



ASSESSMENT ON HOW STRENGTHENING THE INSURANCE INDUSTRY IN DEVELOPING COUNTRIES CONTRIBUTES TO ECONOMIC GROWTH

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Final Report

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LIST OF ABBREVIATIONS

AIG - American International Group

ASSAL - Asociación de Supervisores de Seguros de América Latina

FIDES - Federación Interamericana de Empresas de Seguros

FSAP - Financial Sector Assessment Program

GDI - Gross Domestic Investment

GDP - Gross Domestic Product

IAIS - International Association of Insurance Supervisors

IDMA - Insurance Data Management Association

ISO - Insurance Services Office

MFI - Microfinance Institution

GDA – Global Development Alliance

PL - Property-Liability Insurance

GLOSSARY OF TERMS

Insurance is a widely used financial service used primarily to diversify and pool risks so that the consequences of randomly occurring events do not cripple individuals and businesses. Insurance also facilitates long-term savings through savings and investment products, reduces losses through risk management expertise, and transmits information about risks throughout society so economic actors can make more informed decisions.

Life insurance includes mortality protection-only life insurance products, such as term life (with no money returned to policyholder after coverage expires) and savings-investment life insurance products, such as whole life, variable life, and universal life.

Non-life insurance includes all property and liability insurance, such as auto liability and collision, fire, hail, flood, aviation and marine, and health insurance.

Weather derivatives are financial instruments that can be used to reduce the risk associated with adverse or unexpected weather conditions, serving as a form of hedging against potential losses.

Insurance penetration is the level of insurance used in an economy as measured by total insurance premiums collected by the insurance market divided by Gross Domestic Product (GDP).

I. EXECUTIVE SUMMARY

Given the lack of global information on insurance market development, USAID contracted Chemonics International and the International Insurance Foundation to assess 1) the link between strengthening the insurance industry and economic growth and development in developing countries, and 2) possible donor interventions that would support the development of insurance products in different types of countries, with what preconditions and for what level of investment.

LINKS BETWEEN INSURANCE DEVELOPMENT AND ECONOMIC GROWTH

This report summarizes what is known regarding insurance market development and growth, as expressed in existing research by leading financial sector and development specialists. The report also considers the current state of insurance market technical assistance, and examines key relationships between insurance and economic growth indicators using an international insurance dataset. The three key findings that arise from this analysis are: 1) countries are much more likely to experience sustained growth if their insurance markets develop well; 2) insurance market development is closely related to improved financial sector performance; and 3) insurance markets do not develop adequately without both public and private sector investment in their infrastructure.

The research reviewed identifies the links between insurance, financial sector performance and growth in substantial detail, helping define the insurance – economic growth relationship and supporting the policy conclusions of this report. The thrust of these links is that insurers encourage a greater efficiency and depth in the financial sector, by complementing, competing, and otherwise improving the services offered by other financial institutions. Some of the specific points made are summarized below:

- Insurers measure and manage non-diversifiable risk faced by creditors and borrowers more efficiently than other financial institutions, facilitating the provision of credit.
- Because of their success in marketing contractual savings products and the nature of their liabilities, life insurers (and to some extent non-life insurers) can be an important source of long-term finance.
- Insurance facilitates investment in infrastructure and high-risk/return activities, by generating sources of long-term finance, and helping measure and manage high-risk exposures.
- By mobilizing substantial funds through contractual savings products, and investing them in bonds and stocks, insurers help stimulate the growth of debt and equity markets.
- As institutional investors, insurers pressure equity markets to adopt stronger corporate governance measures and greater transparency.

LINKS BETWEEN INSURANCE TECHNICAL ASSISTANCE AND GROWTH

Despite the existence of substantial research linking insurance market development and economic growth, there is yet little data showing direct causality between technical assistance to the insurance industry and growth.¹ The case for technical assistance is, however, quite compelling: both the role that insurance plays in economic growth and the need for insurance market technical assistance in emerging markets are clearly shown. This fact no doubt has much to do with the increasing attention paid by

¹ While data on this topic is scarce, a number of cases known to us, including India (see Box 4.1), Mexico (see Box 5.1) and Eastern European countries (see Box 6.1), describe situations in which substantial insurance market technical assistance played a part in developing the insurance industry and increasing economic growth.

leading donor agencies to insurance market interventions in the last decade.² Well-designed technical assistance to the insurance market as a means to more rapid development of the financial sector and increased economic growth is becoming an essential component of the widely recognized development framework.

STAGES OF INSURANCE MARKET DEVELOPMENT

It is easier to understand how to strengthen insurance markets by first understanding their development cycle. To perform well and grow, insurance markets require investment in infrastructure, which includes institutions, technical resources and capacity, as well as the existence of suitable economic, legal, and political environments. This paper identifies the internal building blocks of market infrastructure, as well as the external environmental factors, that are commonly decisive during each of the four stages of insurance market development: 1) dormant; 2) early growth; 3) sustained growth; and 4) mature.

STRATEGIES FOR TECHNICAL ASSISTANCE

To assist donor agencies and policymakers determine which countries might benefit most from insurance market intervention, this report provides a preliminary means to compare levels of insurance market over or under-development, and assess its consequences for the potential economic pay-off from insurance market technical assistance. The report also provides guidance on selecting the most relevant type of technical assistance for a particular country, based upon its stage of economic, political, and insurance market development. The various types of insurance market technical assistance that are recommended include the following:

- Conducting insurance sector assessments, ideally in conjunction with financial sector assessments to encourage synergies and cost savings.
- Improving insurance regulation and supervision by encouraging the application of International Association of Insurance Supervisors' core principles and other global best practice standards.
- Encouraging the collection and sharing of insurance data, possibly through public-private partnerships with the Insurance Services Office, the Insurance Data Management Association, and Standard and Poor's, among others.
- Building actuarial resources through the development of formal education and apprenticeships that emphasize experiential learning.
- Supporting professional insurance education, by providing access to or developing a range of off-the-shelf training materials in a broad range of topics and adapting them to local environments, as well as supporting scholarships and exchanges.
- Educating markets and consumers on standards by facilitating exchanges of information, establishing a self-regulatory industry organization, and providing models of consumer education websites.
- Encouraging ethical market discipline by disseminating adequate information (possibly through rating agencies) and ensuring proper incentives and enforcement.
- Promoting institutional development in multiple ways, from developing actuarial databases and strengthening information systems to product development and marketing.
- Connecting regulators with the private sector by nurturing effective communication links between insurance supervisors and private sector executives.

² These donor agencies, which have been and are continuing to pay more attention to insurance market technical assistance, include The World Bank (and International Finance Corporation), Asian Development Bank, the Financial Services Volunteer Corps, Inter-American Development Bank, among others.

- Facilitating new insurance markets, especially for rural and low-income populations.

ADAPTING TECHNICAL ASSISTANCE STRATEGIES TO THE COUNTRY CONTEXT

To help ensure technical assistance generates the greatest economic impact, strategies should be adapted to the local context. Below are additional factors to consider for fragile, stable/transitional and strategic states.

FRAGILE STATES

The goal in fragile states is stabilization, reform and recovery.

- Establish a sound legislative or regulatory foundation, to the extent it can be resilient to economic or political instability, to nurture a potential insurance market and to guard against financial crimes.
- Increase risk management awareness and planning at the national, provincial, and local government levels for eventualities, such as natural disasters, and for general safety concerns, such as fire or industrial accidents.
- Encourage the establishment of the preconditions for insurance transactions, such as rule of law, property rights, property registries, and monetary stability, and support democracy and governance initiatives to enhance voice and accountability.
- Design assistance in a way that minimizes conflict, for example, by taking into account Islamic principles

STABLE TRANSITIONAL STATES

Donors can have the greatest impact in transitional states in the early and sustained growth stages of insurance market development.

- Assess weaknesses and opportunities related to data collection, professional education, actuarial capacity and market conduct.
- Provide technical assistance to prepare for the IMF/World Bank Financial Sector Assessment Program (FSAP) and to complete the International Association of Insurance Supervisors (IAIS) self-assessment. Follow up by helping insurance companies and supervisors implement global standards.
- Increase transparency and efficiency of the insurance industry to enhance the public's perception of and confidence in insurance.

STRATEGIC STATES

Additional technical assistance can be extended to strategic states, as more resources usually become available to them when they take on additional importance. However, any assistance should be based upon the type of state as described above, in line with the country's level of insurance market development.

II. INTRODUCTION

Although insurance has become a widely used financial service since first introduced in ancient Greece, its benefits have yet to reach much of the developing world. USAID contracted Chemonics International and the International Insurance Foundation to examine how, and to what extent, insurance sector technical assistance in developing countries could help build reliable and effective financial sectors and support growth. Specifically, this report assesses the link between strengthening the insurance industry and economic growth, as well as possible donor interventions that would support the development of insurance products and markets in different types of countries.

Section III of this report reviews studies by leading economists and researchers that link insurance with increased financial sector depth and efficiency. The findings from these studies suggest that when insurance markets have the necessary capacity and infrastructure to deliver their variety of services, synergies arise between insurance and other financial services that improve financial sector effectiveness and economic productivity.

Sections IV and V describe the internal and external factors that have the most impact upon the development of an insurance market during its four stages of development. The external factors include specific issues within the economic, legal and political environments, while the internal or industry-specific factors consist of the institutional development of the building blocks of the insurance sector. Tied to how varying economic and institutional environments within a country affect insurance market development is a menu of possible technical assistance interventions..

Section VI concludes with recommendations on how USAID can fashion effective insurance technical assistance strategies. This section begins by presenting a tool for estimating an economy's insurance deficiencies and its potential to receive economic benefits from insurance market intervention. Guidelines are also provided for assessing insurance market needs and identifying the most opportune types of intervention based upon a country's economic, political, and insurance market stage of evolution. Finally, some suggestions are given regarding cost-effective delivery mechanisms for technical assistance.

