as unfinished business, more than a decade on after the Asian financial crisis. Even though, as we argue later in this note, significant improvements have been made in some of the "fundamentals" in the region's financial systems, much more effort is required to protect emerging economies from this risk. What is perhaps surprising is that the recommended actions are not all that onerous – they essentially involve improving data collection and dissemination and establishing useful early warning signals. Yet the impact of these measures being in place could do much both to secure long-term financial inflows into emerging markets and capital market stability.

Earlier this year, we received a report from Professor Kim Dietrich of the Marshall Business School, University of Southern California, on measures to ameliorate the impact of volatile capital flows – which we discuss in below. We commissioned a further report from the same author, to deepen our understanding of data requirements necessary to support early warning systems. That second report is considered in our letter to Finance Ministers this year and attached to that letter.

The earlier report observes that exchange rate flexibility, now more widespread across APEC economies, is likely contributing to capital market stability in the region. The report expresses reservations about the efficacy of capital controls as a means of stabilising capital markets.

In recent reports to APEC Ministers, we have argued that more effort is needed in international agencies in monitoring flows and in improving surveillance of volatile short-term capital flows and the activities of hedge funds and that domestic and regional frameworks be strengthened to support this process. These recommendations remain in our view as germane and urgent. We say this even while noting that developments in fundamentals in the region over recent years have reduced the risks of volatile flows impacting adversely on some economies. (These views are reinforced by the second report from Professor Dietrich and we make recommendations on these matters in our letter to Finance Ministers).

In his first report, Professor Dietrich compared the current international economic and financial situation with that of the 1990's and earlier, when conditions led to the implementation by some economies, in particular Chile and Malaysia, of measures to control capital flows.

The report noted that current conditions are vastly different from those of the earlier period and that it is unlikely that a crisis similar to those of the 80's and late 90's would occur now. Some of the key changes highlighted in the report include:

***- greater exchange rate flexibility and fewer capital controls now in APEC emerging economies***

(this reflects a growing conventional wisdom that the liberalisation of capital flows, especially when combined with fixed exchange rates, is either an underlying cause or at least a contributing factor behind the rash of currency crises experienced in recent years and evidence indicates that, in the context of the sequencing literature on economic reform, an environment where the capital account is liberalised does not appear to be more vulnerable to exchange rate instability. Surprisingly, the opposite appears to be the case. Countries without capital controls appear to have greater exchange rate stability and few speculative attacks (Glick and Hutchinson (2002))

***- foreign exchange holdings, mainly in US dollar assets, in most emerging economies are substantially above their 1990 levels***

***- improving current account balances***

- *financial indicators in emerging markets are showing strong improvements, reflecting confidence, the impact of substantial restructuring and improvements in risk management in financial sectors and improving capital positions in banking*
- *improvements and changes in the hedge fund industry*

(the Financial Stability Forum notes that concerns that HLIs could pose systemic to the international financial system are less than before. Funds are smaller and generally perceived to employ less leverage. Counterparty risk management with regard to hedge funds has improved as have HLIs own risk management practices. However, it is recognised that the information available to outside observers is not perfect, and there are always intangibles)

the IMF notes that strategies of hedge funds have changed dramatically from year to year and for most recent years, global macro strategies – including currency speculation – have accounted for less than 25% of fund inflows)

The report examined the evidence of the controls implemented by Chile and Malaysia and concluded that the controls had a debateable and inconclusive effect on the variables which policy makers are concerned with.

However, the analysis noted that controls used by Malaysia and Chile, combined with transparency in application and clarity on their invocation, are the least distorting and costly types of controls. That said, they present challenges in definition and implementation, and as in the case of Chile, at the cost of higher interest rates to smaller firms. Importantly, the growth of derivative markets makes controls based on domestic institutions activity of limited impact on speculation.

The report also noted that:

- the goal of APEC to promote open and integrated capital markets means that capital controls, by their nature, interfere with this goal
- controls rarely produce their desired results and are often accompanied by negative unintended consequences
- however, the costs of past financial crisis, presumed to result from volatile capital flows has been large and may justify consideration of innovative capital market intervention; the likelihood of anticipating and avoiding crisis would be enhanced with better and more timely data on capital flows, financial institution assets and liabilities, and on activity in derivative markets.
- capital controls if they are to be imposed would be less costly if they are transparent in application and should be imposed only under conditions that market participants can anticipate and plan for
- they should be implemented reluctantly, if at all, and straightforward in application
- policy makers should not focus on past conditions in assessing the types of crisis that might occur. Conditions have changed dramatically from those that caused the Asian financial crisis and early crises

- future shocks will come from different sources, for example, as a consequence of a dollar crisis. This would have very different global and regional implications than assaults on APEC economy financial systems in the past.

***Recommendations :***

We endorse and commend the following recommendations as measures to take into account in reforms to promote capital market stability:

- international institutions, individual economy central banks, finance ministries, economic research bureaus, and regulators, should be encouraged to cooperate in an effort to improve the quality, timeliness, availability, comparability and credibility of international finance capital flow statistics and related macroeconomic and financial market data (some additional recommendations based on the second report from Professor Dietrich are included in our letter to Finance Ministers)
- capital controls should be implemented reluctantly and temporarily and should be invoked only in the case of easily identified changes in market conditions (ie. linked to readily observable market outcomes)
- a concerted effort should be made by APEC economies to carefully analyse the likely types of financial crisis in the future given current economic conditions and update these assessments with future economic changes, disseminate concerns and encourage policy makers to plan specific policy responses, if any, to the anticipated nature of possible future crises.

Finally, we think it worthwhile reiterating a recommendation we have made to you previously and that relates to the importance of Financial Sector Assessment Programs as having the potential to make a major contribution to long-term capital stability. Our strong recommendation is that all APEC economies that have not so far joined the program do so as a matter of priority.

**CHECKLIST**

***FINANCIAL SERVICES LIBERALIZATION:  
GOALS AND BEST PRACTICES***

*For use by economies in assessing and evaluating the quality of financial services offers  
in the Doha negotiations.*

## BANKING

### **GOALS**

*The offer should create new market-opening and investment opportunities.*

*To what degree does it satisfy the following goals?*

- 1) Improves upon 1997 commitments (where applicable)
- 2) Creates new business opportunities through the lifting of restrictions
- 3) Creates conditions that will attract new capital
- 4) Addresses market access, national treatment and transparency of domestic regulation measures in a comprehensive manner (as elaborated in the best practices which follow).

### **BEST PRACTICES**

*A high-quality offer in the banking sector should contain the elements enumerated below.*

#### ESTABLISHMENT

- 1) Permits investor to choose the form of establishment – whether as a branch, joint venture or wholly-owned subsidiary – that makes the most business sense.
- 2) Contains no “economic needs tests” or other geographic or product-specific restrictions.
- 3) Grandfathers existing investments in operations and activities.

#### TEMPORARY ENTRY OF NATURAL PERSONS

Facilitates the temporary entry of key financial services personnel required for managerial, technological, system or risk management purposes (add other categories as may be required by applicable investments).

#### NATIONAL TREATMENT

- 1) Provides assured national treatment for asset management activities provided by financial services firms.
- 2) Avoids discriminatory treatment between international firms doing business in a member economy and domestic companies.
- 3) Should treat locally established affiliates of foreign banks on the same basis as domestic companies for regulatory and other purposes. Where differences in such treatment exist, they should not create conditions of competition more favorable to domestic service or service suppliers than for like service or service suppliers of other WTO Members.
- 4) Where commitments are below the level of access to the market provided under domestic law, the offer should not limit or restrict the present degree of market opportunities or the benefits already enjoyed by any financial service supplier or any other member in the market, whether cross-border or through a commercial presence, but nor should this preclude those benefits being available to all other members.
- 5) Non-discriminatory treatment against a foreign service provider introducing new products or services.

ADDITIONAL COMMITMENTS	
TRANSPARENCY	EXAMPLES
<ol style="list-style-type: none"> <li>1) Commits to improved transparency overall.</li> <li>2) Spells out procedures for providing interested parties with notice of proposed rulemaking and opportunities for comment on proposed new rules.</li> <li>3) Gives interested parties a reasonable amount of time to comment on, understand and take steps to comply before new or revised regulations take effect.</li> <li>4) Commits to current and proposed regulations being easily accessible in writing and on the Internet.</li> <li>5) Commits to a clear and accessible licensing process, including creation of a system for answering inquiries about regulatory requirements, interpretation, exceptions that are easily accessible and responsive to the public.</li> <li>6) Commits to providing justifications for denials of licenses or applications based strictly on factors explicitly identified in the pertinent regulations.</li> <li>7) Commits to the making of prompt licensing decisions and provides a timely, nondiscriminatory appeals process available for applicants whose applications are denied.</li> <li>8) Commits to provide clear and reliable information about an economy's financial services laws and practices.</li> </ol>	<ol style="list-style-type: none"> <li>a) Publication in national gazette.</li> <li>b) Standard procedures for submitting public comments.</li> </ol> <p>Clearly defines a standard "reasonable amount of time".</p> <p>E-government procedures.</p> <ol style="list-style-type: none"> <li>a) Creates an enquiry point for licensing and application matters.</li> <li>b) E-government procedures.</li> <li>c) Employees are evaluated on accountability to the public.</li> </ol> <p>Justifications are provided in writing and within a fixed timeframe, known to all.</p> <ol style="list-style-type: none"> <li>a) Spells out appeals process, sequence and timeframes.</li> <li>b) E-government procedures.</li> </ol> <ol style="list-style-type: none"> <li>a) E-government procedures.</li> <li>b) Regular interchanges between regulatory and supervisory bodies and private sector through public forums or other mechanism.</li> </ol>

## INSURANCE

### **GOALS**

*The offer should create new market-opening and investment opportunities.*

*To what degree does it satisfy the following goals?*

- 1) Improves upon 1997 commitments (where applicable)
- 2) Creates new business opportunities through the lifting of restrictions
- 3) Creates conditions that will attract new capital
- 4) Addresses market access, national treatment and transparency of domestic regulation measures in a comprehensive manner (as elaborated in the best practices which follow).

### **BEST PRACTICES**

*A high-quality offer in the insurance sector should contain the elements enumerated below.*

#### MARKET ACCESS

- 1) Contains no “economic needs tests” or other geographic or product-specific restrictions.
- 2) Grandfathers existing investments in operations and activities.

Reinsurance: marine and transportation insurance allowed cross border (Mode 1).

Reinsurance: Access to marine and transportation insurance and intermediation on cross border basis (Mode 1 for each).

Life and non-life reinsurance:

- a) Elimination of mandatory cessions
- b) Elimination of restrictions for cessions to foreign reinsurance companies
- c) Elimination of right-of-first refusal privileges
- d) Elimination of discriminatory collateralization and localization of assets
- e) Abolition of reinsurance monopolies
- f) Guarantee of freedom of form for reinsurance contracts

#### ESTABLISHMENT

- 1) Permits investor to choose the form of establishment – whether as a branch, joint venture or wholly-owned subsidiary – that makes the most business sense.
- 2) Provides full regard for relationship between parent and subsidiary.
- 3) Allows use of home company name in host economy.
- 4) Does not permit denial of form of establishment on the basis of the legal entity in the home market.
- 5) Permits freedom to determine percentage of foreign equity shares in joint ventures.
- 6) Provides for staged elimination of foreign equity limitations (if any) with minimum 51% ownership during staging period.

Compulsory lines: Fully bound by national treatment and market access, as defined by GATS

Monopolies: Best endeavors to eliminate insurance monopolies and exclusive services providers

#### TEMPORARY ENTRY OF NATURAL PERSONS

- 1) Avoids nationality / residence requirements irrespective of nationality
- 2) Provides freedom to foreign insurance company to select its own representatives in host economy
- 3) Provides for temporary visa or work permits for short periods of stay

#### NATIONAL TREATMENT

- 1) Provides the ability to compete for insurance coverage otherwise provided by state-owned or state affiliated enterprises.
- 2) Provides full national treatment with respect to capital, solvency, subject to prudential carve out (must explain reasons for less favorable treatment under prudential carve out)

- 3) Insurance mediation: monetary transfer obligations limited to what is necessary to assume legal responsibilities in host economies.
- 4) Avoids discriminatory treatment between international firms doing business in a member economy and domestic companies.
- 5) Where commitments are below the level of access to the market provided under domestic law, the offer should not limit or restrict the present degree of market opportunities or the benefits already enjoyed by any financial service supplier or any other member in the market, whether cross-border or through a commercial presence, but nor should this preclude those benefits being available to all other members.
- 6) Non-discriminatory treatment against a foreign service provider introducing new products or services.

#### TRANSPARENCY

- 1) Regulations to be made publicly available
- 2) Prior comment on new and revised regulations
- 3) Reasonable time interval prior to new regulations entering into force
- 4) Written explanations provided for rejected or accepting proposals
- 5) Written statement to insurance applicant outlining necessary documentation
- 6) Ability to provide information to the public on creditworthiness of a company
- 7) No restrictions on availability of financial services information to insurance suppliers
- 8) Availability of rules and procedures with respect to identification of financially troubled institutions
- 9) New tax measures affecting insurance enter into force only after their notification to the WTO on a semi-annual basis

#### SOLVENCY AND PRUDENTIAL FOCUS

- 1) New products, rates and services for other than personal or compulsory lines not subject to file and approval requirements
- 2) Regulations aimed at allowing the market to determine which products and rates are to be applied
- 3) Written explanation required of products that require file and approval procedures
- 4) "Deemer" method for use in file and approval procedures
- 5) No limits on the number or frequency of new products by an insurance supplier
- 6) No restriction on dividend payments, provided that solvency provisions are met
- 7) Encouragement of use of international "best practices" standards in accounting and auditing activities

#### INSURANCE MONOPOLIES

- 1) Monopolies generally prohibited from offering products outside monopoly designations, with provision that they not abuse monopoly position where authorized
- 2) Insurance suppliers with monopoly rights will keep separate accounts regarding monopoly and non-monopoly activities

#### INSURANCE REGULATOR

Must be an independent government entity.

