



Introduction to the Insurance Industry

Rodney Lester

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THIS ISSUE

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The *Primer Series on Insurance* provides a summary overview of how the insurance industry works, the main challenges of supervision, and key product areas. The series is intended for policymakers, governmental officials, and financial sector generalists who are involved with the insurance sector. The monthly primer series, launched in February 2009 by the World Bank's Insurance Program, is written in a straightforward, non-technical style to share concepts and lessons about insurance with a broad community of non-specialists.

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Introduction to the Insurance Industry

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The nature and history of insurance

Insurance in its pure form is a social good and in a number of cases can be classified as a public good (that is, it generates desirable externalities). Insurance companies, mutuals and cooperatives enable individuals and firms to protect themselves against infrequent but extreme losses at a cost which is small compared to the feared loss. They do this through the workings of the law of large numbers and the central limit theorem which ensure that a sufficiently large number of reasonably homogenous risks will produce well behaved and highly predictable aggregate results following a roughly Gaussian loss distribution.

Life insurance contracts can be for short periods (for example, accidental death) or very long periods (for example, whole of life). In consequence life insurance can intrinsically include a savings element, and in many late transition and industrial countries this component dominates funds flows in the sector. This flow of funds effect can be exaggerated by the fact that in recent decades the life insurance sector has begun to compete directly with mutual funds and unit trusts through unit linked contracts offering a life insurance 'tax wrapper'. Non-life insurance contracts, which insure material and financial risks, typically run for one year and are renewed on the basis of updated risk information.

Given its fundamental role in spreading risk it is not surprising that references to insurance can be found in antiquity. A form of risk sharing for marine ventures known as bottomry (not unlike modern catastrophe bonds in concept) was in existence more than two

millennia ago. Non-life insurance in its modern form (also known as Property and Casualty or P&C, and general insurance) became established in Italian cities such as Genoa in the fourteenth century to support their active marine based trading activities, with the first regulation appearing in 1336. The concept spread rapidly to other parts of Europe and eventually to the New World. Life insurance goes back to at least Roman times when funeral societies became popular. Various forms of insurance have been banned from time to time for religious reasons (for example fire insurance was shunned in Southern Germany for a period because it was seen as prevented God from exercising his displeasure) and because of fraudulent or morally questionable schemes such as tontines and pyramid arrangements. The growth of the sector was most rapid in the United Kingdom, largely because of a long-standing liberal approach to markets, and the U.K. remains the most 'insured' country in the world. However the modern approach to the prudential regulation of the insurance sector was largely pioneered in the United States in the nineteenth century, and in Massachusetts in particular.

Insurance by its nature is an intangible good, involving payment in advance for an unknowable quality of delivery in the future. Thus trust is a critical element, and public good classes such as health, disability and work place injury or illness have to date often been delivered through state entities. However most classes of insurance are usually delivered through private markets and insurance regulation tends to reflect solvency concerns and information asymmetry between suppliers and policyholders: many countries have explicit reference to insurance contracts in their civil codes and specialized laws including specific provisions for retail (B to C) markets. As fiscal pressures mount there is an increasing trend to entrust more social good classes, such as workman's compensation and annuities, to the private sector and this adds to the pressure for effective market conduct and prudential regimes.

Government intervention to enforce mandatory insurance (most commonly motor third party, workman's compensation and constructor all risk) aside, private insurance markets form naturally when risk aversion ensures that individuals will pay more than the expected loss in order to hedge against the possibility of a loss that is large relative to available resources. The reason that the market premium is greater than the expected loss is that the expenses of running the business need to be factored in, together with the cost of the capital set aside to underwrite the risks involved. Typically the market premium is not greatly in excess of the expected loss for most common classes such as motor collision insurance, where claims are relatively frequent (around 11 to

15 percent annually) and the average claim size is small, thus generating statistically credible databases. However the cost of capital can dominate where large elements of uncertainty exist and systemic events can affect many risks at once, such as credit insurance and natural disasters coverage.

