



International Association for the
Study of Insurance Economics

Health and Ageing

Research Programme on Health and Productive Ageing

Geneva Association Information Newsletter

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The International Association for the Study of Insurance Economics, or by its short name “The Geneva Association”, is a unique world organisation formed by a maximum of 80 chief executive officers from the most important insurance companies in the world (Europe, North and South America, Asia, Africa and Australia). Our main goal is to research the growing importance of worldwide insurance activities in all sectors of the economy. We try to identify fundamental trends and strategic issues where insurance plays a substantial role or which influence the insurance sector. In parallel, we develop and encourage various initiatives concerning the evolution – in economic and cultural terms – of risk management and the notion of uncertainty in the modern economy.

The Geneva Association also acts as a forum for its members, providing a worldwide unique platform for the top insurance CEOs. We organise the framework for our members in order that they may exchange ideas and discuss key strategic issues, especially at the General Assembly where once per year over 50 of the top insurance CEOs gather. The Geneva Association serves as a catalyst for progress in this unprecedented period of fundamental change in the insurance industry and its growing importance for the further development of the modern economy. It is a non-profit organisation.

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The Health and Ageing research programme of the Geneva Association seeks to bring together analyses, studies, facts and figures linked to issues in health provision and the role of insurance, with an emphasis on the changing demographic structure whereby the population over 60 largely exceeds that of other groups. The key is to test new and promising ideas, linking them to related works and initiatives in the health sector and try to find solutions for the future financing of health care.

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I. GUEST EDITORIAL

Insuring Long-Term Care Risks – The Coming Together of Cultures

By Christopher Ball and Ross Campbell**

The issue of how to provide care for the growing numbers of elderly people across the world has much occupied the attention of governments in developed countries. The make-up of the population will change with a large increase in the oldest old, without a corresponding increase in the younger population to support them either financially or practically.

In the U.K. for example, life expectancy has been increasing faster for women than men and now stands at 81 and 76.6 years respectively. This represents an increase since 1981 of 5.7 years for men and 4.2 years for women. Unfortunately this comes at a cost as disability-free life expectancy has not risen at the same rate as overall life expectancy. This leads to increasing cost and need for care provision. Long-term care (LTC) costs are perhaps the greatest threat to an elderly person's wealth.

European countries have tried various ways to address this issue, sharing of risk between the State and the individual to different degrees. These have had varying degrees of success.

Germany provides global State cover based on a compulsory insurance system which gives benefits to about 1.8 million people. There is also a thriving private insurance market.

In France there is a State insurance system that is based on levels of disability and linked to income but this is inadequate to cover the cost of LTC and so a market for private insurance has grown over the years.

In the U.K. there has been much discussion about the issue but so far no clear direction of travel from the State. The State will act as a safety net and assist people if they have limited assets but political uncertainty and a certain naivety in the insurance industry have led the LTC market to contract.

Each of the methods used to address the LTC issue has had its own problems. In the U.K., attempts are made to curtail the ever growing State cost of providing care through the rigorous use of standardised assessments. The German system has also experienced difficulty in financing the growing demands and there have been deficits in the French system that has led to calls for reform.

None of the systems developed across Europe meet the stringent tests outlined by the Wanless Report in England (2006), namely to:

- 1) be fair and to be seen to be fair in the way the money is raised and allocated;
- 2) support preventive measures, encouraging early intervention;
- 3) recognise the diversity of needs and allow care recipients to retain their dignity;
- 4) promote personal and family responsibility;
- 5) be sustainable; and
- 6) encourage an efficient supply response, through adequate resources for the range of care needed.

The U.K. insurance industry has proposed a number of models through which the risk might be shared with the State but to date none of these have received any specific support from government. If the insurance industry is to play a significant part in the development of LTC systems across Europe, the private insurance sector must learn from the experience of other nations particularly that of the U.K.

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UK experiences

It is now 10 years since the Royal Commission set up by the U.K. Government published their recommendation that LTC should be funded entirely by the State. The Commission recommended making all nursing and "personal" care free—such as help with washing and dressing—both in care homes and when delivered in people's own homes.

At the time the suggestion was rejected as unrealistic due to cost but not in favour of any alternative scheme. In the interim period nothing much changed to improve care funding options. Meanwhile the nascent U.K. LTC insurance market stalled. In addition, free personal care for citizens was introduced by the new Scottish administration in 2002 while State-funded personal care remains means-tested in England and Wales. The U.K. Government is now finalising a Green Paper that will lay out options for the future. The aim is to ensure effective spending on care whilst still promoting choice. The publication follows a six month consultation process that ended in November 2008. The Adult Social Care Green Paper is expected in the early months of 2009.

The state of affairs should be contrasted with the findings of a recent opinion poll of public attitudes and awareness of the care system which found "high levels of ignorance" with 30 per cent of those polled still believing the State would provide for all their care needs.

LTC insurance became widely available in the U.K. from 1990. The most popular product in the U.K. was the pre-funded LTC plan, paying benefits on failure of Activities of Daily Living (ADL) or cognitive impairment measured against set severity criteria. Reviewable regular or lump sum premiums funded pre-selected benefit levels. By the end of 2004 however, the main providers had withdrawn their products from sale. During this timeframe the volume of sales waxed and waned but without ever reaching the levels that might be expected in an affluent society with an ageing population.

The relative failure of this LTC concept in the U.K. has several causes. Among these are a lack of customer confidence in the investment performance of long-term insurance solutions (such as mortgages and pensions) and their misjudgement of the State's appetite to pay for the future care needs of the elderly. The LTC product was expensive and represented a difficult sale. In practice policies were bought by a much older cohort of lives than anticipated and their complex risk profile and propensity to claim early caused problems for insurers and had notable effects on their profitability.

Weak underwriting protocols

One consequence of the relative lack of demand for LTC was that lax underwriting protocols developed as companies sought to maximise any new business opportunities and stimulate further sales. Pressure from the sales operation probably contributed to the under-pricing of individual risks by accommodating underwriters. On reflection, early application form questions were occasionally naive; lacking specific enquiry on memory problems for example. Medical examinations followed the template used for life insurance thereby missing important risk factors of elder lives. Detection of early cognitive problems initially relied on a delayed word recall test and underwriters were guilty of generous interpretation of test scores. Additional loadings were often insufficient as underwriters exhibited a lack of understanding of co-morbidity and the real effects of ageing.

Philosophy of claims management

It was not untypical for an LTC claims philosophy to be open and helpful. Though well meaning, such an approach was often far from robust. Perhaps because U.K. products were non-regulated, insurers were wary of possible criticism of unfair claims handling for elderly or vulnerable policyholders. The effect of generous claim assessment was compounded when there was a discrepancy between claim evidence and underwriting evidence making assessment of any deterioration in physical condition over time very difficult. The style and standard of written reports made by visiting nurses and occupational therapists was inconsistent and often subjective, reflecting the examiner's assumptions about ageing rather than measurable change.

Although conceived as a health-care product, generous LTC claims philosophies may have stepped too far over the line of helpfulness with ex-gratia and borderline settlements a common feature. The effect was perhaps magnified once benefits became payable to claimants as cash not care. Audits of U.K. claims portfolios highlighted examples of overactive claims management resulting in insurers seeking ways to pay claims on a scale not supported by the premiums paid by the policyholder.

One difficulty in assessing ADL failure at claim stage is the effect of temporary and partial failure or so called “good-day/bad-day” behaviour. When faced with a combination of partial failures a simple claims option was to admit on the basis that this seemed fair and helpful, even though this action undermined the pricing of the product.

Policyholder behaviour

Underlying these two aspects was the anti-selective behaviour of LTC applicants. Most U.K. LTC customers are in the higher socio-economic groups, both financially aware and capable of affording the relatively high cost of LTC insurance. While overt non-disclosure was found to be rare, many applicants had postponed their decision to purchase LTC for as long as possible, often until they experienced difficulty with personal care or had memory problems. Weak underwriting protocols fuelled an increase in unexpected early claims.

Once in claim for ADL failure, the health of elderly policyholders was seen to improve with regular medication and care. Those claimants with cognitive decline were observed to live far longer in claim than had been expected. The U.K. insurers experienced a very low level of recovery from disability whilst in claim.

Product design impact

For many, the design of the products themselves was seen as a key factor in the downturn in demand. Products were seen as complicated and with a heavy burden of underwriting. Criticism of ADL-based claims triggers is possibly misplaced as changes in these clinically described behaviours are consistently observed as people grow old. However as claims experience undermined pricing, unpopular premium reviews further stifled new growth as consumer confidence in pre-funded LTC ebbed.