#### PENSIONS

- 1) When private pensions are allowed, provide immediate obligations for full market access/national treatment to those providing private pensions in the market
- 2) Private pension fund managers designated to manage public or private pensions in host economy
- 3) Freedom to select form of commercial presence
- 4) Ability to offer range of product / investment options.



## ASSET MANAGEMENT

### **GOALS**

*The offer should create new market-opening and investment opportunities.*

*To what degree does it satisfy the following goals?*

- 1) Improves upon 1997 commitments (where applicable)
- 2) Creates new business opportunities through the lifting of restrictions
- 3) Creates conditions that will attract new capital
- 4) Addresses market access, national treatment and transparency of domestic regulation measures in a comprehensive manner (as elaborated in the best practices which follow).

### **BEST PRACTICES**

*A high-quality offer in the ASSET MANAGEMENT sector should contain the elements enumerated below.*

#### ESTABLISHMENT

- 1) Removes barriers to establishment by foreign investors in the financial sector and allows wholly-owned subsidiaries.
- 2) Allows establishment in the form of branches or other forms of presence.
- 3) Commits to permitting locally established affiliates of foreign asset management firms to use the services of affiliates outside the host economy to provide asset management services to domestic clients in the host economy.
- 4) Commits to removing prohibitions on foreign firms from managing pension assets, including public assets, on the same basis as domestic firms.
- 5) Contains no “economic needs tests” or other geographic or product-specific restrictions.
- 6) Commits to grandfather existing investments in operations and activities.
- 7) Ensures market access for the full range of asset management services, including cash or portfolio management, all forms of collective investment management, pension fund management, and custodial, depository and trust services and auxiliary services, including credit references and analysis, investment portfolio research and advice on acquisitions and on corporate restructuring and strategy.
- 8) Permits the dissemination and processing of financial information necessary to provide clients with necessary services.
- 9) Commits to support the provision and transfer of financial information, financial data processing, and the provision of advisory and software related services.

#### CROSS BORDER

- 1) Permits foreign asset management firms to provide services on a cross border (Mode 1) basis
- 2) Commits to support financial services provided cross border without requirement of local establishment (Mode 3) and also permits by consumption abroad (Mode 2)

#### TEMPORARY ENTRY OF NATURAL PERSONS

- 1) Facilitates the temporary entry of key financial services personnel required for managerial, technological, system or risk management purposes (add other categories as may be required by applicable investments).
- 2) Removes requirements for a minimum number of senior or key personnel to be resident or located in the economy.

**NATIONAL TREATMENT**

- 1) Provides assured national treatment for the full range of asset management activities provided by financial services firms.
- 2) Locally established affiliates of foreign asset management firms should have the same access to domestic and international markets as domestic companies.
- 3) Locally established affiliates of foreign asset management firms should be treated for regulatory and other purposes on the same basis as domestic companies. Where differences in such treatment exist, they should not create conditions of competition more favorable to domestic service or service suppliers than for like service or service suppliers of other WTO Members.
- 4) Avoids discriminatory treatment between international firms doing business in a member economy and domestic companies.
- 5) Where commitments are below the level of access to the market provided under domestic law, the offer should not limit or restrict the present degree of market opportunities or the benefits already enjoyed by any financial service supplier or any other member in the market, whether cross-border or through a commercial presence, but nor should this preclude those benefits being available to all other members.
- 6) Non-discriminatory treatment against a foreign service provider introducing new products or services.

***ADDITIONAL COMMITMENTS***

<i>TRANSPARENCY</i>	<i>EXAMPLES</i>
<ol style="list-style-type: none"> <li>1) Commits to improved transparency overall.</li> <li>2) Spells out procedures for providing interested parties with notice of proposed rulemaking and opportunities for comment on proposed new rules.</li> <li>3) Gives interested parties a reasonable amount of time to comment on, understand and take steps to comply before new or revised regulations take effect.</li> <li>4) Commits to current and proposed regulations being easily accessible in writing and on the Internet.</li> <li>5) Commits to a clear and accessible licensing process, including creation of a system for answering inquiries about regulatory requirements, interpretation, exceptions that are easily accessible and responsive to the public.</li> <li>6) Commits to providing justifications for denials of licenses or applications based strictly on factors explicitly identified in the pertinent regulations.</li> <li>7) Commits to the making of prompt licensing decisions and provides a timely, non-discriminatory appeals process available for applicants whose applications are denied.</li> <li>8) Commits to provide clear and reliable information about an economy's financial services laws and practices.</li> </ol>	<ol style="list-style-type: none"> <li>a) Publication in national gazette.</li> <li>b) Standard procedures for submitting public comments.</li> </ol> <p>Clearly defines a standard "reasonable amount of time".</p> <p>E-government procedures.</p> <ol style="list-style-type: none"> <li>a) Creates an enquiry point for licensing and application matters.</li> <li>b) E-government procedures.</li> <li>c) Employees are evaluated on accountability to the public.</li> </ol> <p>Justifications are provided in writing and within a fixed timeframe, known to all.</p> <ol style="list-style-type: none"> <li>a) Spells out appeals process, sequence and timeframes.</li> <li>b) E-government procedures.</li> </ol> <ol style="list-style-type: none"> <li>a) E-government procedures.</li> <li>b) Regular interchanges between regulatory and supervisory bodies and private sector through public forums or other mechanism.</li> </ol>



## Financial Services Collective Request

### Collective Request:

The GATS provides a framework under which economies can undertake financial services liberalization while enabling regulators to protect the stability and integrity of the financial system. Improved GATS commitments should include and build upon existing financial services liberalization as appropriate.

The following objectives should help WTO Members consider the scheduling of meaningful GATS commitments:

- Definitions: Use the agreed definitions in the GATS Annex on Financial Services for scheduling commitments (see attachment).
- Mode 1: undertake commitments for marine, aviation and transport insurance; reinsurance; insurance intermediation, insurance auxiliary services; financial advisory services and financial information and data processing services.
- Mode 2: undertake commitments for marine, aviation and transport insurance; reinsurance; insurance intermediation, insurance auxiliary services; and all non-insurance financial services (subsectors v-xvi).
- Modes 1 and 2: there can be advantages of additional liberalization, especially where the consuming agent is sophisticated, for example, an institutional consumer of securities services.
- Mode 3: for all financial services sectors, undertake commitments encompassing rights to establish new and acquire existing companies, in the form of wholly-owned subsidiaries, joint ventures and branches.
- Modes 1, 2 and 3: remove discrimination between domestic and foreign suppliers regarding application of laws and regulations (“national treatment”).
- Modes 1, 2 and 3: remove limitations such as monopolies, numerical quotas or economic needs tests and mandatory cessions.
- Transparency in development and application of laws and regulations, transparent and speedy licensing procedures, and other regulatory issues should be addressed in the negotiations.

Attachment: Definitions:

Insurance and insurance-related services

- (i) Direct insurance (including co-insurance):
  - (A) life
  - (B) non-life
- (ii) Reinsurance and retrocession;
- (iii) Insurance intermediation, such as brokerage and agency;
- (iv) Services auxiliary to insurance, such as consultancy, actuarial, risk assessment and claim settlement services.

Banking and other financial services (excluding insurance)

- (v) Acceptance of deposits and other repayable funds from the public;
- (vi) Lending of all types, including consumer credit, mortgage credit, factoring and financing of commercial transaction;
- (vii) Financial leasing;
- (viii) All payment and money transmission services, including credit, charge and debit cards, travelers cheques and bankers drafts;
- (ix) Guarantees and commitments;
- (x) Trading for own account or for account of customers, whether on an exchange, in an over-the-counter market or otherwise, the following:
  - (A) money market instruments (including cheques, bills, certificates of deposits);
  - (B) foreign exchange;
  - (C) derivative products including, but not limited to, futures and options;
  - (D) exchange rate and interest rate instruments, including products such as swaps, forward rate agreements;
  - (E) transferable securities;
  - (F) other negotiable instruments and financial assets, including bullion.
- (xi) Participation in issues of all kinds of securities, including underwriting and placement as agent (whether publicly or privately) and provision of services related to such issues;
- (xii) Money broking;
- (xiii) Asset management, such as cash or portfolio management, all forms of collective investment management, pension fund management, custodial, depository and trust services;
- (xiv) Settlement and clearing services for financial assets, including securities, derivative products, and other negotiable instruments;
- (xv) Provision and transfer of financial information, and financial data processing and related software by suppliers of other financial services;
- (xvi) Advisory, intermediation and other auxiliary financial services on all the activities listed in subparagraphs (v) through (xv), including credit reference and analysis, investment and portfolio research and advice, advice on acquisitions and on corporate restructuring and strategy.

## **Barriers and Impediments to Foreign Direct Investment (FDI): Checklist and Recommended Policy Response**

The World Bank and others, including private sector groups, have provided advice on the optimal investment environment. The following guiding principles seem to be used by many multinational corporations to evaluate direct investment opportunities. These are divided into two main groups: (1) The basic requirements, meaning those that a potential investor will want to see met before going any further; and (2) Specific requirements, those that inhibit the willingness of an investor to seriously consider an investment or inhibit the ability of the investor to operate efficiently and effectively in a market. The over-arching message is that governments must take steps towards greater financial sector openness and address specific impediments in conjunction with broader structural reform policies in order for both entities, the investor and the host economy, to fully realize the benefits of FDI.

### 1. Basic Requirements

- Stable and sensible economic policies.** Business needs confidence that the host economy will be managed in a competent and predictable way and that the rules of the game will not change mid-way through.
- Low political risk.** Capital tends to flow toward environments with low political risk. An investor's ability to rely upon the integrity of the host government, and its ability to maintain local law and order, are both essential to any long-term investment.
- A well educated labor force and availability of necessary inputs to an operation, including access to technology.** While the investor brings capital, often new technologies and management to the table, the quality of the local work force, and the availability of in-country materials are also important for success. As business operations, financial systems and commerce become increasingly IT-enabled, access to communications infrastructure and the Internet become critical.
- The size, value and potential for growth of the host economy's domestic market,** especially the purchasing power of its consumers. Companies will not invest in areas where there is little potential to make a profit. Note: some markets are small but attractive because they are high value.
- Reliable infrastructure.** The ability to complete transactions, get products and services to market, resolve disputes, and enter into contracts depends upon the presence of reliable telecommunications services, transportation services, power generation, office support services, a competent financial system, legal and judicial services, and other basics. Investments cannot yield reliable returns without them.
- A stable currency, especially protection from currency devaluation or manipulation.** Investments are often made in a foreign currency, usually dollars or yen, but the local products are sold in the local currency. While businesses recognize they need to adopt good mechanisms and management regimes to hedge against currency fluctuations, businesses are wary of economies with a history of currency devaluations and artificial currency manipulations. For example, they will be unwilling to make an investment in dollars if they suspect that local assets (valued in the local currency) will be devalued, and they will lose part (or possibly all) of the original dollar-based investment.

- **Stable and well-functioning market system.** Private property and the freedom to make contracts are essential components as are financial disclosures based on sensible accounting practices. Investors and creditors are rewarded for their good decisions and not shielded by government from the consequences of bad decisions.
- **Ongoing program of regulatory reform and efficiency.** Increased regulatory uniformity among economies should lower regulatory costs for market participants and the governments.

## 2. Specific Requirements

- **Market access and non-discrimination.** Investors will gauge the degree to which foreign governments will interfere with the company's ability to enter the market and compete fairly with domestic or other foreign providers. In some cases joint ventures are a condition of market entry. These can increase the risk to the investor if the regulatory framework is not transparent, is discriminatory and the local partner is not well established. The freer the market, the more attractive it becomes as an investment opportunity.
- **Sensible capital requirements and the ability to manage assets.** Investors will look favorably on economies that adhere to international best practices for paid up capital and capital reserve requirements, and where foreign and local investors are treated in the same way. They also look favorably on markets where they have the ability to manage assets on a global basis (for example, in the ability to invest funds where the return is likely to be greatest, rather than being forced to invest all funds domestically).
- **Policies that encourage the development of strong and stable capital markets.** Investors need to be able to borrow and invest locally as they wish with competitive sources of capital.
- **Provision for the remittance of dividends, interest, and royalties.** Investors are reluctant to place significant investments in economies that do not allow the repatriation of profits.
- **Property rights and the protection against the unfair seizure of or nationalization of assets.** Investors will not put their resources into economies that confiscate them. The importance of government protection of property and asset rights cannot be overstated. Property, includes real assets as well as intangible assets like patents and copyrights.
- **A good corporate governance ethic, supported by the host economy** to ensure that the owners of a company and all its stakeholders get their fair share.
- **Potential for the provision of goods and services beyond the geographic area of establishment.** A business will not necessarily locate in a particular economy or geographic region of a particular economy solely to operate there. Companies value the ability to source from an operating unit in one market to serve nearby external markets, or geographic regions in an economy. Often companies may decide to invest in an economy for the sole purpose of exporting the products of that investment to neighbouring economies. The extent to which barriers to trade in neighbouring economies can determine where the investment is placed, for example, where an economy is a participant in a bilateral or regional free trade or other preferential agreement, rules of origin within that agreement and local/regional content issues become important.
- A consistent and transparent standards regime in line with international best practices. This is especially important in the agriculture, food and goods sectors. For example, adherence to Codex, WTO Technical Barriers to Trade and Sanitary and Phytosanitary Agreements and the ability of an economy to regulate the products of such investment to world-class standards will be important determinants of investment.
- **A transparent and open legal and regulatory regime and good regulatory supervision.** Companies seek markets with fair and consistently enforced business laws, sensible and well-designed regulatory regimes, which do not impose undue burdens and impede the ability of the company to grow and create more opportunities. At the same time, they want to be sure

that their investment is subject to sensible and predictable regulatory supervision consistent with international best practices.

