



# The Role of the Underwriter in Insurance

*Lionel Macedo*

PRIMER SERIES ON INSURANCE  
ISSUE 8, SEPTEMBER 2, 2009

NON-BANK FINANCIAL  
INSTITUTIONS GROUP

GLOBAL CAPITAL MARKETS  
DEVELOPMENT DEPARTMENT

FINANCIAL AND PRIVATE SECTOR  
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## THIS ISSUE

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

The Non-Bank Financial Institutions Group in the Global Capital Markets Development Department aims to promote the healthy development of insurance, housing finance, and pension markets, and to expand access to a broad spectrum of financial services among the poor. These markets provide opportunities for household investment and long-term savings, and can buffer the poor against the risks of sickness, loss of breadwinner, catastrophic events, and other misfortunes.

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First printing June 2009

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Cover and publication design: James E. Quigley  
Cover illustration: Imagezoo/Corbis

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# The Role of the Underwriter in Insurance

*Lionel Macedo*

## Introduction

Insurance companies are legal entities that cover the financial impact or part of it that derives from the occurrence of certain unexpected insured events affecting the insured. They offer this benefit in exchange for payment of a predetermined amount of money called premium. By pulling similar risks together insurance companies transform the unpredictability of the occurrence of an event to an individual into expected events affecting any one of the insured participants. Insurance companies do not care whom they pay to but only that they have to pay a claim. The theory that explains this transformation is based on the central limit theorem<sup>1</sup>. This theorem basically states that a large enough number of similar risks behave in the fashion of a Gaussian distribution. A key assumption in the application of the theorem is that the risks need to be similar or behave in a homogeneous manner. Thus insurance companies can only create value by reducing the volatility of the claims if their portfolio consists of homogeneous risks, or at least if there is a sufficiently large number of similar risks and these are treated as one portfolio. In practice companies do accept risks that have different risk profile but the acceptance of those risks is done under different conditions, like charging an extra premium, applying exclusions or waiting periods to restore the necessary risk homogeneity in the portfolio. Underwriters play the

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1. Central limit theorem : conditions under which the sum of a sufficiently large number of independent random variables, each with finite mean and variance, will be approximately normally distributed.

important role in insurance companies of selecting and accepting risks that behave similarly or assessing the necessary acceptance conditions to those risks that differ to maintain the homogeneity of the portfolio. As an example, the motor insurance premium varies according to the risk characteristics of the driver and the car. Thus a driver that according to past experience has twice the probability of having an accident will be requested to pay twice the standard premium. Driving under the influence of alcohol increases the probability of having an accident, hence underwriters will exclude the coverage if the accident happens under this condition. A person undergoing surgery will only be granted life coverage after a waiting period that according to the underwriter is necessary to classify the risk as a normal risk.

The central role of the underwriter thus is to help the insurance company in creating homogeneous portfolios by evaluating the risks and accepting them under conditions that make them behave similarly. In this Primer we will discuss the different actions undertaken by the underwriters to achieve this task.

### **What is an Underwriter?**

An underwriter is a professional that has the ability to understand the risks to which the underwritten object is exposed to. This ability is gained not only through theoretical study but is also the result of years of experience dealing with similar risks and paying claims on those risks.

In principle there are no formal education requirements to become an underwriter and very few universities offer a field of study in underwriting. The majority of the underwriter's duties are learnt on the job training. Therefore underwriters usually begin their career as trainees or assistant underwriters. Insurance companies when hiring junior underwriters will typically look for individuals with a bachelor's degree or a professional designation, related insurance experience and strong computer skills. In the insurance field there are many lines of insurance that an underwriter can work in. Most underwriters will specialize in one of the following fields: life, health, mortgage and property or casualty. Continuing education is necessary for advancement and independent-study programs for underwriters are available. For instance, the Insurance Institute of America (IIA)<sup>2</sup> offers a training program for beginner underwriters. It also offers the designation of Associate in Commercial Underwriting (ACU) for those starting a career in underwriting business insurance policies. People interested in under-

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2. <http://www.aicpcu.org/>

writing personal insurance policies may earn the Associate in Personal Insurance (API) designation. To earn either the ACU or API designation, underwriters complete a series of courses and examinations that generally last 1 to 2 years. The American Institute for Chartered Property Casualty Underwriters awards the Chartered Property and Casualty Underwriter (CPCU) designation to experienced underwriters. Earning the CPCU designation requires passing 8 exams, having at least 3 years of insurance experience, and abiding by the Institute's and CPCU Society's code of professional ethics.

The American College<sup>3</sup> offers the equivalent Chartered Life Underwriter (CLU) designation and the Registered Health Underwriter (RHU) designation for life and health insurance professionals.

Underwriters who complete courses of study may advance to senior underwriter or underwriting manager positions. Some underwriting managers are promoted to senior managerial jobs. Usually employers require a master's degree to achieve this level. Life and health underwriters have the option to take their career to another level by completing the designation Fellow of the Academy of Life Underwriting (FALU) offered by The Academy of Life Underwriting (ALU)<sup>4</sup>. The Academy of Life Underwriting is made up of the Education Committee of the ALU (ECALU) and "On the Risk," a quarterly published reputable technical journal for underwriters. ECALU produces a series of four exams covering all the aspects of life underwriting i.e. medical, aviation, avocation etc that leads to the professional designation. Another further designation that underwriters usually obtain in the United States is the Fellow Life Management Institute (FLMI) a certification offered by the Life Office Management Association (LOMA)<sup>5</sup>, an international association founded in 1924 committed to a business partnership with its worldwide members in the insurance and financial services industry to improve management and operations through quality employee development, research, information sharing, and related products and services. Among LOMA's activities is the sponsorship of several self-study educational programs leading to professional designations.