Developing the reinsurer response on underwriting and claims

The up and down experience in the U.K. market was shared by reinsurers and their insurance partners on a quota share basis. In any new product field we can expect some development to be required. It is the nature of things. Product and pricing reviews were coupled to tougher “gate-keepers” for both underwriting and claims. Amendments to underwriting practices and increased claims management enabled closer monitoring of results and improved experience. Significant training and development helped make positive shifts in underwriting and claims management philosophies.

LTC providers in the U.K. were not idle while these market conditions were at work. Improvements in both selection process and claims management are now in place following significant development work and these are supported by refinements to the wordings of ADL definitions.

Underwriting improvements

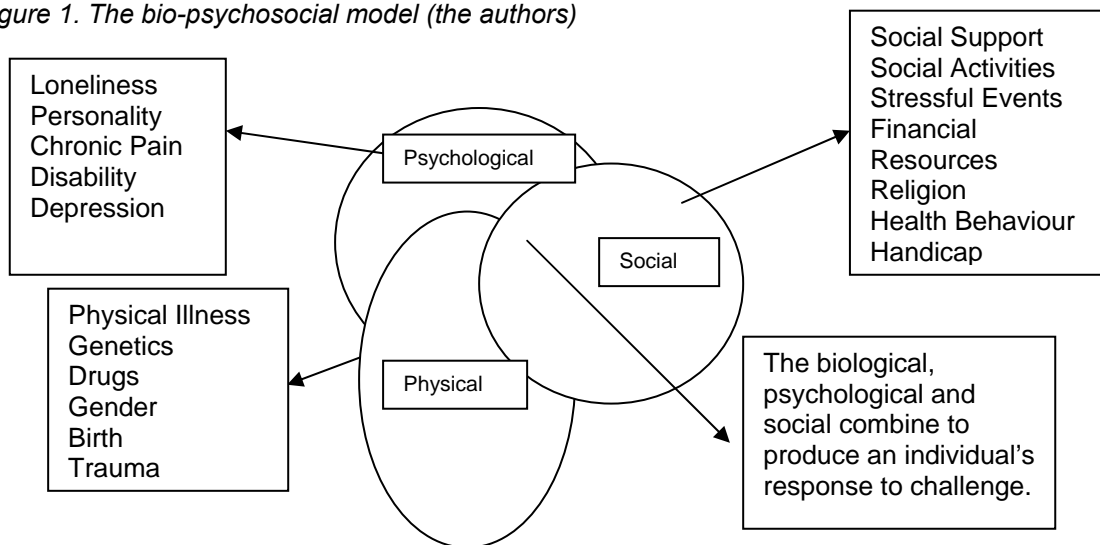
The developments outlined above came about through bringing together the cultures of underwriting, actuarial practice and medical practice for the elderly.

Developing a shared language between underwriter, actuary and physician was at the heart of growing this development expertise to manage LTC risk. For the physician this meant an understanding of the product, the claims triggers, the way information is collected and presented, risk and the processes of underwriting and claims. For the underwriter, developing an understanding of the clinical process of history taking, examination, investigation, diagnosis treatment and management is the challenge.

Caring for elderly patients requires different ways of thinking about problems, compared with younger people. There needs to be a greater interest in the person as whole. It is rarely enough to know that the person has chest pain after walking 100 metres and cannot get upstairs without becoming breathless. This will probably be enough information for a doctor to order an echocardiogram and treat the results but physicians looking after older people will want to know more about the person themselves and the problems that they are having with their day to day life. They will want to understand the physical and psychological resources that their patient has to manage the disease and they will want to understand the impact of the problem on carers.

The theoretical model that underlies this thinking is the bio-psycho-social model. It is not enough to know the diagnosis and severity of an illness to understand the impact that it has on a person. An arthritic knee for a person who has a desk job means that the commute to work is a bit uncomfortable whereas for an international fast bowler it may represent the end of a career, financial hardship and even depression. In order to measure the impact of a disease on a person's function, a lot more has to be known about that individual.

Figure 1. The bio-psychosocial model (the authors)



Source: authors

Understanding the different impacts these different psychological, biological and social factors present in a given individual is an important part of managing their risk.

This thinking lead to improvements in the design of application form questions and the evolution of medical evidence collection protocols to provide underwriters with much improved risk data. Importantly, the medical evidence is designed to mirror that which can be obtained at claim stage. This is important to allow tracking of any decline in functional ability over time. This decline in functionality has been captured by the concept of frailty.

Frailty

Frailty is a complex concept that has been thought about in many different ways over the years. Most concepts of frailty share the idea that some bio-medical measure can predict physiological (functional) capacity. Hand grip or timed walking test¹ serve as proxy measures for the overall functioning of an individual. Other concepts of frailty stress the dependence upon others for the performance of day-to-day functioning whilst more socially based ideas stress the ability of the persons to carry out their roles in life (father, mother, club chairman, etc.). Some include a psychological component with cognitive impairment or depression as important factors. The majority seek to represent frailty as a continuum (how frail is this person?) but a smaller number of others treat it as a dichotomy (frail or not?).²

¹ Klein *et al.* (2005).

² Markle-Reid and Browne (2003).

“Good for their age”—stereotypes of ageing

The question then arises: is this person frail, “good for their age” or a poor LTC risk? Stereotypes of ageing are difficult to displace from the underwriting process. What do you expect at 72? If the underwriter uses their day-to-day experience of the elderly as a guide then problems may ensue. Having a relative who developed dementia in their early 60s may well colour their judgement compared to one who has experienced grandparents as active and very engaged with the world. Merely being “good for their age” is not a basis for an underwriting decision.

The challenge for the underwriter becomes taking a hard look at the evidence that is available to them, putting aside the stereotypical pictures of ageing and attempting to identify applicants with a degree of frailty that makes them an unacceptable LTC risk.

Identifying frailty at underwriting

The principal risk factors for frailty and hence functional decline are outlined in Table 1.

Table 1. Principle risk factors for frailty

Age	Cognitive state
Co-morbidity	Polypharmacy
Changes in life style	Functional limitation in Instrumental Activities of Daily Living (IADL)
Nutrition	Physical inactivity
Social Isolation	Education
Income	Vision

Source: authors

The risk factors for frailty demonstrate how the bio-psychosocial model works. Biological features (age, co-morbidity, polypharmacy) rub shoulders with psychological functions such as cognition and social factors (social isolation, income and education) to contribute to the degree of frailty.

Aspects such as social setting, personal care, judgement and problem-solving become important reference points for accurate underwriting assessment of at-risk individuals. Home visiting nurse agencies supply this service in the U.K. The traditional para-medical examination is extended in LTC underwriting. A vital part of the examination is the more in-depth questions asked by the nurse about ADL and IADL functioning, exploring the changes in functioning over time (has this changed in the last year?). Knowing more about hobbies and pastimes is important. A daily walk to and from the bar on the corner of the street is very different from a couple of miles across the fields with the dog. An interest in gardening can mean anything from looking at the garden through the window to regular digging sessions in the vegetable patch. The nurse is also able to see the person in their own home and get a much better idea about how they are coping day-to-day. This kind of information is unlikely to be available from any other source.

The Mini Mental State Examination (MMSE)³ was adapted for use and deployed at a lower age on applicants. The MMSE is a cognitive assessment tool that assesses a wider range of cognitive ability than a word recall test. It also satisfies the need to be short, portable and repeatable. LTC underwriters use a high score as a cut-off point and indicator of possible mild cognitive impairment with its risk of progression to dementia.

Overall, underwriters were encouraged to have a high index of suspicion when assessing all LTC applicants. A tougher interpretation of associated evidence and test results ensures they would no longer dismiss reductions in functional capacity as representing normal ageing or that the applicant is merely “good for their age”. This historic philosophy, together with a silo approach to the assessment of individual components of risk did much to undermine selection in the past.

³ Folstein *et al.* (1975).

Claims management improvements

Claims management has been tightened up and aligned much more closely to profitability. The claims philosophy that was applied was brought into line with the underwriting approach. Improved training of nurse assessors and the introduction of hand-on protocols to test ADL ability dramatically raised the bar in claims management. MMSE results backed by consultant reports make the assessment of possible cognitive claims more accurate. Charting changes over the time since policy issue became possible since claims evidence, mirrored that taken at underwriting stage.

Conclusions

Bringing together the conceptual worlds of insurance underwriting and medical practice for the elderly has produced a much more robust risk assessment process and claims management. It has enabled the development of instruments that produce the right kind of information for the underwriter and the claims manager to undertake their work efficiently and provide the client with the best service.

As the debate progresses concerning the place of the insurance industry in the provision of LTC, having these robust systems in place means that insurance solutions are more likely to be successful than earlier ventures in this arena.

