Development of the Insurance Sector

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The insurance sector remains small in most of Central America. The scarcity of insurance affects welfare directly, because households and companies must bear most risks themselves, leading to undesired volatility of intertemporal consumption. Moreover, lack of insurance may reduce the availability of financing or increase its costs, because lenders are discouraged when they must bear both the economic risks associated with a project to be financed and also insurable risks such as those for work accidents or property damage. In addition, the limited assets of insurance companies implies that they cannot be major players in domestic financial markets and in particular in securities markets, so these markets are thinner than they would otherwise be. Hence, measures to promote the insurance industry could yield multiple benefits if well targeted.

Many of these measures, such as those related to the modernization of the regulatory framework, can be undertaken by individual countries. In some cases, joint regional initiatives or coordination may make the measures more effective, for example, by exploiting economies of scale or scope in the provision of information or diversifying risks. Despite their differences, the countries covered in this study—Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama—are sufficiently similar that cross-country comparisons are meaningful, and that worthwhile joint action in certain areas might be identifiable.

These considerations motivate the material of this chapter. However, due account must be taken of the limits of a regional study. Information is sometimes not available for all countries, and data are often not fully comparable.[55] More fundamentally, the countries differ in level of development, the structure of their economies, and other aspects of the framework within which insurance markets operate. Panama and Costa Rica are substantially more well-to-do than the other countries, and have generally displayed greater economic and political stability in recent decades. Costa Rica is unique in having a state-owned monopoly provider of insurance. Guatemala, El Salvador, Honduras, and Nicaragua are more similar to one another, although Nicaragua is still transitioning from a long period of state monopoly in the sector, which extended until 1996.

The prevalence of non-term life insurance, that is, life insurance with an important savings element, depends on whether or not other savings vehicles are available and whether or not public or private pension schemes are in operation. Given the multitude of fiscal, distributional, and demographic factors affecting non-term life insurance; their heterogeneity across the region; and the fact that important policy decisions are currently under debate in some countries, this study concentrates on non–life insurance.

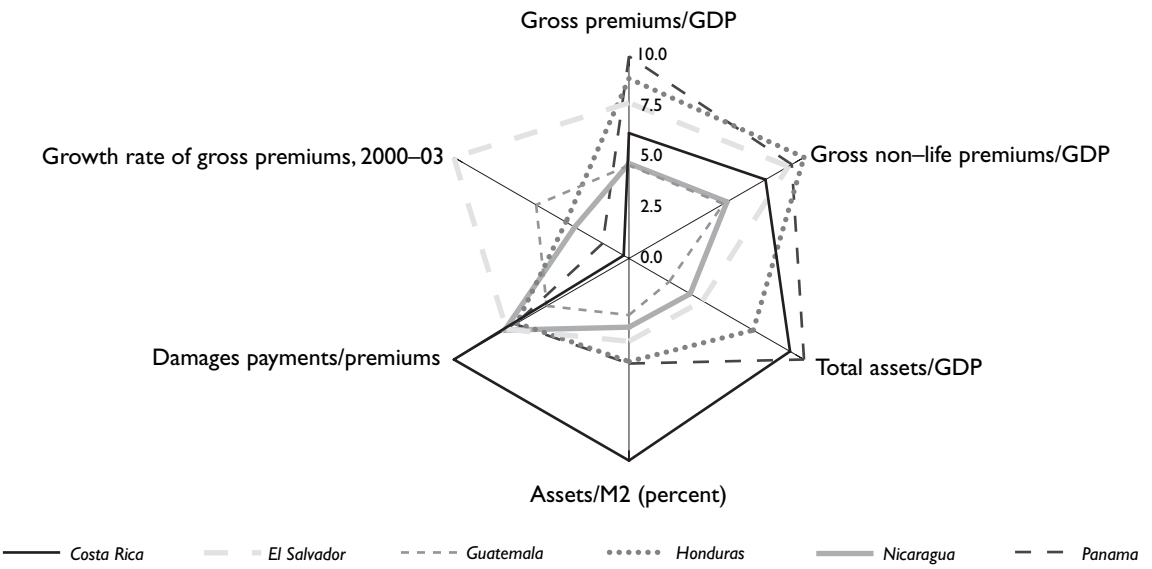
[55]The main sources of information include responses by national supervisory authorities to a questionnaire; self-assessments of observance of the International Association of Insurance Supervisors' Core Principles; the websites of supervisory authorities and the Association of Latin American Insurance Supervisors; Financial Sector Assessment Programs (FSAPs) for Central American countries; and discussions with the supervisory authorities and market participants. The authors benefited from discussions with staff at the World Bank and the Inter-American Development Bank.

TABLE 3.1
Financial Situation of the Insurance Sector

	Costa Rica		El Salvador		Guatemala		Honduras		Nicaragua		Panama	
	2000	2003	2000	2003	2000	2003	2000	2003	2000	2003	2000	2003
						(In millions of U.S. dollars)						
Gross premiums	314	318	230	350	274	344	157	185	50	57	368	393
of which: non–life insurance premiums	277	290	182	303	233	295	125	151	...	50	254	267
Net retained premiums	235	...	96	140	129	163	69	65	34	33	258	251
Gross damages payments	171	...	122	133	100	89	71	64	21	22	191	138
Profits (after tax)	...	...	17	27	11	21	6	21	3	2	...	30
Total assets	776	...	249	347	228	306	203	263	67	77	689	704
Investments	...	...	159	227	141	201	85	162	38	40	423	479
Technical reserves	422	...	91	123	155	134	101	131	39	48	261	305
Capital and general reserves	208	...	78	129	56	90	41	83	17	15	0	261
Paid-in equity	...	...	54	70	24	32	...	40	9	10	...	...
						(In percent of GDP)						
Gross premiums	2.0	1.9	1.8	2.3	1.4	1.4	2.7	2.7	1.3	1.4	3.2	3.1
of which: non–life insurance premiums	1.8	1.7	1.4	2.0	1.2	1.2	2.1	2.2	...	1.3	2.2	2.1
Net retained premiums	1.5	...	0.7	0.9	0.7	0.7	1.2	1.0	0.9	0.8	2.2	1.9
Gross damages payments	1.1	...	0.9	0.9	0.5	0.4	1.2	0.9	0.5	0.6	1.6	1.1
Profits (after tax)	...	...	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.1	...	0.2
Total assets	5.0	...	1.9	2.3	1.2	1.3	3.4	3.9	1.8	1.9	5.9	5.5
Investments	...	...	1.2	1.5	0.7	0.8	1.4	2.4	1.0	1.0	3.6	3.7
Technical reserves	2.7	...	0.7	0.8	0.8	0.5	1.7	1.9	1.0	1.2	2.2	2.4
Capital and general reserves	1.3	...	0.6	0.9	0.3	0.4	0.7	1.2	0.4	0.4	0.0	2.0
Paid-in equity	...	...	0.4	0.5	0.1	0.1	...	0.6	0.2	0.2	...	...
Assets/M2 (percent)	13.7	...	4.1	5.6	4.2	3.8	7.1	7.0	4.5	4.6	8.0	7.2

Sources: National authorities; and IMF staff estimates.

Figure 3.1. Relative Insurance Indicators, 2003, by Indicator



Sources: National authorities; and IMF staff calculations.

The next section describes the structure of the insurance markets of these countries, the availability of insurance products, and the recent performance of insurance companies. The subsequent section looks at the legal, regulatory, and supervisory framework. The final section addresses a number of cross-country issues and recommendations.