III. INSURANCE, FINANCE AND ECONOMIC DEVELOPMENT

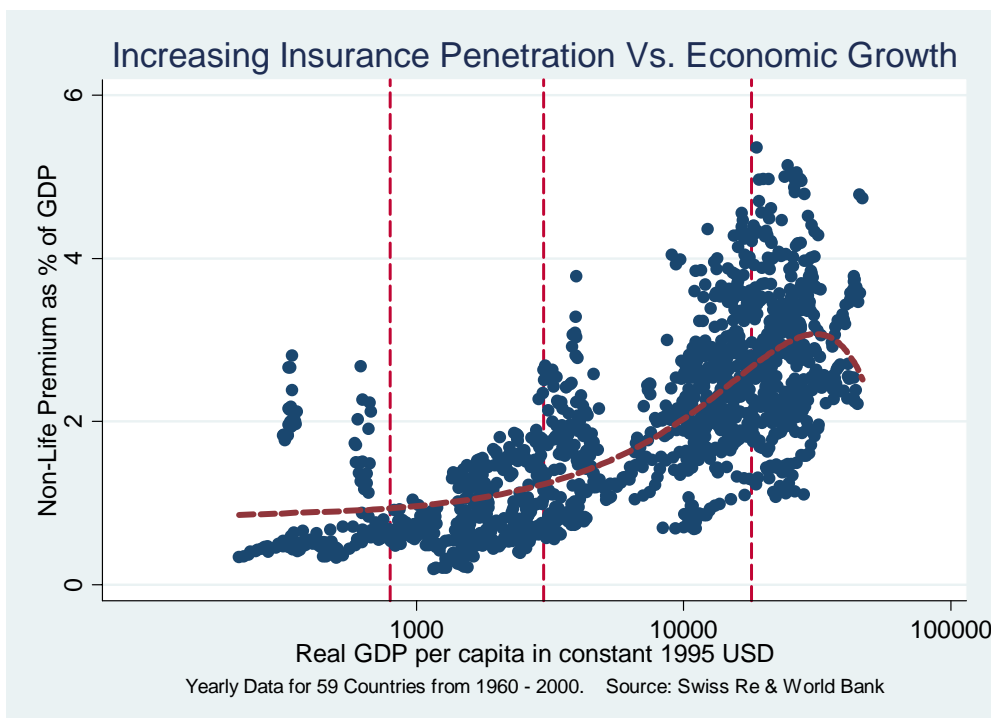
The research reviewed in this report links insurance market development to financial sector effectiveness and economic growth. Research on insurance markets is limited, compared to what is available on banks, partly because insurance market analysis involves considerable difficulties in data collection and comparability. Nevertheless, research on insurance and economic growth is gathering momentum as more reliable data becomes available.

INSURANCE DEVELOPMENT'S CONTRIBUTION TO ECONOMIC GROWTH

A review of international cross-country data over the last 40 years reveals that insurance consumption is not only strongly correlated with economic output; its growth actually outpaces that of the economy. The data also shows us that the growth of insurance consumption (measured as insurance penetration or total premiums as a percentage of GDP) generally follows what is referred to as an “S-Curve”: it is slower at lower levels of development, accelerates as the insurance market and the economy expand, and then slows down again as the market matures. A similar pattern is seen with the growth of life insurance consumption worldwide.

Figure 3.1 illustrates the S-Curve relationship between GDP and non-life insurance growth. The vertical dotted lines are approximate delineations of the four stages of development that most insurance markets go through; dormant, early growth, sustained growth and mature. These stages have consequences for technical assistance, which are explained in Sections IV and VI and Annex C. The scatterplot portrays changes in insurance and economic development over time, as well as across countries. This general relationship is reviewed in Swiss Re (2004), Erbas and Sayers (2005), and Outreville (1996).

Figure 3.1: The S Curve of Insurance Market Development



Property-liability insurance can be used to cover a variety of risks facing the economy's infrastructure (such as fire, flood, mechanical failure, and the loss of income from business interruption). However, the use of these coverages to protect the infrastructure is largely dependent upon the existence of efficient and capable insurance markets. The statistics reflected in Figure 3.1 demonstrate that economies which have had greater access to insurance coverages have over time experienced more growth. This relationship between insurance use and growth dates back to the early days of industrialization of many of today's leading economies. Great Britain, which played a large part in contributing to the development of modern insurance market know-how and practices, turned to various forms of insurance early on its economic development.

Figure 3.2 plots the total sums of fire insurance (in British pounds) against the index of industrial production in Great Britain between 1790 and 1862. During this period, Britain's industrial production and its demand for insurance coverage to protect its physical assets and productive capacity increased almost in tandem. This relationship between business expansion and fire insurance consumption (by creditors and investors who wished to protect their ownership interests in industrial infrastructure) reflects the persistent demand for property-liability insurance that is generally seen during economic expansions worldwide.

Researchers have looked at insurance markets in different countries and over different time periods, applying econometric techniques to separate and control for the effects of many known factors in growth, as well as to identify the probable causal direction between these factors and growth. Many of these researchers have attempted to answer the question: does insurance contribute to growth, or is it simply a by-product of economic growth? These studies have sought not only to understand whether insurance makes an important contribution, but also if this contribution can be measured empirically. This report collected and reviewed relevant research on this topic, the results of which are summarized below.

Studies testing the causal relationship have found evidence that insurance market development is a supply-leading phenomenon.³ While the number of studies carried out to date is limited, being greatly constrained by the lack of available insurance data, the few existing studies present a number of strong arguments, backed up by rigorous and methodological data analysis, advancing the conclusion that insurance is an agent, and not just a by-product, of growth. Using Granger causality tests, Soo (1996) found that life insurance contributed to the productivity and economic growth of the United States over a 30-year period.⁴ His study concluded that much of life insurance's impact on growth was likely due to the huge contribution that life insurance made to U.S. financial intermediation and investment over this period. A follow-up study by Kugler and Ofoghi (2005), using Granger causality tests with disaggregated measures of specific classes of life and non-life insurance in the United Kingdom, found that eight out of nine classes of insurance showed evidence of causing economic growth in the UK. The results implied that stronger causal relationships between insurance and growth could be found across countries if the bias introduced by using aggregated measures of insurance were avoided.

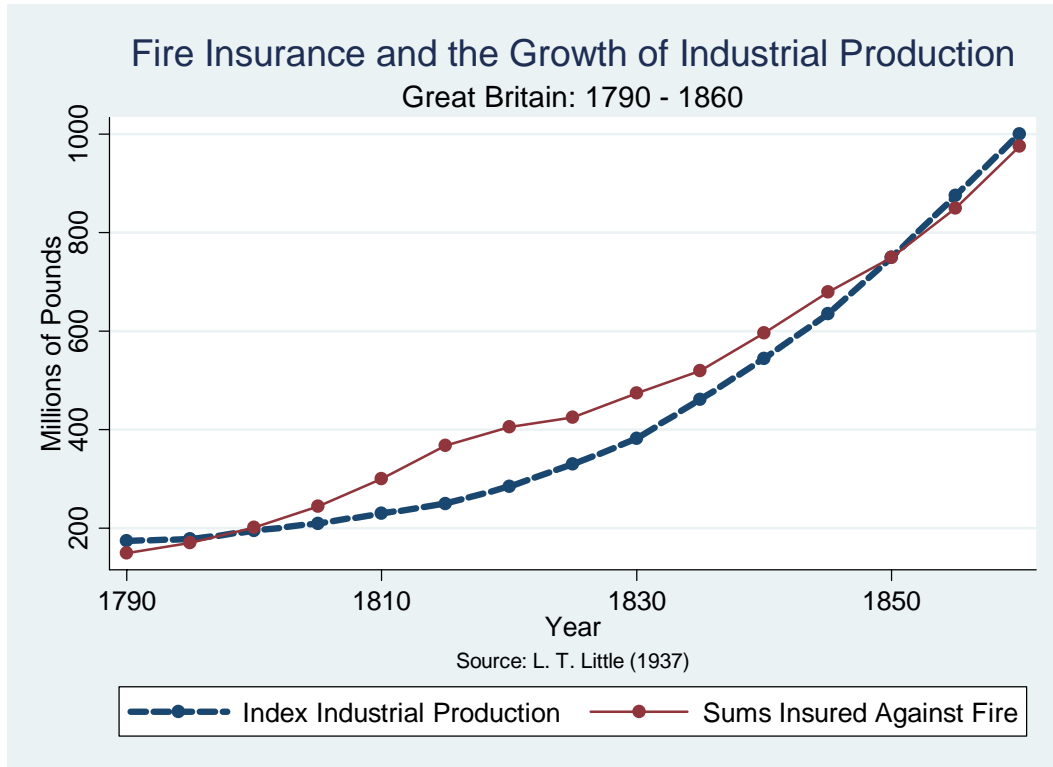
In a larger, multiple-country study, using a different econometric technique, Webb, Skipper and Grace (2002) found that both banking and life insurance penetration were robustly indicative of increased productivity (as measured by increase in growth rate of real GDP per capita) in 55 countries over the period from 1980 to 1996.⁵

³ Patrick (1966) noted that the correlation between financial activity and economic growth could be either supply-driven, where a greater supply of financial sector capacity and activity drives economic growth, or demand-following, where greater financial activity and capacity merely follow economic growth because there is a greater demand for it as the economy grows.

⁴ While causality in the strict scientific sense of "A causes B" generally does not apply in the sphere of economic events due to inability to control conditions in a laboratory sense, econometricians have developed techniques that can suggest the likelihood that there may be a causal relationship between events. One such technique uses time series analysis with what is referred to as "Granger causality tests." Granger causality analysis essentially identifies a variable "x" as causing variable "y" if taking into account past variables of "x" makes possible better prediction of "y."

⁵ Results from this study are shown in table A in Annex A.

FIGURE 3.2: CORRELATION BETWEEN FIRE INSURANCE AND GROWTH



The studies reviewed in this section included variables to control for other influences on growth, as well as econometric techniques to account for the likely impacts of exogenous factors and reverse causality. Their results provide solid econometric support for the premise that economies that experience more growth do so in part because they have access to efficient and effective insurance products.

INSURANCE'S ROLE IN FINANCIAL SECTOR DEVELOPMENT.⁶

The depth and efficiency of a country's financial sector largely determine how well its economy allocates resources. Wide agreement has been reached regarding the importance of a strong financial sector to economic growth. Greater financial depth (i.e. greater variety and availability of financial services and instruments) advances economic growth by providing economic agents more opportunities to save, invest, and borrow.⁷ Financial efficiency is a measure of how cost effectively these economic agents operate. Greater financial depth and efficiency translate into increased levels of financial intermediation, investment, and productive resource allocation.

The mechanisms through which insurance works to stimulate economic growth revolve around the role insurance plays in deepening and improving the efficiency of the financial sector. Studies show that insurance influences financial activity in the following ways:

- Insurers measure and manage non-diversifiable risk faced by creditors and borrowers more efficiently than other financial institutions, facilitating the provision of credit.

⁶ By financial sector development, we are referring to financial and capital market development, including the major indicators of financial sector depth and efficiency, as well as capital market liquidity and transparency. Contractual savings institutions are institutions such as life insurers and pension funds that collect savings from individuals on a contractual basis, as do life insurers and pension funds, allowing customers to plan for their future. These institutions are often institutional investors as well, and as such, channel large amounts of funds into the capital markets and other investments.