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II. INVITED ARTICLE I

Adult Children's Demand for Insuring Their Parents' Long-Term Care Risk: German Evidence

By Tian Zhou-Richter*, Mark Browne**, Helmut Gründl[†]

Introduction

Many countries are experiencing the "ageing population" phenomenon, which is accompanied by an expanding need for long-term nursing care. Due to decreasing fertility rates and increasing female labour participation rates, the task of long-term care (LTC) is increasingly shifted from family members to institutions (e.g., nursing homes). However, institutional nursing care is rather expensive. Even in countries with an established public safety net such as Germany, government insurance systems provide only partial or selective coverage, meaning that the elderly are left to rely on their own assets to pay for the remainder. However, an examination of this population's total assets reveals that about half of the elderly are simply not able to pay the average remaining cost of staying in a nursing home. Even though the purchase of private long-term care insurance (LTCI) could mitigate this financing problem, in Germany as well as in other countries, demand for such insurance is very low. Consequently, there remains significant exposure of dependents' family members' assets to this risk. In some countries, such as Germany, France and Austria, adult children are legally compelled to assist ailing parents who have exhausted their own financial resources. Even in the absence of a legal obligation, there is a strong moral obligation in most cultures for adult children to assist parents in need.

Based on a self-conducted survey, our study investigates adult children's awareness of their exposure to their parents' LTC risk and examines the factors that stop adult children from purchasing LTCI for their parents.

Survey design

The survey, conducted between June and July 2007, was directed to young and middle-aged individuals in Germany. The survey took a three-step approach. We first queried respondents about their knowledge of their parents' LTC risk (e.g. estimates of LTC probability, cost, duration, etc.), as well as about their willingness to buy private LTCI for their parents. This first part of the survey also included questions about an individual's demographic characteristics, health history and attitude toward LTC. We then provided the respondents with information on the actual costs of LTC and the likelihood that an individual would need LTC. The survey ended with a question asking respondents whether the information that was provided changed their desire to purchase LTCI.

This study's target group is comprised of those respondents whose parents do not possess private LTCI and who also had no intention of purchasing LTCI for their parents at the beginning of the survey. In our study we were primarily interested in learning how informed adult children are of their parents' potential need for LTC and what their knowledge was of the potential costs of LTC. We were also interested in learning whether individuals who were not well informed of the potential need and cost of care would have an increased interest in acquiring LTC insurance, if they were better informed.

Our study builds on two strands of research. One of these attributes insufficient LTCI demand to a general underestimation of LTC risk. There are many ways people can underestimate LTC risk, including by (wrongly) believing that government LTC programmes will cover LTC costs, by having a false sense of how often LTC services are needed, by being naive regarding LTC costs and by believing (again, usually in error) that their adult children will take care of them at home.⁴

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⁴ AARP (2006); Bacon *et al.* (1989); Pauly (1990); Zweifel and Strüwe (1998).

The other strand of research on this topic deals with explaining LTCI purchase. The most important factor in this regard appears to be an individual's degree of risk aversion, the influence of which on LTCI demand is addressed in many theoretical works⁵ and observed in several empirical studies.⁶

Hypotheses and methodology

Based on our literature review, we test the hypotheses that those individuals most likely to indicate interest in purchasing LTCI after being informed of the likelihood of the need and costs of care are: (1) those who most significantly underestimated the need and costs of care before being informed, and (2) those who are more risk averse, *ceteris paribus*.

To quantify risk underestimation, the following eight dimensions are considered: whether respondents underestimated the probability of an elderly person needing LTC, the average monthly cost of staying in a nursing home, the average number of hours per day needed to provide care at home, the number of years an average care-needing person requires care, the percentage of total LTC costs covered by public LTCI, whether respondents do not feel legally responsible for parents' LTC costs even if they are financially liable, whether respondents believe that health insurance or the social welfare system will cover LTC costs.

The response variable is binary and defined as:

$$LTC_i = \begin{cases} 1, & \text{if individual } i \text{ became willing to purchase private LTCI;} \\ 0, & \text{otherwise.} \end{cases}$$

Therefore, we use Logit models to test the hypotheses.

Proper modelling to test the hypotheses requires controlling for differences between individuals in a sample. Therefore, we control in our regression models for certain demographic characteristics—age, gender, income, marital status, education, number of siblings, and number of children—which proxy for differences in individuals' utility functions and economic status. In addition, the dependent variable in our models represents the respondents' reaction to new information. To control for differences in prior information, we include controls for an individual's prior experience with adverse health events (e.g. whether the respondent or a close relative is receiving LTC), as well as controls for the individual's attitude toward LTC (e.g. whether the respondent is willing to provide home care to his or her parents).

Empirical results

Our final sample consists of 793 German individuals who, at least in principle, have an incentive to purchase private LTCI because their parents are alive and are not covered by any private LTCI. The individuals in our sample answered a survey question which indicated that they did not intend to purchase LTCI. With a question at the end of the survey, we observed that 233 of the 793 respondents without an initial willingness to buy (WTB) changed their purchase intention and became willing to purchase (about 29 per cent). The high change rate suggests that adult children are not well informed about the risk posed by their parents' future LTC needs and that many would purchase LTCI if they better understood the risk.

Our results show that respondents are more likely to become willing to purchase LTCI if they have underestimated monthly care costs or have overestimated the percentage of LTC costs covered by public LTCI.

Several of the control variables in our model were statistically significant. Based on the regression results, we conclude that individuals are more likely to become willing to purchase LTCI for their parents after being better informed if they are younger or feel morally obligated to help needy parents. Individuals with an annual family income between €20,000–30,000 are, compared to the reference group with an income more than €40,000, significantly less likely to change their purchase intention.

The results for the variable "risk aversion" reveal that more risk averse individuals are much more likely to change their purchase intention than those who are less risk averse. Our findings suggest that adult

⁵ Cutler (1996); Miyazawa *et al.* (2000); Pauly (1990); Schulze (2007).

⁶ Costa-Font and Rovira-Forns (2007); Finkelstein and McGarry (2006).

children are generally unaware of LTC risk and that if better informed they have a greater likelihood of purchasing LTCI to cover the potential costs of their parents' care. The increased likelihood of purchasing care is greatest for those who are more risk averse. The results of our study therefore provide an answer to the puzzle of why people do not purchase private LTCI even though for many it is probably to their advantage to do so—they underestimate the risk.

Implications

Our work indicates that many adult children would benefit from a better understanding of their parents' LTC risk, as many of them could increase their intertemporal utility by insuring against this risk. For policymakers who wish to reduce the pressure on public LTC programmes and enlarge private financing, our results suggest that one very simple and effective way of doing so would be to educate adult children as to their possible liability for their parents' LTC. Our research suggests there could be greater demand for LTCI, if individuals had greater understanding of this risk.

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III. INVITED ARTICLE II

Medicare and the Reform of U.S. Health Care

By James C. Capretta*

Introduction

The election of Barack Obama as the President of the United States has pushed major reform of U.S. health care to the top of the policy agenda. Powerful Democratic Congressional leaders, from Speaker of the U.S. House of Representatives, Nancy Pelosi to Massachusetts Senator, Ted Kennedy, have pledged to take up a sweeping health-care measure over the course of the coming summer months, with the hope of having a bill on the president's desk by August 2009.

Thus far, the primary focus of the debate has been over what to do about the nation's 46 million uninsured residents. Mr. Obama's plan, released as a white paper during his campaign for the presidency in mid-2007, proposed major revisions in the regulatory structure for health insurance for

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the working-age population (those under 65 years old) and their families. He would also provide substantial new subsidies for low-income households (perhaps those with incomes below 350 per cent of the poverty line) to make insurance more affordable.

But lack of coverage is only part of the problem. Health care costs continue to rise rapidly, driving up premiums for the federal and state governments, employers, and households. Indeed, escalating costs for the federal Medicare insurance programme for senior citizens is viewed by many to be the most serious threat to long-term prosperity in the United States. Sooner or later, America's political leadership will need to grapple with the difficult reality that Medicare is not sustainable in its current configuration.

Medicare is the product of the unusual political history of health care insurance in the U.S. Unlike other industrialized countries, the U.S. has never extended a universal entitlement to health insurance to all of its citizens. Instead, in 1965, President Lyndon B. Johnson believed it was possible to move toward a national approach by first covering vulnerable segments of the population with Medicare, for those age 65 and older, and with Medicaid (jointly run with the states) for certain low-income families. In the four decades since these programmes were enacted, they have become the dominant forces in how American health care is organised and financed.