Structure and Performance

Insurance Penetration

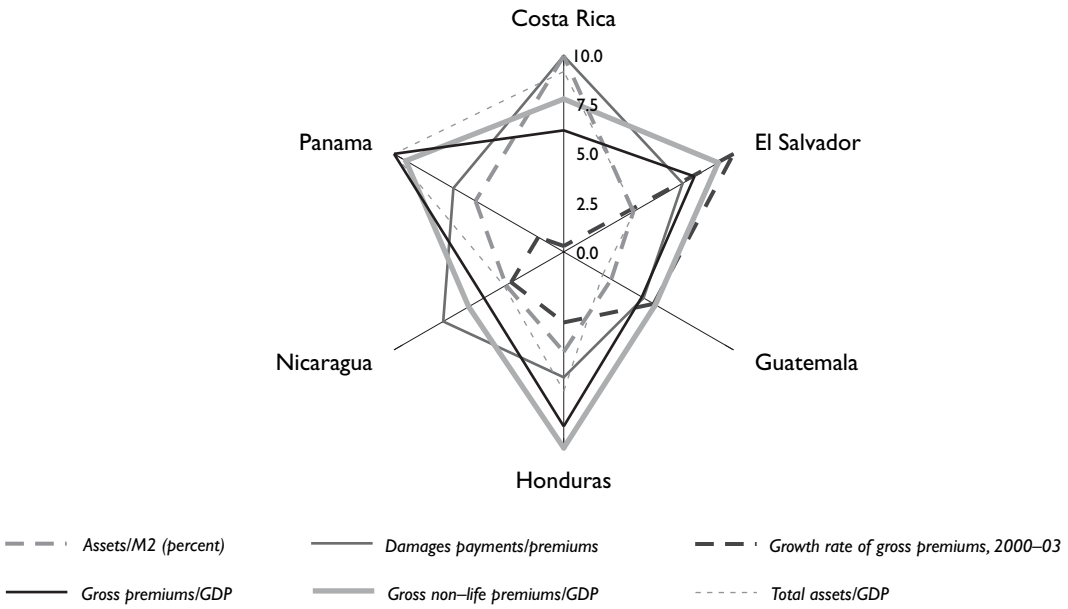
The market volume for insurance products in most Central American countries is modest in absolute terms and relative to those countries' GDP (Table 3.1 and Figures 3.1 and 3.2).[56] However, the level of insurance penetration as measured by the ratio of premium income to GDP is roughly in line with the relationships that are seen around the world: demand for insurance is strongly correlated with average income, and with the presence of a substantial middle class, that is, with a relatively even distribution of wealth. Central America contains some of the poorest countries in the Western Hemisphere, and is characterized by uneven distribution of wealth, so one would expected relatively low demand for insurance. For many Central American countries, their past history of macroeconomic instability and at times severe political conflict may have hindered the supply of, and demand for, insurance products, as well as the creation of an insurance culture. Furthermore, most of Central America also faces large risks, for example, of natural catastrophes, that are not diversifiable domestically, and therefore expensive to insure against.[57]

The insurance sector is small also relative to banks and the market for government debt. Insurance company assets are just a small fraction of broad money, which can be taken as a metric for the size of the banking system (Table 3.2). In addition,

[56]Available information pertains to companies operating in the domestic market. The volume of insurance may be underestimated because much insurance for trade, international transport, and the activities of multinationals companies may be provided by insurance companies abroad.

[57]The same factors that constrain development of the formal insurance sector also constrain the availability of informal insurance, which, moreover, is generally more difficult to organize than informal credit.

Figure 3.2. Normalized Insurance Indicators, 2003, by Country



Sources: National authorities; and IMF staff calculations.

many insurance companies tend to be relatively small affiliates of banks. Hence, insurance companies cannot play a major role in counter-balancing banks in the market for deposits or in the market for securities. Therefore, insurance companies are not generally of systemic importance.

The insurance sector in the region has shown trend growth in absolute terms in the past several years, but rather less when measured by gross premiums relative to GDP. However, growth in insurance services is sometimes underestimated by measuring the service in terms of premiums paid when there is a reduction in unit prices; total premiums may fall even if the risks of being insured are growing. As can be seen in Table 3.3, the number of policies is generally increasing.

Nonetheless, insurance penetration is still low not only in terms of value, but also in terms of the number of policies. In addition to low income levels, this is a reflection of the uneven distribution of income, because most households and production units cannot access insurance services. The available data on the number of policies—because one policy can comprise a large number of end users—complicate comparisons, but market participants agree that low penetration is a characteristic of all regional markets.

The poor are especially deprived of insurance services throughout the region. The relatively high administrative costs of offering small amounts of insurance coverage to low-income households and to small firms, where risk assessment, record keeping, and handling claims generate fixed costs, tends to make the services either prohibitively expensive or unprofitable. Hence, the expansion of insurance services to the mass of the poor population is essentially an issue of developing a low-cost technology for the production of the service (Boxes 3.1 and 3.2). Past administrative control of insurance premiums and the importation of insurance practices and models from more developed countries likely hindered the development of insurance schemes that would make the service accessible to lower-income groups.

Product Range

Insurance companies receive most of their non–life insurance premiums for coverage of automobile and other property risks; property insurance

TABLE 3.2

Insurance Sector Indicators

(In percent)

	Costa Rica		El Salvador		Guatemala		Honduras		Nicaragua		Panama	
	2000	2003	2000	2003	2000	2003	2000	2003	2000	2003	2000	2003
Non–life premiums/total premiums	88.2	91.2	79.4	86.5	85.0	85.6	79.3	82.0	. . .	87.8	69.1	67.8
Automobile/total non–life premiums	. . .	. . .	25.9	18.3	43.3	35.6	23.7	22.2	. . .	29.9	36.4	26.4
Property/total non–life premiums	69.1	. . .	22.2	29.8	19.9	27.8	21.4	27.8	. . .	25.7	13.8	17.6
Health/total non–life premiums	. . .	. . .	13.8	11.6	13.6	15.6	13.5	17.1	. . .	10.9	21.2	22.2
Retained premiums/gross premiums	74.7	. . .	41.8	39.9	47.0	47.3	44.0	35.0	67.7	56.9	70.0	63.8
Damages payments/premiums	54.5	. . .	53.2	37.9	36.6	25.8	45.3	34.6	41.8	38.6	51.9	35.2
Damages payments/reserves	40.5	. . .	134.0	107.4	64.8	66.2	70.5	48.6	53.6	46.0	73.2	45.3
Reserves/retained premiums	179.9	. . .	94.8	88.4	120.1	82.5	146.1	203.3	115.0	147.6	101.3	121.7
Investments/reserves	. . .	. . .	174.5	183.9	91.1	150.0	84.0	123.6	98.6	83.6	162.0	156.9
Share of investments												
Claims on government	. . .	. . .	10.1	13.5	43.1	38.1	. . .	. . .	. . .	. . .	. . .	22.3
Claims on banks	. . .	. . .	36.8	37.6	9.9	22.8	. . .	. . .	40.0	47.8	. . .	32.7
Total capital/total assets	26.8	. . .	31.5	37.2	24.7	29.5	20.4	31.5	25.3	19.3	. . .	37.0
Total capital/reserves	49.2	. . .	85.9	104.8	36.4	67.3	41.0	63.0	43.7	30.9	. . .	85.4
Equity/total capital	. . .	. . .	68.9	53.9	42.9	34.9	. . .	48.4	53.7	66.5	. . .	. . .
Profits/retained premiums	. . .	. . .	1.8	1.9	0.9	1.3	0.9	3.2	1.0	0.7	. . .	1.2
Profits/assets	. . .	. . .	6.9	7.7	4.9	6.9	3.2	7.9	5.0	2.8	. . .	4.3
Profits/capital	. . .	. . .	21.8	20.6	19.9	23.4	15.6	24.9	19.8	14.3	. . .	11.5
Profits/equity	. . .	. . .	31.7	38.1	46.5	67.1	. . .	51.6	36.8	21.5	. . .	. . .
Annual growth rates, 2000–03												
Gross premiums	. . .	0.4	. . .	15.0	. . .	7.9	. . .	5.5	. . .	4.7	. . .	2.2
Gross non–life premiums	. . .	1.5	. . .	18.4	. . .	8.2	. . .	6.6	. . .	. . .	. . .	1.6

Sources: National authorities; and IMF staff estimates.

TABLE 3.3
Insurance Contracts[1]

	Costa Rica		El Salvador		Guatemala		Honduras		Nicaragua		Panama	
	2000	2003	2000	2003	2000	2003	2000	2003	2001	2003	2000	2003
	(Number of policies)											
Life	...	...	...	81,231	...	174,688	117,826	134,678	...	...	108,770	105,250
Health and accidents	...	...	...	5,842	...	106,026	...	...	...	...	57,496	58,118
Property	...	...	...	60,981	...	...	64,937	68,678	...	...	78,857	105,501
Automobile	...	...	...	123,605	...	...	...	...	...	...	129,095	104,175
	(Value of coverage; in millions of U.S. dollars)											
Life	...	...	8,082		...	41,195	...	...	1,495	4,314	...	...
Health and accidents	...	...	4,579	8,364	...	...	...	...	4,029	3,788	...	...
Property	...	...	11,666	13,129	...	...	11,370	15,564	2,716	4,157	...	...
Automobile	...	...	1,764	2,853	...	...	2,836	3,538	1,012	583	...	...

Sources: National authorities; and IMF staff estimates.