⁷ A common measure of financial depth across countries and over time is the ratio of currency to narrow money (M1) or the ratio of broad money (M2) to nominal GDP. This measure somewhat crudely attempts to measure how well the financial sector caters to savers and how well it serves borrowers who want to raise capital for real long-term investment.

- Insurers generate price signals for risk that enables the economy to allocate its resources more efficiently among activities.
- Insurers often offer more competitive and long-term contractual savings vehicles than other financial institutions.
- Because of their success in marketing contractual savings products and the nature of their liabilities, life insurers (and to some extent non-life insurers) can be an important source of long-term finance.
- Insurance facilitates investment in infrastructure and high-risk/return activities, by generating sources of long-term finance, and helping measure and manage high-risk exposures.
- By mobilizing substantial funds through contractual savings products, and investing them in bonds and stocks, insurers help stimulate the growth of debt and equity markets.
- As institutional investors, insurers pressure equity markets to adopt stronger corporate governance measures and greater transparency.

The amount of lending by financial institutions to the private sector is one of the best indicators of the efficiency of a country's financial system, as there will be a greater demand and supply of credit when financial institutions can measure, manage, and price risks better and when borrowers, lenders, and investors can transact with lower costs. Figure 3.3 shows that for 59 developed and developing countries from 1960 to 2000, property liability insurance premiums strongly correlated with financial sector efficiency, as measured by credit extended to the private sector.

INSURANCE CONTRIBUTES TO AND IMPROVES THE EFFICIENCY OF CREDIT IN VARIOUS WAYS

Insurance markets contribute to investment in infrastructure and high-risk/return activities by providing price signals regarding project risks, offering insurance coverage against undiversifiable risks, and generating long-term funds through collecting premiums that can be invested in long-term projects. Uncertainty affects entrepreneurship, investment, and social progress, threatening to curtail growth if it is not well managed.⁸ Banks, investment companies, pension funds, and capital markets combine their resources with insurance companies to accumulate information, consolidate and diversify risks, and manage this uncertainty. Insurance coverages implicitly measure and price risks, thus providing signals regarding the project risks. When risks cannot be managed, or when they are not adequately mitigated through risk management and safety measures, insurance coverages will change, signaling the nature of these underlying risks to potential investors. These price signals and provision of coverage help reduce the transaction costs of investors and borrowers, as they clarify the nature and price of these underlying undiversifiable risks. Hence, it is not surprising that insurance is generally a necessary precondition in many mortgage finance markets and large-scale industrial investments.

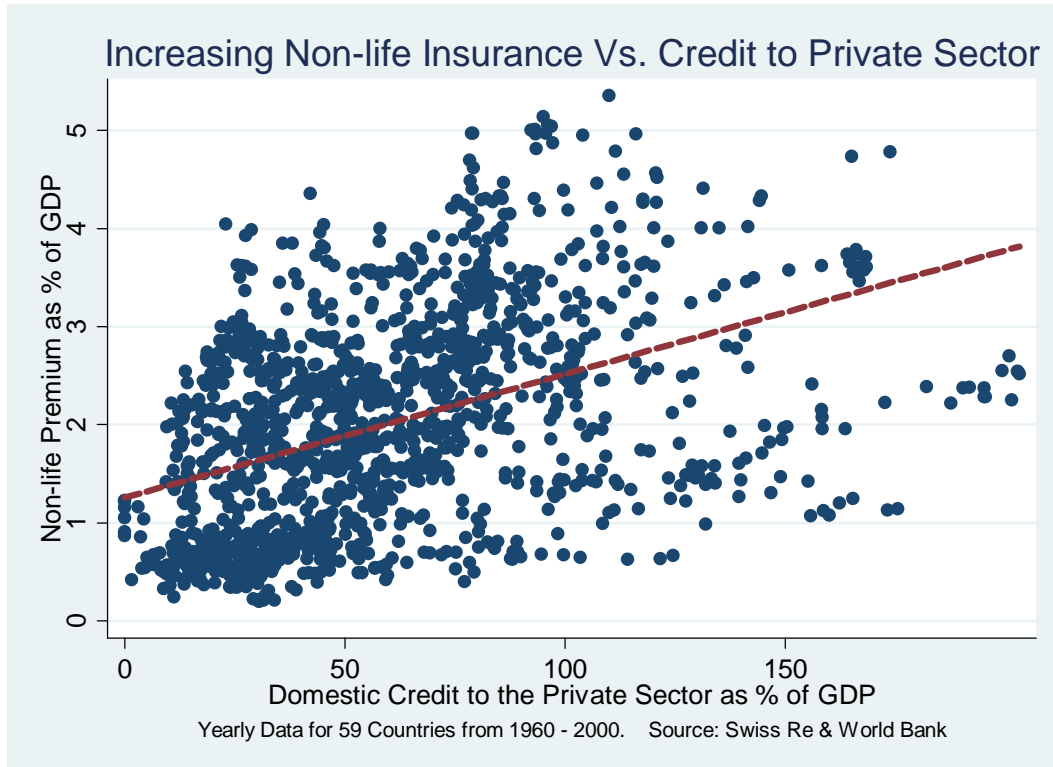
INSURANCE COMPANIES, ESPECIALLY LIFE INSURERS, FACILITATE LARGE AMOUNTS OF CAPITAL ACCUMULATION

By offering products with various combinations of life insurance and savings benefits, life insurers add financial depth to an economy, simultaneously encouraging long-term savings.⁹ The benefit of long-term funds to emerging market investment and productivity has been pointed out by various researchers.

⁸ For our purposes, the difference between the term risk and uncertainty may be defined as follows: Uncertainty connotes a state of mind characterized by doubt, whereas risk refers to an exposure to potential loss, which may be measurable.

⁹ South Africa, Japan, South Korea, Taiwan, Singapore, Hong Kong, and the United Kingdom have had high rates of life insurance consumption for many years, which has turned life insurance companies into major investors in the economies of these countries. In OECD countries, insurers' assets comprised between 30 and 38% of total financial assets of institutional investors (pension funds, insurance companies, investment companies and others) during the period 1980 to 2000.

FIGURE 3.3: CORRELATION BETWEEN NON-LIFE INSURANCE AND CREDIT



The World Bank Development Report (1994, p.107) highlights the fact that the growth in life insurance assets provides a scarce, but highly valuable commodity in developing countries—long-term finance—saying that “Contractual savings institutions, such as pension funds and life insurance companies, are particularly suited to making long-term investments. These institutions levy fixed premiums, have steady and predictable cash inflows, and incur long-term liabilities, making them ideal suppliers of long-term finance for infrastructure projects.”

World Bank researchers Musalem, Impavido, and Tressel (2001) studied the relationships among life insurance companies, pension funds, and banks in 34 countries and found that the development of life insurance companies and pension funds is associated with more efficient banking systems. Their explanation was that life insurers and pension funds, as contractual savings institutions, compete with banks. In response to the competition, banks concentrate on their comparative advantage, their superior ability to monitor firms, and provide short-term loans, thus increasing the efficiency of the financial sector.

LIFE INSURANCE ALSO CONTRIBUTES TO CAPITAL MARKET DEVELOPMENT

Musalem and Impavido (2000) examined the growth of life insurers and pension funds across 34 countries over a 15-year period and found that the rapid growth of these contractual savings institutions partly explain the rapid growth of stock markets. Another World Bank study, conducted by Vittas (1998) also concludes that insurance companies and pension funds can provide a strong stimulus to the development of securities markets. This relationship occurs because life insurers and pension funds can accumulate large amounts of savings in countries, which, in turn, are invested in businesses through equities and bonds. The result is that as life insurers grow, they channel large amounts of medium- to long-term funds through capital markets, deepening the country’s financial sector.

AS INSTITUTIONAL INVESTORS, LIFE INSURERS EXERT A POSITIVE IMPACT UPON THE TRANSPARENCY AND LIQUIDITY OF EQUITY MARKETS

Vittas (1998) describes the important role that life insurers have had in enhancing corporate governance by requiring greater information disclosure and in stimulating financial innovation and modernizing capital markets, mostly in mid-level developing to developed countries. The 1989 World

Development Report suggests that “Because pension and insurance institutions are likely to be relatively large and therefore able to afford professional management, these managers can play a role in monitoring and control of the firms in which they invest.”¹⁰ Better managed investments in turn improve the efficiency of the financial sector.

INSURANCE AND FINANCIAL SECTOR DEVELOPMENT ARE MUTUALLY SUPPORTIVE

The economic benefits produced by a strong insurance market, through its effect on financial sector efficiency and depth, are identified within the study by Webb, Skipper, and Grace (2002). Using 16 years of data from 55 countries, this study finds that when higher levels of banking and insurance activity coexist, countries are more likely to have higher levels of economic growth. The finding is particularly noteworthy in that it shows that higher economic growth can not be explained as well by the individual development of banking or insurance markets as it can by the joint development of these markets.¹¹

To conclude, a substantial and growing body of evidence suggests that robust and efficient insurance markets improve an economy’s ability to organize and allocate its resources. The research shows that insurance adds financial sector depth and efficiency, leveraging its strong role as an institutional investor and offering important services for which it has a comparative advantage, such as managing and pooling risks not diversifiable through capital markets, providing information and price signals to the market regarding such risks, and generating long-term funds for investment in infrastructure and other capital improvement projects.

¹⁰ World Development Report, World Bank, 1989, p. 108.

¹¹ Table A in Annex A presents the results of the simultaneous equations estimation of this study.

IV. STAGES OF INSURANCE MARKET DEVELOPMENT

Insurance markets generally get larger relative to the economy during periods of economic growth. The rate at which this happens seems to be slower in very low- and high-income countries, and faster in low- to middle-income countries. For this reason, economists speak of an S-shaped curve when describing the growth of insurance alongside the growth of GDP. As can be seen in Figure 4.1, insurance penetration appears to rise slowly, then more rapidly, then more slowly again, as GDP per capita increases.

Insurance market growth rates seem to vary according to the state of the enabling environment, which includes economic, legal, and political factors, as well the existence of the necessary internal building blocks of insurance markets, such as institutional infrastructure, technical resources and capacity. Table 4.1 below identifies the environmental factors and the internal building blocks that seem to influence each of the four stages of insurance market development: 1) dormant, 2) early growth, 3) sustained growth, and 4) mature.

The categorizations in Table 4.1 are not mutually exclusive. In reality, countries often fall in between categories. For example, Indonesia may be a fragile country due to its current political instability, but it has had an established insurance industry for many years, with some of the building blocks in place commonly found in more stable countries.