- **Favorable taxation and tax incentives.** While tax incentives geared to attract initial investments are important, governments have to think long term. The final investment decision is usually based on how an economy's taxation will affect the normal operating environment.
- **Temporary entry of natural persons.** Companies want to have the ability to move in professionals from other areas or regions on a temporary basis as needed.



**Checklist of Barriers and Impediments to FDI in the Financial Services Sectors and in other sectors and Recommended Policy Response**

Barrier/Impediment	Issues/Concerns	Recommended Policy Response
<p><b>Restrictive conditions of market entry and operation:</b></p> <ul style="list-style-type: none"> <li>- inhibits the willingness or ability of investors to bring in full range of capital, skills and technology and the efficiencies of management and new product lines</li> <li>- increases risk to potential investor</li> <li>- benefits of new capital, skills, technology and products only available to a portion of the market where establishment or trade is restricted to certain geographic regions</li> <li>- SMEs in restricted regions unable to profit from competitive benefit of new services</li> <li>- Incentive reduced for host government to upgrade prudential standards to internationally accepted requirements (foreign investors generally subject to high standards of prudential supervision in their home economy)</li> </ul>	<ul style="list-style-type: none"> <li>- foreign equity caps</li> <li>- joint venture requirements including ownership and control issues</li> <li>- limits on range of products</li> <li>- limits on ability to operate in an integrated national or regional market</li> <li>- onerous capital requirements</li> </ul>	<ul style="list-style-type: none"> <li>- phase out foreign equity caps</li> <li>- phase out joint venture requirements as condition of market access</li> <li>- remove limits on range of products offered (subject to appropriate supervisory mechanisms)</li> <li>- permit comprehensive market access in all regions of an economy</li> <li>- ensure that bilateral and /or regional trade or preferential agreements do not discriminate against products of foreign investment</li> <li>- consider export control practices that do not conform to international norms</li> <li>- consider external barriers that may be a disincentive to investment</li> <li>- permit foreign majority ownership</li> <li>- establish a strong regulatory system (thereby making establishment and operating restrictions unnecessary)</li> </ul> <p><i>Strengthen Local Industry</i></p> <ul style="list-style-type: none"> <li>- support and encourage capacity building in regulatory supervision</li> <li>- encourage local providers to participate in Basel 2 capacity building workshops (capital adequacy, risk assessment and management, operational risk and financial disclosure);</li> </ul>

		and other financial sector capacity building programs such as those promoted by the IAIS, World Bank, ADB, IMF, PECC and APEC.
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Barrier/Impediment	Issues/Concerns	Recommended Policy Response
<p><b>Lack of National Treatment and MFN</b></p> <ul style="list-style-type: none"> <li>- reduces competitiveness and discourages growth and efficiency of local providers</li> <li>- local providers less resilient to shocks</li> <li>- increase risk by over-reliance on a few foreign service providers</li> </ul>	<ul style="list-style-type: none"> <li>- discrimination between local and foreign providers, including differing capital requirements</li> <li>- differential requirements on 3<sup>rd</sup> country providers</li> <li>- discriminatory tax</li> </ul>	<ul style="list-style-type: none"> <li>- equal treatment for foreign and local providers</li> <li>- improve operational risk management in the financial services sector and in other sectors through capacity building (e.g. Basel 2)</li> <li>- remove discrimination between foreign goods and service providers in terms of market access and operations</li> </ul>
<p><b>Restrictions on Asset Management</b></p> <ul style="list-style-type: none"> <li>- inability to get best return on investment</li> <li>- increases risk</li> <li>- inability to match liabilities with assets</li> </ul>	<ul style="list-style-type: none"> <li>- restrictions on financial service providers; banks, insurers, asset managers</li> <li>- restrictions on assets for investment</li> <li>- restrictions on personnel</li> </ul>	<ul style="list-style-type: none"> <li>- allow cross border investment</li> <li>- allow fund management from overseas</li> <li>- provide for commercial presence of overseas service suppliers</li> </ul>
<p><b>Lack of transparency, predictability and openness in legal and regulatory regimes</b></p> <ul style="list-style-type: none"> <li>- increases risk to investor and consumer</li> <li>- encourages discriminatory business practices</li> <li>- increases risk of corruption</li> <li>- promotes market inefficiencies</li> </ul>	<ul style="list-style-type: none"> <li>- procedures for right of redress and/or appeal</li> <li>- license application and award procedures</li> <li>- inconsistent and discriminatory treatment of business entities</li> </ul>	<ul style="list-style-type: none"> <li>- clear, published processes for legal and regulatory decisions and right of appeal</li> <li>- clear published process for regulatory policy formulation and stakeholder consultation</li> </ul>
<p><b>Weak regulatory and legal infrastructure</b></p> <ul style="list-style-type: none"> <li>- inhibits smooth functioning of the market</li> <li>- encourages monopolistic and cartel practices</li> <li>- inhibits ability to enter into contracts</li> <li>- increases risk and costs to investor and host economy</li> </ul>	<ul style="list-style-type: none"> <li>- poor prudential supervision</li> <li>- enforcement of binding contracts</li> <li>- lack of expertise</li> <li>- inadequate solvency and creditor rights</li> <li>- inadequate standards</li> <li>- framework and regulatory processes</li> </ul>	<ul style="list-style-type: none"> <li>- capacity building in internationally recognized best practices for financial sector regulation</li> <li>- strengthened economic and legal infrastructure, including bankruptcy laws and regulations</li> <li>- capacity building to bring standards and regulatory processes</li> </ul>

	- weak property protection rights and enforcement	up to internationally accepted norms and best practices
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Barrier/Impediment	Issues/Concerns	Recommended Policy Response
<p><b>Capital controls</b></p> <ul style="list-style-type: none"> <li>- potential to increase cost of capital to investor and consumer</li> <li>- inhibits ability of investor to source and place capital appropriately and efficiently</li> <li>- difficulty in hedging risk</li> <li>- inhibits willingness of investor to participate in the market</li> <li>- future exchange rate vulnerabilities without clear exit strategy</li> </ul>	<ul style="list-style-type: none"> <li>- repatriation of profits, dividends, remittances</li> <li>- inability to source capital and place investments on a global basis</li> </ul>	<ul style="list-style-type: none"> <li>- phase out capital controls</li> <li>- strengthen capital markets infrastructure</li> <li>- regulatory reform</li> <li>- phase in flexible exchange rate arrangements</li> </ul>
<p><b>Weak governance</b></p> <ul style="list-style-type: none"> <li>- increases threat of corruption</li> <li>- reduces market efficiency</li> <li>- promotes monopolistic practices</li> <li>- threat of market failures</li> </ul>	<ul style="list-style-type: none"> <li>- corruption</li> <li>- lack of accountability</li> <li>- unpredictable market situation</li> <li>- lack of competition</li> </ul>	<ul style="list-style-type: none"> <li>- strong corporate and public sector governance ethic</li> <li>- capacity building measures to promote understanding and awareness of good governance</li> <li>- competition policy and laws</li> </ul>
<p><b>Poor property rights protection</b></p> <ul style="list-style-type: none"> <li>- inhibits ability of investor to offer innovative product lines</li> <li>- inhibits willingness to fully participate in the markets</li> </ul>	<ul style="list-style-type: none"> <li>- asset seizure, including nationalization</li> <li>- patent, copy right and trademark protection</li> </ul>	<ul style="list-style-type: none"> <li>- adequate laws and rights of redress</li> <li>- eliminate ability to nationalize assets</li> <li>- enforcement of property laws</li> </ul>
<p><b>Restrictions on the Movement of Natural Persons</b></p> <ul style="list-style-type: none"> <li>- reduced ability to share expertise, technology and skills</li> <li>- increases operational inefficiencies</li> <li>- inhibits ability to offer and service innovative product lines on time</li> </ul>	<ul style="list-style-type: none"> <li>- delays in processing temporary visa applications</li> <li>- limited adjudication ability</li> <li>- lack of clear criteria and procedures</li> </ul>	<ul style="list-style-type: none"> <li>- facilitate business travel and intra-company transfers</li> <li>- expedite visa processing for professionals</li> </ul>



Annex B

**DATA REQUIREMENTS TO SUPPORT EARLY WARNING  
SYSTEMS AMELIORATING THE IMPACT OF ADVERSE  
VOLATILE CAPITAL FLOWS**

**Principal Investigator:  
J. Kimball Dietrich\*, University of Southern California**

**August 14, 2006**

**ABSTRACT**

Efficient markets rely on timely and high quality data and other information to provide the price discovery and liquidity functions relied upon by market participants. International capital market data from official disclosures are examined and evaluated against the standards of timeliness, completeness, and adequacy in meeting market users' needs to anticipate problems and develop early-warning systems. Among the many efforts since the 1990's crises to improve capital flow data, the balance sheet approach offers the most promise. Hedge fund data from regulatory filings and private data sources are reviewed next, with the amount of proprietary hedge fund statistics on their activity presenting the best prospects for an analysis of their investment strategies that might threaten market stability. The availability of data on derivatives is described and evaluated. The final section of the paper contains a number of recommendations concerning the publication and use of data to increase the ability of regulators and policy-makers to anticipate and deal with possible problems to the smooth functioning of international capital markets.

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# **DATA REQUIREMENTS TO SUPPORT EARLY WARNING SYSTEMS AMELIORATING THE IMPACT OF ADVERSE VOLATILE CAPITAL FLOWS**

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# **DATA REQUIREMENTS TO SUPPORT EARLY WARNING SYSTEMS AMELIORATING THE IMPACT OF ADVERSE VOLATILE CAPITAL FLOWS**

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## **EXECUTIVE SUMMARY**

Volatile capital flows are usually related to sudden changes in market sentiment coming from revisions in the assessment of future economic outcomes that can be the basis of speculative gains or losses or from profits or losses associated with routine business activities. Better information has economic value in terms of reducing risks of investments in an economy. Research has shown a reduction of one-half percent in the borrowing costs of emerging market economies with the best data dissemination systems. Adequate flows of information to market participants reduce the likelihood of surprises and abrupt revisions in expectations producing capital flow reversals and the possibility of financial crises. Information is essential to efficient market functioning where prices of assets reflect a meaningful balance of expectations concerning future risks and returns in the marketplace and liquidity can be provided to traders at reasonable cost. This paper focuses on the types of information needed by participants in international capital markets: official information on capital flows, cross-border investments, and the structure of economies; information on the activities of active international capital market traders like hedge funds; information on developments in derivative markets used for hedging, risk management, and speculation.

All market participants need data, and market participants always want more information than is available: data is only available at a cost. Data dissemination policies of governments and businesses are determined by weighing the advantages of informed trading market participants and the costs of collecting data and the disadvantages of revealing private or official strategies or possible policy options to the market. Available information will never be sufficient to satisfy all market participants. This paper provides background material for ABAC members to form opinions on data needs and policy that advance their goal of efficient, integrated, and growing international capital markets.

The paper recommends that APEC economies take actions to address issues that limit the perception of reliability of official data releases. It is suggested that ABAC urge APEC statistical agencies to commit to a uniform code of conduct concerning the quality, completeness, and timeliness of data releases. A second recommendation is that ABAC consider urging economic officials to create investor relations units that would work with investors in an effort to provide them with the data they need to reduce their concerns about risks in the economy and the uncertainty concerning the key economic fundamental determinants of an economy's financial market performance.

Official data releases on international capital flows and the structure of economies in terms of sector balance sheets have been improved greatly since the financial crises of the 1990's. Some areas of improvement are more complete than others, as discussed in



the paper, and new developments in data collection promise development of more effective early warning systems than in the past. Data necessary for these efforts can be enhanced by additional effort in collecting balance sheet data. The paper recommends that ABAC endorse the further improvement in the quality and completeness of data collection conducted under the auspices of the International Monetary Fund (IMF) GDDS, SDDS, and balance sheet approach.

Hedge fund regulation and required reporting remain minimal. If hedge funds are considered a threat, despite the proliferation of hedge funds and shift away from exchange-rate speculative strategies by the industry in recent years, private and informal data sources will be required to develop intelligence concerning future speculative attacks or massive hedge-fund trading disruptive to markets. The paper suggests that ABAC members weigh the costs and benefits of developing hedge fund surveillance units and, if the costs are warranted, recommends the development of hedge fund expertise within the APEC community housed in individual economies or as a multilateral effort.

Derivative markets are mainly over-the-counter markets and data on activities in those markets is gathered infrequently. An aggressive effort of data collection and combining from various sources might be warranted as an effort to detect possible problems stemming from derivative trading. The paper recommends that these efforts, like hedge fund surveillance efforts, might be considered if they are judged to be worth the considerable costs.