Medicare's current design and financing gap

Medicare is built somewhat like the Social Security programme, with trust funds tracking income and expenses, and eligibility being determined by worker contributions and premiums. Currently, workers and their employers each pay taxes on wages—1.45 per cent—to gain eligibility for hospital insurance. At age 65, senior citizens must also pay a premium equal to 25 per cent of costs for coverage of physician services, and a 35 per cent premium for coverage for prescription drugs.

Medicare can best be understood as really two programmes. First, it is guaranteed-issue, community-rated insurance. Everyone age 65 and older gets their insurance for the same premium and they cannot be denied coverage based on their health status. These features of the programme are highly valued by beneficiaries and for good reason. Without a regulatory structure putting all seniors into the same risk pool, insurance would naturally move to cover healthier seniors at lower premiums than the unhealthy.

But Medicare is also a large tax-and-transfer programme. And it is this feature of Medicare that is substantially out of financial balance today.

The latest report from Medicare's Board of Trustees, issued in late March 2008, revealed that the programme's unfunded liability now stands at an astounding *US\$86 trillion* and the trust fund which pays for hospital services is expected to be depleted of reserves in 2019. Total Medicare spending is projected to more than triple over the projection period as a share of the national economy, from 3.2 per cent of GDP in 2007 to 6.3 per cent in 2030, 8.4 per cent in 2050, and 10.7 per cent in 2080. Federal individual income tax collections only amount to about 8.5 per cent of GDP. Covering just the increase in Medicare spending expected by 2030 would require a 36 per cent across-the-board individual income tax hike.

Many analysts in the U.S. have put forward plans to restore financial balance to Social Security, but there are very few credible Medicare reform proposals to guide policymakers. Why? Because Medicare's financial problems are much more severe and the policy environment is much more complex as well.

Unlike Social Security, the Medicare entitlement is not defined by a mathematical formula related to payroll tax contributions. Rather, enrollees get government-sponsored insurance coverage, the cost of which is mainly a function of ever-changing standards of medical practice. Today, Medicare pays for many services, diagnostic tests, operating procedures and products that did not even exist when the programme was created. And there is no limit on the quantity of services Medicare beneficiaries can use each year, so both the volume and intensity of care provided can go up over time without Congress passing benefit expansions.

The Congressional Budget Office (CBO) estimates that, between 1975 and 2005, Medicare's cost per enrollee went up, on average, 2.4 percentage points faster than per capita GDP growth each year.

Medicare's Trustees make the reasonable assumption that, absent new information, this long-standing trend of costs outpacing the source of programme income (i.e. the U.S. economy) will continue into the indefinite future (though the Trustees do expect cost growth will moderate somewhat from its recent trajectory).

Medicare's tax on work

In addition to a large financing gap, Medicare's current configuration also discourages long careers at a time when continued work by able and willing seniors should be rewarded.

Currently, Medicare becomes the "secondary payer" when a person age 65 and older works for a firm with at least 20 employees and a company-sponsored health insurance plan. In these cases, the job-based health insurance pays first for any medical care used by Medicare-eligible workers, and Medicare pays only those costs not covered by the company plan.

This "secondary payer" rule was put in place in the early 1980's as a cost-cutting measure, but it also imposes an onerous tax on work. Most economists believe that, in a competitive labour market, when an employer pays for health insurance, the premium effectively comes out of the total compensation the employing firm is willing to pay for a worker. Consequently, when Medicare pushes more health-care costs onto employers, it is workers who end up paying with lower cash wages.

A 2007 analysis by respected economists shows this Medicare "tax on work" to be considerable. They found that Medicare's "secondary payer" rule imposes a 15 to 20 per cent tax on wage income for workers at age 65, and the implicit rises to 40 to 75 per cent for those approaching 80 years old.

The problem is further compounded by Medicare's payroll tax financing. Workers age 65 and older who are already getting Medicare benefits must nonetheless continue paying Medicare's payroll tax (2.9 per cent of wages, for the combined employee-employer tax) even though they get no additional benefit for doing so.

Reforming the programme

Some health-care analysts believe that it would be unfair to focus cost-control efforts just on Medicare because rising costs is a system-wide phenomenon. To these analysts, Medicare is just one of many rail cars hooked onto a runaway cost train. The solution, these analysts argue, is not Medicare reform but a concerted effort led by the federal government to implement changes that will improve efficiency and eliminate low value services for everyone buying insurance and services, including employers.

This seems to be the thinking behind the health-care plan of the Obama administration. To slow cost escalation, the administration's top officials have suggested three basic ideas: more and better health information technology, funding for an ambitious "comparative effectiveness research" programme and more use of value indicators in Medicare's reimbursement system. While widely supported as sensible steps, most analysts do not think such measures are sufficiently robust to really control costs. Even the CBO has said that these measures are likely to fall far short of effective cost control unless coupled with other, more far-reaching changes.

One approach to aggressive cost control would have the federal government enforce tight budgets for hospitals and other provider groups and impose price controls on the purchase of certain services and supplies, as many European countries do today. But this approach to cost control raises concerns about government-rationed care and deterioration in quality. In the U.S., many voters would react negatively to the prospect of a distant federal bureaucracy having the power to deny access to health care to a citizen based on a perceived need for budgetary control.

But strong, centralized cost control need not be the only option under consideration. There is an alternative approach to improving efficiency in the health sector, based on a different perspective on why costs are high and rising in the first place.

A 2006 study by an economist at the Massachusetts Institute of Technology (MIT) showed that the creation of Medicare in the mid-1960's triggered an explosion in the health-care infrastructure in regions with previously low levels of private insurance enrolment among seniors. Hospitals were built, and

physicians and others opened up offices to provide newly enrolled Medicare beneficiaries with a much improved level of service. This was, of course, generally to the good, as the primary purpose of Medicare was to improve the quantity and quality of health care services available to seniors. But, four decades later, with cost escalation now a major concern, policymakers must also understand that expansive, third-party insurance is also one important reason for expensive care and rising costs. The MIT economist suggested that about half of the real cost increase in health care spending in the United States from 1950 to 1990 is attributable to the spread of Medicare and other, expansive third-party insurance.

Medicare's current design also provides strong financial incentives for ever-increasing use of services. Four out of five enrollees are in the traditional programme, which is fee-for-service insurance. That means Medicare pays a pre-set rate to any provider for any service rendered on behalf of a programme enrollee, with essentially no questions asked. Nearly all Medicare beneficiaries also have supplemental insurance, from their former employers or purchased in the Medigap market. With this additional coverage, they pay no charges at the point of service because the combined insurance pays 100 per cent of the cost. This kind of first-dollar coverage provides a powerful incentive for beneficiaries to use as many services as their physicians suggest might help improve their health. Whole segments of U.S. medical industry have been built around the incentives embedded in these arrangements. To be sure, Medicare's payment rates are low, but political pressure ensures they are just high enough to protect the status quo and allow doctors and hospitals and others to continue operating autonomously, thus underwriting continued fragmentation of health-care delivery.

Instead of centralizing cost-control efforts even further, Medicare could be re-structured into an entitlement with more decentralized budgetary control and incentives for cost-conscious consumption. Under this approach, Medicare would continue to provide guaranteed issue, community-rated insurance to everyone age 65 and older, but future retirees would be eligible for premium subsidization commensurate with the tax base associated with each generation's working years (a large exception would be made for seniors in the lowest fourth or fifth of the wealth distribution). This change would ensure that programme spending rose in tandem with the programme's revenue. In addition, workers age 65 and older could be exempted from further payroll tax contributions and the "secondary payer" rule, thus eliminating today's disincentives for continued work.

Proponents of this type of reform believe it would provide strong incentives for a more efficient health sector, with consumers choosing from among a large number of insurers and suppliers of services competing based on price and quality. Indeed, it is just this kind of model which has been used to provide drug coverage in Medicare and costs for that portion of the programme are coming in 40 per cent below initial expectations.

Opponents argue that controlling the entitlement in this manner would be dangerous for future retirees because health care costs might rise faster than the financial support provided by Medicare. But does it really make sense for the government to pre-commit health entitlement spending 25 and 50 years from today that is unaffordable? It seems much better to build a programme that is solvent by definition, with ample room for future policymakers to make adjustments if evidence indicates that seniors need more taxpayer support to secure appropriate health care.

The United States can provide generous health insurance coverage for seniors in the future through Medicare, even coverage that costs much more than it does today. But Medicare's costs cannot rise indefinitely at rates well above growth in the programme's revenue base. The sooner U.S. policymakers face up to this reality, the better.