TABLE 4.1: DECISIVE FACTORS PER STAGE OF INSURANCE DEVELOPMENT

Insurance Stage	Type of State	Influential Factors of Insurance Market Development	
		<i>External Economic/Legal/Political Preconditions</i>	<i>Industry-specific Insurance Building Blocks</i>
Dormant (Afghanistan, Iraq)	Fragile	<ul style="list-style-type: none"> • Political stability • Property rights • Freedom of enterprise • Voice & accountability • Legal framework • Contract enforcement 	<ul style="list-style-type: none"> • Insurance law • Initial regulatory / Supervisory framework • Basic data collection • Risk management at government level (natural disaster planning)
Early (Bolivia, Egypt, Mongolia)	Stable / Low Income	<ul style="list-style-type: none"> • Income • Scale • Economic stability • Market restrictions 	<ul style="list-style-type: none"> • IAIS Core Principles (regulation/supervision) • Consumer awareness of risks • Actuarial capacity • Data collection • Professional education • Market restrictions • Industry market conduct • Consumer protection/ support • Private/public sector collaboration • Ethical and transparent behavior
Sustained Growth (Peru, India ¹² , El Salvador)	Stable / Lower Middle Income	<ul style="list-style-type: none"> • Income • Scale • Savings rate • Financial sector • Enforcement, judicial efficiency/transparency 	
Mature (North America, Western Europe, etc.)	Stable / Upper Income	<ul style="list-style-type: none"> • Tax incentives 	<ul style="list-style-type: none"> • Alternative risk management and finance • Financial market risk securitization

¹² Due to its large population and evolving middle class, India's insurance market has markedly different potential and needs than Peru or El Salvador.

DORMANT STAGE

The first stage involves creating the preconditions for insurance transactions. These are critical as their absence makes consumers and insurance companies wary of entering into insurance contracts. These preconditions are similar to those identified within the USAID Financial Sector Strategy Paper as enabling conditions for financial intermediation.¹³ The “voice and accountability” measure, which reflects the composite rating of several World Bank governance indices, was found by Erbas and Sayers (2005) to be the single most reliable predictor of insurance market penetration. Hence, supporting this precondition for insurance market development fits well with USAID’s commitment to democracy and governance. Some of the critical preconditions to meet during this stage are the following:¹⁴

- **Political stability.** Since insurance contracts are performed over time, conditions must be sufficiently stable to encourage people to plan into the future.
- **Property rights.** The political system must protect private property rights and assign personal responsibility if property insurance is to function well.
- **Freedom of enterprise.** The government must allow markets to operate freely without fear of expropriation or intervention.
- **Voice and accountability.** Political processes must be transparent and reliable; with sufficient civil liberties and political rights.
- **Contract enforcement.** Insurance transactions are contracts; therefore, the legal environment must permit people to make and enforce contracts.

Examples of countries currently in this stage include Afghanistan and Iraq. Recently, Afghanistan has had only one insurance company, owned and run by the government, and not a single broker or agent in the market. The government’s intervention, combined with political instability and the weakness of established property rights and contract enforcement, clearly place Afghanistan’s insurance market in the dormant stage. Iraq currently lacks the political, legal, and economic stability to support a growing insurance market. While establishing an insurance law and discussing risk management at the government level may be feasible and worthwhile steps, considering anything beyond this may have limited short term impact.

EARLY GROWTH STAGE

Some insurance markets operate at a very low level, even though the preconditions for insurance transactions have been established. Whether the country has experienced economic or political upheaval or has just not yet developed the level of income, scale, or economic stability needed, it remains in a low-growth stage. Insurance markets in this stage need to address the following factors if they are to advance to the next stage:

- **Low Income and Wealth.** Individuals and businesses at all income levels benefit from insurance. Poor people may actually need the consumption-smoothing benefits of insurance even more, as they have fewer resources to cushion an income or wealth shock.¹⁵ Insurance companies find it difficult to provide insurance for small premium amounts due to transaction and overhead costs, especially

¹³ If a country has recently experienced economic or political upheaval, it may have some of the necessary insurance market infrastructure in place, but its insurance market will be idled by the lack of other necessary preconditions.

¹⁴ The World Bank has created indices of political stability, legal transparency, judicial effectiveness, and other institutional factors, some of which may serve to determine whether countries have met the preconditions necessary for insurance market development.

¹⁵ Research broadly addressing insurance and its impact on consumption-smoothing may be found at CGAP’s Microinsurance Resource Center (<http://www.microfinancegateway.org>; also see www.microlinks.org). Some of this research focuses on low-income populations and the benefits they receive from insurance (albeit informal village or family-level insurance) when faced with income shocks or sudden losses.

since marketing to the poor usually involves greater expenses.¹⁶ Some companies, however, have overcome these high per client transaction costs by partnering with a firm already serving low-income clients. For example, American International Group (AIG) worked with FINCA/Uganda, a microfinance institution (MFI), to develop an insurance product for the MFI's loan clients. As a result of this initiative, FINCA's clients find AIG's group personal accident (GPA) insurance product useful and affordable, helping them to manage traumatic lifecycle events. In addition, the product has helped generate additional revenues and improved FINCA's loan portfolio quality.¹⁷

- **Insufficient Scale of Insurable Risks.** As the size of an insurance market increases, economies of scale are reached, because costs to both the consumer and insurer decrease as the pool of similar risks and statistical information increases. In the early growth stage, the small size of insurance companies and its market can substantially challenge the efficiency and effectiveness with which the market provides insurance.
- **Macroeconomic Instability.** Currency devaluation and hyperinflation complicate product pricing and cost administration for insurers and discourage consumers from planning into the future with insurance products.¹⁸
- **Market Restrictions.** Governments occasionally distort the efficient allocation of risk and capital by interfering unnecessarily in the workings of the private market, for example, by limiting entry of foreign insurers, favoring state insurance or reinsurance companies, or by controlling prices. The entry of foreign insurers usually brings a great wealth of management and technical expertise, training, innovative products, and capital, thereby giving the local market an infrastructural boost.¹⁹ Box 4.1 provides an example of how market liberalization combined with technical assistance can play an important role in developing insurance markets and increasing economic growth.

BOX 4.1: INSURANCE STRENGTHENING AND ECONOMIC GROWTH IN INDIA

India experienced a liberalization of its insurance market in 2000, and received substantial technical assistance from USAID and other agencies in the following years. From 2000 to 2004, the Indian insurance industry grew at a rate of 15% per year, far surpassing the average growth rate for the world's insurance markets during the same time period. During this time, India also saw the percentage of life insurance in household's total financial savings increase from 12.9 % to 14.5% on average, which was apparently linked to a simultaneous increase in total household savings in financial assets. In addition, India's Gross Domestic Product grew 6.7% on average during this period. These results imply that India's insurance sector liberalization and related technical assistance helped to increase household long-term savings in financial assets, which were then used to support investment, a key factor in spurring economic growth.

Examples of countries in the early growth stage include Bolivia, Egypt, and Mongolia. Mongolia recently privatized a major market insurer, which now has more than 50 percent of the market, and has seen the entry of a

¹⁶ In spite of these constraints, insurance has been successfully sold to low-income individuals. In the early 1900s, British and American insurers sold large amounts of industrial life insurance by having agents collect premium payments on a weekly basis. Microinsurance has been marketed with different degrees of success in India, Colombia, Bangladesh, Uganda, and other countries. More research and experimentation is required to find suitable ways to meet the insurance needs of the low-income population while keeping transaction costs manageable.

¹⁷ See the International Labour Organisation's Web site <http://www.ilo.org/public/english/employment/finance/vulnerab/micro/practice.htm>

¹⁸ Hyperinflation can utterly destroy the market for long-term products like life insurance, as demonstrated in Brazil during the 1980s and Zimbabwe more recently. While this factor is not as clearly delineated, inflation rates greater than 25 percent per year over a 5-year period or greater might be considered substantial obstacles. Countries in which devaluation wiped out savings, severely affecting demand for insurance savings vehicles, include Kazakhstan, Turkmenistan, Serbia, Peru, and others.

¹⁹ Markets that have benefited from foreign entrants include India, Taiwan, Korea and China. Many markets in the infant stage are hobbled by continuing existence of government owned insurers (Costa Rica, Egypt, Vietnam). For markets to advance to the next stage, they also need to leave behind government-imposed prices.

few other small companies. Bolivia's insurance market may be the strongest of the three, with a well written insurance law, strong supervisory framework, and a growing insurance industry association. None of these three countries, however, have yet established much of an insurance market infrastructure.

SUSTAINED GROWTH STAGE

Insurance markets in this stage work within supportive economic, legal, and political environments and have many of the essential insurance market building blocks in place. As a result, they typically experience steady and substantial growth, responding quickly and effectively to financial and economic needs of the growing economies in which they work.

- **Income.** As the middle class grows, more individuals have the disposable income to take advantage of the risk management and savings services of insurance.
- **Scale.** As the insurance market continues growing, more economies of scale are achieved. The costs of establishment (incorporation and authorization, required minimum capital, and initial staffing), underwriting (accumulation of scientific knowledge concerning specific risks), and product development (market research, drafting contracts, preparing marketing materials, and printing forms) can be spread over a greater volume of policies as the market grows.
- **Financial sector development.** An expanding economy will put many demands upon the financial sector, which, in turn, places demands on the insurance market. Increasing demand for mortgage, auto, and private sector business lending, the need to protect domestic and international commercial transactions, an increased appetite for investment in long-term capital infrastructure, and entrepreneurial investment in high-risk and high-return projects, all feed greater demand for insurance services.
- **Enforcement, judicial efficiency and transparency.** As insurance markets enter into sustained growth stages, the trust that individuals have in the workings of the market and the efficiency with which judicial and enforcement institutions support the insurance function become the critical factors. This level of insurance market development requires a high degree of institutional transparency and efficiency.²⁰

MATURE MARKET STAGE

As an insurance market matures, its growth slows again and may even lag behind the aggregate growth rate of the economy. Insurance markets continue to find new risks to insure and new ways of packaging coverage, but the gains are smaller than in the earlier stages of development. Examples of new products include investment life insurance products, such as variable life and annuity products, which transfer more investment choice and risk to the consumer, as well as catastrophic disaster risk-financing mechanisms. Product complexity and niche competition means that insurers experience diminishing returns to scale. As insurance gets more expensive, prospective insurance buyers, especially large enterprises, find it more advantageous to retain greater amounts of risk than to buy insurance. Innovation continues to find more efficient ways to manage risk, but the results may be outside the traditional insurance market and therefore not captured in the measurement of insurance penetration. All G7 countries have insurance markets in the mature stage.