A major industry subset, the global reinsurance sector, has largely arisen from its ability to modify the frequency and claims profile of a direct insurer at a price that is efficient for both parties (that is, reinsurers are insurers of insurers). For a typical mature non-life insurer in an industrial country the net cost of reinsurance in a normal year accounts for approximately 8 percent of gross premium revenues. However reinsurers also effectively 'lend' capital to rapidly growing insurers (both life and non-life and sometimes known as surplus relief reinsurance) and the proportion reinsured can be much larger in emerging markets. The reinsurance sector has also been the core source of technology transfer between developed and developing markets and is the subject of Module 2 of this series.

Given the balance sheet risks involved, the capital management of insurers bears some resemblance to that of banks. In both cases it ideally reflects a desire to set some upper limit on the probability of failure within a defined period of time. Hence elements such as market, credit and operational risk are increasingly reflected in solvency regimes as various countries introduce risk based supervisory regimes. However insurance capital determination is considerably more complex as both sides of the balance sheet are stochastic in nature (liabilities are the present values of uncertain future obligations) and the correlations between liability and asset risks can be much less obvious than for banks.

Role of government in insurance

Government has three roles in insurance. The first is to ensure that those who are granted licenses are competent to enter the business and will have sufficient scale. The second is to ensure that there are sufficient competitors to prevent cartels from developing, while limiting numbers to a level that prevents pyramid structures (known as cash flow underwriting) from emerging. Insurers are prone to pyramid structures because premiums are paid well in advance of claims and the ultimate cost of claims is uncertain. The main tools to achieve these potentially conflicting objectives are minimum capital requirements (see figure 3), licensing rules and centralized claims data collection so that indicative pure premiums (that is, expected losses per unit

of coverage) can be published. Market premiums are pure premiums loaded for expenses and cost of supporting capital.

The third role is to protect the public. This is not the same as preventing insurer insolvency (Stewart Economics, Inc. 2003). In fact allowing an insurer in trouble to delay insolvency (known as regulatory forbearance) can be inimical to the public interest and involve substantial unexpected and unnecessary public expenditures. This recognition has contributed to the development of risk based supervisory approaches, including corrective actions and enforcement based on the ratio of actual capital to statutory measures of risk based capital.

Profile of the modern insurance sector

Today the insurance sector is a major global industry covering a huge range of risks ranging from natural disasters and environmental hazard, through life and disability and standard property risks (fire, explosion, burglary, and so forth) to various types of liability under tort and civil codes to protecting the balance sheets of credit granting institutions. In the latter case the sector has developed overlaps with, and become the backstop for significant sections of the banking and shadow banking sectors. It is also a significant source of investment funds (box 1).

In 2003 seven insurers were in the top fifty corporations in the world in terms of revenues and insurers accounted for two of the top four global financial institutions by market capitalization. The industry is global by nature as it is in the risk spreading business, but in practice less than fifteen insurers can be called genuine global players

Box 1. The global metrics of insurance markets

Total premium revenues (2006 data):

- Life—US\$2.2 trillion o.w. developing markets US\$176 million
- Non-life—US\$1.7 trillion o.w. developing markets S\$160 million

Assets under management (2005 data):

- Insurers—US\$17 trillion plus
- Standalone pension funds—US\$20 trillion plus
- Mutual funds—US\$18 trillion plus

Source: Swiss Re and OECD.

Table 1. Geographical emphasis of transnational insurers (percent revenues)

<i>Home country</i>	<i>Host region</i>					
	<i>Europe</i>	<i>CEE</i>	<i>Africa</i>	<i>LAC</i>	<i>Asia Pacific</i>	<i>West Africa</i>
United States	24.8	10.3	4.1	25.6	28.3	6.9
United Kingdom	37.7	6.5	1.3	7.8	40.2	6.5
France	43.4	1.5	5.9	17.1	28.4	3.7
Germany	34.1	20.6	12.1	9.5	21.1	2.6
Netherlands	38.1	15.5	10.4	7.8	24.9	3.2
Switzerland	36.8	12.3	8.7	5.5	31.8	4.8
Spain	25.0	5.5	2.8	55.6	8.3	2.8
Italy	35.9	17.9	2.6	23.1	12.8	7.7

Source: UNCTAD 2005.