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IV. INVITED ARTICLE III

Long-Term Care and Housing

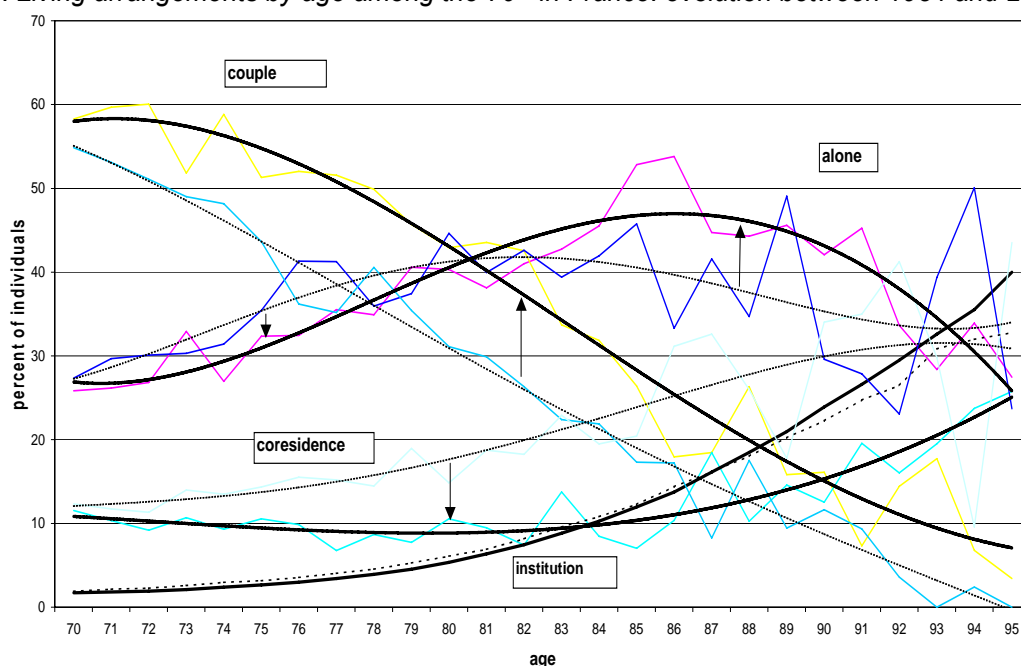
By Anne Laferrère*

Housing is both a consumption and an investment good and its role in case of long-term care needs is twofold. The living place has to be adapted, and, if the home is a saving vehicle, the issue is how to extract housing equity to finance care.

Families and places

With old age disabilities, not only care has to be organised and financed but the living place has to be adapted. Housing consumption has many dimensions at all ages. It provides a roof, but also access to schools or jobs. In old age, doors have to be large enough, stairs have to be avoided and location remains of the utmost importance. A secure and accessible neighbourhood encourages daily mobility and minimises the risk of falls for the handicapped person. It facilitates the access of home-care helpers. "Home" may mean the elderly's own home, but also a child's home or a nursing home. The three types of "living arrangements" are possible. Among the 80+ in France, 71 per cent live on their own (41 per cent alone, 30 per cent with a spouse), 14 per cent co-reside (12 per cent with a child), and 16 per cent live in an institution.⁷ It is not easy to infer the choices of future generations from past behaviours. For instance observing that the rate of co-residence with a child is 14 per cent at age 80 and 35 per cent after age 90 hides the fact that this rate is decreasing from one generation to the next.⁸ As income increases and health improves, preferences are for independent living, all the more as the increase in life expectancy means more live as couples and fewer are widowed at a given age. Indeed the percentage of the 70+ living with a spouse is 9 percentage points higher in 2002 than in 1984, while the percentage of those living alone or with a child decreased (Fig. 1).

Figure 1. Living arrangements by age among the 70+ in France: evolution between 1984 and 2002



Note: Each line gives the percentage of the four main living arrangements by age, in 1984 (dotted line) and 2002 (full line). In 2002, at age 80, 5 per cent live in an institution, 11 per cent live with a child (15 per cent in 1984), 40 per cent live alone (45 per cent in 1984) and 43 per cent live with a spouse (31 per cent in 1984). Arrows show the evolution between the two dates. Source: authors.

What determines the choice to move into a retirement home is not fully documented, because few longitudinal individual data is available.⁹ In Europe, the two waves of SHARE (*Survey of Health Aging*

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⁷ Estimation made by the author from the 1999 census and from *Enquête Logement* (2002).

⁸ Flipo *et al.* (1999).

⁹ See however Delbès and Gaymu (2004) or Gaymu *et al.* (2007).

and Retirement in Europe) allow us to begin studying such behaviour.¹⁰ Based on observations of only two points of time some elements stand out.¹¹

- Residential mobility in old age is extremely low, except after the loss of a spouse.¹² The more time one has spent in a place the less one moves. Preference for ageing in the same place seems clear.
- Moves between private “ordinary” homes, i.e. excluding moves to nursing homes, do not seem triggered by a low income. Health has little influence. The more a home is adapted to old age, the less one moves. The richer the more mobile. It could mean some immobility is resource constrained.
- By contrast, moving to a nursing home seems to take place under a triple constraint: health problems, low resources and the absence of a spouse or children. This is observed in all European countries.¹³
- If co-residing with children is declining over time, geographical proximity remains very important. In the SHARE countries, 13 per cent of those aged 70 or more co-reside with a child, 12 per cent live in the same building without sharing their home, and 34 per cent live less than 5 km away from a child (Fig.2). Moreover, in old age the moves bring the families closer.¹⁴ Because of this proximity, the many exchanges of everyday services are easier. In that sense for the current generations the demise of the family is a myth.¹⁵

If ageing in the same place is an ideal, both housing and care expenses have to be forecasted. Their financing could be dealt with separately, especially in terms of insurance products, but they are interrelated. If the home is adapted in advance, costly (both in monetary and psychological terms) moves could be delayed as care may be provided at home rather than in an institution. Only 10 per cent of the 70+ in France say they live in an especially adapted home; 14 per cent in Switzerland and 29 per cent in the Netherlands. Even among those Europeans aged 70 or more who have mobility problems only 12 per cent live in an adapted home; potential demand for home improvement is high.

It is less expensive to provide some care at home than in an institution, except when dependency problems become very heavy. But which type of care is better in terms of survival rate and well-being? Again, only panel longitudinal data will help answer unequivocally. But professional care providers must exist outside nursing homes, and ordinary private homes must be adapted to receiving a caregiver. Residential care in an institution, professional home care and family more informal care are more complements than substitutes.¹⁶ The interaction between family supply of care and the financing of formal care is crucial. Does being insured reduce the informal care provided by children?¹⁷ How do public and private insurance interact? Living arrangement choices dictate who is in charge of the parents and the geography of the family might be endogenous.¹⁸ The fact that the oldest old are often the richest of their cohort is not without consequences on the decision to take up long-term care insurance. As far as residential care in institutions is concerned, higher incomes and a higher percentage of men in the elderly population might make future demand more “demanding” than in the past.

How to extract housing equity

A majority of the elderly (65 per cent of the 70+ in the SHARE countries) own their home. Housing is a form of auto-insurance for its owner, as it is likely that its value is proportional to the desired care quality. The issue might be that a house is illiquid. A means to release equity from a home simply is to reduce maintenance, which some elderly do.¹⁹ Another means is to let part of the home. This is frequent in Switzerland and Germany²⁰ but rare in other countries such as France. Moving to a less expensive home is another option. The importance of *downsizing* at the end of the life cycle is still debated. In spite of a low mobility rate, older households when they do move, choose more often smaller than bigger homes and more often to rent rather than buy, all the more as they grow older.

¹⁰ This paper uses data from SHARE Wave 2, as of December 2008. See www.share-project.org for details.

¹¹ Angelini and Laferrère (2008).

¹² See also Bonnet *et al.* (2008).

¹³ Heiss *et al.* (2003) for the U.S. Hotz *et al.* (2007) mention that income might be endogenous.

¹⁴ Bonnet *et al.* (2008).

¹⁵ Attias-Donfut and Wolff (2007).

¹⁶ Bonsang (2008).

¹⁷ Zweifel and Strüwe (1996).

¹⁸ Konrad *et al.* (2002).

¹⁹ Davidoff (2004).

²⁰ 11 per cent of the 70 + let part of their house in Germany, 15 per cent in Switzerland.

They also leave houses for flats, which is consistent with their anticipating a risk of dependency.²¹ However, as they move closer to city centres, it is not sure that they reduce their housing expenses. More data is still needed to conclude.