²⁰ Erbas and Sayers [2005] demonstrate that institutional quality explains the growth of insurance markets better than income, although this explanation is often overlooked because institutional quality and income are highly correlated. This finding has a profound policy implication: The sustained development of insurance markets cannot be taken for granted as income rises; it depends on the supporting institutions. As the USAID White Paper stresses, institutions matter more than resources. People in low-income, developing countries often have capital resources that are not readily mobilized to support economic growth. Due to fears of capricious and corrupt officials and jealous neighbors, surprisingly large amounts of money have been hidden away in the form of foreign hard currencies — historically, in U.S. dollars. Five years ago, Ukraine's central bank estimated that there were billions of dollars in United States currency hidden in the country. As citizens develop confidence that money placed with financial institutions will be safe — a long and gradual process — economic development will be supported. The emergence of reliable savings programs either in banks or insurance companies will have a good reception once they have earned positive reputations. As this “mattress money” becomes intermediated with banks and insurance companies, it then becomes available to support economic development through capital investment, working capital loans, and other productive uses.

V. BUILDING ROBUST INSURANCE MARKETS

While sound economic, legal and political environments provide fertile ground for robust insurance markets, the key to insurance market development is investment in market infrastructure. It is this infrastructure that enables an effective marketplace to exist for the pooling, trading, and management of many of society's risks. Unfortunately, this infrastructure is late to arrive in many countries, leaving insurance markets to operate ineffectively and inefficiently. There are many reasons why the establishment of this infrastructure is delayed, and why insurance market intervention can produce substantial economic benefits. These reasons are summarized below:

- Insurance market infrastructure is a long-term investment that is less attractive to insurance companies focused on short-term profits.
- While insurance market infrastructure investment typically benefits the entire market in the long run, and often requires the active participation of all insurers, it is hard to obtain industry consensus to collaborate collectively on such market improvement initiatives.
- Improvements in insurance market infrastructure can have substantial economic benefits to the public that outweigh the benefits to any particular insurance company.

Insurance market assessments carried out or collected over the last three years by the IAIS, World Bank and the IMF, have confirmed what financial specialists in donor agencies have known for some time – there exist fundamental and at times startling deficiencies in the insurance market infrastructure of emerging markets. While these assessments have in many cases identified the principal weaknesses, in most cases a shortage of resources has prevented any investment in strengthening the insurance market infrastructure from taking place.

The types of investment in insurance market infrastructure that are most needed are described in this section, along with suggestions on how such investment might best be organized in emerging markets.

IMPROVING INSURANCE REGULATION AND SUPERVISION

The primary foundation of an insurance market is an adequate insurance law. The law must provide a specific definition of insurance and set forth the fundamental insurance market parameters, such as a supervisory authority, licensing criteria, and prohibited practices. Following the development of an appropriate legal framework, an insurance market requires a sound regulatory framework, including efficient and effective supervision. Lacking these preconditions, an insurance industry can be curtailed by arbitrary, opaque, ineffective, and unnecessarily costly regulatory interventions, which can diminish consumer confidence and dissuade potential consumers from buying insurance. In addition, lack of effective supervision can discourage foreign and domestic investors from supplying capital, retard insurance market efficiency, and dampen industry development.

Essential aspects of supervision are protecting policyholders from the possible insolvency of their insurers and ensuring that insurers treat policyholders fairly. Moreover, because of the potential for money laundering, effective supervision is also a concern to the integrity of the global financial system.

To meet the above demands, a supervisory agency requires adequate resources, training, and guidance. The primary source for training and guidance is the International Association of Insurance Supervisors (IAIS). Since 1994, IAIS has worked to establish sound insurance markets and contribute to financial stability around the world. With insurance supervisor members from 118 countries, the IAIS issues global insurance principles, standards, and guidance papers; provides training and support on issues related to insurance supervision; and organizes meetings and seminars for its members. The Financial

Stability Forum has recognized the IAIS as the relevant standard-setting body for insurance supervision and included the IAIS' core principles of insurance supervision among the 12 key standards for financial stability. These core principles serve as the benchmark for the evaluation of insurance supervision in the IMF/World Bank's Financial Sector Assessment Program (FSAP).

Compliance with the IAIS core principles speeds developing countries' integration into the global economy. Establishing an effective supervisory body also drastically reduces the potential for fraud and financial crimes and signals foreign investors that the country intends to meet its responsibilities in the global financial system. To benefit fully, however, countries need various types of help in understanding and implementing the core principles. Countries at earlier stages of development tend to require more assistance with fundamental reserving and financial analysis practices, while those at later stages may need help with risk-based capital and asset-liability risk modeling. At all levels, however, the principles relating to supervisory independence, corporate governance, internal controls, and investment regulation present the greatest challenges. Technical assistance that transfers the expertise and lessons learnt from more mature to emerging insurance markets has been an essential component of insurance market interventions for decades.

Since the mid-1990s, the IAIS, the International Insurance Foundation, the OECD, the Financial Stability Institute, and other organizations have organized regional seminars for insurance supervisors. These seminars are an elementary step towards training and guidance. The IAIS core curriculum modules being developed with substantial assistance from the World Bank will be another good source of training materials, once they are finished and taken up by trainers. These participatory modules can serve as the foundation for other insurance seminars, in house training, or in distance learning.

Donors can support institutional development and capacity building by funding workshops and study tours in the United States. For example, anticipating the opening of its reinsurance market, Brazil's insurance supervisor sent a team of experts to study reinsurance regulation in the United States, a program organized by the U.S. Department of Commerce and the International Insurance Foundation.

An unmet and pressing need for many developing countries is technical assistance to complete the IAIS self-assessment and prepare for the IMF/World Bank Financial Sector Assessment Program (FSAP). Not only is the process new and unfamiliar, the terminology can also be confusing in different contexts. International experts with a wider perspective can facilitate a country's preparation for the FSAP. Following the FSAP, these same emerging markets require technical assistance in the interpretation of the results and implementation of the recommendations.

COLLECTING AND SHARING INSURANCE DATA

The insurance industry relies on information to function. While much of an insurer's added value comes from its superior ability to analyze and price risk, that ability requires having sufficient data to calculate losses and expenses per unit of exposure.²¹ Lacking adequate data, insurance companies tend to manage their balance sheets (amounts of reserves and investment selection) inefficiently, causing inefficiency in the use of capital and raising the cost of insurance.²² Without sufficient data to estimate losses more precisely, insurers either set prices too low and eventually become insolvent or set prices too high and attract few customers. Neither scenario is good for market development. A robust market needs a sound system to collect, organize, and make available detailed data on losses and exposures. The more comprehensive, the better, as an industry-wide system of data collection can help to mitigate fraud, reducing the cost of insurance for all.

Creating a data-sharing mechanism that protects confidentiality and preserves market neutrality is a complex challenge. Large insurers may perceive a competitive advantage from their larger database and

²¹ Up-to-date information about people and properties insured is critical to the insurance business, not only to ensure its efficiency and cost effectiveness but also to help encourage better risk identification and loss mitigation. Useful information includes risk profiles of individuals; risk/hazard profiles of properties, machinery, operations and locations; demographic trends; economic and financial trends; geophysical trends; and documentation of the details regarding losses.

²² Gathering and managing detailed statistical data differs from recording and compiling the aggregate data needed for financial reporting. Although both are essential to sound insurance markets, statistical reporting and financial reporting are different functions requiring different tools. In emerging markets, they are often confused.

may therefore resist pooling loss statistics on an industry-wide basis. Smaller insurers may balk at sharing costs. Consumers may fear anti-competitive motives in concerted industry action. And the possibilities for improved risk classification systems and better understanding of the causes of loss often go unrecognized.

There are, however, turnkey solutions to these problems. The U.S. insurance market relies heavily on services of statistical organizations, the largest of which is the Insurance Services Office (ISO). ISO has experience in advising emerging markets on procedures for data sharing. ISO also has a successful three-way partnership with government and insurers for the collection, aggregation, and analysis of data for risk assessment. The major obstacle to apply this model in developing countries is cost. If a donor provided initial support, however, an industry-wide data collection agency eventually could become self-supporting as the insurance market grows. Another organization that could potentially provide beneficial workshops on how to approach and enhance data collection is the Insurance Data Management Association.

BUILDING ACTUARIAL RESOURCES

Actuaries — specialized statisticians who compute insurance risks, premiums, reserves, and capital requirements — are as important to insurance markets as doctors are to medicine. Many emerging insurance markets have minimal input from actuaries, and they have reduced efficiency, effectiveness and product flexibility to show for it. Often they make do with occasional visits by foreign actuaries or take suggestions from reinsurance company actuaries. Without the technical skill to evaluate risks and adapt products to local conditions, markets cannot innovate. Many emerging insurance markets, moreover, do not have actuaries within the supervisory agency, which weakens the supervisor's ability to monitor reserves, pricing adequacy, and solvency. Some emerging markets have no actuaries at all, which causes inappropriate reserving and non-enforced solvency requirements, further reducing market efficiency.

Training actuaries involves formal education in statistics, finance, economics, and insurance company operations, followed by an apprenticeship that introduces the realities of a particular marketplace (including regulations, product characteristics, data quality, and environmental risks), and then, by training in statistical software and how to apply to insurance company operations.²³

The most cost-effective approach to improving the actuarial capacity combines local university resources with foreign or local-trained actuaries and involves tailoring one of the many existing actuarial training curricula to a local market, to establish a local training curriculum and certification program. Emerging countries have various levels of teaching capacity in the theoretical subjects of actuarial education. Local universities can teach the introductory actuarial courses in statistics, finance, and economics. In addition, some emerging markets have a few practicing resident actuaries and large international insurers with substantial actuarial resources. The International Actuarial Association has already established a model actuarial training curriculum for emerging markets, and other actuarial associations have also made efforts to provide model curricula. Some professional associations utilize online training programs, which can help trainers ensure quality standards, while allowing materials to be adapted to the local environment.

The standards and procedures by which professionals earn actuarial designations and the standards and guidelines actuaries are expected to follow are crucial. National actuarial associations can help establish and promulgate such standards. The International Actuarial Association and its leading member organizations are good sources for such actuarial standards of professional practice.

SUPPORTING PROFESSIONAL INSURANCE EDUCATION

The crucial building block for a robust insurance market is a reliable cadre of insurance professionals, including actuaries, underwriters, agents, claims personnel, policy administration and customer service personnel, managers, and supervisors. Formal training programs are by far the most efficient means to develop knowledge and skills in staff. However, since relatively few countries have formal professional

²³ As much of what actuaries calculate is carried out with software programs, familiarity with the variety and application of such software is also important to the actuarial education.

training programs, on-the-job training dominates. Not only is on-the-job training generally deficient in ensuring accuracy, thoroughness, currency of practice, and uniformity of subject matter; in a new company, there may be no one qualified to provide it. Centralized institutes located in the capital city or at a university often reach only a limited number of employees and suffer from lack of curriculum materials in the local language and suited to the local market.