(and these are mostly European), with the balance having more of a regional approach or being confined to their home countries. In terms of geographical involvement it is clear that colonial pasts and cultural affiliations have played a large part in foreign investment, in addition to proximity (table 1). However other factors are also important.

Of particular note is the fact that, the global success of the sector notwithstanding, there is a massive dichotomy between developed and developing markets (see box 1). The density of insurance (that is, premium per capita) in an industrial country like France at US\$4,075 is many multiples of the US\$38.4 reported by a poor country like India (Swiss Re 2007). In parts of Africa the sector is effectively non existent, despite its fundamental social and economic role. The insurance development path is discussed in detail below but can in part be explained by the sequencing of the introduction of the various classes of insurance (table 2), which in turn follow developments in the real sector and the establishment of property rights.

The major challenge for development institutions is to work to change the traditional development patterns to support real sector development and hence generate more rapid sectorial development in a virtuous cycle.

Development paths for the insurance sector

The growth of insurance markets has been different to that of banking sectors, with the insurance sector being more sensitive to fundamental

Table 2. Sequencing of classes of insurance (percent of written premiums by major class, 2006 data)*

	<i>Canada</i>	<i>Croatia</i>	<i>Senegal</i>
Transport	0.5	4.6	17.1
Motor vehicle	26.0	45.8	35.6
Liability	5.7	3.0	5.1
Property	13.6	15.5	16.3
Other non-life	1.4	2.0	4.9
Life	52.8	29.1	20.9

Source: UNCTAD 2005.

* Medical and workman's compensation have been omitted as the treatment of these classes tends to be subject to local political economy considerations.

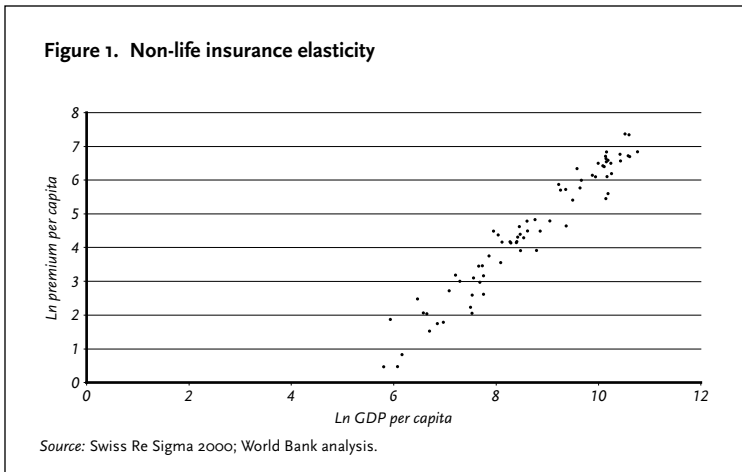
real sector development, and in particular to average income levels (Annex I). This partly reflects the fact that insurers are usually not allowed to borrow or take on net foreign exchange exposures.¹ Their balance sheet leverage (typically around 10 to 1 for life and 5 to 1 or less for non-life) is naturally generated by the need to hold reserves against claims incurred but not yet settled and future obligations. Thus insurers are more dependent on local financial resource mobilization and in turn on growth in domestic economic activity.

Formal life insurance markets normally develop well after non-life insurance markets. This reflects the former's dependence on the emergence of a middle class and, ideally, the development of reasonably deep and liquid capital markets. However culture can play a part, with life markets appearing sooner where strong savings ethics apply, such as in North Asia and former British colonies.

If non-life premiums/capita (premium density) is graphed against GDP/capita it can be seen that economic growth is the main driver (figure 1), with a global elasticity between premium/capita and GDP/capita of approximately 1.3.² However densities vary considerably between countries at similar stages of development.

The mechanisms of non-life insurance growth have varied both over time and according to country context. Originally most non marine insurers started as mutual organizations set up to meet a common need

1. Some major markets (for example, the European Union and the United States) do in fact allow insurers to borrow to support solvency, but only on terms that strictly limit the investors' capacity to redeem the relevant notes.
2. That is, a 1 percent increase in GDP per capita corresponds to a 1.3 percent increase in premium per capita.