Selling “*en viager*” is a venerable system of equity release based on the separation between usufruct (the right to use or receive a rent) and *nue-propriété* (an expectant interest on the property, that makes the buyer a full property owner after the usufructuary’s death). At the date of the sale the buyer pays a capital called the “*bouquet*” and promise life annuities or to keep the seller in the home. Such sales remain rare, and up to now have even become rarer in France, for reasons that are both economic (rents are not actuarially fair) and psychological (a buyer bets on the quick death of a seller). More sophisticated products have been suggested, mediated by a financial institution²² (*viager partiel, prêt viager hypothécaire*, reversed mortgage). The fact that they do not develop may be a sign that there is no demand (few are house rich and cash poor in France²³), or low supply (no wish from financial institutions to enter a market perceived as risky). Recent anecdotal evidence suggests that demand is increasing, for instance in some southern countries such as Italy. The question of equity release cannot be asked independently of the presence of children, nor of the public provision of long-term care. Children add a transmission motive to the precautionary motive for saving. The way public care is financed be an incentive to reduce one’s wealth. Depending on time and country, means-tested long-term care benefits can be income-tested or wealth-tested; they can be combined with rules of maintenance liability (“*obligation alimentaire*” in France) between child and parent and recovered or not from the child’s inheritance. Those rules combine with inheritance laws, differential taxation of inheritance and *inter-vivos* gifts, and lead to a multiple actor game between parents, spouses, children, national and local communities. The new forms of family lives (quid of the maintenance of an old step-parent, of the parent of an unmarried or a registered partner?) complicate strategies. Leaving aside homes that are considered as family homes for future generations, a sale “*en viager*” could reconcile annuity and bequest, as the *bouquet* can be given to a child (the one who cares for instance), and as using annuities to pay for care is a means not to be a burden on the children.²⁴ All this has to be borne in mind when designing long-term care insurance products.

Linking long-term care to housing and living arrangements compels one to face the fact that the choices are interrelated. The issue is one of finance and resources, and housing is an important part of income and capital but it is also one of family relationship: a house is often the symbol of family unity and, ultimately, care has to be provided in a place where you feel “at home”. For all these reasons, housing is an important element in the financing of long-term care risk.

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²¹ Angelini and Laferrère (2008).

²² Taffin (2007).

²³ Laferrère (2006).

²⁴ Just as long-term care insurance purchase preserve bequests (Courbage and Roudaut, 2008).

V. INVITED ARTICLE IV

The Chinese Financing System for Medical Care

By Xiaoxian Huang*

Introduction

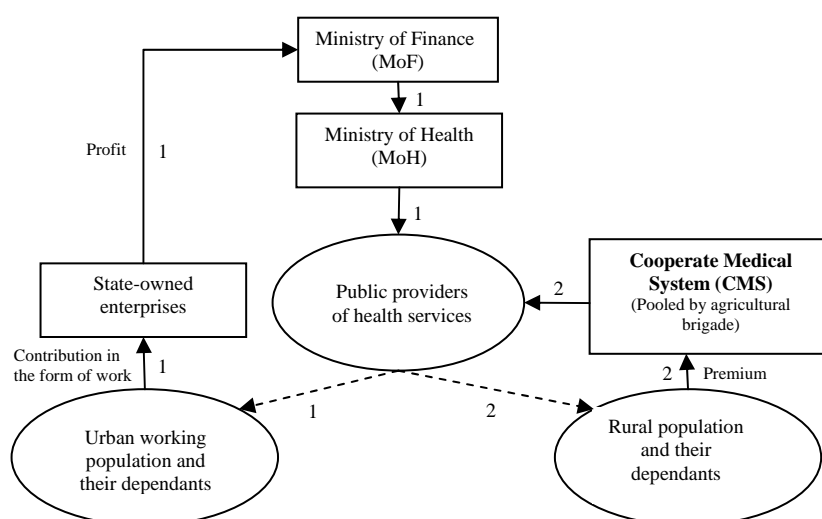
Since the establishment of the People's Republic of China in 1949, the Chinese financing system for medical care has experienced three periods and two reforms. The first period is characterised by the public nature of the health sector. Under the central planned economy, the health sector was an integrated part of the command economy. The provision of health services was mainly financed by the government budget and was free for the whole population. The second period was marked by the commercialization of the sector. Economic reform since the end of 1970s shifted the country from a central planned economy to a market-oriented economy. This mutation broke the base of the public health system and brought a wave of commercialization in the health sector. Health institutions were asked to balance operating costs by their own income. Individuals were more and more in charge of health spending and exposed to health risks. The negative effect of the commercialization on the country's health outcome has attracted the government's attention. Since the end of the 1990s, a new wave of reform emerged to re-socialize the health sector. The restoration of the social health insurance (SHI) system is an important content of this reform.

The purpose of this article is to analyse the evolution of the Chinese financing system for medical care in the period of economic transition. It can serve as documentation for further research.

The Chinese health financing system before the economic reforms

China has a dual economic structure: a modern capital-intensive industry sector co-exists with a traditional labour intensive agricultural sector. Correspondingly the health system is also divided into urban and rural sections (Figure 1).

Figure 1. Organisational chart of the Chinese Health Financing System before economic reform (1949-1978)



Note: The plain arrows indicate the financial flux in the health system. The dashed arrows indicate flux other than the financial ones. The "1" indicates the financing and services circle for urban people; while the "2" for rural people.

Source: compiled by the author.

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In the urban health system, health spending is financed from the government budget. It offers free or quasi-free health services to urban workers according to their work status. The Government Health Insurance scheme (GHI) covers government employees, such as civil servants, the military, officials and university students. The Labour Health Insurance scheme (LHI) covers employees of state-owned enterprises as well as their dependants. As no private enterprise was allowed until the end of the 1970s, this system reached the quasi-totality of the urban population.

In rural areas, the health financing system is a quite self-sufficient one. An insurance fund, called Cooperate Medical System (CMS), is organised on a community basis to pay for the health spending of the adherents. The insurance has two major financing sources: insurance premiums from agricultural households and a matching welfare fund from the agricultural brigade. The participants benefit from health consultations at low cost and inpatient services for free.²⁵ According to the 1997 estimation of the World Bank, this system covered about 80 per cent of the rural population in the 1960s.

This health financing system, accompanied with effective control of the cost of health services and the high performance of mass campaigns against infectious diseases, brought China important progress in its health status in the short period after the civil war. The Chinese life expectancy at birth climbed from 36 in 1960 to 68 in 1980. The infant mortality ratio dropped from 150 per 1000 live births in 1960 to 49 per 1000 live births in 1980 (World Bank's development indicator).

This system, however, has an important disadvantage: lack of accountability. On the side of health providers, as they are financed by the government budget, they are not accountable to patient-consumers and thus not systematically motivated to increase the responsiveness and quality of the services. On the side of the consumer, as the health services are often free or cheap, the patient-consumers are not responsible for their health spending and thus motivated to overuse the services.

Since the end of the 1970s, China's economic and social structure has been dramatically altered following numerous market-oriented economic reforms, including the elimination of rural collectives, the privatization of state-owned enterprises, tax reforms and fiscal decentralization. These reforms have had significant impacts on China's health structure, financing and priorities.²⁶

The Chinese health financing system during the economic reforms

Chinese economic reform was launched in 1978, continued in the 1980s and accelerated in the 1990s. The main objective was to introduce the market mechanism to increase the efficiency of the economy. The high growth of the private market means more and more working force shifts from the public sector to the private sector. As the previous social protection system was based on public work units, this change meant more and more labour moving out of the public protection system. On the other hand, the pressure from market competition makes private enterprises reluctant to take on the cost of social protection. As a consequence, workers in the private sector found themselves without any insurance. According to the Chinese Third Health Service Survey 2003, 44.8 per cent of urban people are totally without cover.

In rural areas, the most remarkable change was the disappearance of the agricultural production brigades. With the household production responsibility system replacing the collective production system, the household became the basic work unit. As the ancient CMS was based on the agricultural collectivity, this change caused the collapse of the rural health insurance system. The Chinese Third Health Service Survey 2003 found that 79.1 per cent of the rural people are actually not covered by any insurance.

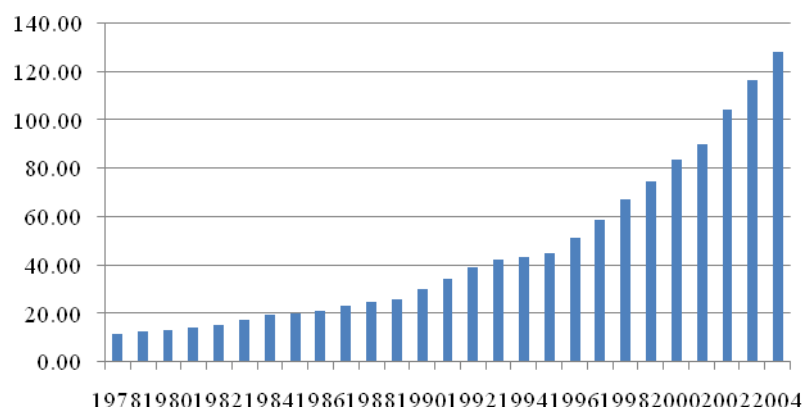
On the health provider side, economic reform has also had an impact. Increasing inefficiency in the health sector and success of the private sector in improving efficiency have pushed the government to reform public hospitals in the same way as it did for state-owned enterprises. It continues to own the hospitals but requires them to be financially self-sufficient. The initial idea was to put hospitals under the market mechanism and thus increase their accountability. However, on the other hand, the government continues to intervene in the management of hospitals on issues such as employment of

²⁵ Wen and Hays (1976).