# DATA REQUIREMENTS TO SUPPORT EARLY WARNING SYSTEMS AMELIORATING THE IMPACT OF ADVERSE VOLATILE CAPITAL FLOWS

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## I. Financial Crises and Data: Introduction

Data and information are the grease to the many wheels and hubs in efficient capital markets. The term *efficient capital markets* in the finance literatures refers to the assumption that asset prices reflect relevant information concerning economic fundamentals available to investors and other market participants. Markets are important because they provide investors with *liquidity*, essential to most investors to ease entry to and exit from commitments of financial resources to asset holdings. An equally important role of markets is *price discovery*, that is that transactions initiated by informed investors operating in efficient financial markets establish values and rates of return on assets reflecting consensus views of fundamental economic conditions determining the future risks and returns on different assets. These values and expected rates of return are important in determining the most efficient business strategies and achieving an efficient allocation of real resources in both the public and private sectors. Liquidity and price discovery are valuable if not essential aspects of international financial markets that are built on reliable sources of economic and financial data.

Data on financial market activity are reported by participants in the market, including official institutions like governments and central banks, regulated private firms

like commercial banks and others, exchanges, trade associations, estimates of the activities of private individuals and firms, and so forth. Some financial market activities are reported partially or not at all. As will be discussed in the next section, the quality and timeliness of data on the financial-market activities of all classes of financial market participants are important in forming expectations of future market conditions and associated risks, trading strategies, and possible future opportunities or problems.

High quality, timely, and comprehensive data collection and dissemination is costly to provide. What benefits to market participants justify these costs to suppliers of data? Two answers reflect the *public good* and *private benefit* attributes of financial markets benefiting from the availability of good data. Both the public good and private benefits and their relation to data are described in the following discussion.

*Liquidity* and *price discovery* are public goods that benefit all market participants and policy makers since they contribute to good policy decisions and efficient allocation of resources. Reliable trades at prices meaningful in terms of underlying fundamentals assure private investors of fair returns on average for investment strategies entailing risk. Unreliable data force economic decision-makers to be cautious in their financial market activities, demanding lower prices and higher returns to account for the uncertainties and unreported unknowns inherent in an economic environment. New information may easily tip expectations based on partial or unreliable information towards expectations reversing or doubling the implications of financial market strategies, increasing the price reactions and hence risk of the market. The chances of herd behavior and accompanying “crowded trading” as many traders attempt to exit positions simultaneously in response to changes in expectations arising for unexpected data or rumors are reduced with high

quality data enabling analysts and research departments to sift through historical data and build statistically reliable predictive models.

The private benefits to financial markets with the availability of good data result from increased confidence and reduced uncertainty concerning the true state of an economy and financial markets. Increasing data quality can have real benefits to an economy by increasing confidence and reducing uncertainty concerning the ability of sovereign borrowers to fulfill debt obligations. For example, Cady and Pellechio (2006) provide convincing evidence that emerging-market sovereign borrowers adhering to higher IMF data standards (as described in the next section) have borrowing costs between 20 and 50 basis points lower than sovereign borrowers with lower quality data, with the larger interest-costs savings associated with the most complete data disclosures. Reduced yield risk spreads on debt instruments issued by emerging-market governments have clear benefits for residents of those economies. To achieve these important savings, emerging market officials in countries issuing securities must be committed to gathering and disseminating the best data possible.

Private-market analysts and investors aggressively seek more reliable international market data. Data distribution services have developed to ease the updating and expansion of available data series to financial market customers. Sophisticated market participants scrutinize critical data series as they are released to assess any implications requiring minor or major innovations in previously held expectations. Hypothesized relations between data series and important economic magnitudes are based on extensive statistical analysis and comparisons of theoretical models with market outcomes, as we discuss with early warning systems (EWS) in the next section. These

analyses require long historical series of comparable observations on important economic variables. Some officials and policy-makers may view this attention and scrutiny as bothersome, but it has a useful analogy in private debt and equity financial markets.

In the United States and other developed markets, the analyst community, regulators, and sophisticated investors demand high-quality data from publicly traded firms. Poor or misleading data is often punished by the market in terms of valuations of firms reluctant to communicate candidly and frequently to the investor community. Recent accounting scandals and revelation of option-granting practices producing large share-price losses illustrate the importance of investor confidence in reported private-sector data and the consequences for assets values of a loss of confidence in data quality.

Most firms in the United States have *investor relations* departments. Top executives and investor relations staffs of the firm participate in presenting and analyzing financial and operating data through a variety of mediums like analyst meetings, phone conferences, and “road shows.” Securities laws in the United States also assure investors that false disclosures are subject to criminal and civil legal sanctions. Gaining the confidence of current and future investors justifies the management time and direct costs of investors relations departments in terms of market access and valuation of claims on corporations. Losing the confidence of its investors is a major cost to firms that often must expend substantial resources to restore the reputation of the firms.

Sovereign borrowers of emerging market (or developed) economies entering international capital markets are in a situation similar to private corporate issuers in developed securities markets. The economic situation is however qualitatively different between sovereign and private issuers in one very important way. Governments and

other official issuers can influence economic fundamentals for an entire country through policy decisions. The market can lose confidence in official data disclosures due to lack of complete data reporting or the discovery or suspicion of manipulation of data. If officials offer unconvincing arguments in defense of policies accompanying data disclosures (as for example loss of reserves and continuing pledges to maintain a fixed exchange rate), this can and often does shake market confidence and increase assessments of risk. Inadequate, suspicious, unreliable data can increase the chances of sudden changes in market sentiment when new information becomes available to market participants.

Agencies responsible for official data, like central banks, statistical bureaus, and regulatory agencies, develop reputations among investors in part on the basis of their historical record of releasing and explaining data, no matter how bad or good the statistical releases appear. In the interest of smooth market functioning, it would be productive if official agencies were committed and held accountable on the record to highest possible standards in data publication. An important extension of this commitment would be if these agencies were actively helpful to data users and were perceived as trying to meet the data requirements of the international investor community, like the most successful investor relations departments of publicly traded firms. As Larry Summers wrote after the 1990's crises:

Providing confidence to markets and investors that a credible path out of crisis exists and will be followed is essential. That requires transparency (providing all relevant information to markets so that risk-averse investors are not uncertain about how deep serious problems are), consistent and credible commitment to a coherent –policy-adjustment package (so that political and policy uncertainty does not undermine investors' confidence), and close consultation with creditors (so that sudden negative policy and information are minimized, and so that creditors are reassured that cooperative approaches to debt servicing difficulties will be pursued. ( p. 11)

Clearly, data disclosures and other official communications can create confidence and may serve to avoid crises in the first place. Institutional investors' confidence and trust should be an objective of reporting agencies, in anticipation of the positive goals of reducing unnecessary risk assessments, smooth market functioning, and expanding the role of international financial markets in an economy's development. This report suggests some measures in support of increasing confidence in international financial market data based on this discussion in the final section.

## II. Official Efforts to Improve International Capital Market Data<sup>\*</sup>

Since the Financial Crises of the 1990s, most economies have attempted to improve financial market data released to the public under the guidance of multi-lateral organizations, most importantly by the International Monetary Fund (IMF). The effort to improve data has been a multi-pronged process with many task forces formed out of the many multi-national organizations (like the Bank for International Settlements (BIS), the World Bank, and the United Nations (UN)), as well as regional organizations and individual economies. It is enough for purposes of this policy background paper to provide a general summary describing this effort and provide an assessment of its successes to date. Providing a summary here should not be taken to diminish the importance of the details of this effort and the significance of its agenda for many working groups and task forces for the future. Paukula and Waller (2005) provide a good review of many of these data improvement initiatives: the following discussion can be seen as an update and expansion of the discussion in that paper. The most recent activities directed at improvements in international data are described in the IMF's Statistics Department newsletter (2005b) and in the many papers and reports of meetings posted on their website and those of other multinationals describing data improvements initiatives and reporting on their progress.

### Improvements in Official International Capital Flow Data and Early Warning Systems

The IMF has played a key role in efforts to improve international capital market data in its General Data Dissemination System (GDDS) and the Special Data

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Dissemination Standard (SDDS), both initiated in the wake of the financial crises of the 1990's. The GDDS is a framework to develop a program of data collection and publication for less developed economies among IMF members. This GDDS program is often accompanied by assistance by the IMF and other multinational agencies and organizations. One goal of the GDDS program is to encourage and assist countries to develop data dissemination systems adequate to "graduate" to the SDDS. As of September 2004, 76 countries belonged to the GDDS program.

The SDDS was established to guide IMF members in developing data disclosures adequate to provide access to international capital markets. As of March 31, 2006, 62 countries participated in SDDS, or were "subscribers" to the system in IMF terminology. Subscription to SDDS requires data in four sectors: the real sector, fiscal sector, financial sector and external sector. An important component of these data disclosures are country disclosures of "metadata" consisting of information by subscribers about their data definitions and collection methods, as well as initiatives to improve future data releases, including actions taken under both the GDDS and SDDS and the Data Quality Program (IMF Statistics Department, 2005a).

Timely disclosures of data are important in the application of early warning systems (EWS). To illustrate the adequacy of existing data disclosures as well as the types of data requirements market participants have used to develop EWS, Table 1, "EWS Data Variables and Availability for Three Economies," lists all the variables used in representative EWS models of financial crises or sovereign debt defaults that have been published and reviewed for this study. As is demonstrated by the table for the selected economies, most required data is available and is published within a reasonable

timeframe. In terms of the data reporting by SDDS, most of the variables required by EWS are available from the system (all APEC economies except Brunei, Chinese Taipei, and New Zealand subscribe to SDDS). While data comparability and timeliness have improved since the 1990's with the development of the SDDS, this does not mean that there are no complaints from international capital market participants about quality or availability of comparable data series from each economy.

An informal survey of international financial market participants and a review of the literature identify two often-mentioned types of limitations to data available through SDDS. Addressing these limitations will form the basis of additional ABAC recommendations to APEC concerning international financial data presented in the final section of the paper. These data limitations are discussed below under the two headings, practical and theoretical limitations on SDDS data.

#### Practical International Financial Data Limitations

First, in terms of practical considerations, financial market data users continue to raise certain general criticisms of some data series, for example international reserves. While these data are reported monthly, Table 1 shows that they are often reported with a two-month lag, although the IMF explains that some delays are due to “technical problems.” According to Maurine Haver, President of Haver Analytics, a data distribution firm widely used by institutional investors, one major concern to international financial market observers is that the definitions of international reserves are not consistent. Market observers feel they need more detail on the composition of reserve assets and currencies. The currency composition of reserves is likewise of interest (see Truman and Wong (2006)). While the IMF is focusing attention on the issue of

improving international reserves reporting (see IMF Statistics Department (2005b), p. 4), the concerns of the private financial market participants concerning the timeliness, comparability, and completeness of the reporting of reserves are voiced frequently.

Another set of practical concerns has to do with the terms at which necessary data are made available to researchers and analysts in the private sector. For example, some countries until recently charged substantial subscription fees for data to be distributed to financial market users. Other statistical offices continue to charge for historical series necessary for statistical analysis and model building. Some data are published that are difficult to users to interpret because English language annotations of tables are not easily used or are not available.

Finally, several international financial market participants have voiced concerns about the ethics of data publications by some statistical offices. For example, official data releases have been said to contain obvious errors, and that corrected data are provided to some users before an officially scheduled update of the release. Possession of corrections to released data that are not officially released could have significant market impact and present issues similar to those associated with inside information concerning private-sector issuers. Another complaint dating from the crisis period is that official data disclosures were not complete pictures of underlying financial exposures of government-related institutions.

### Theoretical Issues

Theoretical issues raised by practitioners with respect to international financial data have to do with the fact that most of the published data under SDDS is flow data, based on balance of payments and national account or similar statistics. National income

**Table 1: EWS Data Variables and Availability for Three Economies (Korea, Thailand, Chinese Taipei)**

(Last updates as of May 2006)

Variables	Korea		Thailand		Chinese Taipei	
	Availability	Last Update (Frequency)	Availability	Last Update (Frequency)	Availability	Last Update (Frequency)
<b>External Sector Variables</b>						
Overvaluation ( <i>Exchange rate</i> )	Yes	28-Apr-06 (D)	Yes	23-May-06 (D)	Yes	Apr-06 (M)
Terms of trade	No		No		No	
Current account	Yes	Mar-06 (Q)	Yes	Q4-05 (Q)	Yes	Q1-06 (Q)
Current account balance/GDP	Yes	Q1-06 (Q)	Yes	Q4-05 (Q)	No(GDP)	
Current account balance/investment	No (investment)		No (investment)		No(investment)	
Reserves growth	Yes	Apr-06 (M)	Yes	May-06 (M)	Yes	Apr-06 (M)
Reserve losses	Yes	Apr-06 (M)	Yes	May-06 (M)	Yes	Apr-06 (M)
Reserves/M2 (level)	Yes	Mar-06 (M)	Yes	Mar-06 (M)	Yes	Mar-06 (M)
Reserves/M2 (growth)	Yes	Mar-06 (M)	Yes	Mar-06 (M)	Yes	Mar-06 (M)
Reserves/Imports (level) <sup>1</sup>	Yes	Mar-06 (Q)	Yes	Q4-05 (Q)	Yes	Q1-06 (Q)
Openness (Exports+Imports/GDP)	Yes	Mar-06 (Q)	Yes	Q4-05 (Q)	No(GDP)	
Export growth <sup>2</sup>	Yes	Mar-06 (Q)	Yes	Q4-05 (Q)	Yes	Q1-06 (Q)
Import growth	Yes	Mar-06 (Q)	Yes	Q4-05 (Q)	Yes	Q1-06 (Q)
Total external debt/GDP	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No(debt, GDP)	
Debt/Export	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No(debt)	
Short-term external debt (original maturity basis)/reserves	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No(external debt)	
Short-term external debt (remaining maturity basis)/reserves	No		No		No	
ST Debt/Reserves	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No(debt)	
Interest on short-term external debt/GDP	No(interest)		No(interest)		No(interest, GDP)	
Debt service on short-term external Debt/reserves	No (debt service)		No(debt service)		No(debt service)	
Financing requirement/reserves	Yes	2004 (Y)	Yes	Mar-05 (Q)	No(financing)	
FDI/GDP	Yes	2004 (Y)	Yes	2004 (Y)	No(FDI, GDP)	

<sup>1</sup> Import of goods and services is available quarterly but merchandise import is available monthly.