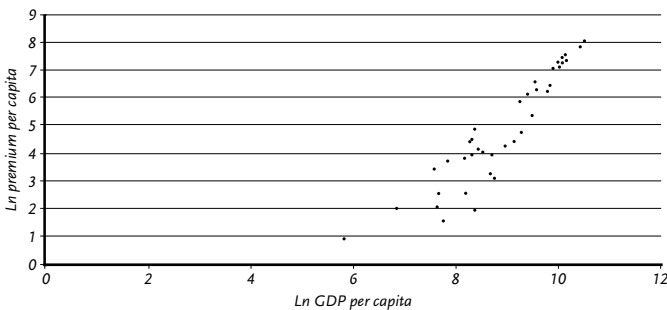
or out of natural linkages. State Farm, now one of the largest insurers in the world, began life as a mutual to insure farmers' vehicles. Fire insurance was founded in France by the water company, which organized the first fire brigade service. The life insurance industry grew out of widows' funds and arrangements set up by various religious groups, and subsequently by the fraternal movements (supported by industrialization and increasing population concentration). Many large and long established life insurers in industrial countries had mutual structures until relatively recently, when competition and the obvious existence of lazy capital (and the chance for current management to utilize the profits created over many decades of operations) forced a move to shareholder structures.

The current pattern in developing markets tends to be different. Transport (MAT), industrial and commercial non-life lines first appear, driven by the requirements of trading partners and foreign investors/partners and the arrival of international insurance brokers. Even the most extreme centrally planned economies require marine and transport insurance. In addition certain economic sectors, such as agriculture, often see the early emergence of insurance mechanisms for consumption smoothing purposes: such classes are often subsidized by the state. However the general public usually remains unexposed to insurance until motor car fleets begin to build, often with a sudden increase in traffic related deaths and injuries, at which point compulsory third party liability insurance is almost inevitably introduced by

law. Because of the strong cash flows generated by this class it often attracts questionable entrepreneurs and the insurance sector can rapidly lose the public's confidence. Thereafter the main driver tends to be the development of formal credit markets with attendant needs to cover loss of a wage earner's life or loss of collateral. This helps to explain the strong link to GDP growth and an observed nexus with the development of credit markets (see Annex II).

Life insurance based savings develop along a somewhat different path. Sales people offering hard currency contracts arrive on the scene as soon as a middle class with surplus income begins to appear. The insurers are often from other countries and the transactions are carried out in hotel rooms. Local life insurers usually cannot be sustained until a reasonable level of income is attained by a significant number of families (typically corresponding to a GDP/capita of between US\$5,000 and US\$8,000 in 2007 dollars), the local regulatory system has been strengthened and there is at least some local currency capital market development. Thereafter it tends to grow rapidly, with a premium density elasticity to GDP/capita growth of approximately 2 times. Often the first stage will involve some variant of multi level selling (that is, using social contacts) and professional sales channels follow some time later. However banc-assurance, in one of its various forms, is increasingly being tried at the early stages in emerging markets, with varying degrees of success (see discussion below). Thus, while life insurance development is also primarily driven by GDP/

Figure 2. Life insurance elasticity versus GDP growth



Source: Swiss Re Sigma 2002.

capita, there are strong threshold effects, and other factors such as income distribution, the role of social transfers and religious mores can have a significant impact³ (figure 2). Recent history also plays a role with a well known international brand being seen as a positive in some countries, particularly those of the former Soviet Union which saw savings destroyed by hyperinflation and other countries where pyramid schemes have collapsed.

Aside from these factors the major determinant of life insurance development is the level of involvement the sector has in managing funded pension arrangements. There is evidence for a substitution effect when mandatory second pillar pensions are introduced in more developed countries, although forced savings in poorer countries does appear to lead to a net increase in overall savings.

Little work has been done on the tradeoffs between establishing local insurers and introducing foreign players, although UNCTAD has encouraged the development of locally owned sectors. The main official drivers of this policy stance usually involve retention of foreign exchange, creation of a competitive domestic market and local control of long term funds. The economic justifications behind the second and third drivers can be questioned. FDI has no apparent relationship to market size but it does appear to be related to non-life underwriting capacity and product/distribution innovation, and foreign insurers tend to be less driven by local bank funding needs and issues of government paper.