²⁶ Hsiao and Liu (1996).

health staff or pricing of health services. The hospitals cannot behave as independent private units and adjust their strategies to the needs of efficiency. As a result, an even higher increase in health costs has been observed since the 1990s. (Figure 1).

Figure 2. Health expenditure per capita (at the constant price of 1978)



Data resource: Report of Chinese National Health Account 2007

The rise in health spending and the reduction in health insurance cover have considerably increased the financial barriers to people's access to health services. According to the Chinese Third Health Service Survey 2003, 35.7 per cent of investigated patients were self-treated and 13 per cent didn't seek any treatment for their diseases.²⁷ The direct and indirect financial losses related to health problems become a main cause of poverty in China. In some regions, the population that fell below the poverty line due to illness accounts for two thirds of the total poor population. The progress in health status has stagnated since 1990. According to World Bank data, the Chinese life expectancy at birth rose only one year, from 69 to 70, during the 1990s, and the infant mortality rate reduced only from 45 per 1000 to 44 per 1000 during the first half of the 1990s, and from 44 to 37 for the second half of the 1990s.

The new health insurance in China in the post economic reform period

The inefficiency of the health system and the stagnation of health progress during the economic reform period drew more and more attention from the Chinese government. A new reform was then implemented to re-socialize the health system, of which the restoration of the SHI system is an important component.

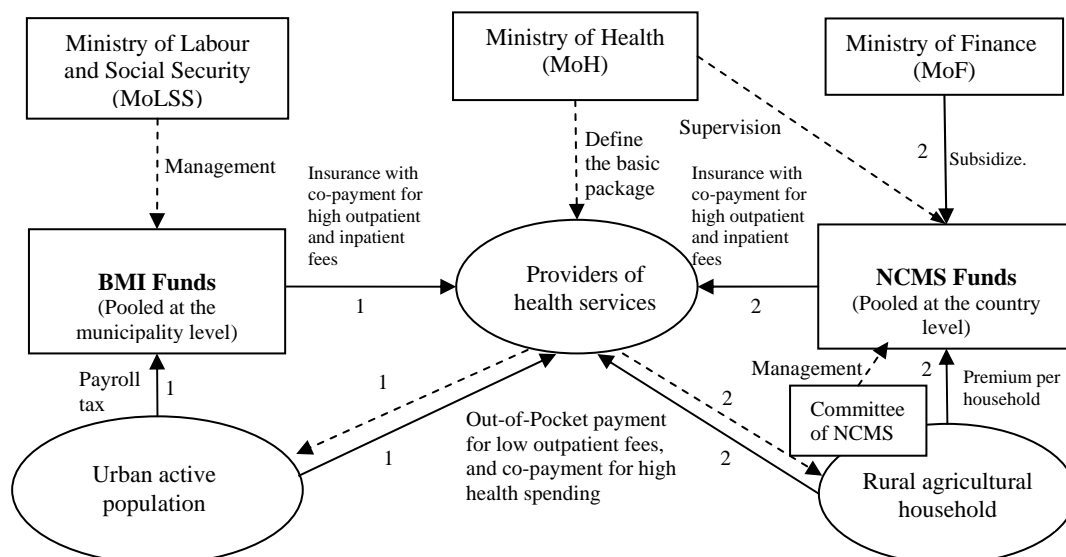
Since the middle of the 1990s, the central government began to development regional experiments for the application of the SHI. From 1992 to 1997, these experiments were concentrated in the relatively well-developed cities, such as Shanghai in 1993, Shenzhen in 1995, Zhenjiang and Jiujiang in 1994.²⁸ Based on the experiences gathered from these experiments, the Chinese government set up a nationwide health insurance scheme for urban workers in 1998, called the Basic Medical Insurance (BMI) scheme. In rural areas, regional experimentation on the New Cooperative Medical System (NCMS) was launched in 2002 and spread nationwide in 2003.

Figure 3 shows the general structure of the health insurance protection system since 2000. Two parallel health insurance systems, BMI and NCMS, target urban and rural populations separately. The main objective of the insurance system is to protect people against catastrophic health spending. The common points of the two schemes are that they are both independent public funds, pooled at regional level. The benefits of the insurance are restricted to the contributors. The reimbursement rules, however, are identical for all participants of the same scheme, whatever their contribution levels. Reimbursements contain a deductible and a total spending cap. In between, the reimbursement rate is progressive proportional to health spending.

²⁷ For details of the report www.china.com.cn/zhuanti2005/txt/2004-2/03/content_5719473.htm.

²⁸ World Bank (1997).

Figure 3. Organisational chart of Chinese Health Financing System since 2000



Note: The plain arrows indicate the financial flux for health system. The dashed arrows indicate the flux other than the financial ones. The "1" indicates the financing and services circle for the urban population; while the "2" for rural population.

Source: compiled by the author

The differences between the two schemes are found in the collection of insurance premiums and the level of reimbursement. The BMI scheme is inspired by the German Bismarck model. Participation in the BMI is compulsory for all formal employees. Contributions are collected in the form of payroll taxes and shared between the employers and the employees. In total, it accounts for about 8 to 10 per cent of an individual's wages, of which one quarter is paid by the employee and three quarters by the employer. The funds are managed by the bureau of the Ministry of Labour and Social Protection, and separated from the government's as general revenue.

Participation in the rural NCMS is voluntary. The initial premium is fixed at a very low level, about 10 yuans per person (less than 2 dollars). Central and local government complement the individual premium to attain a final level of 30 yuans (about 5 dollars) per person. As the reimbursement level of the insurance depends directly on the contribution level, this contribution has proved to be insufficient to offer effective protection for rural people. Regional government increases the contribution level in accordance with local development. The most recent data shows that the premium was raised to 120 yuan per person (20 yuans from the individual, 50 yuans from local government and 50 yuans from central government) in numerous rich rural regions.²⁹

The funds of the NCMS are officially managed by an independent committee which is composed of representatives of the peasant participants and the medical providers. However, as more than two thirds of the funds come from central and local government budgets, local government and the Ministry of Health are both heavily engaged in the management of funds.

As far as reimbursement levels are concerned, they vary according to the regional economic development level, but generally there is a large gap between rural and urban regions. In 2006, BMI reimbursement for urban employees was about 812 yuans per person, higher than the average medical spending per urban resident (620 yuans). At the same time, NCMS reimbursement was about 57 yuans per insured, which accounts for only 30 per cent of average medical spending of rural people.³⁰

The evolution of the health insurance market in China

The health insurance market is dominated by the government. In general, four public health insurance funds are available depending on the individual's working status: the Government Health Insurance (GHI), the Labour Health Insurance (LHI), the urban Basic Medical Insurance (BMI) and the New Cooperate Medical System (NCMS). In total they covered 45 per cent of the urban population and 11

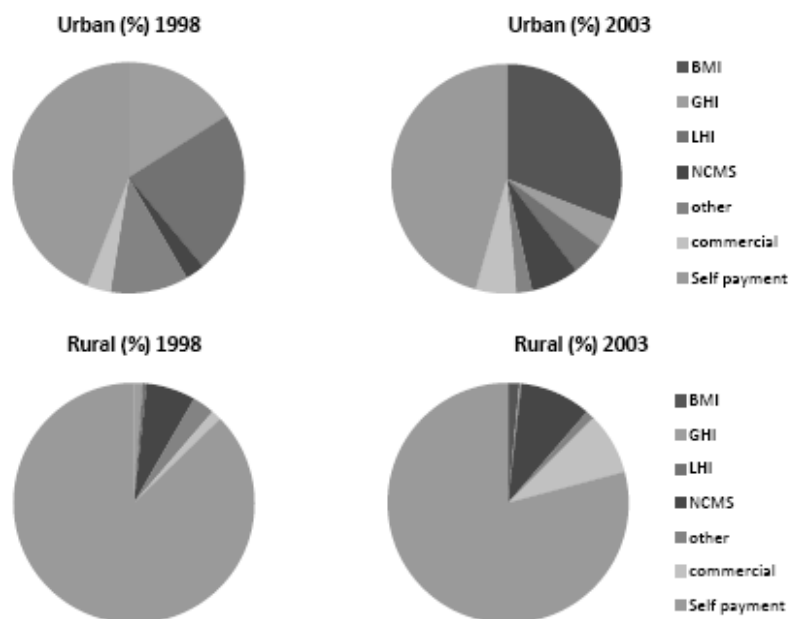
²⁹ Chinese Ministry of Health (2006).