<sup>2</sup> Export of goods and services is available quarterly but merchandise export is available monthly.

**Table 1 (continued): EWS Data Variables and Availability for Three Economies (Korea, Thailand, Chinese Taipei)**

Variables	Korea		Thailand		Chinese Taipei	
Oil prices	No		No		No	
LIBOR	Yes		Yes		Yes	
U.S. Treasury bill rate	Yes		Yes		Yes	
<b>Monetary/Fiscal Policy Variables</b>						
Bank Deposits	No		No		No	
Domestic credit growth <sup>3</sup>	Yes	Mar-06 (M)	Yes	Mar-06 (M)	Yes	Mar-06 (M)
Domestic credit/GDP growth	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No (credit, GDP)	
Growth of credit to pvt. Sector	Yes	Mar-06 (M)	Yes	Mar-06 (M)	Yes	Mar-06 (M)
Financing requirement ( <i>Govt</i> )	Yes	Mar-06 (M)	Yes	Mar-06 (M)	No (financing)	
Domestic real interest rate <sup>4</sup>	Yes	Mar-06 (M)	Yes	Apr-06(M)	No (inflation)	
<i>Real interest rate on deposits</i>	Yes	Apr-06 (M)	Yes	Apr-06(M)	No (inflation)	
<i>Ratio of lending interest rate to deposit interest rate</i>	Yes	Apr-06 (M)	Yes	Apr-06(M)	No (inflation)	
Domestic Foreign real interest Rate differential	Yes	Apr-06 (M)	Yes	Apr-06(M)	No (inflation)	
Inflation (year-on-year, in percent)	Yes	May-06 (M)	Yes	Apr-06(M)	No	
Short Term Debt	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No	
Debt coming due	No		No		No	
Total Debt	Yes	Q4-05 (Q)	Yes	Q4-05 (Q)	No	
Commercial Share	No		No		No	
Concessional Share	No		No		No	
Multilateral Share	No		No		No	
Primary balance in percent of GDP	No (net interest payment/receipt)		No (net interest payment/receipt)		No (net interest payment/receipt)	
General government consumption as % of GDP	No (govt cons)		No (govt cons)		No (govt cons, GDP)	
<b>Real Sector Variables</b>						
GDP growth	Yes	Q1-06 (Q)	Yes	Q4-05 (Q)	No	

<sup>3</sup> Domestic credit is not given in case of Taiwan. However, one can obtain it by adding claims on public and private sector.

<sup>4</sup> Can calculate using nominal interest rate and inflation on which data is available. Though interest rate data is available daily price data is available only monthly. For Taiwan, inflation data is not available.

<b>Table 1 (continued): EWS Data Variables and Availability for Three Economies (Korea, Thailand, Chinese Taipei)</b>						
<b>Variables</b>	<b>Korea</b>		<b>Thailand</b>		<b>Chinese Taipei</b>	
Industrial production	Yes	Mar-06 (M)	Yes	Mar-06 (M)	No	
<b>Stock Market Variables</b>						
Stock market	Yes	28-Apr-06 (D)	Yes	23-May-06 (D)	Yes	23-May-06 (D)
Stock price growth	Yes	28-Apr-06 (D)	Yes	23-May-06 (D)	Yes	23-May-06 (D)
<b>Contagion Variables</b>						
Global liquidity contagion	These model specific derived variables, i.e. the authors have used various variables to construct these measures and the exact methodology and data requirements are not known for these variables. Most of these variables are used in EWS models used in industry.					
Regional Contagion						
Devaluation contagion						
Market pressure contagion						
Interest rate 'event' <sup>5</sup>	Yes	Mar-06 (D)	Yes	23-May-06 (D)	Yes	Mar-06 (M)
<b>Other Variables</b>						
Political event	No		No		No	
Regional dummies	No		No		No	
Moody's sovereign credit ratings	No		No		No	
Institutional investor sovereign credit ratings	No		No		No	
Presidential Elections	No		No		No	
Index of Freedom Status	No		No		No	

Sources for EWS Model Variables: Berg, Borensztein, and Pattillo (2004), Detraigiache and Spilimbergo (2001), Manasse, Roubini, and Schimmelpfennig (2003), and Pakula and Waller (2005)

<sup>5</sup> Depending on the definition of "event" it can be calculated from the data. Although Korea is supposed to report interest rate data daily it reports it when there is a change in the interest rate on aggregate credit ceiling loans.

account and balance of payments data like GDP or exports are *flow* statistics rather than the total accumulation of *stocks* of assets or liabilities on balance sheets of decision-making entities in an economy. Stock data on debt levels necessary to estimate debt-service obligations are often not available (see Table 1). While the IMF has expanded its SDDS requirements for external debt in 2003, the quality and coverage of stocks of assets and liabilities are limited in most countries. The historical lack of balance sheet data forced analysts to construct analytical approaches and models that were compromised by data availability, as noted in Table 1, under several asset and liability classifications.

In evaluating the data available for EWS development, one must keep in mind that most of these models were developed and conditioned on data availability, not necessarily the suitability of data. In other words, the coverage of the current data required by SDDS, even if available and of sound quality, does not satisfy the theoretically desirable and most useful variables to use developing in EWS models. Previously reported EWS research reflects data compromises forced on analysts concerning measurements of vulnerabilities in asset and liability accumulations or stocks, and should not be used as a standard for the ideal data to have available. These points are relevant to the following discussion on the recent efforts to improve data useful in diagnosing financial market vulnerability to crisis.

#### Asset and Liability Data and the Balance Sheet Approach

Voluminous research reported by academic and central bank researchers, private analysts, and by the multilateral institutions since the financial crises of the 1990's, has focused on balance-sheet mismatches (maturity and currency) for important economic entities as an important cause of these crises. Sector balance-sheet mismatches can result

in liquidity crises when income or other flows are inadequate to cover required debt service (see Chang and Velasco (1998)). The distributed effects of liquidity crises are transmitted from one sector of the economy to other sectors: for other examples of transmission, see Counterparty Risk Management Policy Group II (2005) report discussed in the next section. These accumulating liquidity and often solvency issues are responsible for increased volatility in asset values and required rates of return in international financial markets in the face of liquidity difficulties. These issues are emphasized by Pettis (2001) among others.

In recognition of the importance of balance sheet mismatches and the way economic shocks are transmitted through balance sheets of sectors in an economy, in 2002 the IMF increased its efforts to develop a *balance sheet approach* (BSA) to presenting sector sheets. The goal is to be able to assess each sector's financial market exposures to currency and maturity mismatches (see Mathisen and Pellechio (2006)). In the following discussion, we discuss both the implications of the BSA for data reporting and quality improvement and the significance of IMF surveillance effort to reducing the probability of an unexpected financial market disturbance (crisis).

The BSA is based on the presentation of aggregate balance sheets for seven sectors of an economy:

- (1) Central bank;
- (2) General government;
- (3) Other depository institutions;
- (4) Other financial corporations;
- (5) Non-financial corporations;
- (6) Other resident sectors;
- (7) Rest of the world.

This breakdown of an economy into sectors with balance sheets is comparable to the venerable Federal Reserve Board's *Flow of Funds* accounts, published since the end of



the Second World War. In addition to the sectors, data gathering is aimed on a classification of important asset and liability classes, that is the required entries in the balance sheets. The major difference in the IMF BSA initiative and data reported by the Federal Reserve is the emphasis by the IMF on maturity and currency classifications of individual asset and liability classes. Of course, these classifications are of central interest in developing assessments of likely international financial market disturbances stemming from volatile capital flows.

Accurate and timely data disclosures under the BSA initiative would meet many practical and theoretical concerns raised in developing EWS. Unfortunately, data on balance sheets of most sectors in most economies are not yet reported with enough reliability to give a complete view of non-financial sector vulnerabilities and aggregations of balance sheet items can obscure significant omissions in data on specific types of transactions. Tables 2 and 3 below from Mathisen and Pellichio (2006) show an assessment of the relative reliability of different sectors' balance sheets source data and specific asset and liability entries, and they report:

Data reliability can vary significantly by sector (Table 2). In general, central bank data are most reliable, followed by data from commercial banks and other financial institutions, international investment position data, and government debt data. Secondary trading in government debt can substantially affect the ability to determine sectoral holdings of government securities. Data on households and nonfinancial corporations are typically very scarce in emerging markets and in many cases are nonexistent. ... Sectoral data reliability can vary by methodology. In general, the most reliable data are those that follow ... [IMF guidelines].... Data on nonfinancial corporations' positions vis-à-vis household and nonprofit organizations are generally less reliable. The uncertainty of these data are exacerbated if derived on a residual basis. [p. 30]

Households and businesses account for most bank and non-bank borrowing. Much of the data on foreign obligations and asset claims are estimated and the above quote may overstate the reliability of these assets and liabilities. Most of these data are based on comparisons between domestic reporting and foreign creditor and investment surveys. A

BIS report (2002), while somewhat outdated, discussed the differences between national and creditor estimates: these can be substantial and important.

While in most economies central bank and regulated financial institutions balance sheet data are routinely generated in great detail and with sanctions against misrepresentation (see Table 2), many of the other non-bank data items are estimated using survey data. Surveys are expensive and hence data are collected less frequently than would be desirable to analyze growing sector maturity or currency mismatches. The Bank of Thailand (2006) provides a detailed example of survey procedures for estimating external debt for the non-bank sector, illustrating the effort and adjustments required by the survey approach to estimates. Several commentators have noted problems with trade credit in particular, an important variable not only from the point of view of short-term non-financial liabilities, but also often used to hide transactions that are essentially speculative short-term capital flows. A focus on trade credit availability during crises is usual because credits reflect changes in trade volumes in and out and may be essential to support exports with their foreign exchange earnings potential.

#### Bilateral Surveillance and the Balance Sheet Approach

Research reported by the IMF (for example IMF (2004a)) and others provides several examples of the benefits of using the BSA to diagnose the vulnerability of emerging market economies to financial crises. The IMF has embraced the balance sheet approach in its surveillance program based on the value the BSA has in identifying financial

Table 2: Data Reliability (by Sector)

	Public sector		Financial Private Sector		Nonfinancial Private Sector		Rest of the world
	Central bank	General government	Other depository corporations	Other financial corporations	Nonfinancial corporations	Other resident sectors	
Central bank	High	High	High	High	High	High	High
General government	High	High	Middle	Middle	Middle	Middle	Middle
Other depository corporations	High	High	Middle	Middle	Middle	Middle	Middle
Other financial corporations	High	High	Middle	Middle	Middle	Middle	Middle
Nonfinancial corporations	High	High	Middle	Middle	Middle	Middle	Middle
Other resident sectors	High	High	Middle	Middle	Middle	Middle	Middle
Rest of the world	High	High	Middle	Middle	Middle	Middle	Middle

Table 3: Data Reliability (by Financial Instrument<sup>1</sup>)

: High 
  : Middle 
  : Low

	Financial corporations				General government		Nonfinancial corporations				Other residents		Rest of the world	
	Depository		Other financial		Assets	Liabilities	Finance		Other		Assets	Liabilities	Assets	Liabilities
	Assets	Liabilities	Assets	Liabilities			Assets	Liabilities	Assets	Liabilities				
Currency and Deposits	High	High	High	High	Middle	High	High	High	High	High	High	High	High	High
Currency and Deposits	High	High	Middle	High	High	High	High	High	High	High	High	High	High	High
Deposits	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Loans	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Securities other than shares	High	High	High	High	High	High	High	High	High	High	High	High	High	High
General government securities	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Other securities	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Structured-financing instruments	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Shares and other equities	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Financial derivatives	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Insurance technical reserves	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Other accounts	High	High	High	High	High	High	High	High	High	High	High	High	High	High

Source: IMF, *Compilation Guide for Monetary and Financial Statistics*, Chapter 8 (forthcoming).

1/ The darker areas indicate where the compiler placed a relatively "high" degree of reliability. The moderately shaded areas indicate series where estimates are judged to be less reliable, but still where source data are available on a sample basis or on a basis where the frequency is less than quarterly or annually. The lightly shaded areas are for series where there is virtually no source data; estimates for series in the non shaded area are based largely on residual calculation.

system vulnerabilities. The IMF's review of its surveillance activities under its Article IV (IMF (2004b)) describes the value of the BSA as follows:

Vulnerability assessments are benefiting from initiatives to enhance coverage of balance sheet issues, including implementation of the strengthened framework for debt sustainability assessments. Balance sheet issues have received substantial attention in surveillance of both advanced and emerging market economies. In advanced economies, the focus has been on private balance sheet vulnerabilities, particularly in connection with risks stemming from rising real estate prices and mortgage lending. In emerging market countries, staff reports have focused on the potential transmission of shocks across domestic sectors under crisis conditions, key factors contributing to resilience under such conditions, and ensuing policy advice. Nevertheless, limited data availability remains an obstacle to detailed balance sheet analysis in many instances. [p. 13]

The IMF Annual Report of 2005 states as follows:

During FY2005, such balance sheet analysis was increasingly integrated into the Fund's operations, with a particular focus on the role of public debt. Analyses of balance sheet vulnerabilities are increasingly being incorporated into Article IV consultations and other surveillance exercises. [p. 2]

Data on short-term foreign currency assets and liabilities, for example, are balance-sheet series directly relevant to assessing potential international payments problems.