The retention of foreign exchange argument may be more sustainable provided the mechanism adopted efficiently uses local capacity. For example a more efficient use of local financial and human resource capacity is sometimes achieved through mandatory reinsurance through a local or regional reinsurer. Such entities enable a more attractive and larger portfolio to be offered to international risk transfer markets and, through a critical mass of technical staff, can offer advice to small insurers.

Most insurance markets are now opening up as the GATS negotiations proceed although these liberalization efforts are being implemented with highly varying level of skill and sometimes in the absence of necessary institutional settings (see policy issues below). Like banks, state controlled insurers created to provide mandatory insurances and to insure state owned enterprises have been misused under directed lending and investment programs. Even in some late transition countries insurers have been required to direct funds to socially preferred sectors such as housing (for example, New Zealand in the

3. Takaful insurance is now showing signs of growing rapidly in Muslim communities.

1970s). This and the strong linkages that typically exist between the insurance sector and the influential classes in developing markets has been a major source of resistance to effective market liberalization in some jurisdictions.

A new role outside the normal development path is now emerging for the insurance sector. This involves protecting the working poor from falling into poverty due to catastrophic idiosyncratic events such as death or illness of the wage earner or systemic events such as drought and is somewhat similar to the social role played by friendly societies and industrial insurers in the U.K. and Europe in the late nineteenth and early twentieth centuries. It comes under the general heading of micro-insurance and emerged out of the micro finance industry in the late twentieth century as a means to raise collateral against micro-lending and to develop alternative sources of contribution to overheads. The official funds flow and GDP numbers likely to be generated by this sub-sector are small but the social and poverty impacts can be considerable, with more than 100 million poor people already covered and the number increasing rapidly. This series discusses micro-insurance in Module 3.

Insurance and development

There has been virtually no academic research on the economic role of insurance: risk considerations appear to be absent from most economics courses. However a body of research, largely supported by the World Bank and UNCTAD, is now emerging that demonstrates growth related causalities from insurance sector development to economic development. These appear to apply for non-life insurance at all stages of development (no country can trade without insurance) and for life insurance at the later stages of development (Arena 2006). Anecdotal evidence would point to the process as being iterative.

Research has shown the central role of insurance in supporting credit creation (Annex II) and trade finance, and the development of equity and long term debt markets (Impavido 2003). Recent financial crises have also pointed to the unreliability of bank lending (particularly cross border lending) under stress and the importance of developing more reliable long term sources of funding. Finally it is now becoming clear that risk markets can play a key role in protecting developing countries from fiscal and liquidity stresses following major natural catastrophes.

There are very few examples of insurance sector failure adversely systemically affecting the economy. In most cases where this has occurred it has arisen from links with the banking sector: the Jamaican

meltdown in the late 1990s is perhaps the best known example. Only one recent case of a direct impact on the economy is known. This was the HIH collapse in Australia, which threatened to bring the construction industry to a halt because of lack of required insurance coverage. However this was rectified quickly. Similarly only one recent case of a significant liquidity sourced insurer failure is known. This was Confederation Life in Canada, which was siphoning its liquid assets to leasing and property subsidiaries. Most insurers fail because of insolvency, although reduced cash significant flows are often a sign that problems are brewing for non-life insurers.

Microinsurance for the poor and informal sectors is still at an early stage of development but has considerable potential, both in the credit related sense through MFIs and for social safety net purposes through mutuals and community based organizations.

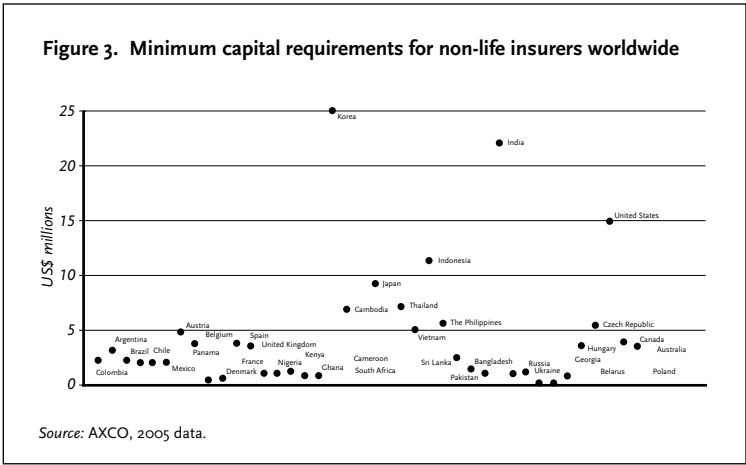
Policy issues in insurance market development