### **Main tasks and challenges of the underwriter**

Insurance companies hire underwriters to be able to put the business in their book corresponding to the risk profile priced for by the actu-

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3. <http://www.cluinstitute.ca/>

4. <http://www.alu-web.com/Login/Default.aspx>

5. <http://www.loma.org/>

aries. The job of the underwriter is to protect the insurance company from acquiring non profitable business. But this cannot mean that every risk should be declined and the decision has to be balanced with the necessity of accepting well understood risk to grow the business. This balancing act requires often a lot of creativity from the underwriter. Underwriting is considered to be an art and not a science. Experienced underwriters develop a sense for each application that allows them to determine when the risk should be accepted and when declined. It is the job of the underwriter to protect the company and at the same time to give the agent an equitable policy which can be sold. In some lines of business underwriters are also responsible to provide best advice with respect to risk protection and are closely involved when designing insurance programs for the individuals and companies looking for protection.

Insurance companies have identified several factors that can increase or decrease the likelihood of a claim on a policy. There are two important considerations, the physical risk and the moral risk. The physical risk is related to the physical characteristics of the insured object that may increase the possibility of a claim. For instance in motor insurance the age of car is an important variable to determine the possibility of the theft. Similarly in property insurance the construction code of a building will determine the possible damage under an earthquake. In Life insurance, an individual with a history of cancer possess a physical risk that increases the individual's probability of dying sooner than an individual of the same age and sex who does not present the same medical history. On the other hand, the moral risk is related to the applicant's reputation, financial position or criminal record. When underwriters evaluate applications for insurance they follow a very thorough thought process to identify the moral and the physical risk. The next section describes how this sense is applied in the different parts of the business.

Most type of insurance is voluntary which means that individuals decide if they buy insurance or not. Individuals will only look for insurance if they perceive that there is a possibility to suffer a loss. This desire to acquire insurance is stronger as the perception of a possible loss grows. This explains the observed tendency to receive insurance applications of risks that have a higher tendency to suffer a loss than the average of similar risks. This fact is called anti-selection. Experienced Underwriters have developed a sense to assess the anti-selection effect in the process of assessing the risk.

Another important aspect that underwriters have to deal with while assessing an application is the asymmetric knowledge of the risk. Individuals will always know more than anyone else about the perils to which their own goods, businesses or health are exposed to. This

insider knowledge could be misused in the form of misrepresentation or non disclosure of important facts about the object to be insured thus not allowing the underwriter to properly assess the full extent of the risk. Experienced underwriters will always look for hints that will point out to non full disclosure of the risk. As an example an individual answers 'no' to the consumption of alcohol question in a life insurance application, but confirms that he was cited for driving while impaired.

Insurance relies on good faith. It is economically not viable to verify every aspect of the insurance application. While most individuals act on good faith, there are always those that will try to take advantage of this situation. Misrepresentation, non disclosure, claims simulation or self inflicted losses count to the list of fraudulent acts that insurance is confronted with on a regular basis. Underwriters acting like detectives are looking for clues that will indicate possible fraud to protect the insurance companies and the honest policyholders from those that misuse insurance.

Underwriters analyze information on insurance applications to determine whether a risk is acceptable and will probably not result in an early claim to the insurance company. To be able to properly assess the risk insurance companies have developed underwriting guidelines to which all underwriters must abide. For example in a life application, depending on the applicant's age and the sum assured certain requirements are necessary: An individual age 30 applying for US\$500,000 sum assured in the United States would in general need to provide the following: the application form, a para-medical exam, a blood profile to include the following tests Glucose, Cholesterol, SGPT,GGTP, SGOT, triglycerides, creatinine, cholesterol/HDL ratio, HDL, LDL, urinalysis, HIV and drug screens. To properly interpret the information and results it is imperative for the life underwriter to have basic knowledge in the medical field. The underwriter needs to understand the significance of abnormal test results and how these abnormalities translate to adverse mortality or morbidity.

New scientific developments present permanently significant challenges to the underwriting of risk. Insurance companies have to be knowledgeable about the new methods of detecting risk to maintain their competitive advantage and also to avoid anti-selected by the insured. Consider as an example the challenges that genetic testing has posed for life and health insurance underwriting. It is a known fact that many diseases have a genetic basis that can be detected with simple tests. Certain diseases are determined by one's genes and that a positive genetic test means 'doom and gloom' for the person who has tested positive. We must be cautious though as it is not entirely true that carrying a genetic mutation for a given disease is a guarantee that

the disease will eventually occur. Most genetic mutations generally only increase the probability of developing the disease, and therefore the possibility of prevention and treatment once the carrier is aware of the mutation is very good. In many countries there was concern that insurance companies could consider using such information to deny coverage, or make insurance more expensive for those individuals that present a positive genetic result. This concern resulted in regulating the access to such information for insurance companies. It is illegal in most countries for health insurers to discriminate against potential customers on the basis of a positive genetic test.

Underwriters are not alone in the risk assessment process. All insurance companies have on staff professionals in the different relevant fields, like engineers and architects in the commercial insurance business or medical doctors in case of personal lines insurance to assist in the interpretation of the information obtained through the application, third party reports, the internet and physical on site inspection. In addition to the specialist's support companies have a risk assessment manual. The manual is a comprehensive source of information and reference for the underwriters, which, combined with the skills and judgment of the underwriters and specialists provides for a sound decision making process. Underwriters work closely with the specialists in determining the most appropriate risk assessment. However, in most insurance companies the underwriter has the final decision and responsibility on the assessment of the case.