Improvements in the quality, reliability, and timeliness of balance sheet data, both in support of the IMF surveillance program and to supply private-sector analysts with useful statistics, is an obvious position for ABAC to support to the APEC economics ministers, as will be presented in the final section.

#### IMF Surveillance and Public Information Notices

Transparency is necessary for market participants to assess policy and performance in economies as effectively as possible. Economic conditions are always changing and there are always risks of unexpected events or developments. A major part of effective financial market assessments of values and risks underlying international investment strategies in economies and regions is to consider likely future outcomes contingent on future policy changes and the resilience and adaptability of governments and institutions to unexpected changes. An open dialogue or debate between various

market participants can help analysts assess the range of reactions official and private market participants might consider in the face of unexpected events.

The IMF surveillance effort produces biannual detailed reviews of IMF member economies. Official and private international financial market participants have differing views about the effectiveness of past IMF policy prescriptions and the ultimate value of the IMF and other multilateral organizations in dealing with past and future crises. However, open debate of these issues, including the assessments resulting from IMF surveillance efforts, contributes to an understanding of the range of possible future policy responses to unexpected financial market disturbances and can reveal the considerations relevant to determining the impact of policy changes on financial market performance. In other words, active discussion of current economic conditions and possible future problems reveals information about the understanding, motives, and likely responses of major market participants in the event of shocks to the system. Because this non-data based information is relevant to assessing risks and develops an understanding of alternative theories and objectives and decisions by major participants in financial markets, this debate should be encouraged to stimulate broader transparency going beyond disclosure of data in international financial markets.

For example, as part of the IMF surveillance process, individual countries have the option of publishing or not publishing the IMF staff report covering the assessment of its economy. Countries may release only the IMF executive board's assessment contained in the Public Information Notice (PIN). In 2005, 130 countries were reviewed of which 12 are ABAC economies. Of the 12 ABAC members, seven either did not publish the full IMF staff report or published it with a lag of one month or greater (as

tabled in IMF *2005 Annual Report*). While many reasons could be advanced to justify non-publication of the IMF staff report, non-publications limits the ability of market observers to debate the merits of the assessment and the concerns raised by IMF staff. We believe that timely airing of all the positions concerning the likely future status of an economy and financial markets is a healthy contribution to a broader notion of market transparency and will be the subject of a proposed recommendation in the final section of this paper.

### **III. Hedge Fund Regulation, Reporting, and Data**

Hedge funds have come to play an almost mythic role in international financial markets. They were alleged to have played a major role in the speculative attacks on currencies in the 1990's financial crises. Funds under the control of hedge-fund managers are said to have grown to over \$1.3 trillion in the last few years. They operate without disclosing their operations and strategies publicly and are therefore often considered suspicious and possibly dangerous. This section reviews the current status of the data available to follow the hedge-fund industry. The discussion first makes some general observations about the hedge-fund industry and then reviews the concerns of regulators related to hedge funds and the state of regulation and official reporting. The section concludes with a discussion of non-official sources of data and some possible recommendations that could be made with regard to the hedge-fund industry.

#### General Observations on the Hedge-Fund Industry

The hedge-fund industry in terms of hedge-fund managers has spread to many money-market centers but management of the industry is still dominated by the United States (estimated 70% of assets under management in world) and in Europe by London (15 to 20% under management) (Waters, 2005). In addition to Europe, Asian centers like Hong Kong and Singapore have become important centers of hedge-fund management. While the location of hedge-fund management may be the most important attribute of the hedge-funds strategic regional orientation, other functions required by a hedge-fund, like brokerage, custody, marketing (capital introduction), accounting, and so forth, have also spread widely to locations like Ireland, the Channel Islands, and off-shore tax havens like the British Virgin Islands. The hedge-fund industry is very mobile,

despite its reliance on sophisticated financial market talent. Most host economies are reluctant to lose the jobs, prestige, and related business associated with the location of services required by hedge funds. The politics of hedge-fund regulation is clearly influenced by the mobility of the industry in a world of increasingly integrated capital markets and cheap international communication.

Traditional hedge-fund managers invest money on behalf of sophisticated investors, where sophisticated is interpreted as institutional investors (insurance companies, endowments, pension funds, other corporations) or wealthy individuals. In the United States, the capital by investors is paid into a partnership where investors are limited partners and the manager is a general partner. Off-shore funds are usually corporations (SEC (2003)). The typical hedge manager charges investors asset-management fees (say one percent of invested capital) and demands incentives payments when the fund exceeds benchmark performance (for example, 20 percent of profits above the benchmark will be paid to the fund managers). Historically, the client of the investment advisor or hedge-fund manager is a fund (a limited partnership), and managers can have several funds to manage.

Because hedge funds are not sold to the general public but only large, sophisticated investors, they are exempt from regulation under United States law. Mutual funds, on the other hand, are marketed to individuals so mutual funds are regulated. Regulation of mutual fund companies in the United States consists of required registration of their investment advisors and periodic examination under the Investment Advisors Act (1940). Mutual funds have required periodic filing of reports to the Securities and Exchange Commission (SEC) and to their current or potential investors.



Separation of mutual fund advisory functions and asset custodial functions is mandated under the Investment Company Act (1940). Advisors and mutual funds and separate accounts of corporate pension funds are also subject to U.S. securities laws and codes of conduct and regulations of exchanges.

Many hedge fund managers have avoided registration and regulation by limiting their marketing to sophisticated investors, so-call *qualified purchasers* of hedge-fund partnership shares (SEC (2003), p. 11-12). This treatment is widely followed around the world, as for example in the United Kingdom (see FSA (2002)) and elsewhere (see PriceWaterhouseCoopers (2006)). The attraction of hedge funds for sophisticated investors is that they can employ investment strategies that are not possible for regulated investment vehicles and that they are not required to report to regulatory authorities like the SEC or FSA. Another class of institutional money managers using investment strategies called global tactical asset allocations (GTAA) and employing derivatives to trade foreign exchange are exempt from registration requirements.

As discussed below, hedge funds are not totally exempt from regulation by government agencies like the SEC or self-regulatory organizations like the exchanges. A recent SEC initiative attempted to bring hedge fund advisors under regulations similar to those for mutual fund advisors by arguing that individual investors in hedge funds partnerships were the advisors' clients. The SEC reasoned that an exemption from registration requirements for advisors with fewer than 15 clients was not a valid basis for exemption from registration of hedge-fund advisors with more than 15 investors, an argument that was contested in court. In June 2006, the Supreme Court of the United States ruled that the SEC had exceeded its authority in requiring the registration of hedge

fund advisers. Regulation of hedge-fund advisers was thus determined to be an unauthorized extension of SEC authority. Regulation of hedge funds in the United States is currently under intense discussion.

Market observers classify the investment strategies of hedge-fund managers into several categories. Three broad categories are *market trend or directional strategies*, *event-driven strategies*, and *arbitrage strategies* (SEC (2003), p. 34). Under the first broad category are two subcategories: *macro* and *long-short strategies*. Currency speculation falls under the subcategory of a macro strategy. While no official data on hedge-fund portfolio composition is available, industry sources (as discussed below) indicate that total hedge-fund assets managed on the basis of all possible macro strategies are estimated to have fallen from around 71% in 1990 to under 10% of off-shore funds currently (presentations to ABAC by Macquarie Bank (2005) and Russell (2006)). Hedge funds currently seem to be much less engaged in currency speculation than in the 1990's.

Unregulated hedge funds, unlike mutual funds, can employ borrowed funds (often margin account lending) to leverage their speculative positions. They also can sell stocks short (that is, sell borrowed shares with the intention of returning the shares later with purchases at lower prices.) Both margin-account borrowing and short selling require the services of large brokers that offer those services to large accounts. Brokers providing these services to hedge funds, as well as handling clearing and settlement for transactions handled with other brokers, are called *prime brokers*.

Hedge funds require custodial, accounting, and marketing services, as mentioned above. Firms outside of the residency of the fund manager often provide these services,

sometimes for tax reasons. For example, Ireland has developed a substantial presence as a service center for hedge funds. Hedge funds, with their large investment pools of money and frequent trading, are desirable residents in cities attempting to retain or develop active securities markets services and the employment and incomes associated with those activities.

### Hedge Fund Regulation and Disclosures

Hedge funds are not regulated much, as discussed above. Nonetheless, an active debate is underway by potential regulators like the SEC and FSA and others about why (or why not) hedge funds should be regulated. Essential to understanding this debate concerning regulation is an appreciation of regulators' major concerns. Major issues and concerns related to hedge-fund activities raised in the debate concerning hedge-fund regulation (see SEC (2003) and FSA (2004)) are:

- (1) Protection of retail investors;
- (2) Concerns about market stresses because of concentrated trading in similar instruments;
- (3) Liquidity problems caused by leverage used by hedge funds;
- (4) Corporate control issues from large share positions;
- (5) Valuation of assets in hedge-fund portfolios;
- (6) Incentive issues concerning investment advisors and different classes of investors.

Each of these concerns can be related to developments in the industry, as discussed below. To illustrate the general tenor of the discussion concerning policy issues raised by hedge funds, the European Central Bank *Financial Stability Review (2006)* summarizes its concerns about hedge funds as follows:

The possibility of tighter global liquidity conditions in the period ahead has raised investor redemption risk for hedge funds managers, particularly as the share of less liquid assets has reportedly been increasing. The correlation of returns within some hedge fund investment strategies and among strategies have remained high or have even increased, raising the risk of disorderly synchronous exits from similar trades. [p. 133]

Market liquidity and smooth functioning of markets are main focus of regulators' concerns.

Concerns regarding hedge funds and retail investors are mainly due to the development and marketing of hedge funds investing exclusively in other hedge funds forming so-called “funds of funds,” intended to provide hedge funds returns as well as diversification in smaller investment amounts to the retail market. Marketing of hedge fund related products to the retail market is controversial because securities market regulators want to be assured that small savers not be exposed to excessive risks or risks they do not understand. Funds of funds, however, can be regulated without regulating the underlying hedge funds since they are a type of mutual fund.

Hedge fund concerns not related to the retail market have a number of bases. Concentrated simultaneous trading of assets that are the focus of hedge funds pursuing similar strategies that require quick entry and exit into positions to realize profits or limit losses. Liquidity issues associated with many traders unwinding strategies involving the same or similar assets have moved to the forefront of regulatory concerns following the Long Term Capital Management (LTCM) hedge-fund collapse in September 1998. Corporate control issues associated with accumulations of large equity positions have always played a role in securities regulation in the United States. Hedge funds are not exempted for reporting investment positions that could be considered an attempt to gain control of a private firm. Valuation issues are an issue because of the complexity of many hedge-fund assets and the requirement to report performance to investors. Finally, since funds are limited partnerships, different classes of partners (defined by so-called “side letters”) may be disadvantaged relative to other partners and managers may be able to exploit these differences to advantage (for example, by differentiated disclosures to classes of partners or priority calls on capital ahead of other investors).

None of the issues of concern to potential hedge-fund regulators in the above list is related to concerns about issuers of securities or derivative contracts suffering unwarranted attacks on their values unless the usual securities trading rules are violated. For example, hedge funds might fraudulently manipulate a market in order to profit from a “short squeeze,” whereby funds could extort high prices for assets deliverable against contracts (like shares of stock or commodities) that they have accumulated secretly with undisclosed trading through affiliated parties. Market manipulation of securities’ values is prohibited in most securities markets. Outside of the impact of illegal trading practices and fraudulent disclosures, regulators currently are not concerned about the effects of hedge fund trading on issuer security values.

Two of the concerns from the above list, market stress and leverage, are being addressed in the hedge-fund industry, but not through regulatory intervention. In the case of large concentrations of assets (item (2) on the list), for example, the FSA is planning on developing intelligence on potential problems through the improvement of communication with the hedge-fund industry based on voluntary relations with FSA “hedge-fund supervisory teams” (FSA 2005). These teams would become familiar with the hedge-fund industry and its managers and focus on the possible adverse effects on securities markets of “high impact” funds with large concentrations of less liquid assets. The existence of these team could possibly increase investor confidence in hedge funds.

The Counterparty Risk Management Policy Group (CRMPG), chaired by a former president of the Federal Reserve Bank of New York, E. Gerald Corrigan, has concentrated on averting the systemic risks associated with the liquidity and credit-risk problems associated with the LTCM collapse. This effort has had the effect of increasing

the credit-risk standards applied to hedge fund customers of prime brokers and other service providers of hedge funds. Most observers believe that impact of improved risk-management by hedge-fund creditors has been to reduce average hedge-fund leverage and to reduced systemic risk. The latest CPRMG report (2005) summarizes:

In approaching its task, the Policy Group shared a broad consensus that the already low statistical probabilities of the occurrence of truly systemic financial shocks had further declined over time. The belief that the risk of systemic financial shocks had fallen was based on a number of considerations, including: (1) the strength of the key financial institutions at the core of the financial system; (2) improved risk management techniques; (3) improved official supervision; (4) more effective disclosures and greater transparency; (5) strengthened financial infrastructure; and (6) more effective techniques to hedge and widely distribute financial risks. [CRMPG (2005), p. 1]

The report focuses on risk-management of large exposures and makes the following recommendation:

CRMPG II recommends that the private sector, in close collaboration with the official sector, convene a high level discussion group to further consider the feasibility, costs and desirability of creating an effective framework of large-exposure reporting at regulated financial intermediaries that would extend – directly or indirectly – to hedge funds. Using the indirect method, regulators would collect and aggregate large exposure data from traditionally regulated institutions and, through those institutions, collect data on hedge fund activity. Under the direct approach, hedge funds would, on a voluntary basis, provide a large exposure data directly to the appropriate regulator. [p. 40]

This position is very similar to that advocated by the FSA (2005, p. 16).