[1]Statistics cover the number of contracts outstanding and the value of coverage. The number of insured parties may differ because parties hold more than one policy each, or because policies cover multiple parties.

Box 3.1. Mass Insurance Products

To assure low costs, mass insurance product carriers rely on simple and standardized policies that require little verification (and are therefore inexpensive and easy to sell), and also on inexpensive collection arrangements. One of the ways in which this has been achieved in some countries in the region is through "bancassurance." Bancassurance relies on the use of bank's branch network as a sales platform and the bank's established payments system as a collection mechanism with low marginal costs. Bancassurance has been quite successful in several countries in the region. In El Salvador, perhaps the most successful country in this regard, a large insurance company led the effort to sell mass insurance products through a bank with which it was affiliated. The first program was one for traditional individual life insurance policies (which can be made more simply than property insurance policies): in the five years to 2004, close to 300,000 individual life insurance policies were sold. Of these, some 120,000 were in existence at the end of 2004, compared to 3,000 policies in existence before the program was launched. Reportedly, the number of policies sold by this company in the five-year period was more than the number of individual life insurance policies sold in all of Central America in the previous 20 years.

However, bank networks may not be entirely well suited to the distribution of mass insurance products. Banks may offer cost advantages mainly in collecting predetermined amounts from established clients, rather than more generally. Alternative distribution network with low cost collection arrangements could be available to sell a product whose crucial ingredient is its simplicity. Indeed, various insurance companies in the region are developing mass insurance products that need not be distributed via bank branches. One independent insurance company that had successfully developed a mass product reported technical difficulties in using banks as a collection mechanism; it proved difficult, for example, to keep track of payments from policyholders who were not depositors at the collecting bank. It appears that a major reason that mass insurance products are often sold through banks is that banks are often affiliated with insurance companies.

Bancassurance, as well as any mass insurance distribution system, may raise regulatory concerns regarding the appropriateness of the information and advice provided to end users. The absence of a qualified salesperson (be it a broker or a trained insurance company employee) in a bank sales point may reduce the scope for informed choice by consumers. Yet the success of mass insurance products depends on low costs, and if more expensive conditions are imposed on the point of sale, they may effectively block the product. (This issue has a parallel with the question of when to allow sale of over-the-counter medicines rather than prescription drugs.) The question is whether the potential costs of "mistaken" choices by consumers are offset by the gains from making the service more cheaply available to larger number of consumers. In any case, regulations should consider new and future developments in order to determine the responsibilities and the scope for action of agents in activities related to insurance.

typically covers damage from earthquake, fire, flooding, other natural catastrophes, and similar risks. Health insurance is usually the third most important category.[58] Life insurance generates between one-tenth and one-third of total premium income.

Mandatory insurance coverage exists in some countries. This is the case of third-party liability (TPL) automobile insurance in Costa Rica and Nicaragua and, for commercial vehicles, in Panama. Other coverage is sometimes also mandatory (e.g., worker compensation insurance in Costa Rica). Mandatory insurance policies are the source of significant premium income and various schemes, especially automobile TPL, are being debated in some countries. However, insurance requirements seem often to go unenforced.[59]

In most countries, some type of coverage is available for a wide range of risks. Larger firms and better-off households reportedly can obtain most standard forms of insurance at competitive rates. Insurers are able to tailor contracts to special needs when the client is willing to pay a sufficiently high premium. However, total premium income from such business is small. From the available statistics, it appears that insurance of plant and equipment as opposed to buildings is still very limited. This reflects the weak industrial base of the region.

[58]Most of the countries have some form of social security and also a state-funded health service, but the provision of services is limited.

[59]For example, in Nicaragua, third-party motor insurance is compulsory, yet as of 2004 there were only about 100,000 motor policies in force, while some 250,000 cars were registered.

Box 3.2. Product Bundling

In addition to bancassurance (banks and insurance companies joining together for the mass marketing of unbundled insurance products), banks throughout the region also sell bundled financial and insurance products. This is often the case of insurance tied to mortgage loans or automobile credits. The sale of bundled insurance products through banks may generate concerns over consumer protection, as it may lead to confusion on the part of the public with regard to both product pricing and which entity is responsible for the insurance liabilities. This is especially problematic in the sale of insurance products tied to banking products offered by affiliated firms, which creates stronger incentives for uncompetitive practices that are difficult to regulate. However, these kinds of uncompetitive practices generally are caused by a preexisting lack of competition in loan services, rather than on the offering of insurance services themselves. Informing the public and requiring the unbundling of the prices for the different services offered would likely improve consumer choices. This appears to be another area for regulatory improvement in some countries, in addition to the issues mentioned in Box 3.1.

Nonetheless, experience in the region suggests that it is not always easy to exploit "captive clients": one insurance company reported that an attempt to integrate its customer base and that of an affiliated bank so as to sell both products to all clients was abandoned because the preferred customers for each product line where rather different. Hence, attempting to force bundled products on them threatened to alienate the better clients of both product lines.

Another issue that may be associated with product bundling and bancassurance is cross-subsidization between affiliated firms of a financial/business group. There appears to be evidence of this in some countries, with premiums for affiliated firms apparently being higher than those for nonaffiliated firms (this may be motivated by tax arbitrage). In one country, for example, an insurance company's premiums for mortgage-related policies sold through an affiliated bank more than doubled when authorities determined that insurance taxes were being avoided by setting artificially low insurance premiums, which were compensated for by high (untaxed) insurance sales commissions for the bank. However, the concern in these cases is not bancassurance itself but rather the broader issue of adequate regulation of business/financial groups.

Public sector institutions often take out insurance for certain risks (e.g., affecting government cars), but rarely for health coverage for government workers. In all countries, substantial public sector assets, such as roads and bridges, are not insured. Coupled with the lack of insurance of most of the private sector capital stock, this exposes the country to significant macroeconomic risks from large-scale disasters, such as major hurricanes or earthquakes. The government's implicit liabilities regarding disaster relief and reconstruction in the case of widespread destruction can also have serious fiscal consequences.

Crop insurance and other forms of agricultural insurance are rare and in most cases have been newly introduced, despite the importance of the agricultural sector in the region, in particular in El Salvador, Guatemala, Honduras, and Nicaragua (Box 3.3). This deficiency has several causes. First, crop insurance is relatively complex and expensive to administer (even in industrialized countries) because (1) policies must be tailored to specific products and to such factors as projected weather and local geographical conditions; (2) high monitoring costs result from such tailoring and from large exposure to moral hazard;[60] and (3) high loss rates are prevalent in the sector. These complications apply a fortiori in developing countries. Second, many farmers in the region are poor and undercapitalized, so transaction costs are high relative to potentially insured amounts. Also, agricultural risk in undercapitalized countries tends to be higher because of the absence of agricultural infrastructure (such as dams and irrigation networks), which is largely aimed at reducing risks to agricultural output. Finally, in small coun-

[60]It is difficult to distinguish whether a low harvest is because of exogenous growing conditions or because of the farmer's neglect.

Box 3.3. Crop Insurance Initiatives

Existing crop insurance schemes in almost all cases are derived from insurance requirements tied to bank loans, with the loan funding typically offered by state development banks. Hence, most crop insurance schemes are not wholly voluntary and appear to have some element of subsidy in the financing conditions, although no subsidy is provided directly to the insurance premiums.

In El Salvador, the crop insurance scheme promoted by the Banco Multisectoral de Inversiones (BMI), a state-owned bank, resulted in the insurance of 3,000 hectares of cotton in 2004, with premiums of 5 to 6 percent of the loan amount. This appears affordable in the context of scarce and/or expensive agricultural credit, and the premiums appear roughly in line with the overall cost of subsidized crop insurance in Mexico. The program expects to increase coverage to 8,000 hectares of cotton in 2005, under similar conditions. Some farmers with other crops have begun to request the service directly, without being tied to a specific financing scheme. The insurance is calculated to cover the equivalent of 70 percent of normal crop yields. Approximately 75 percent of the risk is reinsured abroad. The program required extensive research and preparatory work by the insurance company, which won the opportunity to manage the program in a contest among local insurers that was organized by the BMI. The program benefited from the experience in crop insurance in other countries, including expert assistance for the supervisor for the approval of the novel policy, and the BMI partially financed the international consulting services needed for the preparation of the program. Note, however, that the insurance covers only weather-related losses in crop yields and not losses related to pests or other causes.