Technical assistance can help establish insurance educational bodies in countries where they do not exist and strengthen them where they do. Appropriate technical assistance includes both consultations regarding administrative issues and educational needs analysis for the specific insurance market, as well as consultation on the applicability of substantial educational materials developed for other mature markets. The Institute for Global Insurance Education, the world's association of such professional training bodies, is a logical starting point for coordinating professional insurance education. Faculty exchanges and scholarships to study insurance in the United States can also promote professional insurance education in developing countries.

EDUCATING MARKETS AND CONSUMERS ON STANDARDS

Since insurance depends on consumer confidence, enlightened insurers safeguard their reputation. They police the marketplace through self-regulatory organizations. Through policy statements and codes, they shape the expectations of consumers regarding the benefits of insurance, responsible sales practices, the products offered, fair treatment in claims, ways to control losses, and other aspects of insurance transactions. In some markets, insurers also offer a grievance procedure to resolve consumer complaints. Creating a positive image can enhance consumer confidence and expand the market.

Technical assistance can help build consumer confidence by creating mechanisms that encourage transparency and enable the industry to devise marketplace standards on consumer education. Appropriate technical assistance includes facilitating exchanges of information on marketplace standards and codes, establishing a self-regulatory industry organization, supporting peer exchanges with self-regulatory agencies or best practices organizations in the U.S. or other developed markets, and providing models of consumer education web sites. To increase consumer awareness of how insurance works and can benefit them, consumer education campaigns should be undertaken.

ENCOURAGING ETHICAL MARKET DISCIPLINE

The market can play a crucial role in disciplining bad performers, but only if there is adequate information and proper incentives. Countries without developed capital markets and insurance company rating agencies exhibit less market discipline, particularly if most insurers are closely held. Rating agencies enhance transparency and strengthen market discipline. Potential investors, as well as agents and brokers of insurance products, use ratings of insurance companies. These ratings can influence the amount of business placed with an insurer and the amount of capital an insurer can raise. Technical assistance that supports and promotes the development and use of insurance company ratings will strengthen insurance markets.

PROMOTING INSTITUTIONAL DEVELOPMENT AND MARKETING

Like other financial institutions, insurance companies can use a variety of technical assistance and training to strengthen their management and governance, from the development of actuarial databases and information management systems to new product development. Because insurance, in many cases, will not be bought unless substantial efforts are made to educate consumers about its benefits, it is a product whose success depends entirely on how well it is advertised and marketed. American marketing expertise could be especially valuable in helping fledgling companies adopt successful marketing practices, especially in formerly planned economies, such as the former Soviet republics. Marketing technical assistance can help firms to serve new markets, but should be provided to the industry in general to avoid giving an unfair advantage to just one firm.

CONNECTING REGULATORS WITH THE PRIVATE SECTOR

An effective insurance supervisor can transfer a substantial part of the monitoring responsibility to the private sector through codes of corporate governance, standards for actuarial and accounting professions, and the expectations of investors, reinsurers and consumers. To achieve this, the supervisor needs to foster an environment in which all parties play an active role in improving the efficiency of the market. In developing countries, it is common for insurers to perceive supervision as an unwelcome burden, and the supervisor as an opaque entity, creating an adversarial relationship between the private and public sectors that can diminish supervisory effectiveness.

A modest, but effective technical assistance intervention in such an environment could orchestrate peer-to-peer exchanges, exposing regulators and industry leaders to environments where a healthy interaction exists between supervisor and industry.

FACILITATING NEW INSURANCE MARKETS

Private markets can be expected to respond to any demand for insurance that is economically feasible. There are situations, however, in which mutually advantageous risk transfers do not occur in the absence of relevant information and expertise. In these situations, technical assistance can foster new markets by gathering the information and demonstrating its application.

One example is the market for agricultural insurance. Substantial obstacles facing insurers in the form of increased moral hazard,²⁴ inadequate loss data, and monitoring complexities, have made most types of agricultural insurance unsustainable without external subsidization. Nevertheless, some forms of innovative loss coverage, such as coverage based upon weather derivatives or crop yield indices, can be introduced through technical assistance. Box 5.1 provides such an example from Mexico.

Another form of technical assistance for new market development involves insurance products for lower income and rural populations in developing countries. There are many examples in the history of developed markets of how to market to these populations, but these lessons may have not yet reached these markets. Nontraditional insurance distribution agents are an important method to make such insurance cost effective (such as through bank branches or cooperatives).

Annuities provide another example. Annuity markets cannot thrive without an adequate regulatory structure to define the solvency requirements for companies selling these products, the marketing practices, and the guarantees provided to policyholders. Many economies have privatized their pensions systems over the last few decades, causing the level of accumulated pension funds to increase dramatically. This increase is creating a parallel increase in demand for annuities. Other

Box 5.1: An innovative way to manage price risk

In 2001, Agroasemex, the Mexican state-owned agricultural insurance company, transacted the first weather derivative in Mexico with a US-based weather derivative market maker, Aquila Energy. Following the World Bank's extensive development work, Agroasemex and the Aquila Energy developed indices that tracked the performance of the insurance company's portfolio for the autumn and winter of 2001-2 based on 10 weather stations: four for low temperature, five for excess humidity, and one for drought. The crops and regions covered were tobacco in Nayarit (low temperature), tobacco in Nayarit (excess humidity), beans in Sinaloa (low temperature), beans in Sinaloa (excess humidity), maize in Sinaloa and Sonora (low temperature), maize in Sinaloa and Sonora (excess humidity), garbanzo beans in Sinaloa (excess humidity), and sorghum in Tamaulipas (drought). In December 2001, Agroasemex bought a call option to reinsure its portfolio of agricultural insurance policies, which cut its costs in half from what it had paid previously through reinsurance markets, thereby facilitating its ability to offer competitive products to Mexican agriculture.

Source: ITF on Commodity Risk Management (2005). <http://www.itf-commrisk.org/itf.asp?page=54>

²⁴ Moral hazard is "the tendency whereby people expend less effort protecting those goods which are insured against theft or damage," Frank (1991, p.193).

sociodemographic changes interrelated with cultural changes can also increase the demand for retirement products. For example, in emerging markets such as China, where children have traditionally been expected to take care of their elderly parents but are doing so less and less due to labor market mobility and cultural changes, insurance products are being developed to provide retirement benefits in old age. Unfortunately, annuities are not often understood by regulatory staff, which can hinder market development. Technical assistance directed toward explaining the risks and characteristics of these products to regulatory staff and assistance in establishing appropriate regulations and supervisory monitoring would be a good starting point for markets where annuities have not been successfully launched.

VI. INSURANCE TECHNICAL ASSISTANCE STRATEGIES

To estimate the expected benefits from insurance market development and decide how to allocate its limited development funds, the following guidelines can help USAID obtain the greatest developmental impact per dollar of insurance market technical assistance.

BALANCED GROWTH AND THE INSURANCE GAP

Research to date suggests that the benefits of insurance are closely linked to its synergies with other financial institutions and its facilitation of economic activity. The benefits arising from insurance therefore are closely related to how well the supply of insurance can meet the demands created for its services by other financial institutions and the economy. When the supply does not meet the demand for insurance services, as, for example, when the insurance market faces capacity constraints and infrastructural weaknesses, there arises an “insurance gap.” This gap is related to a loss of economic efficiency and productivity. When the insurance gap is greatest, such as when financial institutions and economic activity far outpace insurance supply, the potential economic benefits from an insurance market intervention will also be greatest. An important criterion, therefore, to determine the relative expected benefit from investment in insurance market development is the level of insurance gap existing in a particular country.²⁵ Annex C provides a diagram to help donor agencies determine the imbalance that exists between insurance and financial and economic development.

OPPORTUNE INTERVENTIONS

Once the potential economic impact that the development of insurance markets could have on a country is clear, it is necessary to determine what type of insurance market interventions would be most cost-effective.

The first step is to identify the weaknesses in the insurance market infrastructure. The Financial Sector Assessment Program and IAIS’ directed self-assessments provide policymakers excellent tools for identifying and gauging the weaknesses in the financial sector, in general, and in the insurance market, in particular.²⁶ This information can be supplemented by evaluation of market statistics, consideration of priorities according to the stage of the market, dialogue with the host government, and consideration of regional trends. Annex B provides a sample diagnostic tool for insurance.

The second step is to consider how the country’s current stage of insurance market development will affect the potential benefits of different types of interventions. Recommendations below address the types of interventions appropriate for countries at various stages of development. These categories of states (fragile, stable/transformational, and strategic) are taken from the White Paper and are combined with the stages of insurance market development (dormant, early growth, and sustainable growth.) In general, development resources should be allocated to activities expected to have the most developmental impact, taking into account recipient commitment, priorities and self-help. For countries on the threshold of being eligible for Millennium Challenge Corporation (MCC) funds, support should be focused on those aspects most needed to meet the minimum eligibility criteria as soon as possible.

²⁵ Inasmuch as research points to insurance’s synergies with the financial sector and facilitating roles in investment and risk management, the benefits obtained by insurance market development are going to be directly related to how well insurance services keep pace with the development of other financial services and the economy in general.

²⁶ Although the results of these assessments are often confidential, donor agencies working alongside financial sector authorities in countries can obtain information regarding these evaluations for purposes of selecting appropriate forms of technical assistance.

In most cases, the general development of the insurance market's infrastructure and capacity will be a highly effective development goal. In some cases, assistance directed to a specific type of insurance product may be merited, but the general quality and effectiveness of the insurance market will inevitably be a major determinant of the success of any particular product.