Regulators are primarily concerned about market liquidity and solvency risks of major securities market participants like investment banks serving as prime brokers to the hedge-fund industry. They are also mindful of the huge supply of liquidity hedge funds supply as part of their routine trading activities. For example, the *Wall Street Journal* (July 27, 2006, p.1) reports that the hedge fund industry accounts for up to half the daily trading volume on the New York and London stock exchanges. Interference with routine hedge-fund activity would reduce liquidity (and price discovery) benefits from major money-center exchanges. Important officials like Ben S. Bernanke, Chairman of the

Federal Reserve System, and his predecessor Alan Greenspan, are skeptical about the merits of more required hedge fund reporting (Bernanke (2006)).

Hedge funds do not escape all regulation or regulatory reporting requirements (see SEC (2003), pp. 23–32). Hedge fund managers that have registered with the SEC as investment advisors because they also manage pension funds and mutual funds are subject to examination and audit. Large hedge funds managers with over \$100 million in assets under management must file quarterly portfolio reports detailing asset long positions in equity holdings over 10,000 shares or \$200 thousand on a form 13-F to the SEC. Assets include U.S. stocks, some equity options and warrants, shares in closed-end investment companies, and convertible debt securities. Hedge funds report to investors as agreed in partnership arrangements and provides information to prospective investors in private placement memorandums. Under certain circumstances, hedge funds trading commodity contracts are considered to be “commodity pools,” subject to reporting requirements by the Commodity Futures Trading Commission (CFTC). The United States Treasury Department may require reporting large positions in Treasury securities or large foreign currency positions (over \$50 billion) to the Federal Reserve Bank of New York. They may be subject to reporting requirements if they manage pension fund assets due to the Employee Retirement Income Security Act (ERISA), and they are subject to National Association of Securities Dealers (NASD) regulation on the suitability of hedge fund investments for individual investors. Most of this reporting is not available in public data sources.

It seems likely that neither in the United States nor other centers of hedge-fund management will increase the regulation of hedge-fund activity in the near future. If

there is increased regulation, this regulation will most likely focus on sales of hedge-fund related investments to the retail market or will focus on position concentrations and/or leverage in an effort to reduce systemic risk. The alleged role of hedge funds as a cause of the crises of the 1990's, even if valid, would not be addressed by regulatory initiatives in these two directions.

Short of internationally enforceable and enforced rules preventing hedge-fund investments in assets whose values are linked to exchange rates, any foreign currency denominated assets, or even broader capital controls preventing cross-border payments and settlements, it is hard to imagine any future regulation of hedge funds reducing their ability to speculate on exchange rates. Officials of economies concerned about the role of hedge funds in speculative attacks should consider improving the assessment of accumulations of undesired speculative positions through surveillance of the private data sources that are available and are discussed next.

#### Data From Hedge-Fund Information Services

Interest in the returns to hedge funds following different investment strategies and by hedge-fund service providers in developments in the hedge-fund business have lead to a robust industry in collecting and disseminating information on hedge fund returns, assets under management, and strategies. Hedge fund managers themselves are also interested in what other managers are doing: hedge funds are among the most active subscribers to hedge fund information providers. Most of this data is proprietary, with subscription fees for access to data reports and the ability to screen or analyze data at varying levels are high. For example, annual access fees for Morningstar Direct, an information provider for all-types of managed assets using a variety of proprietary



databases are between \$7 to \$15 thousand per year, depending on the kinds of data included in the subscription. A variety of services allow limited search capabilities and the ability to extract data from different hedge-fund databases for around \$1 thousand per year.

There are several competing hedge-fund database services. For example, many academic studies have used the Lipper-Tremont TASS database (see Malkiel and Saha (2005) for an example) that contains 3,900 hedge funds and over 300 commodity trading advisor programs as of July 2006. Hedge Fund Research (HFR) with over 5,000 funds and Center for International Securities and Derivatives Markets (CISDM) with over 3,000 funds at the end of 2004 are competing databases (see Fung and Hsieh (2006)). Data analysis and software services have also developed to enable users to search and analyze these data. Other databases are also maintained by Morgan Stanley Capital International and Eureka Hedge of Singapore. Many other firms and publications involved in hedge fund management or services develop data bases or provide research on hedge fund activity and strategies.

Proprietary databases on hedge fund activity rely on voluntary disclosures of data to collection and dissemination services, since most hedge funds are not subject to mandatory regulatory filings. Most of the attention on hedge-fund databases is focused on comparing performance of alternative funds and strategies. Poorly performing funds often stop providing data on their operations, meaning that performance statistics based on the usual hedge-fund databases are biased towards higher performance than actual averages.

Some databases contain combined data for large hedge fund advisors' 13-F quarterly filings (as discussed above) enabling an analysis of portfolio composition and trading activity data for the aggregate funds managed by advisors with large sums of money under management (see for example Brunnermeister and Nagel (2002)). Morningstar offers clients the ability to merge data from the 13-F filings for asset managers with hedge fund performance and strategies, allowing estimates of net quarterly trading in reported positions. Large hedge fund managers meeting the 13-F reporting standard accounted for only 71 investment advisors in 1998 in the Brunnermeister and Nagel study. For comparison, only 4 of the 49 hedge funds located in Singapore had assets under management of that magnitude. Morningstar's new database linking hedge-fund advisors with return data has 600 advisors accounting for around \$600 billion assets under management, although not all of these assets are hedge funds since 13-F filings include pension fund and mutual fund assets managed by hedge-fund advisors as well. Thus detailed portfolio strategies for hedge funds on a quarterly basis would provide incomplete coverage in terms of the number of funds included in the sample<sup>\*\*</sup>.

It is very possible that a dedicated staff of financial market experts could track hedge fund trading and strategies with some accuracy as part of an effort to identify threats to international capital market functioning. Such a staff would require expertise in analyzing data, access to proprietary data bases and public filings from a number of sources, and appropriate analytical resources. Putting together a reasonable assessment of recent trends using quarterly data (and higher frequency data on some derivatives as discussed in the next section) seems possible some private sector analysts do that now.

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<sup>\*\*</sup> This discussion benefited from an extensive conversation with Peter Dietrich and Ryan Zigal of Morningstar

Staff members with institutional investing experience with and contacts in the hedge-fund industry, its service providers including especially prime brokers, data dissemination firms, trade publications, and so forth, as well as access to regulators, banks and brokers, and exchanges, could develop a pretty good sense of current or even fast-breaking changes in hedge fund trading strategies. This is in fact what the FSA is proposing and the CPRMG II has suggested. However, such a surveillance unit would not be cheap to staff and maintain.

The opinions of many experts like Federal Reserve Chairman Bernanke (2006) as well as his predecessor Alan Greenspan or academic experts like Barry Eichengreen *et al* (1998) are that hedge funds do not pose a serious problem for international financial markets. If hedge funds, despite these experts' opinions, are felt to be a threat to global financial market stability, a recommendation could be made to form a hedge fund surveillance effort. Such an effort could be housed in a multinational institution like the Asian Development Bank or in another regional institution, possibly with funding and cooperation in operations with other member central banks. Of course, there could be several efforts in different APEC economies. The real question is to weigh the costs of such an effort against the threat poised by hedge funds. We summarize these tradeoffs in the recommendation to consider the establishment of a hedge fund surveillance unit in the final section of this paper.

#### **IV. Data on Derivative Markets Activities**

Speculative activity in international financial markets can be implemented, often more cheaply and in more liquid markets, using derivatives. As described in Garber (1998), all speculative strategies using assets or liabilities can be replicated with derivatives, avoiding disclosures to authorities of “on-balance” items. However, for private firms, audited disclosures do contain information on “off-balance sheet” derivative positions. This section explores the availability of data concerning the use of derivatives for speculation and hedging. The goal is to identify the availability or lack of availability of data useful in identifying speculative attacks on asset values, specifically those of importance to international capital movements, primarily exchange rates.

Aggregate trading activity of OTC derivatives is reported on a semi-annual basis by the Bank for International Settlements (BIS). These data reflect OTC derivative trading in the G-10 countries plus Switzerland. The data are classified by forwards, swaps, and options and by foreign exchange, interest-rate and equity-linked contracts. The data are released with a three-month lag. While aggregate trading by type of contract may signal some aspects of derivative market developments, the data are obviously not of high enough resolution in terms of timeliness of reporting or specifics of contracts to assess speculative surges in particular currencies. The BIS supplements these data with more complete surveys every three years.

Data on derivative activity in the United States are available from four different sources: (1) corporate use of derivative contracts are reported in footnotes of audited statements filed with the SEC; (2) the Comptroller of the Currency (OCC), the regulator

of nationally chartered U.S. banks, publishes quarterly summaries of derivative activity by U.S. chartered commercial banks; (3) the CFTC requires registration of commodity pool operators and futures commission agents (commodity brokers) and publishes aggregate reports on their capital and assets; and finally, (4) commodity futures and options exchanges are required to provide daily commitments of traders (COT) reports trades and positions for contracts by traders classified as “commercial” (presumably used for hedging) and “non-commercial” (large traders including speculators), and “non-reportable” (small traders), a residual category. Each classification is discussed briefly below.

Some of the above listed data enable an examination of aggregate derivative activity by individual firms. Academic research, for example Covitz and Sharpe (2005), has used 10-K SEC filings for an examination of corporate hedging activity. The article cited examines different corporations’ use of derivatives for hedging interest-rate risk. These data are annual. The OCC data on bank derivative positions are published quarterly and some individual bank data, for example large banks, are published allowing some assessment of the activity of individual banks measured by total notional amounts in different classes of derivatives. For example, J. P. Morgan Chase had \$53 trillion notional amount of total derivatives, of which \$280 billion is spot foreign exchange, on March 31, 2006 (OCC (2006), Table 1). Since the derivative data is aggregated into categories, actual positions, as for example a net exposure to a given currency, are impossible to infer. Finally, the CFTC provides individual commodity brokers capital and assets quarterly, but does not report details of derivative positions.

The COT reports do not report by individual firms but does provide weekly data on aggregate positions and trading activity by individual contract. These data can be used to track aggregate investor activity in individual contracts. For example, Wall (2006) presents an example of using COT reports to assess the direction of the market by analyzing commercial, large trader, and residual trades in a stock-equity index contract. While some efficient market economists might question the assumptions underlying the analysis (small traders are slow to react to changes in expectations), the level of detail and frequency of these data do enable close analysis of linkages between trading patterns and future market events as would be necessary in an EWS.

The COT data are limited to contracts traded on exchanges. As is well known, a substantial share of the growth of derivative markets has taken place in the over-the-counter (OTC) markets. In the case of the most innovative contracts, like swaps and credit derivatives, nearly all the trading by sophisticated investors is done in OTC markets, with commercial and investment banks playing a major role. OTC reporting, beyond that reflected in the SEC and OCC filings discussed above, does not exist on a frequent basis.

Prime brokers and major commercial and investment bank counterparties normally know the identities of individual traders with large exposures to derivative contracts. This information is proprietary and in many cases is subject to non-disclosure agreements with traders. Trade data are and not reported in official statistics, but hints and clues about major concentrations may be possible to obtain through detective work. As with hedge fund activities discussed in the previous section, sophisticated market observers with access to major traders, including hedge funds, can often develop a sense

of market sentiment using bits of data and tips from contacts. Obtaining information on critical market moves, like an attack on a specific currency, may be possible given skilled intelligence gathering. These moves are never going to be obvious since speculators and other traders will not want to dilute their ability to profit from market swings by signaling their intentions, so detecting them will require the full resources of experienced market observers. If speculative or other disruptive trading is of concern to policy makers and measurement of potentially adverse activity is desirable, as with hedge funds, intelligence or surveillance units could justify their costs. We include this observation in our recommendations in the next section.

## V. Summary and Possible Recommendations to APEC Ministers

The previous three sections of this report describe data issues concerning official reporting of international capital flows and related economic statistics, the data available on hedge funds and their activity, and finally data available on traded derivatives. In line with that discussion and to further the goal of the ABAC Finance Working Group to promote growth and development of integrated international capital markets, actions by APEC economy officials to improve the supply of good information desirable for markets to function smoothly and efficiently are identified. The following suggestions for policy advocacy and recommendations are made:

A. Statistical offices and official agencies in APEC are urged to recognize that participants in active international capital markets require the best information possible if those markets are to perform effectively and grow. Rather than viewing demands for information disclosure as a bothersome chore, these offices and agencies should:

- Commit to a uniform code of conduct concerning the reliability and care taken in assuring the quality and unbiased nature of information releases, to be governed by fairness in the timing and nature of releases, and in general, to make it easy to obtain, interpret, and use data for market participants.
- Form units within their economies that take as their objective to play a role similar to investor relations units in private firms in anticipating and meeting data requirements and other information needed by current and future investors in the economy, explaining official policy, and strategy and being open to queries and discussion.



B. APEC officials should support the IMF actively in improving data disclosures and specifically should:

- Commit to the highest SDDS data quality standards and work with other APEC members to assure the maximum comparability of data on economic activity
- Urge APEC statistical bureaus and related agencies to commit to improving data disclosures under SDDS and other reporting efforts necessary to further develop the balance sheet approach, with particular attention to improving data on non-financial sectors of the economy.