Other private sector crop insurance schemes are currently being pursued in most countries in the region, with varying degrees of success. The experience so far indicates that the service takes some time to be fully developed on a sound basis and to be understood by farmers: A crop insurance program that was admittedly rushed into operation two years ago in another country has had serious difficulties, with a substantial decrease in the amount of crop land covered and with losses for the insurance company that initiated the program. A number of private insurance companies (including at least one with extensive related experience in a neighboring country) appear to be planning to develop the product line.

tries, premiums may have to be high because it is difficult for companies to diversity risk (e.g., a drought may affect farming throughout the country).

Market Structure

Most insurance companies are locally owned, but subsidiaries of foreign companies operate throughout the region with the exception of Costa Rica (Table 3.4). The foreign parents are typically located outside the region, in particular in the United States, but there also exist a few local insurance groups active in several countries. Foreign entry is undertaken through subsidiaries rather than branches, with the latter forbidden in several countries. In all countries of the region, cross-border selling of insurance is prohibited under the insurance law, with exemptions only for products that are not offered locally. Another reason for opening a local subsidiary, as opposed to a branch, is that it can be difficult to enforce insurance contracts and effect dispute resolution between entities in different jurisdictions.[61]

The insurance sector in most of the region is highly fragmented and, therefore, the average company is small. As of 2003, the average company in El Salvador received the equivalent of just $17 million per year in gross premiums. Costa Rica, with its monopoly provider, is an exception. The insurance sector in Nicaragua is also relatively concentrated because a state monopoly existed there until 1997; the

[61]This chapter does not look further into differences among legal and judicial systems other than what is found in insurance legislation. Analogous differences exist in other regions: reportedly, large European insurance groups generally find it easier to operate through separate subsidiaries in European Union member countries rather than sell insurance products across borders or through branches abroad.

TABLE 3.4
Structure of the Insurance Sector

	Costa Rica		El Salvador		Guatemala		Honduras		Nicaragua		Panama	
	2000	2003	2000	2003	2000	2003	2000	2003	2000	2003	2000	2003
Number of companies	1	1	18	21	18	16	11	11	5	5	20	19
of which: domestic	1	1	17	20	18	16	8	8	5	5	14	14
	(Share in gross premiums; in percent)											
Share of largest company	100.0	100.0	18.5	12.7	23.8	18.8	18.5	21.2	57.1	42.0	...	19.1
Share of largest five companies	100.0	100.0	54.7	54.2	70.3	63.9	70.8	61.4	100.0	100.0	...	72.9
	(Average per company; in millions of U.S. dollars)											
Gross premiums	314.1	318.0	12.8	16.7	15.2	21.5	14.3	16.8	10.0	11.5	18.4	20.7
Profits	...	...	0.9	1.3	0.6	1.3	0.6	1.9	0.7	0.4	...	1.6
Assets	776.2	...	13.8	16.5	12.7	19.1	18.4	23.9	13.5	15.4	34.4	37.1

Sources: National authorities; and IMF staff estimates.

former monopolist has been slowly losing market share but still makes up about half of the sector.

The fragmentation is conducive to competition. It appears that most property product lines are offered under reasonably competitive conditions in most of the region. This thesis is supported by data on falling premiums and high loss-rates. Nonetheless, premiums tend to be somewhat high in international comparisons, but this may be mainly because of higher nondiversifiable risks associated with the region as well as the higher average costs of operating on a smaller scale and with smaller insured amounts. However, markets are sufficiently flexible that fire premiums (which include earthquake risks) are lower in Honduras, where there is no substantial earthquake risk, and auto premiums are lower in Nicaragua, where auto theft risk is relatively low.

These numerous small companies almost certainly operate at well below efficient size, especially since most, if not all, of them operate as a traditional insurance company with traditional procedures.[62] In many cases their revenues are insufficient to support the employment of their own actuary or the development of a fully computerized system of record keeping, data analysis, and claims processing. Their investment portfolios may also be too small to achieve full diversification.

The concentration ratio has remained fairly stable in most countries over the past few years and, on average, the top six firms account for about 70 percent of the market. While high in absolute terms, this concentration ratio is not unusual in international comparisons. The number of insurance companies has been relatively stable (except for growth in Nicaragua since the market was opened to the private sector in 1996); some companies have exited, but others have entered.

The available statistics may overstate the fragmentation problem to an extent because, in most countries, many insurance companies form groups with each other and perhaps with banks (for example, a bank might have one life insurance subsidiary and one non–life insurance subsidiary), and the group as a whole might provide certain "back office" functions. Some companies, for example, in Nicaragua, are subsidiaries of larger foreign insurers from the region or from industrialized countries.

[62]Academic studies suggest that, for American insurance companies, economies of scale prevail in companies with premium income up to at least $500 million per year.

Insofar as insurance companies are attached to financial groups that have a strategy of offering a full range of products, the lack of consolidation is not surprising. Some insurance companies may be linked to broader industrial-financial conglomerates, which prefer to keep insurance in-house and which may be able to benefit from regulatory or fiscal arbitrage.[63] In addition, it is widely believed that consolidation is being held up also by the desire of managers and major shareholders to preserve their independence. Industrial-financial groups will have to decide to break up for there to be significant additional consolidation in the insurance sector of several of the countries.[64]

The close, and in some cases growing, links between insurance companies and banks present a number of regulatory concerns. Chapter 2 in this volume addresses the regulation and supervision of financial conglomerates. Nevertheless, it is worthwhile to note that affiliated insurance companies are generally smaller than their related banks, and that often the insurance company has had significant exposure to the bank's risk (largely from assets placed with the bank).[65] The opposite is typically not true, as affiliated insurance companies typically account for only a small part of bank deposits. However, the growth of bancassurance may lead to increased exposure of banks to the activities of their affiliated insurance companies, to the extent that their profitability may in time depend increasingly on insurance.

Insurance companies use a variety of means to distribute their products. Besides using their own offices, a network of independent agents operates in all countries. Independent agents take the form of both individual brokers and brokerage firms, and in all countries they intermediate a substantial per-

[63]For example, if marginal tax rates differ by sector and level of profits, a conglomerate can adjust transfer pricing in order to minimize taxation. Operating as a conglomerate might also be advantageous because that structure might effectively loosen constraints on connected lending.

[64]Possible obstacles to the breakup of industrial-financial groups include (1) the lack of liquid capital markets that make it hard to price assets, and hence difficult to agree on terms of sale for companies (and may induce nonmarket diversification of wealth); and (2) the relatively small scale (by international standards) of the industrial-financial groups themselves, which allows economies of scale in top management to offset the costs of centralized control of disparate businesses.

[65]Regulations regarding insurance company portfolio diversification vary greatly within the region. Some countries have strong diversification requirements, especially with respect to affiliated firms, while others do not.

centage of policies. The importance of brokers in distribution varies significantly across countries, although exact figures are not available: in Panama brokers reportedly generate over 90 percent of premiums, while in El Salvador they generate less than half of all premiums. Bancassurance is growing in importance in most countries (see Box 3.1). In some countries, such as El Salvador and Honduras, a significant part of bank profits are reportedly derived from their sale of insurance products.

Specialized reinsurance companies are found only in Panama. Companies in other countries are too small to achieve the risk diversification inherent in reinsurance. Instead, heavy use is made of reinsurance from the large international reinsurers, although the relatively small Panamanian reinsurers (both specialized reinsurance companies and insurance companies authorized to also perform reinsurance services) also accept risks in the region. The incentive to cede premiums to reinsurers is greater for companies with low capitalization, and it is reinforced by certain regulatory provisions (see the next section). Reinsurance is especially favored for product lines for which it is difficult to diversify risks domestically and for which monitoring costs are lower. Thus, companies retain a higher proportion of premiums for auto insurance, where the large number of policies, their smaller value, and the nature of the risks ensure that loss rates are relatively stable and administrative expenses high, than for other property insurance, especially catastrophe risk. At the other end of the spectrum are specialized high-value products, such as airline insurance, where there is essentially no local retention and reinsurance is handled through a small number of specialized foreign companies.

Recent Performance

Most indicators for the soundness and performance of insurance companies in Central America display stability and do not raise immediate, systemic concerns. There have been no major failures in recent years, despite the occasional failure of small companies. In at least one case, the failure of an insurance company was the direct result of substandard reinsurance contracts, and, in another case, an insurance company failed because of the collapse of its affiliated bank. In cases of failures, insurance policies have typically been transferred to other insurance companies along with associated assets to constitute reserves.[66] However, the last decade has witnessed a few cases of more disorderly closure in which policies have not been honored, for example, because of delays in court resolution of disputes or because the affected company did not have enough remaining assets.