Insurance companies usually have underwriters on staff to carry out the underwriting tasks. However there are also different business models that outsource the underwriting activity to third party entities. These are organizations where a number of underwriters offer their services to several insurance companies and underwrite cases on a fee per case basis. This is common in the United States where outsourcing can create a competitive advantage.

As we discussed above, the main task of an underwriter is to help the insurance company to build a portfolio of homogeneous risks. While the assessment of risks is a delicate and complex matter, the interaction with the rest of the organization adds yet another degree of difficulty. Agents and the commercial area will be opposed to accept any restrictions requested by the underwriter to the acceptance of the policy which would make the sale more difficult. Explaining the reasons for such additional conditions for the acceptance might not always be straightforward. The reasoning will usually contain both analytic and subjective elements. As we mentioned before underwriting is an art and as such there is an important space for a subjective assessment of the risk by the underwriter. It is this space that will contract or

expand depending on the pressure exerted by the commercial area, the character of the underwriter and the risk preference of senior management. Underwriters are permanently confronted with the request to grant an exception to the commercial area. While granting only one exception might not jeopardize the quality of the portfolio, the problem lays in the amount of the exceptions made. Experienced underwriters manage the pressure to allow for excessive exceptions by offering to the sales people a fix number of exceptions per year if appropriately priced for. It is interesting to note here that in most cases this granted number of exceptions will ultimately not be requested. Sales people are always expecting to find the really worthier case for the use of their now limited number of exceptions.

### The role of the underwriter in an insurance company

To better understand the different roles that underwriters can play in an insurance company, let us consider the relevant parts of the value generating chain of the insurance business where the participation of the underwriter is necessary.

**Figure 1. Value Generating Chain of the Insurance Business**



### *Insurance application*

It is in this part of the insurance process that the insurance company is presented with a proposal or insurance application. The application form will contain the relevant information of the risk that allows the insurance company to assess the risk, price it and ultimately accept or reject it. The underwriter plays an important role in determining the content of the application form. The underwriter will make sure that enough but not excessive information is requested in this form that will allow for a proper assessment of the risk. Underwriters have also developed questions which addresses the moral risk. For example questions pertaining to felony charges, bankruptcy, driving criticisms and the use of alcohol and drugs are used to assess possible moral risk. These types of questions have to be in compliance with insurance regulation and relevant consumer protection requirements.

The application form becomes an important part of the documentation of the policy if the proposal is accepted. This document is of particular importance in the case of a claim or any type of dispute that may arise. The application form needs to comply with the legal requirements with respect to discrimination, confidentiality and relevant consumer protection laws. The application form is a standard document in any legal dispute and as such it should always be legally sound. Of equal importance is to avoid writing derogatory comments on the application form, as this could be considered prejudice against the proposed insured. As an example due to findings in the documents the underwriter puts the comment on the application form that the individual is 'gay' thus creating an unnecessary legal hassle for the company.

Insurance is sold through different sales channels. Insurance can be sold by an agent, a broker, enterprises, the government or by mass distribution channels like banks. Depending on the sales channel a different application form will be needed. For instance for sales done using the mass distribution channel it is conceivable to use a simplified application form, where only 2 to three questions are asked. The products sold through a mass distribution channel, have very little underwriting and the 'underwriting' is done on an accept/reject basis. An example of a complete application form for individual and group life policies can be found in appendix 1.

### *Risk assessment*

When an application is received by the insurance company the administration department will set up the application on the company's

underwriting system. This system can be web base, electronic or in some cases paper. At this point the underwriter will have the task to assess the risk and classify it according to its likelihood of a loss. He will proof if the risk should be accepted and if so how the policy should be issued. Insurance companies cannot assume that every proposed insured object will represent an average likelihood of loss. For instance, motor insurance has different tariffs depending on the type of car, experience of the driver, location of the risk, usage of the car, etc, reflecting the different likelihood of suffering a claim. The process of identifying and classifying the degree of risk represented by a proposed insured object is an important aspect of underwriting or risk selection.

To assess the risk the underwriter uses relevant information contained in the application form to screen the object to be insured from possible risks. For instance the location of a building in a non earthquake prone area will exclude the earthquake exposure. A certain construction code will allows the exclusion of the perils created by winds below certain strength. The underwriter will also use data bases to check on the risk exposure, possible past claims, or declined applications in the past.

As an example let us consider in detail the different steps that a life underwriter in the United States will undertake during the process of assessing the risk. When an application is received by the insurance company the administration clerk will set up the application on the company's underwriting system. At this point the clerk would index the proposed insured to determine if the insurance company has prior insurance in force on that life and whether an application was submitted for insurance in the past. In addition the clerk will run an MIB check (Medical information Bureau)<sup>6</sup>. The MIB organization has been in existence since 1902. It is owned by its member insurance companies. It operates the MIB consumer data base for the sole benefit of the MIB member companies, providing free annual disclosure to consumers regarding their MIB files. When an individual applies for insurance and it is determined that there is adverse personal information, the insurance company reports this information to the MIB. This entity will then code this information into the MIB data base so that when any company runs an MIB check it will pick up the coded information and be able to use it in the risk assessment process.