Industrial structure and minimum capital

A rough rule of thumb is that the minimum sample size (in terms of number of claims) to develop a pure premium for a given rating cell (that is, a collective satisfying a given set of risk characteristics such as motor vehicle power, age of driver, and so forth) is 1,000. Assuming a claims frequency of 10 percent this means one rating cell needs 10,000 policyholders. Thus many insurers in developing, transition and industrial countries are too small to be statistically efficient. They are able to operate because reinsurance is able to remove the potential extreme results of their risk portfolios. Essentially these small insurers are 'fronts' for international reinsurers and the European reinsurers in particular have a long history of providing technical support to set up such entities. Operating scale and scope can also be important but studies carried out to date indicate that there is an optimum level beyond which complexity and loss of local knowledge begin to reduce efficiency.

From a supervisory point of view a large number of insurers is undesirable given the limited resources typically allocated by governments to the non bank sectors and the possibility of excess competition arising from a breakdown in signaling mechanisms. This is relevant to the insurance sector because of the opacity of pricing and a consequent inherent tendency towards pyramidal structures.

Several significant jurisdictions (Nigeria and Russia are two recent examples) have increased minimum required capital to force consoli-



datation of overly fragmented insurance sectors and to help develop local champions. Some major countries opening up to foreign players (for example, China and India) have set very high initial capital requirements to filter out all but the major global insurers and to support heavy initial capital needs (figure 3). It is now almost universally required that life and non-life insurance be written through separately licensed companies and as a rule the minimum capital requirements are greater for life insurers (and for reinsurers).

Financial insurance

Financial insurance includes such lines as mortgage lenders’ insurance, which typically covers default risk on higher levels of LTV ratios (particularly if secondary mortgage markets have formed), debenture guarantee insurance (which supports debenture credit ratings), project finance insurance (covering large long term projects dependent on supplier or end user financing), retail consumer credit insurance and fiduciary insurance (which covers the dishonest behavior of company officers handling financial transactions and is known as bankers blanket bonds for banks). It can be argued that, like reinsurers, credit insurers are centers of specialized underwriting and risk management expertise, able to support a wider range of originators. However it also needs to be recognized that credit related risks have parallels with catastrophe reinsurance as the law of large numbers tends to be irrel-

evant within a given jurisdiction when such insurance is really needed (that is, arising from some combination of systemic events such as high interest rates and high unemployment). In industrial and some transition countries credit risks typically have to be written through specialized 'insurers' called monolines with heavy capitalizations reflecting the 400 to 600 percent loss ratios that they can experience every decade or so. Where countries already have financial insurers or are contemplating them the normal advice is to have a separate specialized section of the law, to require that they are segregated from other lines of business (preferably in a separate licensed entity) and are appropriately capitalized with adequate reinsurance. Aside from the highly differentiated capital needs the argument for segregating monolines revolves around their unique nature—effectively a limitless downside and an upside constrained by competition and regulation and, possibly, a tight linkage to the rating of capital market instruments. In these situations a clean structure able to raise capital quickly and be assessed by the credit rating agencies in a way that is meaningful for investors is essential.

Liberalization

There is strong pressure on transition countries to open up their local insurance sectors to international competition, even if this only means the ability to establish a local subsidiary or joint venture. This pressure comes from various sources, although the WTO (GATS) negotiations tend to be the most common factor mentioned. A number of countries have agreed to open up their insurance sectors, sometimes as a trade off for enhanced physical goods access to developed markets or to deflect attention from the banking sector. Unfortunately because the insurance sector is small the liberalization is often hurried and poorly thought through, with foreign insurers cherry picking the middle class (if there is one) and little or no technology transfer occurring. Critical steps required before an insurance market is opened up include strengthening the regulatory regime and raising the capacity of the supervisory entity, developing necessary local skills and standards (accounting, auditing actuarial) and privatizing, or at least corporatizing any government owned or controlled insurers. It may also be necessary to first put mandatory insurance classes such as motor third party liability onto a sound financial and operational basis.