Soundness indicators such as profitability rates, leverage, and liquidity ratios appear generally adequate for sectors as a whole, although in most countries there are some firms that appear less healthy (Table 3.2). The absolute level of capitalization of most firms is low and tends to be proportional to the size of the market. Average loss ratios (the ratio of payouts on claims to premium income) are in line with, or sometimes above, those found in other comparable markets. Since loss ratios are considered to be indicative of the degree of market competition, these indicators support the reported high level of competition in most product lines.

Recent experience with heavy losses from both hurricane Mitch in several countries (especially Honduras) and two earthquakes in El Salvador in 2001 indicates that, in the affected countries, the insurance sector as a whole was prepared to cover its liabilities, largely because it was extensively reinsured.[67] In the case of the Salvadoran earthquakes, some $300 million in losses were paid for by local insurers, but the net cost for the local companies was less than $5 million. All market participants agreed that most claims were settled rapidly, which helped reduce the overall cost of the earthquake damages. However, the low penetration of insurance services also resulted in substantial losses being absorbed by producers and families, with some of those losses transferred to governments.

Companies' investment portfolios are typically not very diversified, at least by type of investment. This appears to be largely the result of underdeveloped capital markets with few investment options; diversification by asset type is greater in Panama, where the capital market is most developed, although portfolio concentration with related parties is in some cases significant. Honduras applies stringent portfolio diversification regulations with regard to both asset types and private sector issuers (especially for related parties and for foreign investments), but there is no

[66]Insurance legislation generally includes various provisions for intervening in and winding up companies in distress.

[67]Note, however, that, in Honduras, Hurricane Mitch led to the failure of an insurance company that had substandard reinsurance contracts.

limit to portfolio concentration in government securities. Most companies place most assets in bank accounts or, in some cases, in securities issued by their respective national governments. Real estate, direct lending, and equity are also significant investments for companies in some countries. Investment abroad is modest and in all countries is severely constrained by regulations. Partly due to regulatory reasons, investments related to non–life insurance business, which has a short time horizon, are held mostly in relatively liquid assets to match companies' liabilities (i.e., their reserves against potential insurance claims and other risks). In this case, the available investments may be broadly adequate, although real returns may be fairly low, especially for small companies that lack the volume and sophistication to engage in active portfolio management or bargain with banks to obtain a good return on deposits. The latter is especially true when dealing with banks that are affiliated with (smaller) insurance companies. For non–term life insurance business, companies are often severely constrained by the lack of securities with a maturity approaching that of liabilities to policyholders.

Until at least the 1990s, the majority of the insurance sector in all countries had antiquated back offices, which led to slow service both in issuing policies and in paying claims. Information for adequate management decisions was poor, leading to poorly managed risk taking. Administrative costs and issuing costs were high. Largely due to the deficiencies of insurance companies, brokers established a very strong position in most insurance markets, often taking over some functions that are typically performed by the insurance companies.

In all countries, to varying degrees, the past few years have seen a significant improvement in the operations of at least the leading companies, largely as a result of the use of more modern information systems. In the case of Nicaragua, the elimination of the state monopoly in 1997 allowed private companies to start from scratch and build up relatively modern systems, despite operating in the smallest market in the region. Improved operations and information should lower costs and improve products, allowing for greater market penetration. As an example, a company in El Salvador used its improved information system to track and control costs in such a way that it could introduce a new automobile insurance product that attracted new clients by offering no deductible at no additional cost.

Several caveats must be made with relation to these indicators of performance. On the one hand, insurance companies have significant scope (perhaps more than banks) to smooth results from year to year.[68] On the other, the insurance business is inherently vulnerable to rare but large risks; performance can be satisfactory for many years, but the true soundness of the system is often apparent only when a major event such as an earthquake tests the capital adequacy of the sector. Some, but not all, countries in the region have weathered "stress tests" rather successfully. As mentioned above, the stress test of Hurricane Mitch in Honduras revealed that regulatory standards for reinsurance contracts were inadequate, and that it was the sound business practices of most insurers (and not regulatory controls) that allowed them to cope with the event. It is also interesting to note that El Salvador and Honduras, the two countries that in the recent past have suffered the greatest losses from natural disasters, were motivated to update their regulatory frameworks. These considerations reinforce the importance of reviewing the regulatory framework.

The Legal and Regulatory Framework

No detailed assessments of observance of the International Association of Insurance Supervisors' Core Principles were available, but several countries in the region have performed self-assessments. Most supervisory institutions publish extensive material on their activities and the regulations in force. These materials were the basis for the summary contained here (Table 3.5).

In El Salvador, Guatemala, Honduras, and Nicaragua, supervision is carried out by a section of the financial sector supervisor. In some cases, insurance supervision is not integrated as a unit, and some insurance-specific responsibilities (including, in one case, the review and approval of insurance policies) are assigned to non-specialized units within the overall financial sector supervisor. This may lead to significant coordination issues. In addition, in some cases, reorganization and reassignment of responsibilities for insurance regulation and supervision have affected effectiveness. Panama has a separate insurance superintendency that reports to

[68]Insurance companies typically have some discretion in determining the appropriate level of reserves against various risk factors and allocating losses across reserves and capital.

TABLE 3.5
Summary of Main Insurance Sector Regulation

	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Location of supervisor	Self regulating.	Integrated supervisor.	Integrated supervisor.	Integrated supervisor.	Integrated supervisor.	Separate; bureau of the Ministry of Commerce and Industry.
Licensing requirements	Company established by law.	Yes. Life and non–life insurance must be separate companies.	Life and non–life insurance activities must each be licensed.	Life and non–life licensing not separated.	Life and non–life licensing not separated.	Separate authorization for life and non-life.
Ownership forms	State monopoly.	Joint stock company.	Share company.	Anonymous company or mutual.	No restriction.	No restriction.
Foreign entry	Forbidden.	Foreign subsidiaries and joint ventures but not branches.	Foreign subsidiaries and joint ventures but not branches.	Foreign subsidiaries and joint ventures but not branches.	Foreign subsidiaries, joint ventures, and branches with own capital.	No restriction.
Minimum capital	None.	US$0.67 million for non-life companies and US$1 million for life companies. Updated periodically.	Equivalent to about US$0.5 million for either life or non–life insurance companies, and US$1 million for mixed companies.	Equivalent to about US$1.3 million for personal or property companies, and US$2.6 million for mixed companies.	Minimum equivalent to US$0.7 million for life or property companies, US$1.4 million for mixed companies.	Equivalent to US$2 million.
Technical provisions and reserves	Required to hold reserves on premiums, claims, and contingencies.	Technical reserves on non-life products proportional to retained premiums. Mathematical reserves for life products on actuarial basis. Also reserves for unearned premiums, statistical risk, unpaid claims, and unreported claims. Catastrophe reserve based on probable maximum loss (PML) of highest risk concentration area.	Technical reserves on non-life products proportional to retained premiums (10 percent to 25 percent). Mathematical reserves for life products on actuarial basis. Also reserves for unearned premiums and unpaid claims. Catastrophe reserves from accumulated earthquake policy reserves.	Technical reserves on non-life products proportional to retained premiums and to loss history. Mathematical reserves for life products on actuarial basis. Also reserves for unearned premiums, statistical risk, unpaid claims, and unreported claims. Catastrophe reserve based on PML of highest risk concentration area.	Technical reserves on non-life products proportional to retained premiums (40 percent to 50 percent). Mathematical reserves for life products on actuarial basis. Also reserves for unearned premiums, statistical risk, unpaid claims, and unreported claims. Catastrophe reserve based on PML of highest risk concentration area.	Technical reserves on non-life products proportional to retained premiums (35 percent). Mathematical reserves for life products on actuarial basis. Also reserves for unearned premiums, statistical risk, catastrophe, unpaid claims, and unreported claims.
Solvency requirements	None.	Determined by law on the basis of product-specific premiums and losses as well as fixed parameters.	Determined by regulation on the basis of product-specific premiums and losses as well as fixed parameters.	Determined by regulation on the basis of product-specific premiums and losses as well as fixed parameters.	Determined by regulation on the basis of product-specific premiums and losses as well as fixed parameters.	Determined by regulation on the basis of product-specific premiums and losses as well as fixed parameters. General reserve accumulated from 10 percent to 20 percent of net earnings.