After reviewing the MIB check, underwriters will turn their attention to the answers of the questions on the application. As a next step and because insurance companies have a duty to exercise reasonable care in determining whether insurable interest exists and whether the

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6. <http://www.mib.com/>

consent of the insured has been obtained to avoid legal implications, underwriters look at the beneficiary's insurable interest. The presence of insurable interest must be established for every life insurance policy to make sure that the insurance contract is not challenged to be an illegal wagering agreement. If an insurable interest is not found at the time of underwriting the policy will not be issued. To determine insurable interest the following rule of thumb is followed 'Insurable interest exists when the proposed insured is likely to benefit if the insured continues to live and is likely to suffer some loss or detriment if the insured dies'. Underwriters screen every application for life insurance and make sure that the insurable interest requirement imposed by law in the applicable jurisdiction will be met when the policy is issued. Stated differently the underwriter must determine whether the beneficiary of the life insurance policy has an insurable interest in the proceeds of the insurance policy. A person is always deemed to have an unlimited insurable interest in one's life and health. Therefore the beneficiaries of the policies do not need to prove an insurable interest as long as they are deemed to be concerned with the insured life. Courts and state laws have established guidelines for those persons and entities deemed to have insurable interest in the proposed insured life. They fall into three categories, relations by blood or marriage, business relationship, and creditors.

#### Blood or Marriage:

People generally have an insurable interest in the lives of their spouses and dependents. Based on this relationship, the general rule of thumb is:

<u>Insurable Interest</u>	<u>No Insurable Interest</u>
Husbands and wives	Other relatives by marriage
Parents and children	Nieces and nephews
(including adopted children)	Cousins
Grandparents and grandchildren	Uncles and aunts
Brothers and sisters	Stepchildren and stepparents
Engaged couples (some states)	

#### Business Relationship:

One who receives economic benefit from the continued life and good health of another has an insurable interest in that person's life. For example, employers can take out key person life insurance on key employees, corporations can take out insurance on the lives of their officers, and business partners can take out life insurance on each other. Thus an insurable interest may be created in an otherwise non-insurable interest relationship by the existence of a financial dependency or a business relationship between the parties. For example, an uncle may be deemed to have an insurable interest in a nephew because the uncle's

business is run by the nephew and the business, as run by the nephew, is making money for the uncle.

Creditors:

Creditors are allowed to take out life insurance on the lives of their debtors, with the debtors' consent, up to the limit on the debt. Mortgage and credit insurance are examples of this type of insurance.

The underwriter then reviews the non medical aspects of the application to assess the moral and physical risks:

- The purpose of the insurance is to protect and not create value. Thus the underwriter will look in the application form for a valid insurance purpose like estate planning, business or family protection, etc.
- The occupation of the applicant is relevant because some occupations are hazardous and increase the risk of death, disability or accident death.
- The income of the applicant is also important to determine if the amount of insurance applied for is justified.
- The use of tobacco or smoking is another important factor affecting mortality and morbidity as is the excessive use of alcohol.
- In addition the avocation/aviation and foreign travel are also important factors in the risk assessment process as these could also have an impact on mortality and morbidity.

As a final step the underwriter will analyze the medical exam or para- medical exam, blood profile, and electrocardiogram and in some cases the attending physician statements if applicable. Reviewing the medical information is also critical as the underwriter has to determine that there is no adverse medical history that could result in a poor mortality or morbidity risk. During this step the underwriter's knowledge of medicine is valuable to interpret and understand the information received from the attending physician or specialist like pathology reports, tests results from MRI's, CT scans, to mentioned a few.

We have included in appendix 2 the underwriting of HIV in life and health insurance that illustrates the thought process that underwriters go through when assessing these complex cases.

### *Insurance acceptance*

Here the underwriter will determine under which conditions the risk should be accepted. Upon the completion of identifying the risks, the

underwriter will classify the insured object into the appropriate risk class. Classifying risk into classes allows the insurance company to determine the appropriate premium rate that should be charged. Not having such differentiation of the risk classes would result in some insured policies being charged too much premium while others will be cross subsidized as they would be charged less than the actual cost for insurance. In a competitive market this cross subsidy will create a serious competitive disadvantage for the insurance company.

Underwriters follow general rules for the risk classification. These rules are referred to as underwriting guidelines or selection tables. Every insurance company develops its own guidelines. It is standard for insurance companies to have guidelines or selection tables that identify various classes according to the likelihood of a claim. Further, if a risk does not meet any of the classes mentioned then the risk is declined.

Typical guidelines or selection tables for personal lines are the following:

**Standard Class:** Describes the risk profile of the cases that actuaries use to price for the bulk of the expected business. The majority of cases an underwriter reviews will fall into this class.

**Substandard class:** There are medical conditions that do not lend themselves to the use of exclusions, for example hypertension, or diabetes. For such conditions an extra premium will be added to the standard premium to cover the higher risk.

**Preferred class:** Individuals will fall into this class if they present a significant less likelihood of claim than the standard class. The premium rates are lower in this class than for the standard class.

**Benefit modification:** There are cases where the risk factors make it necessary to adjust the policy. This adjusted policy will allow the agent to make an offer to the insured instead of simply declining coverage. For example the offer may indicate a reduction of the benefit beginning at age 60.

**Limited condition:** This is a type of exclusion rider which provides some type of coverage for a specific condition without altering the other benefits that were applied for. The underwriter may consider extending the coverage to a condition on a limited basis rather than completely excluding it. For example an individual might get 50% of the death benefit of the full policy if the death occurs as a result of an accident while practicing paragliding, an activity excluded from the original policy.

**Decline:** This class consists of those risks that are considered too high to the insurer to offer any type of coverage. A person with severe coronary artery diseases and a diabetic will probably be declined.

### *Risk management*

The board of directors, regulators and reinsurers are demanding greater accountability for the insurance business. As a result it has become important for life insurance companies to manage their risk portfolio better. For proper risk management companies assign to their risk management unit a select group of industry experts that as a group will understand all aspects of risk that can affect the company financial stability. Underwriters play an important role in the risk management of the company. The underwriting risk is an important element that every risk management unit carefully has to assess and monitor. Underwriters get involved in claim experience studies, design of risk acceptance requirements, development of underwriting audits for their clients, creation and maintenance of underwriting guidelines and manuals, risk retention management, reinsurance and retrocession management, granting and removing underwriting authority to the different underwriting departments and individuals.