FRAGILE STATES / DORMANT INSURANCE MARKETS

In fragile states, the goal is stabilization, reform, and recovery. Almost by definition, fragile states lack the requisite enabling environment for insurance. Trying to force the development of insurance without the necessary preconditions in place is not a good use of resources. Nevertheless, several forms of insurance market interventions are appropriate in such cases:

- **Establish a sound legislative or regulatory foundation for the insurance market if it has the potential to be resilient to economic or political instability.** This step will help eliminate unsupervised jurisdictions that become havens for money laundering, terrorist financing, and other financial crimes. Relevant technical assistance might involve drafting an insurance law, establishing a supervisory authority, and encouraging the country's membership in the International Association of Insurance Supervisors. The opportunity for an effective intervention will vary greatly depending upon the conditions in each country. Nevertheless, where and when possible, a timely intervention within a fragile state or dormant insurance market may allow for the establishment of a sound legislative or regulatory framework before vested interests develop that could oppose it, helping guide the market in the right direction.
- **Increase risk management awareness and planning at the national, provincial, and local government levels for eventualities, such as natural disasters, as well as for general safety concerns, such as fire or industrial accidents.** The expertise of the insurance industry might be enlisted to support disaster planning and emergency preparedness. The risk management lessons learned will filter down and illustrate pre-loss rather than post-loss financing of risk. Although even governments in the most advanced economies can experience difficulties responding to disasters due to political obstacles, policymakers in developing countries can take an important step forward by becoming familiar with the fundamental aspects of frameworks for disaster mitigation and response. In the United States there exists a public risk managers association (PRIMA), whose members have defined recommended practices for identifying and managing risks facing public entities. There also exist many documented case studies of natural disaster risk planning around the world, at the federal and provincial levels, which could help illustrate lessons about risk management planning. These and other sources can provide useful material for developing an introductory seminar and self-evaluatory workshop for officials at the national, provincial, and local levels in emerging markets. It is important to note that many countries in both fragile and stable/transitional states would benefit from such technical assistance on public sector risk management planning.
- **Encourage the establishment of the preconditions for an insurance market, such as rule of law, property rights, property registries, and monetary stability, and support democracy and governance initiatives to enhance voice and accountability.** Box 6.1 demonstrates the importance of building a sound institutional framework for insurance markets by comparing results achieved in Central and Eastern Europe with those of Southeastern Europe.
- **Design assistance in a way that minimizes conflict.** For example, in planning insurance technical assistance for fragile Islamic countries, the application of Islamic principles should be taken into account. One principle is that the insurer must not profit at the expense of the insured. A second principle is that the insurer must not place its investments in unacceptable enterprises, such as those that support alcohol consumption. Insurance can be and has been organized in conformity with these two principles, as in Takaful in Malaysia and the Saudi Arabian cooperative insurance law

STABLE/TRANSITIONAL STATES / EARLY GROWTH INSURANCE MARKETS

In stable states in transitional development, the goal is to select cost-effective approaches to expanding insurance markets that will yield the greatest positive impact on financial intermediation and economic growth. For countries that have achieved some stability and established the preconditions for an

insurance market, USAID technical assistance can strengthen the insurance market and enable it to respond to economic growth forces in the following ways:

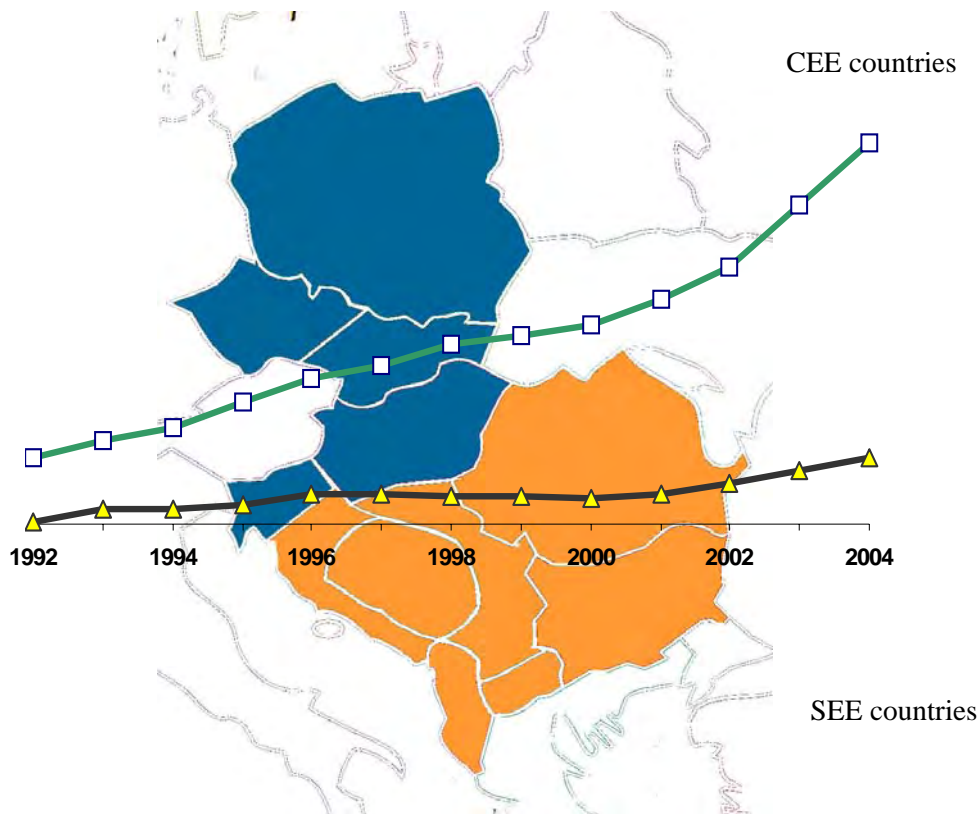
- **Strengthen regulatory and supervisory capacity and resources for oversight.** Particular threats to poor supervision arise in countries where insurance markets have recently reopened and large numbers of companies are quickly entering the market without adequate capital and internal controls.²⁷ Other common weak areas include market conduct (ensuring claims are paid fairly and efficiently), reserving (actuarial analysis), financial analysis, and asset-liability management. Regional training seminars to expose supervisory staff to global standards could be an especially cost-effective form of assistance and could be used to stimulate transnational cooperation among supervisors.
- **Assess weaknesses and opportunities related to data collection, professional education, actuarial capacity, and market conduct.** The competitive nature of the early growth stage typically results in underinvestment by the industry in infrastructure and resources, due to the lack of capital and collaborative market building. USAID can help the industry understand and prioritize its needs and begin to address them in a way that mitigates the potential negative effects of rapid growth.
- **Increase the transparency and efficiency of the insurance industry.** While most countries have in place compulsory third-party automobile liability insurance, in many cases, this insurance does not work well, serving as more of a tax on drivers than actual coverage against accidents. Technical assistance should be directed toward both the private and public sectors, thereby providing techniques and best practices in the management of this coverage. Such assistance should be devised to simultaneously enhance the public's perception of and confidence in insurance.
- **Help insurance companies and supervisors implement global standards.** Helping establish an effective supervisory body drastically reduces the potential for fraud and financial crimes and signals to foreign investors that the country intends to meet its responsibilities in the global financial system. For some countries that have made good progress, weak supervision and the insurance industry's lack of adherence to best practices may constrain further progress. Among Millennium Challenge Account (MCA) Threshold Countries, for example, Guyana, Indonesia, Kenya, Kyrgyz Republic, Malawi, Moldova, Paraguay, São Tomé and Príncipe, and Zambia do not belong to the IAIS, which suggests that they may not be adhering to global standards.
- **Evaluate the potential to develop agricultural insurance schemes, annuity markets and insurance products for low-income populations.** Some countries may have great potential to benefit from the development of specific lines of insurance, given adequate infrastructure and conditions. The private sector has been exploring the introduction of new products in emerging markets in order to more fully meet the insurance demands in these countries. In many cases weaknesses in both public and private sector infrastructure limit the options available. In particular, the success of insurance aimed at agriculture, low-income populations, or retired populations (annuities) rests often on the ability of local players to collect and employ reliable statistics on loss exposures and on client characteristics (such as weather data for crop insurance, and mortality statistics for the marketing of annuities.) Nevertheless, the increasing demand for insurance products in emerging markets combined with growing creativity in approaching the infrastructure weaknesses have allowed old obstacles to be overcome. In the case of agricultural insurance, reinsurers such as Munich and Swiss Re have been looking at technologies that permit weather monitoring to facilitate risk assessments and the creation of weather/crop derivatives. In some countries the successes of micro-finance has prompted insurers, either alone or in conjunction with micro-banking providers, to use proven methods and data collected in the distribution of micro-lending in order to test market insurance products for lower income populations.²⁸

²⁷ Russia and Uzbekistan are examples of countries where large numbers of companies were established within months of the market reopening, and many insurers were inadequately supervised.

²⁸ In Peru, La Positiva, one of the largest insurance companies in the market, has joined forces with MiBanco, a micro-banking provider, to develop and test insurance products for lower-income populations.

Box 6.1: Strengthening Insurance in Emerging Economies

Of the emerging economies of Central and Eastern Europe (CEE), five countries entered the European Union in 2004: Poland, Czech Republic, Slovakia, Hungary, and Slovenia. The countries of Southeastern Europe (SEE): Croatia, Bosnia-Herzegovina, Serbia-Montenegro, Albania, Macedonia, Romania, and Bulgaria, have taken much longer to make the necessary reforms. The European Union requires member states to supervise insurers with solvency margin and consumer protection regimes, as well as imposing many other conditions that foster competition and transparency throughout the economy. In the countries that met the accession criteria, insurance markets expanded dramatically during the period of transition to a free-market economy. Whereas in the economies of Southeastern Europe, insurance markets languished. The chart below compares the growth of insurance premiums written in these two regions. The two lines measure the growth of the insurance markets as the total volume of premiums in U.S. dollars in the regions between 1992 and 2004. The lower line represents the SEE countries; the higher line represents the CEE countries.



Substantial technical assistance contributed to the development of the financial sector of the CEE countries. Compared to the funding for banking and capital market reform, insurance-related projects were quite small, but timely. The Financial Services Volunteer Corps, the Partnership for Financial Stability, the International Insurance Foundation, the Department of Commerce, the OECD, the IAIS, and the European Union provided insurance technical assistance, and the Government of Poland provided regional leadership. These diverse organizations coordinated their efforts, and this work complemented the larger financial sector reform agenda. The host countries were receptive and committed to building insurance market institutions that paralleled other financial sector work.

STABLE/TRANSFORMATIONAL STATES / SUSTAINED GROWTH INSURANCE MARKETS

The technical assistance for these markets follows the same lines as described for early growth markets, with the main difference being the need for higher level training and technical assistance, as these markets are more sophisticated and have advanced capacity. Another difference is that the private sector in these countries will tend to offer more resources for collaboration. Box 6.2 highlights some of the potential public-private sector partnerships that USAID could explore to leverage more resources to insurance market development.

Box 6.2: Public-Private Insurance Partnerships

The U.S. insurance industry draws on a variety of ancillary services: statistical agents, rating agencies, claims adjusting services, property appraisers, software designers, and so on. These private entities provide highly specialized, technical services to insurers that developing countries need, but cannot afford. USAID's Global Development Alliance (GDA) could introduce these ancillary services into the insurance markets of developing countries. Two of the organizations contacted in the preparation of this report, the Insurance Services Office and Standard & Poor's, expressed strong interest in public-private partnerships to establish their services in small or low-income countries. In addition, USAID's Development Credit Authority (DCA) could be used to leverage additional private resources to stimulate credit to markets traditionally underserved by the financial sector, in tandem with insurance products that protect against loss of life or collateral.

STRATEGIC STATES

Technical assistance for strategic states should theoretically be based upon the same issues regarding level of insurance market development and type of state described above, again in line with the country's level of insurance market development. However, given the added strategic interest and additional resources that come with it, the scope of the insurance market intervention may expand.