Restrictions on investment portfolio	Only government securities, real estate, and mortgages.	Direct lending limited. Maximum limits on various categories of investment.	At least 40 percent in government securities; at least 1 percent in demand deposits; at most 59 percent in other investments.	Ceilings on share in banks, government bonds, corporate bonds, shares, loans, real estate. Exposure to one risk less than 10 percent of capital.	Supervisor sets limits on categories of investment. No limit on exposure to government. Equity limited to 10 percent of portfolio.	Admissible investments specified for 75 percent of technical reserves: government and private securities, real estate. No large exposure limits.
Restriction on investment abroad	Forbidden, although local U.S. dollar assets are available.	Maximum of 20 percent of technical reserves and required capital. Excess capital freely investable.	Forbidden for required reserves and capital. Excess capital freely investable.	Maximum 20 percent of capital and reserves from local-currency-denominated policies can be invested abroad. Reserves from dollar-denominated policies can be freely invested abroad.	Maximum of 20 percent of technical reserves and required capital. Excess capital freely investable.	Maximum of 25 percent of required capital and reserves; at most 50 percent of excess capital.
Pricing restrictions	None. Policies denominated in local currency and U.S. dollars.	Supervisor reviews premiums so that they cover future claims but enforcement only through suspension of product.	Supervisor reviews and can enforce premiums so that they cover future claims.	Supervisor reviews and can enforce premiums so that they cover future claims.	Supervisor reviews and can enforce premiums so that they cover future claims. Supervisor may set ceiling on rates for compulsory insurance.	Supervisor reviews premiums so that they cover future claims but enforcement only through suspension of product.
Compulsory insurance	Auto third-party liability (TPL), civil liability, and labor risks.	None.	None.	Government demands bond from contractors.	Auto TPL.	TPL for commercial vehicles.
Reinsurance regulations	Law exists. No companies operate. Reinsurance abroad available.	No companies operate. Companies specify maximum and minimum retention limits. Reinsurers must register and meet minimum qualifications from rating agencies. Retention and cession requirement for catastrophe insurance.	No companies operate. Companies specify maximum and minimum retention limits. Reinsurers must register and meet minimum qualifications from rating agencies. Maximum retention limits specified.	No companies operate. Companies specify maximum and minimum retention limits. Reinsurers must register and meet minimum qualifications from rating agencies.	No companies operate. Companies specify maximum and minimum retention limits. Reinsurers must register and meet minimum qualifications from rating agencies. Maximum retention limits specified.	Reinsurance specialists have to be licensed.
Regulation of brokers and agents	Various agents, including bancassurance, are used.	Brokers must be licensed.	Brokers and agents must be licensed.	Brokers and agents must be licensed.	Brokers and agents must be licensed.	Only licensed brokers can offer insurance products.
Tax treatment	Premiums on life, worker safety, and a few other products exempt from sales tax. Property and catastrophe premiums deductible from income tax.	Life products over 10 years exempt from sales tax. Life premiums deductible from income tax and payments exempt.	(Term) life premiums deductible from income tax.	Payments exempt from income tax.	Premiums on life, health, accident, and mandatory insurance products exempt from sales tax, and payouts tax exempt.	Special levy (2 to 5 percent of net premiums) to pay for supervisor. No tax on earnings from life-savings products.

TABLE 3.5
(concluded)

	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Accounting conventions	Generally Accepted Accounting Principles (GAAP).	Set by supervisor: International Accounting Standards (IAS) with insurance adjustments.	Set by supervisor: IAS with insurance adjustments. Life and non-life income statement.	Set by supervisor: IAS with insurance adjustments. Life and non-life income statement.	Set by supervisor: IAS with insurance adjustments. Life and non-life income statement.	GAAP
Auditing	Auditor General, internal, and external firm.	Internal and external auditors mandatory. Annual external audit of financial statements.	Annual external audit of financial statements.	Internal and external auditors mandatory. Annual external audit of financial statements and actuarial audit of reserves.	Internal and external auditors mandatory. Annual external audit of financial statements.	Internal and external auditors mandatory. Annual external audit of financial statements.
Actuarial report	Not obligatory.	All new products. Quarterly actuarial review of technical reserves. Annual external actuarial audit of technical reserves.	All new products. Supervisor does actuarial audit.	All new products. Annual external actuarial audit of technical reserves.	All new products. Annual actuarial financial statements audit.	All new products. Supervisor does actuarial audit.
Centralization of claims data	Yes, but not publicly available.	Yes	No	Yes	Yes	Yes
Remarks	State monopoly will end under CAFTA-DR.	Revisions to law under consideration.	New law in preparation.	New law 2001. Implementation not fully completed.	New law in early stages of preparation.	New law in preparation.

Sources: National authorities.

the Ministry of Commerce and Industry. In Costa Rica, the state monopoly insurance company reports directly to the executive and is not subject to formalized prudential or other regulation and supervision beyond provisions of the insurance law and general legal principles.

The supervisors generally monitor the condition of their insurance industries closely and are aware of regulatory developments elsewhere. However, in several countries the supervisors acknowledge that they lack the budgetary resources to retain as many well-trained staff as they would prefer. In addition, in some countries, detailed and inflexible laws that may be outdated limit the supervisor's ability to respond to perceived problems. Insurance supervisors have available several venues for international cooperation, such as bilateral contacts with other national supervisors, the Central American Council of Financial Sector Supervisors, and the Latin American Association of Insurance Supervisors. In some countries, international cooperation is a very important source of resources for training.

All countries have a law on insurance. The Honduran law was substantially amended in 2001 and the supervisor is currently working on some minor legislative revisions. The supervisor in El Salvador is planning changes aimed at establishing risk-based reserve regulations and some other modest revisions to the 1997 law. Panama and Guatemala are preparing substantially new insurance laws that are expected to be discussed in their respective congresses during the course of 2005. It appears that the proposed legislation would only partially move in the direction of risk-based regulation. In Nicaragua, the regulator expects significant revisions to the 1997 legislation, also aimed at establishing risk based reserve regulations, but only in the medium term.

Existing laws sometimes specify prudential and other provisions in detail, which can be problematic when they have not been amended to keep up with developments in insurance practice. Supervisors and market participants are generally aware that certain legal provisions are inappropriate, but enacting the necessary amendments is not high on the legislative agenda.[69] Many firms choose to establish internal financial policies that are much stricter than those required by regulations.

[69]The legislatures in some Central American countries are characterized by weak party discipline, so on occasion it has proven difficult to pass even technical laws without delay or substantial amendment.

Largely because of the provisions in insurance laws, certain common features can be identified in the regulations of many (if not always all) of the countries of the region:

- Minimum required technical reserves (also called provisions) for non–life insurance policies are defined as a proportion of premiums net of the amount ceded to reinsurers, rather than related to the actuarial value of expected losses. This approach may be administratively convenient and would not be problematic if premiums were always set as a known proportion of risks borne. Indeed, in most countries, a company must receive approval from the supervisor for the terms attached to any new product; approval is contingent on proof that (initial) premiums are set at or above an actuarially appropriate level. However, this condition need not obtain over time because required reserves are related to a company's pricing policy, which may vary depending on such factors as the degree of competition in various product lines, administrative expenses, the current return on assets, and level of the company's capitalization. Furthermore, the factor of proportionality linking net premiums to minimum reserves is defined in law and is often the same across a broad range of products, yet the risk characteristics of products may differ. Thorough studies are not available on the determinants of appropriate proportionality factors; the various countries use different factors for no apparent reason. Furthermore, this specification of minimum reserves may create an incentive for companies to increase risk by competing via lower premiums, because that way they both gain market share and reduce the expense of holding reserves.[70] If the proportionality factor is too high, the affected products will be needlessly expensive.
- On a related point, the treatment of insurance premiums ceded to reinsurers does not differ-

[70]To illustrate the issues, suppose that a company underwrites a risk on a project; losses are normally distributed with mean 100 and a standard deviation of 10. If the authorities wish to ensure that the company can meet payouts without resorting to its capital 95 percent of the time, the company should be required to hold premiums and reserves of 120. If required reserves are set at 20 percent of premiums and premiums are 100, the objective is achieved. However, the company would underprovision if it set the premium at 90 (when reserves would be only 18), or if the minimum-reserve-to-premium ratio is fixed at 10 percent.

entiate sufficiently depending on the specifics of the reinsurance contract. Reinsurance might be ceded on more or less tight conditions, so that the reinsurer has more or less scope to limit or contest reinsurance payouts to the primary insurer in case of loss. If the regulations do not allow for this possibility yet required reserves are related to net premiums or retained risks, primary insurers have a short-term incentive to reinsure as cheaply as possible while also reducing the expense of holding reserves. Hence, the effective level of reserves against true retained risk might be less than the supervisor intended. The regulation of reinsurance risk (i.e., the risk that, for whatever reason, the reinsurer will not cover all the ceded risk) is especially important given companies' heavy reliance on reinsurance.