³⁰ Government of China, *Health Statistical Yearbook* (2008).

per cent of the rural population in 2003 (the most significant growth of NMCS was observed after 2003). Private insurance is increasing quickly. However it is not the main health financing source in China.

The Chinese health insurance market still has a lot of room for development. According to the Chinese National Survey on Health Services, 1998 and 2003 (Figure 4), until 2003, an important part of the population was still not covered by any insurance. From 1998 to 2003, in urban areas, the most significant change was that BMI replaced GHI and LHI and became the most important health insurance scheme for urban residents. However this change did not significantly increase the insurance coverage in urban areas, the self-payment share stagnated at about 44 per cent.

Figure 4. The financing structure for medical care in 1998 and 2003



Source: National Survey on Health Services, 1998 and 2003.

In rural areas, until 2003, self-payment predominated all other health financing resources, accounting for 79 per cent of total health spending. However, since 2003 the NMCS experienced extremely rapid growth. Its coverage rose from 9.5 per cent in 2003 to 83 per cent in 2007.³¹

From 1998 to 2003, commercial health insurance had a remarkable increase. It rose from 1.4 per cent to 8.3 per cent in rural areas and from 3.3 per cent to 5.6 per cent in urban areas.

Regardless of the rapid increase of the coverage ratio, commercial health insurance is still in its beginning stages in China. The government has not yet explicitly defined the role of private insurance. Before 2005, no independent health insurance company was available in China. Private health insurance packages were mainly presented as additional options to life insurance contracts. These health insurance packages were mainly aimed at catastrophic spending. They resemble more health saving plans, where the reimbursement depends exclusively on the accumulative sum of premiums, than an insurance plan, where the risk is shared in the insurance pool.³² The first independent health insurance company, PICC Health Insurance Company, was established in 2005. And until 2006, there were only four commercial health insurance companies available in China.

The government implicitly encourages private insurance to complement the protection of public insurance. Precisely, they allow enterprises to voluntarily choose private insurance to supplement the BMI's protection. They also allow private insurance to extend to the population uncovered by public insurance. However, for the first option, as private insurance has neither access to accurate information on the cost of health services, nor control on health providers' behaviour, it is costly for them to assure catastrophic health spending. For the second option, the problem of asymmetric information will lead to either the failure of the insurance company or the exclusion of high risk populations from the insurance system. The role of private health insurance is thus still in question.

³¹ Government of China, *Health Statistical Yearbook* (2008).

³² Chinese Life Insurance Company <http://www.e-chinalife.com/product/personInsur/healthInsur/healthInsur.html>.

Discussion

The restoration of the social health insurance system is not the reproduction of the ancient public health system. The new SHI system tries to avoid the potential inefficiency of the ancient system by increasing accountability of each party on the health market. The patient-consumers are asked to participate in the financing of small health costs in the form of co-payments and deductibles, so that they are aware of the cost of health services. Health providers are asked to find their financing on the health market, rather than directly from the government budget. SHI funds are managed by institutes which represent the interests of the patient-consumers: in the case of BMI, it is the Ministry of Labour and Social Security; and in the case of NCMS, it is a selected committee. This structure permits the separation of the buyer and the provider of health services, and thus increases the accountability of health providers to patient-consumers.

The new health financing system, however, still faces great challenges. Firstly, universal coverage is not yet attained. About 140 million rural-urban migrants are still outside the insurance system. How can they be identified? Which insurance scheme will be suitable to their status? Secondly, the inequality in financial protection between urban and rural areas is still big. The average reimbursement was 812 yuans for urban residents and 57 yuans for rural residents in 2006. Meanwhile, all regional NCMS report an accumulation of funds since the beginning of the implementation of NCMS, which implies a manipulation aspect of raising protection levels in rural areas. What should the optimal level of protection be, given the actual premium level? Thirdly, the separation of health providers and health buyers remains theoretical. As the government is largely engaged in health insurance reform, the management of funds remains in its hands. The local NCMS bureau, for example, is often located inside the local government building, and functions as an administrative department of the government. How can the independence of insurance funds be guaranteed? Fourthly, what is the role of private insurance? According to the experiences of developed countries, they should be a complement to public insurance. However, the experience of Chinese private insurance shows that sustainability will be a great challenge for the former to complement the insurance market. How can private insurance be developed then? Last but not least, how will health providers be paid? The different payment methods will impose different incentives on the providers' behaviour. According to the experience of developed countries, the prospective budget is more efficient in controlling health costs than the retrospective budget. However, its good functioning depends on a well established information system, which is lacking in China. How can feasible payment rules be established to increase the efficiency of health services? These questions will have more precise answers when more data will have been collected.

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VII. PUBLICATIONS ON HEALTH ISSUES

Health Care Costs: Causes, Effects and Control, edited by Bernice R. Hofmann, published by Nova Publishers, 2008. It is difficult to find an area of such unyielding cost increases as health care except perhaps energy costs. These costs and the underlying health care systems continue to constitute major issues around the world. This new book tackles these tough issues head on from multiple perspectives around the world.

Long-Term Care Insurance and Health Insurance, Special Issue of *The Journal of Risk and Insurance*, 76(1), March 2009.

Health Systems and the Challenge of Communicable Diseases—Experiences from Europe and Latin America, edited by R. Coker, R. Atun and M. McKee, published by the Open University Press, 2008. This book looks at two regions where the pace of change is especially rapid, Europe and Latin America—places where health systems are themselves undergoing rapid organisational transition. The book begins with an historical overview of the way in which humans and micro-organisms have always competed, before examining the current status of this evolutionary struggle. It assesses the extent to which human societies and their governments are prepared for the challenges ahead and reviews the experiences of countries in Europe and Latin America in developing effective responses.

Social Sciences in Health Care and Medicine, edited by Janet B. Garner and Thelma C. Christiansen, published by Nova Publishers, 2008. Health care and medicine are dependent upon a close interaction with social sciences and professions in order to effectively treat patients. Although medicines have become more and more targeted in recent times, it is the recovery of the patient which is the true test of the system whether it be in a hospital setting or within a daily societal setting. Such interactions may be psychological or interactions with social organisations essential to phase the patient back into society. This book presents new issues, experiences and research in the field from around the globe

International Trade and Health Protection, by Tracey Epps, edited by Edward Elgar Publishing, 2008. This book examines and critiques the WTO's agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), asking whether it strikes an appropriate balance between conflicting domestic health protection and trade liberalization objectives.

The Logic of Care: Health and the Problem of Patient Choice, by Annemarie Mol, published by Routledge, 2008. What is good care? In this book the author argues that good care has little to do with "patient choice" and, therefore, creating more opportunities for patient choice will not improve health care. Illustrating the discussion with examples from diabetes clinics and diabetes self care, the book presents the "logic of care" in a step by step contrast with the "logic of choice". The book is crucial reading for all those interested in the theory and practice of care, including sociologists, anthropologists and health care professionals. It will also speak to policymakers and become a valuable source of inspiration for patient activists.

The Health Debate—Policy & Politics in the Twenty-First Century, by David J. Hunter, published by The Policy Press, 2008. Focusing on the British NHS, this book reviews some of the key contemporary debates concerning health systems and how they have shaped the way that health care has, and is, evolving.

Health and Health Care in the New Russia, edited by Nick Manning and Nataliya Tikhonova, Ashgate Publishing, February 2009. The project reported in this volume explores the nature of health and health care experiences in different social settings within Russia. The unique use of longitudinal data collected over 10 years, allows the authors to address key questions on Russian individual experiences of health care.

Efficiency Measurement in Health and Healthcare, by B. Hollingsworth and S.J. Peacock, published by Routledge, 2008. This book provides a concise synthesis of cutting-edge research in the theory and practice of efficiency measurement in health and health care.

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September

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- 21-23 Bergen **36th Seminar of the European Group of Risk and Insurance Economists (EGRIE)**

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- tba* *tba* **6th Liability Regimes Conference**
- tba* Warsaw **6th Health & Ageing Conference**, jointly organised with PZU

December

- tba* London **6th International Insurance and Finance Seminar of The Geneva Association**