Financial supervisor cooperation or integration

While it is tempting to apply a one size fits all approach to supervisory coordination, experience to date shows that every country is different and a degree of caution is needed before making any substantive recommendations. In smaller countries there has often been a bias towards moving all financial sector supervision under the central bank—and where this has happened results have generally been encouraging. However central banks often decline the opportunity and at this point it is better not to be specific about options. While the need for greater coordination should naturally emerge from any reasonably thorough assessment using some or all of the IAIS ICPs the safest route is to form a joint working group to look at needs and options and to then develop a detailed plan—possibly with technical support.

Catastrophe risk

Many developing and transition countries are subject to severe natural catastrophe risk. However the poor development of local insurance markets can limit opportunities to transfer risk because of limited or even negligible penetration into the household and SME sectors. In addition there is a certain size of direct insurer below which international insurers cannot justify any support for transaction cost reasons. A number of structures and products have been developed by the World Bank and other development organizations to fill this lacuna.

Accounting and information systems

Insurance accounting needs to be on an accrual basis of meaningful information is to be generated. This means that the unearned portion of premiums as at the accounting date need to be reserved together with the present value of future claims obligations. This latter amount can be simply an addition of claims outstanding in claims files, with a mechanistic adjustment for claims incurred but not reported, or very complex calculations based on models in the case of long term life insurance and classes of non-life insurance where claims take a long time to stabilize and settle (such as for example a quadriplegia workman's compensation claim). Revenues need to reflect changes in unearned premiums, and claims costs changes in claims reserves and provisions. A module on insurance accrual accounting appears later in this series.

Historically the reserving process has been controlled by actuaries, who tend to build in substantial safety margins. In addition assets were held at the lower of book or market, building in further safety margins. However accounting doctrine now requires that reported profits are a good representation of reality and that surplus distribution to policyholders and owners is equitable over time. This has led to a requirement that assets are held at 'fair' value (that is, market for listed assets) under international accounting standards. The valuation of liabilities is also conceptually to be at 'fair value' but as no effective market in insurance liabilities exists the meaning of this concept remains unclear. The core insurance accounting standard (IFRS4 – Insurance contracts) is currently in an half way house and its final version will probably remain unresolved until 2012 at earliest. In the interim Solvency II, the EU approach to prudential controls of the insurance sector, will require that reserves and provisions have some resilience but that most of the balance sheet risk is carried by capital.

Insurance information systems are critical for both general accounting and statutory reporting purposes, and for effective management of insurers (and pricing in particular). In recent decades there has been a move towards relational databases so that analysis of emerging experience can be carried out along a number of vectors. The use of increasingly sophisticated analytical techniques such as generalized linear models has also put increasing pressure on data granularity and accessibility. Countering this has been a dependence on legacy systems, particularly by life (long-term) insurers that have sold a wide range of product types over the years. The role of legacy systems has been a constraint on rationalization of life insurance sectors, although some acquirers simply put the relevant business into run off. Run off has in fact become a profitable business in some jurisdictions with supporting legislation.

Many IS firms now offer insurance systems and this has become less of a competitive factor over time.

Insurance taxation

Insurance companies can conceptually be taxed on the same basis as any other commercial enterprise. That is on declared profits and at the corporate tax rate. For non-life insurance this is in fact the normal approach, although a number of countries will only allow for case estimates in setting claims provisions, rather than also allowing for incurred but not reported claims. This reflects a desire to be able to audit the tax accounts and to minimize scope for creative tax accounting.

For life insurance the position is much more complex as reserving offers substantial scope for creativity and there is the additional complication of how the policyholders' equity in emerging surplus (profits) should be allocated and taxed. As a rule of thumb policyholders are entitled to participate in surplus receive 90 percent of the profits emerging from the business lines they are supporting. It is not uncommon for taxation regimes in developing markets to tax investment income less the expenses incurred in generating that income (called the I-E method) rather than the declared surplus. The investment income arising from pension related business may be exempted from tax. This approach has the advantage of being relatively objective but can result in an unprofitable insurer being taxed and further weakened.