C. APEC policymakers would contribute to the quality of economic policy debates and understanding of financial market participants of the principles guiding decision-making by timely publishing of the complete IMF surveillance staff reports and engage in an active discussion and providing official explanations of the points raised in the reports.

D. Concerns about hedge funds should be assessed carefully against the likelihood of problems to financial markets caused by their trading activities and, if these concerns are felt to be important, to develop hedge fund market surveillance teams to develop intelligence on hedge fund actions and their trading intentions. This effort could be conducted by individual economies, or housed and operated in an appropriate multilateral organization funded by several economies, or could be contracted to a private institution. In any case, if such an intelligence effort is judged to be worthwhile, sponsors must recognize the need for such an activity to have adequate funding, resources, and access to policymakers.

E. If derivative trading is also felt to be a problem, an intelligence unit solution similar that discussed in D. above should be considered, perhaps in conjunction with that effort.

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**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  
prepared for the  
Finance Working Group  
of the  
APEC Business Advisory Council

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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.<sup>1</sup>

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%).<sup>2</sup> 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<sup>(a)</sup>**

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.

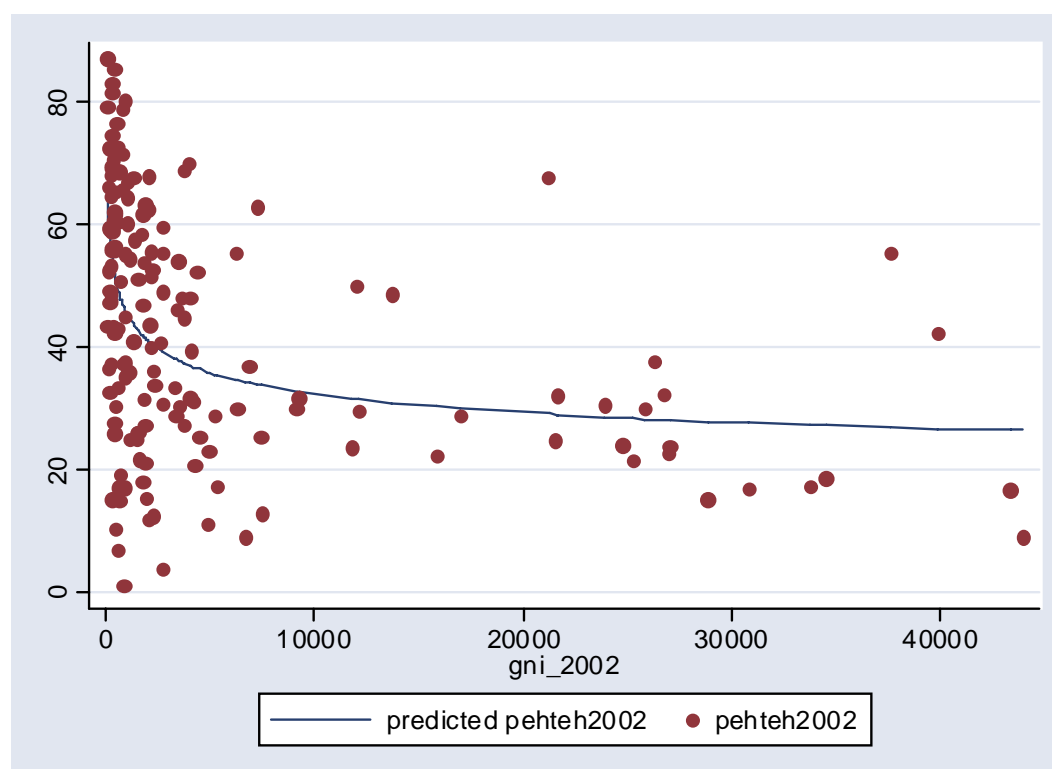
**Source:** WHO World Health Statistics

<sup>1</sup> All APEC economies excluding Chinese Taipei.

<sup>2</sup> 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<sup>(a)</sup>**



**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<sup>(a)</sup>**

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<sup>(a)</sup>**

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<sup>(a)</sup>**

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 <sup>(a)</sup>	Private financing <sup>(b)</sup>	Private financing: OOP <sup>(c)</sup>	Private financing: PPP <sup>(d)</sup>
	(1)	(2)	(3)	(4)
<b>Country groupings:</b>				
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
<b>APEC study countries (individual):</b>				
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

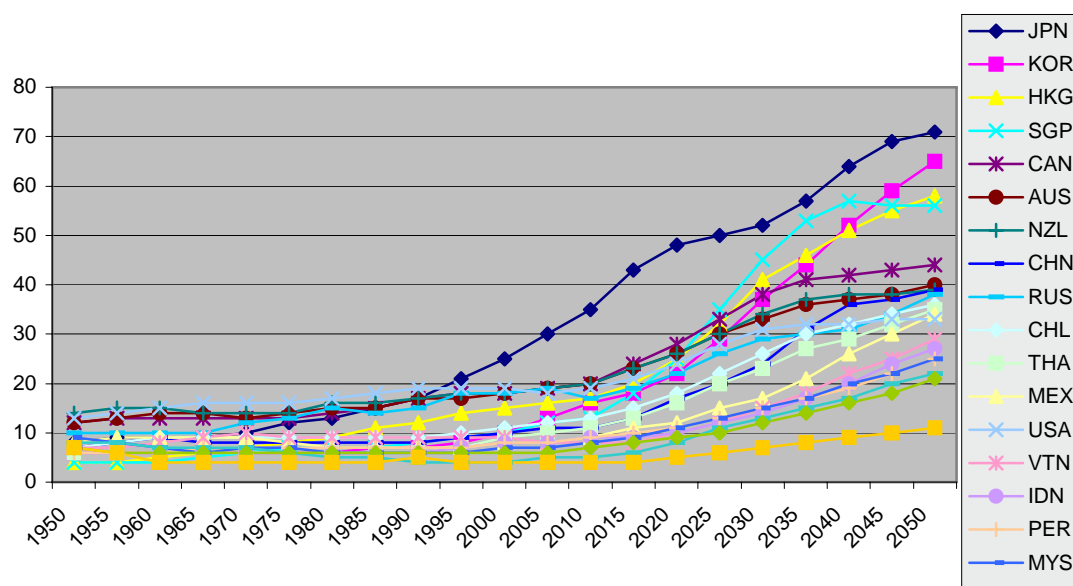
Two other countries that rely relatively heavily on private health insurance are Australia and New Zealand. In contrast to the USA, neither of these countries have employment-based private health insurance arrangements. Private health insurance is offered by private, mostly non-profit, organisations 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.<sup>3</sup> 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".

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<sup>3</sup> [http://www.iaisweb.org/132\\_ENU\\_HTML.asp](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)<sup>4</sup> 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

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<sup>4</sup> <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.<sup>5</sup>

***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

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<sup>5</sup> <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*<sup>6</sup> 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

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<sup>6</sup> <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*<sup>7</sup> 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.<sup>8</sup>

***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.

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<sup>8</sup> Source: CIRC "Regulations on Administration of Insurance Companies" effective June 15 2004 ([http://www.circ.gov.cn/Portal45/InfoModule\\_5501/21575.htm](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”<sup>9</sup>). 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.

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<sup>9</sup> Source: [http://www.circ.gov.cn/Portal45/InfoModule\\_5501/21582.htm](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.<sup>10</sup> 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

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<sup>10</sup> 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)<sup>11</sup>, 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*<sup>12</sup> 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.

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<sup>11</sup> [www.liam.org](http://www.liam.org)

<sup>12</sup> [www.insuranceinfo.com.my](http://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 Comision 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)<sup>13</sup>. 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.<sup>14</sup> 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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[http://portal.cnsf.gob.mx/pls/portal/docs/PAGE/CNSF/SECTORES\\_ASEGURADOR\\_AFIANZADOR/NORMATIVA/CIRCULARES/CIRCULARES\\_SEGUROS/S-11/S-11.2.PDF](http://portal.cnsf.gob.mx/pls/portal/docs/PAGE/CNSF/SECTORES_ASEGURADOR_AFIANZADOR/NORMATIVA/CIRCULARES/CIRCULARES_SEGUROS/S-11/S-11.2.PDF)

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[http://portal.cnsf.gob.mx/pls/portal/docs/PAGE/CNSF/SECTORES\\_ASEGURADOR\\_AFIANZADOR/NORMATIVA/CIRCULARES/CIRCULARES\\_SEGUROS/S-24/S-24.1.PDF](http://portal.cnsf.gob.mx/pls/portal/docs/PAGE/CNSF/SECTORES_ASEGURADOR_AFIANZADOR/NORMATIVA/CIRCULARES/CIRCULARES_SEGUROS/S-24/S-24.1.PDF)

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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 Society<sup>15</sup> - 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

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<sup>15</sup> 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.<sup>16</sup>

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.

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<sup>16</sup> [www.iombudsman.org.nz](http://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.<sup>17</sup> 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

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<sup>17</sup> 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.<sup>18</sup> 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).<sup>19</sup> 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-private<sup>20</sup>. 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\$800<sup>21</sup>. 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.<sup>22</sup> 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-

<sup>18</sup> 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>

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

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

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

<sup>22</sup> Ministry of Health, 2006: [http://www.moh.gov.sg/cmaweb/attachments/topic/36a42956fapD/Comparison\\_of\\_IPs\\_0.pdf](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.<sup>23</sup>

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.<sup>24</sup>

***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.<sup>25</sup> Under the Eldershield 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 Eldershield scheme was tendered out to private insurers through a competitive bidding process. Up to four insurers can be contracted to offer Eldershield. 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.<sup>26</sup> Premiums payments to approved insurers can be made using funds from

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<sup>23</sup> MSA Insurance Report 2004: Table AL 3.4

<sup>24</sup> MAS Insurance Report 2004: Table L9

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

<sup>26</sup> Ministry of Health, 2001. *Tenders for Eldershield 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,<sup>27</sup> 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 above<sup>28</sup>. 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.

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<sup>27</sup> 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/36fe3097691I/Comparison\\_of\\_IPs\\_wef\\_1\\_May\\_2006\\_0.pdf](http://www.moh.gov.sg/cmaweb/attachments/publication/36fe3097691I/Comparison_of_IPs_wef_1_May_2006_0.pdf)

<sup>28</sup> Ministry of Health, 2006. [http://www.moh.gov.sg/cmaweb/attachments/topic/36a42956fapD/Comparison\\_of\\_IPs\\_0.pdf](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.<sup>29</sup>

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.<sup>30</sup>

In August 2005, the Financial Industry Disputes Resolution Centre Ltd (FIDReC)<sup>31</sup> was established to handle financial sector disputes, taking over the insurance industry's Insurance Disputes Resolution Organisation (IDRO).<sup>32</sup> 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.<sup>33</sup>

***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).<sup>34</sup> Employers enjoy tax deductibility for medical expenses of up to

<sup>29</sup> MAS Insurance Report 2004: Table L9

<sup>30</sup> [http://www.lia.org.sg/ftpsite/guide/LIA\\_GIAdisclosure.pdf](http://www.lia.org.sg/ftpsite/guide/LIA_GIAdisclosure.pdf)

<sup>31</sup> <http://www.fidrec.com.sg>

<sup>32</sup> [http://www.mas.gov.sg/masmcm/bin/ptIConsumer\\_Portal\\_Dispute\\_Resolution.htm](http://www.mas.gov.sg/masmcm/bin/ptIConsumer_Portal_Dispute_Resolution.htm)

<sup>33</sup> 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](http://www.mas.gov.sg/masmcm/upload/mm/MM_47DD8AAF_6295_5312_480AD65365FCF45B_ADC6044B_D606_F5E9_60046C3C1DB18594/Brochure%20English.pdf)

<sup>34</sup> NTUC, 2006. *Portable medical benefits on the way*. Available at: [http://www.ntuc.com.sg/ntucunions/news/news\\_110403e.asp](http://www.ntuc.com.sg/ntucunions/news/news_110403e.asp). See also MAS Annual Report 2003-2004.

2% of payroll if they adopt TMIS.<sup>35</sup> 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.<sup>36</sup> 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.<sup>37</sup> 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.

<sup>35</sup> Life Insurance Association, Transferable Medical Insurance Scheme (TMIS). Available at: [http://www.lia.org.sg/ftp/site/guide/TMIS\\_Mkt.pdf](http://www.lia.org.sg/ftp/site/guide/TMIS_Mkt.pdf)

<sup>36</sup> Business Times. Singapore. 2005. *MediShield reform can help achieve portability*. 1 March 2005.

<sup>37</sup> 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.<sup>38</sup> 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.<sup>39</sup> 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).

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<sup>38</sup> [http://www.cms.hhs.gov/NationalHealthExpendData/02\\_NationalHealthAccountsHistorical.asp](http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp)

<sup>39</sup> [http://www.medpac.gov/publications/congressional\\_reports/Jun04DataBookSec1.pdf](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,<sup>40</sup> 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 have 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.

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<sup>40</sup> <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).<sup>41</sup>

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/\\_02WhatHIPAADoesandDoe sNotDo.asp](http://www.cms.hhs.gov/HealthInsReformforConsume/_02WhatHIPAADoesandDoe sNotDo.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.<sup>42</sup>

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.<sup>43</sup>

*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.<sup>44</sup> 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

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

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

<sup>44</sup> <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****9<sup>th</sup> 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 (22/25<sup>th</sup> 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.

## **Acknowledgements**

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