EFFICIENCIES IN THE DELIVERY OF TECHNICAL ASSISTANCE

A final consideration is potential technical assistance delivery efficiencies. The following suggestions are based on global experience providing technical assistance in a variety of insurance markets.

INCORPORATE INSURANCE INTO FINANCIAL SECTOR ASSESSMENTS.

The evidence demonstrates the interdependencies among insurance, banks, stock markets, and pension funds and the positive impact these can have on financial sector depth and efficiency and economic growth. For this reason and due to the potential cost savings, financial sector assessments should include insurance market assessments and propose technical assistance that could stimulate insurance market development along with general financial sector development. In short, insurance should be an integral part of USAID's Financial Sector Strategy.

EXPLORE POTENTIAL FOR COLLABORATION WITH KEY PRIVATE SECTOR ORGANIZATIONS.

To obtain a high level of participation and commitment from relevant actors in countries, USAID should combine forces with the private sector for many types of technical assistance projects. If the local insurance industry has invested its own funds, it will monitor progress and help ensure that practical, tangible results are achieved. Potential candidates for public-private sector partnerships include the Insurance Services Organization, the Insurance Data Management Association, Standard and Poor's, and the Insurance Marketing Standards Association, among others.

FACILITATE LEARNING FROM SUCCESSFUL PRACTICES OF NEIGHBORING OR SIMILAR STATES.

In Latin America, for example, greater leverage may be obtained by directing technical assistance to strategic states, such as Colombia and Bolivia, by working with and through the private regional insurance industry umbrella association, FIDES (*Federación Interamericana de Empresas de Seguros*), as well as through the regional regulatory association, ASSAL (*Asociación de Supervisores de Seguros de Latinoamérica*). Both these organizations are interested in assisting member countries through bilateral and regional training and resource-sharing efforts.

DEVELOP OFF-THE-SHELF TOOLS TO COST EFFICIENTLY APPLY IN MANY COUNTRIES

These tools could offer guidance on self-assessments, best practices, and potential performance indicators to measure success. Additional tools could be developed for:

- Introducing government level risk management planning.
- Ensuring good performance of mandatory third-party auto liability insurance.
- Introducing and facilitating development of annuity markets.
- Developing agricultural risk management tools and instruments.
- Establishing an actuarial curriculum.
- Designing insurance professional education.
- Improving the quality of data collection and analysis.
- Developing and upgrading portfolio and asset management practices.
- Standardizing insurance laws and reporting requirements for regions, such as former Warsaw Pact and Latin American countries that share similarities in legal frameworks, business practices, and market characteristics.²⁹

²⁹ The standardization of insurance laws and reporting requirements can be a tremendous boost to a region's economic competitiveness, as it will facilitate foreign investment and regional trade. Wisconsin's insurance law, which is widely recognized as an outstanding model, could be considered as a resource for the toolkit.

ANNEX A: CORRELATIONS

TABLE A: SIMULTANEOUS EQUATIONS: INTERRELATIONSHIPS BETWEEN FINANCIAL INTERMEDIARY PENETRATION AND GROWTH OF GDP PER CAPITA

	Dependant Variables				
	<u>GDP</u> ^a Population	<u>GDI</u> Population	<u>Bank Credit</u> GDP	<u>Life Premium</u> GDP	<u>PL Premium</u> GDP
Independent Variables					
<u>GDP</u> Population		231.091 ** ^b (80.754)	0.022 (0.019)	0.004* (0.001)	0.001 (0.001)
Intercept	-0.14 (0.925)	-359.820* (184.321)	0.067 (0.043)	-0.004 (0.003)	0.004 (0.003)
<u>GDP 1980</u> Population 1980	-0.000 (0.000)				
<u>GDI</u> Population	0.000 (0.000)				
<u>Bank Credit</u> GDP	4.239* (2.108)				
<u>Life Premium</u> GDP	56.873** (21.572)				
<u>PL Premium</u> GDP	-63.148 (59.764)				
% Pop 25+ Primary Education 1980	0.023* (0.014)				
<u>Exports</u> GDP	996.439 (3508.906)				
<u>Go's Expenditure</u> GDP	54574.754 (39433.930)				
<u>GDI 1980</u> Population 1980		1.036** (0.034)			
<u>Bank Credit 1980</u> GDP 1980			0.921** (0.091)		
<u>Life Premium 1980</u> GDP 1980				1.302** (0.138)	
<u>PL Premium 1980</u> GDP 1980					0.641** (0.083)
System Weighted R ² = 0.847					
N = 55					

^a GDP/Population is the average growth rate of real GDP per capita over 1980-1996. All other variables are average levels over 1980-1996; or, if indicated, 1980 values. The system weighted R² is reported for the entire set of simultaneous equations.

The results above are from the study by Webb, Grace, and Skipper (2002). The findings of this study support the premise that banks and insurers complement each other in a way that stimulates higher levels of economic growth. The growth prediction holds even after controlling for the role of investment, education, exports and government intrusion in the economy. Moreover, it is the exogenously determined components of banking and life insurance penetration that predict economic growth.

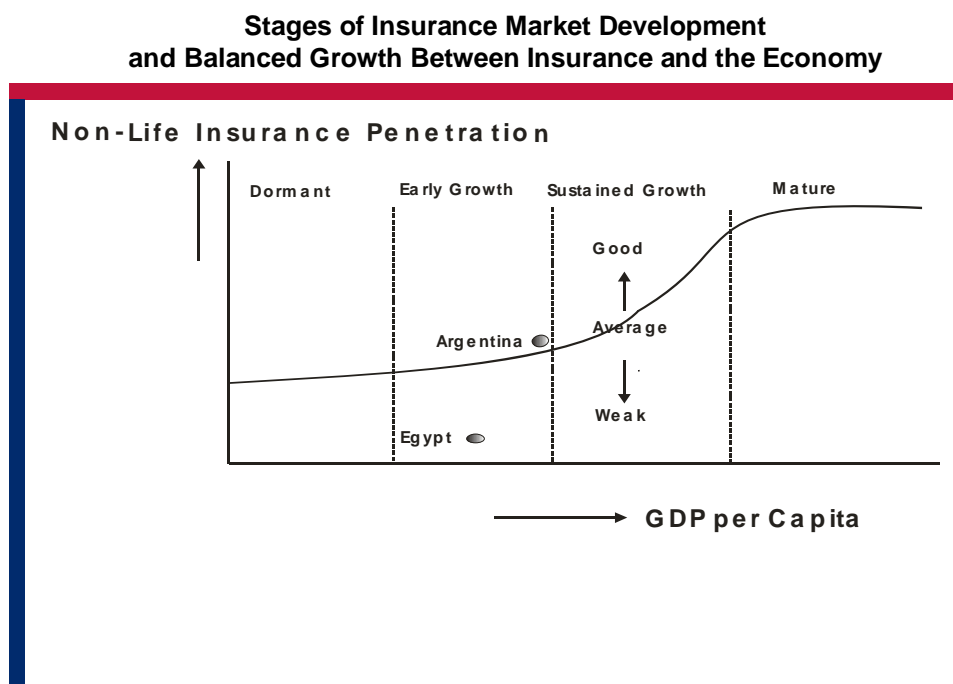
ANNEX B: INSURANCE TECHNICAL ASSISTANCE DIAGNOSTIC³⁰

1. Regulation/Supervision
 - i) Is there an insurance law?
 - ii) Is there an insurance supervisor?
 - iii) Does the supervisor belong to the IAIS?
 - iv) Has the country completed or requested an FSAP?
- 2) Market Restrictions
 - i) Is the insurance market open to competition?
 - ii) Are insurers free to set prices?
 - iii) Is there an efficient product approval process?
 - iv) Are there transparent licensing requirements [minimum capital, qualifications of personnel, business plans]?
 - v) Are any insurers wholly or partially government-owned?
 - vi) Does any single insurer write more than 30% of any one type of insurance?
- 3) Compulsory
 - i) Are any types of insurance [e.g. motor insurance] compulsory?
 - ii) If yes, do prices seem adequate and commensurate with the risk, and claims paid fairly and efficiently?
- 4) Data Collection
 - i) Do insurers have sufficient data to determine adequate prices?
- 5) Accounting Standards
 - i) Are the accounting standards for insurers clear, particularly in regard to the valuation of assets and liabilities [reserves or technical provisions]?
 - ii) Is there a high degree of compliance with these standards?
- 6) Actuarial Capacity
 - i) Is there a professional actuarial body in the country [or the region]?
 - ii) Are members admitted by examination only?
 - iii) Does it have a disciplinary code?
 - iv) Is it recognized by the International Actuarial Association?
- 7) Professional Education
 - i) Is there a professional educational body for the insurance industry?
- 8) Market Conduct
 - i) Is there a self-regulatory or best practices organization for the insurance industry?
 - ii) Is there a code of best practices?
- 9) Consumer Support
 - i) Do consumers have available a clear mechanism for complaint and redress?
- 10) Collaboration of Private and Public Sector
 - i) Is there regular exchange of information between the industry and the supervisor? Is this process formalized and transparent?

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ANNEX C: THE INSURANCE GAP AND DEVELOPMENT STAGES

In the diagram below, the “S-Curve” represents the average level of insurance market development for an international cross-section of developing and developed markets. Countries falling below the curve have a lower than average level of development, essentially an insurance development gap. An insurance market typically experiences an insurance gap (a mismatch between the demand and supply of insurance services) when the insurance market has inadequate infrastructure and capacity to respond to the economy’s demands. When there is a large gap, the potential gains from insurance interventions to the economy and financial sector are greater. The four stages of insurance market development are represented by the areas between the dotted lines. Countries in the early growth stage that receive technical assistance may produce faster and greater economic benefits per dollar of investment than countries in the dormant stage, if they move into the sustained growth stage sooner. During the sustained growth stage, insurance market and economic development tend to accelerate, potentially multiplying the benefits that a strong insurance market can generate, before leveling off in the mature stage. This finding implies that USAID could leverage more results at less cost by targeting substantial technical assistance to: 1) countries that are close to entering the sustained growth stage of insurance market development; and, 2) countries that display a large insurance development gap.



Using data on insurance and economic development, the approximate positions of Egypt and Argentina with respect to the world insurance market S-Curve in 2003 have been plotted on the diagram. The substantial vertical distance between Egypt and the S-Curve suggest that Egypt’s insurance market may be underperforming relative to other countries in meeting the country’s economic and financial needs. If Egypt is in an early growth stage, as the chart suggests, then it is poised to move on to the sustained growth stage, during which insurance consumption will accelerate, leveraging any technical assistance invested in the insurance market.

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