### *Treaty work*

Underwriters are normally not involved in treaty work in an insurance company. However underwriters who work for a reinsurance company<sup>7</sup> would find their day to day underwriting role expanded to include treaty work. Reinsurance is a financial transaction by which risk is transferred from an insurance company to a reinsurance company. A reinsurance treaty will specify all the details and conditions under which the reinsurance company will accept the transferred risk. An important aspect pertaining to these conditions corresponds to the underwriting terms. When the risks to be reinsured are of considerable size or complexity, the reinsurance underwriters get involved in the direct underwriting of those risks. For the bulk of the reinsurance business though, the reinsurer will grant an automatic capacity to the insurance company. The automatic capacity is the dollar amount of exposure that the reinsurance company is willing to offer the insurance company under which the reinsurer will follow the insurance company risk acceptance decisions. Under these conditions if the case meets all specifications as agreed upon, the automatic capacity allows the insurance company to automatically bind the reinsurer on the risk without providing the underwriting documents on the case and without requesting the reinsurer's approval. Underwriters working for

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7 See Primer on Reinsurance of this series for a definition of a reinsurance company

a reinsurance company are involved in approving terms and conditions to which the insurance company must abide on all risks reinsured.

### *Claims*

By and large underwriters are not involved in claims adjudication. This is to avoid a conflict of interests. Underwriters will rather see their underwritten claims free from losses and hence there is a tendency to become particularly critical in accepting the claims. Claims adjudicators should have a basic understanding of risk assessment since when processing claims they not only review the claim documents but in addition the original underwriting documents. They are to provide a full and fair assessment of the claim, by reviewing the claim file, contractual language and any applicable state or federal regulation that are deemed appropriate. When processing and paying a claim, the claim adjudicator will determine if the policy is in force and current with the premium payments. The adjudicator will also verify if the insured object corresponds to the policy, verify that the loss is insured and that it has occurred. Determine who is entitled to the proceeds and calculate the amount of benefit that is payable.

### *Product Development*

Product development is the heart of all insurance activity and therefore the involvement of underwriters in this process is important. Underwriters work closely with the actuary to determine the risk profile of each risk type that the insurance company is willing to accept. The risk profile will be determined by following precise underwriting rules, using a specific application form and applying the pertinent exclusions. Equipped with the risk profile for the products, the actuaries can then price them.

### *Audits*

Throughout this section we have seen the relevance in the insurance business of proper underwriting. Underwriting has a direct impact on the performance of the portfolio of any insurance company. Actuaries when pricing a specific product or coverage they are assuming a certain risk profile determined by the underwriting guidelines provided by the underwriter. Exceptions to these guidelines or weak underwriting

will result in an inadequately priced portfolio. Knowing the quality of the underwriting clearly affects the claim cost of the portfolio. Underwriting audits are therefore the norm for insurance, reinsurance and retrocession companies. The underwriter auditor gains a better understanding of the underwriting department, the proper use of the guidelines, the acceptance criteria and practices, any informal exception procedures, the market targeted, the underwriting system used and the philosophy on particular perils.

### **Principles for the underwriting profession**

The relevance of the underwriting profession can be captured by reading the guiding principles for the underwriter profession as developed by the organizations CIU (Canadian Insurance Underwriters), The Academy of Life Underwriting and the AHOU (Association of Home Office Underwriters). These principles are presented, not to set specific standards for others to measure individual performance, but for the self-guidance of all those who are striving to understand and meet the responsibilities of an underwriter.

*It is the responsibility of each underwriter to:*

- *Act promptly, while exercising sound, objective and consistent judgment, in making underwriting decisions.*
- *Follow established risk classification principles that differentiate fairly on the basis of sound actuarial principles and/or reasonable anticipated mortality or morbidity experience.*
- *Treat all underwriting information with the utmost confidentiality, and use it only for the express purpose of evaluating and classifying the risk.*
- *Comply with the letter and spirit of all insurance legislation and regulations, particularly as they apply to risk classification, privacy and disclosure.*
- *Avoid underwriting action which is in conflict with the obligation to act independently and without bias.*
- *Act responsibly as an employee with scrupulous attention to the mutual trust required in an employer-employee relationship.*
- *Provide information and support to sales personnel to help them to fulfill their field underwriting responsibilities in selecting risks and submitting underwriting information.*
- *Strive to attain Fellowship in the Academy of Life Underwriting, maintain a high level of professional competency through continued education, and help promote the further education of all underwriters.*

- *Maintain the dignity and sound reputation of the Underwriting Profession.*
- Increase the public's understanding of the underwriting by providing information about risk classification.

## Appendix 1



## Application For Group Life Insurance

Aetna Life Insurance Company

United Nations

(Please read Eligibility Requirements on reverse side before completing this form.)

### Applicant Information *(Print all information clearly.)*

Name (LAST, First)				
Home Address			Payroll Index Number	Sex <input type="checkbox"/> M <input type="checkbox"/> F
			Birthdate (Day/Month/Year)	
Organization	Duty Station	Room Number	Office Telephone Number	Office E-mail
Original Date of Entry on Duty		Current Contractual Status: <i>(Proof must be provided with completed form)</i>		
		<input type="checkbox"/> Permanent <input type="checkbox"/> Probationary    From: _____ To: _____ <input type="checkbox"/> Fixed-Term    From: _____ To: _____		

### Beneficiary Designation Information

Full Name of Beneficiary	Relationship	Address	%*
<b>Total</b>			<b>100%</b>

\*Where no percentages are specified, benefit proceeds will be divided equally among the beneficiaries, if more than one is designated.