Distribution and intermediaries

Insurance intermediation comes under a range of headings:

- Tied agents, who normally represent only one insurer for each class of insurance.
- General agents, which may have agency arrangements with a number of insurers for a given class, and which employ sub agents. This category is banned in many countries because of the confusion it can cause for consumers.
- Brokers, who represent the insured and who can deal with any insurer. Brokers can accept commission from the insurer in most countries and ideally they should be required to disclose this to their client.
- Insurers own staff selling from the insurers own premises.
- Bancassurance, where a bank either acts directly for an insurer or provides space for an insurer's representative in its retail outlets. This channel has become very successful in such countries as France and Italy and is being implemented in many countries around the world as high initial costs can be offset by lower distribution costs in the long run.
- Call centers have had mixed success but can be very effective for highly specialized markets and when linked with radio and internet advertising. Like bancassurance initial costs can be very high.
- Other businesses where insurance is ancillary to a main business, such as travel agents.

For non-life insurers distribution and marketing costs typically range between 10 and 40 percent, depending on the power of the intermediary networks and the class of business. Mandatory lines typically have a cap placed on commission levels, although this has proved to be difficult to enforce in some countries.

For life insurance, marketing and distribution is typically 70 percent of the total annual costs. For agency based systems the costs of putting a new policy on the books is typically more than the premiums received in the first year (the so called new business strain) and is recovered from subsequent years' premia.

In most transition and industrial countries insurance agents need to be at least registered and there is an increasing trend to require a level of training commensurate with the complexity of the product being sold. The European Union now has a directive covering insurance intermediaries. This topic is covered in greater detail in a later module.

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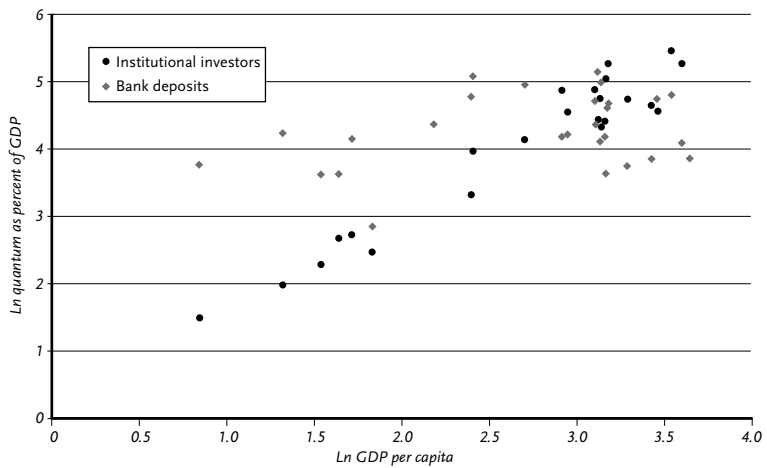
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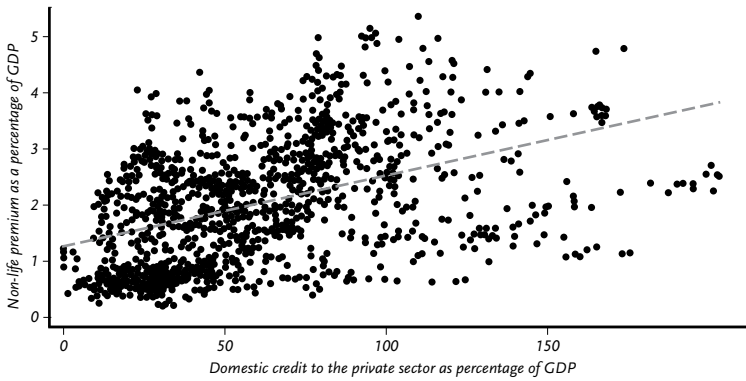
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Annex I: Bank deposits versus insurance and pension assets, OECD survey 2001



Source: OECD 2003.

Annex II: Non-life insurance and private sector credit growth



Source: Webb 2006 (data). Author's calculations.
Note: Yearly date for 59 countries from 1960 to 2000.