- Most countries also require companies to establish reserves against a standard range of risk factors, such as those connected with nonaccrued premiums, unpaid or unreported claims, uncertainty over the actuarial model used in setting policy rates, and the possibility of unusually large correlated losses ("outliers" in statistical parlance or "catastrophe risk" in insurance parlance). Some countries have slightly less comprehensive regulations in these areas and, as in the case of technical provisions, the reserve requirements vary across countries, often without thorough studies to establish the appropriate level of required reserves.
- All countries establish solvency requirements ("solvency margins") that set a minimum level of overall reserves and capital, based on complex calculations that depend on, among other things, gross and retained premiums, current and past gross and retained claims, and the composition of the insurance portfolio. Numerical parameters, presumably based on international and historical experience with event risks, are also part of the calculations and were uniform in some countries. No supervisor had a study that supported the parameters used or the specific calculations, although they indicated that similar practices appear to exist in other countries outside of the region. A few supervisors indicated that the minimum solvency requirements appeared to be too low. In some countries, (private) insurance firms have capital and reserve levels that are a multiple of regulatory requirements. In Panama and Guatemala, the insurance sectors have five times and three times the required level of capital and reserves, respectively. This would indicate that required capital and reserves are too low.
- Insurance laws also set an absolute minimum capital requirement, which is somewhat low in some countries and for some business lines.[71] The requirement is set in local currency, which erodes in real terms over time due to inflation, although some countries have a mechanism for regularly revising and maintaining the capital requirement level in real terms. A low minimum capital requirement permits very small firms to survive, though it also facilitates entry. It can be argued that higher capital requirements would help consolidation of the insurance sector, but it is not clear what the costs would be in terms of barriers to entry, especially if one considers the potential for the development of small-scale insurance schemes aimed at the lower-income population.
- Investment by insurance companies is restricted in various ways. While many of these restrictions are motivated mainly by concern to preserve the solvency and liquidity of the companies, some may be counterproductive or inefficient. Certain restrictions strongly favor investment in securities issued by the national government, rather than a full range of domestic investments. In all countries, regulations specify authorized investments, and most countries establish maximum exposure limits to specific issuers and to specific securities, while others have no such requirements. Typically, when specifying exposure limits to issuers, no differentiation is made on grounds of the varying riskiness of issuers or of investments within one category. In some countries, this can result in measures aimed at diversification forcing insurers into poor quality investments. Given the prevalence of insurance companies affiliated with financial-business groups, most (but not all) countries also have regulations on exposure to related parties.

[71]In the United States, where insurance is regulated by the states, the typical minimum absolute capital requirements for property insurance companies are about the same as in Central America, but minimum requirements for certain products and in particular for life business tend to be somewhat higher.

- Additionally, in all countries, investment abroad is severely limited and in some countries returns on foreign investment are taxed much more heavily than returns on domestic investments. In at least one country, limits on exposure to a single issuer are applied separately to domestic and foreign investments, creating a further restriction for foreign investment.[72] Given the limited size and development of regional capital markets, restrictions on foreign investment seriously limit investment choices and significantly increase risk by limiting diversification. While developmental/nationalistic arguments are made to support restrictions on foreign investment by insurance firms, all the countries in the region have reasonably open capital accounts. Hence, any restriction on insurance sector investment has scant macroeconomic impact since the local recipients of said investment can normally invest the funds abroad with few if any restrictions. The only result is that policyholders bear additional risk and potentially lower returns.
- Investments related to non–life insurance reserves typically have significant liquidity requirements in order to assure that funds are available to pay claims without insurers having to resort to potentially high costs of selling illiquid assets. However, an adequately capitalized and solvent insurer should be able to access liquidity in the market without incurring these liquidation costs. Since liquidity requirements can significantly erode returns on investments, regulators should be careful not to overemphasize the importance of liquidity when setting investment regulations.
- The interaction of underdeveloped capital markets and investment regulations limits the investment options available to insurance firms. Hence, it may be expensive for companies to diversify their portfolios, obtain adequate risk adjusted returns, and match their portfolios to their underwriting risks to the degree that would be desirable.
- Entry by foreign firms is generally permitted, subject to standard licensing procedures (except in Costa Rica). However, there are restrictions on the form in which a company can be incorporated. In particular, in several countries, a foreign entrant must establish a locally incorporated subsidiary, rather than open a branch. All countries prohibit the purchase of insurance from abroad, with some countries making exceptions for the products that cannot be offered by local insurers. The requirement to insure through domestic authorized firms leads to the widespread practice of "fronting," whereby local firms will nominally carry insurance that is in reality offered by a foreign insurer. This is most common in the case of multinational firms.[73]
- Premiums and other contract conditions are generally free of restrictions, except that they must be approved by the supervisor when a new product is introduced. Some regulators may enforce compliance with minimum premium levels determined on an actuarial basis when policies are originally authorized, but other regulators have no mechanism to assure compliance once policies are authorized. Laws relating to free competition and pricing may limit any attempts to enforce actuarially sound premium levels. In most countries, minimum (or minimum average) premium levels are often imposed by reinsurers as part of proportional reinsurance contracts. To the extent that proportional reinsurance is replaced by excess loss contracts, reinsurers do not impose minimum premiums. In some cases this has led to increased price competition among insurers.
- In most countries, presumably because of the recent nature of the service, specific regulations regarding bancassurance are weak. As discussed above, when banks sell insurance products through their branches, the scope for bundling financial products—such as a loan with an insurance requirement—gives rise to potential issues of consumer protection and the definition of fiduciary responsibilities.[74]
- Regulations in all countries cover the licensing and authorized activities of insurance agents

[72] Suppose that regulations state that at most 25 percent of the total portfolio can be invested abroad, and at most 10 percent of investments can be placed with any one issuer. If the large exposure limit is applied just to the foreign component, effectively only 2.5 percent of investments can be placed with any one foreign issuer.

[73] The countries of the region have subscribed to the Central American Free Trade Agreement with the United States. When this comes into force, entry and the availability of insurance from abroad will be liberalized.

[74] Chapter 2 in this book addresses the regulation and supervision of financial conglomerates.

and brokers, although the specific regulations vary significantly. In some countries, regulators have encountered significant problems when trying to impose mandatory qualifications for broker licenses.

- Few countries have extensive requirements for companies to prepare and publish regular reports on their actuarial situation (Nicaragua is an exception), although some countries require an actuarial review of reserves as part of an annual external audit of financial statements. Regulations related to and supervision of information management systems, computer systems, and other forms of operational risk are very limited. The lack of requirements in these areas, where effective systems are characterized by high fixed cost, helps smaller companies to survive.
- Domestic reinsurers exist only in Panama, which has a reinsurance law, but throughout the region companies are heavy users of foreign reinsurance. In most countries, reinsurance contracts can be established only with reinsurers that meet minimum ratings set by international ratings agencies, and, in some cases, reinsurers must also provide the supervisor with basic and updated information to be authorized to sell reinsurance to local companies. Supervisors often establish contact with the regulators of the home countries of the reinsurers to assure their good standing. In most countries, reinsurance plans must be presented to and approved by the supervisor.
- The tax treatment of insurance differs across countries. In some, but not all, countries, premiums for life insurance and certain other categories of insurance are deductible from income tax. Sometimes certain insurance expenses are exempt from sales tax or value-added taxes. The tax treatment of insurance payouts also varies.

Insurance Sector Development and Regional Issues

The insurance sector in Central America is developing, and the private sector is taking the lead. Some important initiatives are under way, for example, in the mass marketing of products and the provision of crop insurance. Nonetheless, the authorities, in individual countries and in the region as a whole, have scope to accelerate the process.

Fostering Insurance Sector Development

Modernizing the regulatory framework and supervisory practices will contribute to the sound development of the insurance sector. The authorities hope to move toward a more risk-based approach to regulation and supervision, with a greater role played by actuarial calculation of risks. In particular, technical reserves need to be related to expected value of losses, their variance and covariances, and other risks (such as reinsurance risk and catastrophe risk). Also, companies need more scope to manage their portfolios to match underwriting risks. Many measures needed for prudential purposes, such as introducing more risk-based reserve requirements, mandating the production of actuarial reports, and introducing modern information management systems, would likely have a greater effect on smaller companies, and could spur consolidation.