### Authorization

<p>I request the Organization to enroll me in the United Nations Group Life Insurance Company plan, underwritten by Aetna Life Insurance Company, for which I am, or may become, eligible and authorize the Organization to deduct from my earnings the required premiums.</p>	
<p>_____ Applicant's Signature</p>	<p>_____ Date Signed (Day/Month/Year)</p>

Date Insurance Terminated:	Pensionable Remuneration for the Last Full Month of Service (Base Currency):
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Comments
----------

**Eligibility Requirements**

1. All staff members who receive a letter of appointment of six months or more will be eligible to participate in the plan.
2. Enrollment in the plan is automatic for eligible staff who apply for life insurance coverage under the plan, on the appropriate form, within 60 days of signing the qualifying letter of appointment. They will be covered from the effective date of the letter of appointment.
3. Enrollment in the plan for eligible staff who apply more than 60 days after signing the qualifying letter of appointment, is conditional on the provision by the staff member at the time of application, on a special form for that purpose, of evidence of insurability satisfactory to the insurance company.
4. The insurance company, which reserves the right to reject any application by a staff member who applied after 60 days, may require the applicant to undergo a medical examination at the applicant's own expense. Such staff members, whose applications are accepted, will be covered from the date on which the insurance company gives its written consent.

# Part I of Application for Life Insurance to United of Omaha Life Insurance Company

## A. General Questions

- 1 Proposed Insured's Name: \_\_\_\_\_ Former Name (if applicable): \_\_\_\_\_
- 2 Home Phone Number: ( ) \_\_\_\_\_ Best Time to Call: \_\_\_\_\_ a.m. \_\_\_\_\_ p.m.
- 3 Legal Residence Address: \_\_\_\_\_  
Street No., Apt. No. City, State ZIP
- 4 Mailing Address: \_\_\_\_\_  
Street No., Apt. No. City, State ZIP
- 5 Mail Premium Notices to:  Residence  Owner  Business  
 Address: \_\_\_\_\_  
Street No., Apt. No. City, State ZIP
- 6 Sex:  M  F Age: \_\_\_\_\_ Birth Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Birthplace (state): \_\_\_\_\_
- 7 Social Security Number: \_\_\_\_\_ Driver's License Number: \_\_\_\_\_ State of Issue: \_\_\_\_\_
- 8 Are you a U.S. citizen?  Yes  No If "No," date of arrival in U.S. \_\_\_\_\_  
 Do you have an alien registration receipt "Permanent Visa"?  Yes  No If "Yes," Permanent Visa No.: \_\_\_\_\_
- 9 Occupation: \_\_\_\_\_ Duties: \_\_\_\_\_  
 Businessowner?  Yes  No Retired Military?  Yes  No Active Duty?  Yes  No  
 If "Yes," are you on flying status or receiving hazardous duty pay?  Yes  No  
 If "Yes," explain type of duty or type of aircraft: \_\_\_\_\_
- 10 Name of your firm or employer: \_\_\_\_\_
- 11 Business Phone Number: ( ) \_\_\_\_\_ Best Time to Call: \_\_\_\_\_ a.m. \_\_\_\_\_ p.m.
- 12 Local Business Address: \_\_\_\_\_  
Street No., Apt. No. City, State ZIP
- 13 Do you use tobacco in any form?  Yes. What form? \_\_\_\_\_ No. per day: \_\_\_\_\_  
 No.  Never Used.  Stopped on \_\_\_\_/\_\_\_\_/\_\_\_\_
- 14 Applicant/Owner Name (if different from Proposed Insured or if Proposed Insured is under Age 15):  
 Address: \_\_\_\_\_  
Street No., Apt. No. City, State ZIP  
 Relationship to Proposed Insured: \_\_\_\_\_ Social Security No. (or Taxpayer ID No.): \_\_\_\_\_
- 15 Complete only if Spouse/Children (must be full time student if over age 19) are Proposed for Insurance:
- | First Name, Middle<br>Initial and Last Name | SSN No. | Relationship to<br>Proposed Insured | Birth<br>Date | Age | Sex | Ht. | Wt. |
|---|---------|-------------------------------------|---------------|-----|-----|-----|-----|
|   |         |                                     |               |     |     |     |     |
|   |         |                                     |               |     |     |     |     |
|   |         |                                     |               |     |     |     |     |
|   |         |                                     |               |     |     |     |     |
|   |         |                                     |               |     |     |     |     |
- 16 Spouse's Occupation: \_\_\_\_\_ Birthplace (state): \_\_\_\_\_  
 Income: \$ \_\_\_\_\_ If self-employed, income after expenses and before taxes: \$ \_\_\_\_\_  
 Driver's License Number: \_\_\_\_\_ State of Issue: \_\_\_\_\_
- 17 Is spouse a U.S. citizen?  Yes  No If "No," date of arrival in the U.S. \_\_\_\_\_  
 Does spouse have an alien registration receipt "Permanent Visa"?  Yes  No  
 If "Yes," Permanent Visa Number: \_\_\_\_\_
- 18 Does spouse use tobacco in any form?  Yes. What form? \_\_\_\_\_ No. per day: \_\_\_\_\_  
 No.  Never Used.  Stopped on \_\_\_\_/\_\_\_\_/\_\_\_\_

- 19 Do all family members proposed for insurance live with the Proposed Insured?  Yes  No If "No," explain and give name and phone number where family member can be contacted \_\_\_\_\_

## 20 Plan Information

a. Plan of Insurance: \_\_\_\_\_  
Amount: \_\_\_\_\_

b.  Addition to Existing Policy No.: \_\_\_\_\_  
Amount: \_\_\_\_\_

c. Death Benefit Option:  
 Option 1: Accumulation Value included in Specified Amount  
 Option 2: Accumulation Value in addition to Specified Amount

d. I elect the Automatic Premium Deduction Option.  
(Not available with all plans)  Yes  No

e. Riders: \_\_\_\_\_ Amount or No. of Units (if applicable)  
(Please Note: Not all riders are available with all plans)

- Waiver of Premium or Disability \_\_\_\_\_ \$ \_\_\_\_\_  
 Accidental Death Benefit \_\_\_\_\_ \$ \_\_\_\_\_  
 Guaranteed Issue Benefit \_\_\_\_\_ \$ \_\_\_\_\_  
 Children's Rider \_\_\_\_\_ \$ \_\_\_\_\_  
 Spouse (Indicate type of coverage) \_\_\_\_\_ \$ \_\_\_\_\_  
 Additional Insured Rider (Self, Spouse) \_\_\_\_\_ \$ \_\_\_\_\_  
 Other Insured Rider \_\_\_\_\_ \$ \_\_\_\_\_  
 Other \_\_\_\_\_ \$ \_\_\_\_\_

Premium

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

THIS BOX FOR ADMINISTRATIVE PURPOSES ONLY

f. Amount Collected (Cash with App):	Explanation of Amount Collected	Mode	Total Premium
\$ _____			\$ _____

- 21 List all Life Insurance now in force or pending on any Proposed Insured(s). If none, write "None." Have you had or do you intend to have any life insurance policy replaced, converted, reduced, reissued, subjected to borrowing, or otherwise discontinued because of this application? If "Yes," so indicate below.

Company	Policy Number	Face Amount	Pending	ADB Amount	To Be Replaced, etc.	1035 Exchange?
_____	_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

## 22 Life Insurance Beneficiary (Give full names and relationship).

**Note:** Unless you specify otherwise, payments will be shared equally by all primary beneficiaries who survive the Insured or, if none, by all contingent beneficiaries who survive the Insured. The right to change the beneficiary is reserved unless otherwise stated.

See Attached Beneficiary Designation

## Primary Beneficiary(ies)

Name \_\_\_\_\_ Relationship \_\_\_\_\_ SSN No. \_\_\_\_\_

Name \_\_\_\_\_ Relationship \_\_\_\_\_ SSN No. \_\_\_\_\_

## Contingent Beneficiary(ies):

Name \_\_\_\_\_ Relationship \_\_\_\_\_ SSN No. \_\_\_\_\_

Name \_\_\_\_\_ Relationship \_\_\_\_\_ SSN No. \_\_\_\_\_

## 23 Complete only for PRD or Association Group or Franchise Coverage:

Full Name of Group/Organization \_\_\_\_\_ Date Joined \_\_\_\_\_

Group/Membership No.: \_\_\_\_\_ Relationship to above:  Shareholding Member

Dues-paying Member  Other \_\_\_\_\_

## Part II of Application for Life Insurance — Nonmedical Supplement

Please Print. All Questions Relate to Anyone Proposed for Insurance.

Wisconsin Residents: AIDS (HIV) test results received at an anonymous counseling and testing site need not be disclosed.

1 Name, address and telephone number of personal physician of each person proposed for insurance:

\_\_\_\_\_

(a) Date last seen: \_\_\_\_\_

(b) State reason, findings and treatment: \_\_\_\_\_

\_\_\_\_\_

2 Name and address of physician most recently consulted by each person proposed for insurance: \_\_\_\_\_

(a) Date: \_\_\_\_\_ (b) State reason, findings and treatment \_\_\_\_\_

3 Have you, or any person proposed for insurance, ever been told that you had, or have you consulted or been treated by a physician or licensed practitioner for any of the following:

YES NO

(a) Any disease or abnormal condition of the heart, circulatory system or blood vessels, high blood pressure, rapid pulse, rheumatic fever, murmur, coronary artery disease, chest pain, angina or stroke? .....

(b) Any disease of the lungs or respiratory system, including tuberculosis, asthma, bronchitis, emphysema or shortness of breath? .....

(c) Any digestive system disease, including stomach or duodenal ulcer, indigestion, stomach pain, liver or gallbladder disease, colon or rectal disorder? .....

(d) Any genitourinary system disease including albumin, blood or sugar in urine, kidney infection or stones, tumor or disease of the prostate, testis, breasts, uterus or ovaries? .....

(e) Any nervous, brain or mental disorder, convulsions, dizziness, headaches, epilepsy, nervous breakdown or paralysis? .....

(f) Any bone or joint disorder, arthritis or rheumatism, bodily deformity, back or spinal disorder? .....

(g) Any disease or impairment of vision or hearing? .....

(h) Gout, diabetes, thyroid or other glandular disorder, cancer, tumor or blood disorder other than AIDS or AIDS Related Complex (ARC). .....

4 Have you, or any person proposed for insurance, ever been diagnosed as having Acquired Immune Deficiency Syndrome (AIDS) or AIDS Related Complex (ARC), caused by the HIV infection, or been treated for AIDS or ARC by a physician or licensed practitioner? .....

5 During the past 10 years, have you, or any person proposed for insurance:

(a) had any illness, injury, surgery, hospitalization, medical examination or care not listed above? .....

(b) had or received treatment for any unexplained fever, fatigue or chronic cough? .....

(c) had any X-rays, electrocardiograms, blood or other studies, except for an HIV test? .....