While the regulatory and supervisory framework can be improved, it will be important to allow room for less sophisticated products aimed at providing basic coverage at low cost. Regulatory principles that by and large have been developed for more sophisticated markets may limit some potential avenues for growth in countries where insurance markets are at an early stage of development.

Besides these regulatory issues, the authorities may have a role in providing other supporting services. For example, direct subsidies or administrative support for crop insurance could be worthwhile.[75] Any subsidy would have to be made transparent in the budget and consistent with fiscal sustainability, perhaps by being offset by a reduction in other agricultural subsidies. Furthermore, the cost-benefit ratio would probably be most advantageous if any subsidies were temporary and directed at covering start-up costs. Administrative support might take the form of some type of centralized information processing and provision, possibly government organized, to reduce the substantial start-up costs of crop insurance services.[76] Financing the dissemination of international experience in agricultural insurance can also help reduce the costs of

[75]Mexico, among other countries, has a program of direct subsidy for agricultural insurance that pays between 30 and 45 percent of insurance premiums for a wide number of crops.

[76]The firm in El Salvador that launched agricultural insurance reported that collecting existing but unpublished data mostly from public sector institutions constituted one of the more complicated and time-consuming tasks in the preparation of its program.

developing agricultural insurance schemes. Insofar as farmers are poor, there may be distributional reasons for these types of support. Moreover, the availability of crop insurance may yield a payoff in terms of greater provision of credit to the agricultural sector (helping to break the vicious cycle that limits the capitalization of the sector), yet be held back by fixed costs that are high relative to the capitalization of the sector. Government action may be needed to overcome this threshold to establishing a market and achieving critical mass.[77]

Governments could also contribute to the development of the insurance sector by insuring more of their own risks instead of relying on implicit self-insurance.[78] Greater insurance volumes by the government could help in creating critical mass and economies of scale for the sector. Note that increased demand for insurance by the government is neither unlikely to pressure prices (in part because the products would be specialized) nor would it necessarily lead to crowding out. Adequately insuring important assets such as roads and bridges, among other infrastructure, could add to explicit planned expenses but would also allow for an improved budgetary process and less need for costly last minute reallocations of budget revenues to attend to unforeseen reconstruction expenses and other losses.

Another potential area for government action is catastrophe insurance; action in this area could be linked to efforts to stabilize government expenses as described in the previous paragraph. A large number of private sector assets are uninsured and the potential losses from a large event, such as an earthquake, can create a negative macroeconomic shock that significantly disrupts economic activity and multiplies the direct losses from the event. To the extent that governments typically assume some responsibility for disaster recovery and reconstruction in the case of catastrophes, there exists an implicit public sector liability. Recognizing these potential liabilities and dealing with them through appropriate insurance contracts is likely to reduce the associated costs.[79] In the light of international experience and the size of the Central America economies relative to the world insurance and reinsurance industry, a variety of approaches seem feasible. Hence, a number of issues must be considered when designing these insurance contracts.

- Given that social desirability of providing for catastrophes through insurance, should the costs of the insurance be financed through mandatory insurance, as is the case with similar programs such as pension schemes, or should financing come out of general government revenue?[80] In this connection, should operations be managed by one or more private companies, with the government acting as regulator, or should the government play a more direct role?
- Since high administrative costs constitute a major reason why insurance coverage is currently low, any insurance scheme (mandatory or not) must focus on minimizing the costs of implementation.[81] This would likely entail the use of existing mechanisms and non-insurance distribution systems for identification of potential program clients as well as for access, collection (if necessary), and potential payments.
- The insurance scheme should aim to provide for rapid relief, to minimize both the direct macroeconomic shock occasioned by a catastrophe as well as the added costs of delaying relief and reconstruction. There will generally be a trade-off between precise targeting of the relief and the speed and administrative expense of providing the relief; assessing and verifying individuals' losses is time consuming and often relatively expensive.
- The insurance scheme should aim to create incentives for economic agents to reduce risk

[77]Many factors, including land titling and a history of political interference, contribute to agricultural under-capitalization and the scarcity of agricultural credit. However, crop insurance services themselves are relatively simple contracts in terms of legal principles and ownership, as they apply to a single crop cycle and tend to be paid in advance.

[78]Governments in other some countries take out insurance on major installations. In Bahrain, for example, premiums on government-owned infrastructure such as petroleum facilities accounts for about half of all non–motor property insurance.

[79]Initiatives to develop catastrophe insurance are under way in several individual countries of the region, with the assistance of the World Bank, the Inter-American Development Bank, and the International Finance Corporation.

[80]Turkey has introduced mandatory earthquake insurance where premiums are paid by homeowners. Iceland imposes a special levy to pay for a reserve fund dedicated to meeting costs associated with natural disasters.

[81]Traditional insurance services typically cost several times the underlying "technical" cost of the risk because of the costs associated with marketing, identifying, and valuing the insured asset; processing the policy; monitoring the risk; placing the reinsurance; identifying and valuing losses; processing claims; and paying out the proceeds.

through individual decision making, for example, on where and how to build housing. Again, there will generally be a trade-off between how sophisticated the insurance scheme is and the expense of administering it.

Governments could also reduce the losses from various risks, including catastrophes, by enacting and/or and enforcing appropriate regulations, such as building codes or zoning restrictions. Reducing losses would lead to lower insurance and reinsurance costs, and hence help expand insurance services. In addition, existing insurance schemes, in some countries such as those for automobile TPLs, could be better enforced to further expand the market.

Regional Issues

It is likely that economies of scale in insurance activity could be better exploited on a regional basis, and that the countries could learn from each other's experience. One set of measures available to the authorities would be directed at the harmonization and mutual recognition of regulations, in line with international best practice. The authorities could coordinate the introduction of risk-based regulations, and eventually there could be a presumption that a company satisfying the regulatory requirements of one jurisdiction would be free to offer insurance products and to open a branch or subsidiary in another country of the region.[82] In this way, competition could be preserved even as the sector consolidates within individual countries. This type of effort appears particularly relevant given the expected results of the CAFTA-DR with the United States and other possible trade liberalization negotiations.[83]

Regional efforts could be worthwhile in other areas, including (1) the collection and dissemination of demographic, meteorological, agronomic, and other statistics needed for actuarial calculations that underlie insurance pricing, notably, but not exclusively, in relation to crop insurance; and (2) joint development of catastrophe insurance programs, especially where geographic or climatic regions with similar risk characteristics extend across the border.

Conclusions

The insurance sector is small and fragmented in most of Central America, and much of the population has scarcely any insurance cover despite their exposure to a range of natural and other risks. Yet, the sector has the potential to contribute much more to financial deepening and economic development. Some recent initiatives, for example, in the areas of crop insurance and the mass marketing of certain products, are promising. The financial situation of the insurance companies is generally satisfactory, the macroeconomic environment is relatively benign, and countries of the region have committed themselves to intensified regional integration, for example, through free trade agreements. Hence, conditions are favorable for measures to promote the sector.

The regulatory and supervisory regime governing the insurance sector needs to be modernized, primarily by moving toward a risk-based approach. For example, the provisions that a company must make need to be related to a fair valuation of the risks that it retains, and companies need to improve risk management techniques by developing the requisite systems for information collection and analysis. The relaxation of nonprudential limitations on the allocation of companies' investments could enhance both the functioning of regional capital markets and the soundness of the companies. Liberalization of trade in insurance products could ensure that competition remains effective even if national industries consolidate.

Governments can play a more direct role in expanding the availability of insurance coverage. Crop insurance schemes may yield a range of benefits, including improved access to credit for the agricultural sector. Governments could insure more of their own assets, which would not increase the scale of the insurance market but also contribute to fiscal management. In recognition of the region's vulnerability to natural disasters, consideration could also be given to introducing compulsory catastrophe insurance, with premiums paid by private parties.

[82]Foreign (extra-regional) reinsurers currently operate under similar conditions to those proposed here for regional insurers. In effect, regulation by their home country supervisor, plus some simple registration and information requirements (and minimum risk classification), are deemed sufficient for them to offer (re)insurance services in the region.

[83]CAFTA-DR contains provisions requiring home country treatment of insurers from all signatory countries, so that entry will be restricted only by nondiscriminatory prudential requirements. Therefore, the insurance monopoly in Costa Rica will be dismantled after a phase-in period. Insurance companies in all countries may face more competition from larger U.S. companies.