(d) been advised by a physician to have a surgical operation? .....

(e) been advised by a physician to limit your use of alcohol? .....

6 Are you, or any person proposed for insurance, now taking any medication prescribed by a physician? .....

7 During the last 10 years, have you, or any person proposed for insurance:

(a) used alcohol or other drugs to a degree that required treatment or advice from a physician or other licensed practitioner? .....

If "Yes," has use been discontinued? .....

(b) been or are currently a member of Alcoholics Anonymous or Narcotics Anonymous? .....

8 If pregnant, enter approximate delivery date: \_\_\_\_\_

9 Height: \_\_\_\_\_ ft. \_\_\_\_\_ ins. Weight: \_\_\_\_\_ lbs.

Weight change during last 12 months: Lbs. Gained: \_\_\_\_\_ Lost: \_\_\_\_\_





## **Appendix 2**

### *Underwriting of Aids/HIV:*

HIV is the human immunodeficiency virus, a retrovirus of two types (HIV-1 and HIV-2) that attacks the body's CD4 T lymphocytes (the cells that guard against assault by viruses, fungi and other organisms) and weakens the immune system.

AIDS is the acquired immune deficiency syndrome which describes an HIV-positive person who has suffered physical manifestations of a depleted immune response, classically opportunistic infections or tumours.

HIV is acquired:

- By sexual contact
- By contact or transfusion with infected blood or blood products
- Transplacentally from mother to foetus
- Via breast milk.

Approximately six weeks after infection with the virus, most individuals experience a febrile illness with enlarged lymph nodes. This may be referred to as acute HIV syndrome; although in some a generalised lymphadenopathy persists. Thereafter the individual remains symptom-free until or unless AIDS develops after a variable period.

In AIDS there is a critical drop in the CD4 lymphocyte count (<200/ $\mu$ l (normal 800/ $\mu$ l) and/or the occurrence of various opportunistic infections or tumours, including pneumocystis carinii pneumonia (PCP), Kaposi's sarcoma, candidiasis, herpes simplex, tuberculosis and toxoplasmosis.

### *Investigations*

Investigations include:

Testing for HIV antibodies in the blood: these are present from about two weeks after acquiring the infection but are only detectible after a further period has elapsed—up to six months  
CD4 counts: these provide an indication of the strength of the immune system; serial CD4 counts are particularly instructive  
HIV RNA: reflecting the concentration of virus in the blood.

Treatment:

Treatment of HIV infection uses a range of anti-retroviral drugs. Combinations of such drugs (usually in multiples of three or four) are referred to as HAART (highly active antiretroviral

therapy), which aims to suppress near-totally virus replication and allow the CD4 T cell count to rise. Treatment must be life-long. Note that the virus can mutate and become resistant to treatment.

Treatment for AIDS consists of addressing the conditions to which immune-deficient individual is susceptible. In many cases this will merely be palliation.

Individuals with known HIV infection or AIDS are generally unacceptable for life insurance, other than viatical-type products. Viatical type products allow the investment in another person's policy. In a viatical product, one will purchase the policy of a person (or part of it) at a price that is less than the death benefit of the policy. When the seller dies, the policy pays the full death benefit to the new owner of the policy)

The long latency period between HIV infection and the development of symptoms of AIDS (on average 8–9 years); the fear of social and economic stigmatisation and the associated financial consequences, mean that there is a high risk of non-disclosure. For life underwriting, this means that the emphasis is on identifying and screening for HIV antibodies in those who are considered at high risk, rather than evaluating the risk in those known to have HIV infection.

Those at high risk for acquiring HIV infection or at high risk of being HIV-positive include:

- Individuals resident in or from HIV-endemic areas
- Sexually promiscuous individuals with a history of recurrent
- sexually transmitted infections e.g. gonorrhoea, syphilis, Chlamydia,
- Individuals with hepatitis B or C infection
- Intravenous drug abusers
- Recipients of infected blood products e.g. blood transfusion and haemophiliacs prior to routine screening of blood products for HIV antibodies
- Those who have (unsafe) sexual contact with a member of a high-risk group
- Neonates with HIV-infected mothers.

Different insurance markets have evolved radically different approaches to detecting and screening those considered to be at high risk of HIV infection, and these approaches are modified according to local legislation, particularly with regard to anti-discrimination and privacy law; the regulatory environment; consumer concerns and the prevalence of HIV infection in the general and insured population. Thus for example practice is radically different in South Africa, Europe, North America and Asia.

Routine screening limits by age and amount for HIV antibodies varies widely based upon the estimated prevalence of infection in the insured population, ranging from screening of all lives in markets such as South Africa to screening at levels at which other screening tests such as oral fluid, urine or blood tests are usually done.

As a general rule, in most developed markets no questions can be asked about an individual's sexual orientation or other 'proxy' information such as occupation, marital status, gender, beneficiary and residential location to determine an individual's sexual orientation. The access to, transfer and use of existing HIV-related information is restricted in many markets; and in some jurisdictions it is not possible to decline an insurance application based on an HIV positive antibody test.

There are strict criteria in all markets about the requirements for an HIV antibody test including the need for written informed consent and a rigorously laid-down testing protocol.

For these reasons, the underwriting guidelines can only provide a general guide, and it is recommended that all potential high risk cases and any history of HIV testing, HIV positive tests or AIDS are considered individually.

Prognosis in HIV infection is dependent on the CD4 count. High CD4 levels, especially with retroviral, carry a relatively favorable prognosis. Survival following HIV infection has increased in developed countries beyond the average survival of 11 years after HIV infection where individuals have access to HAART. In some markets for best cases, HIV infection may be considered as a chronic disease with similar mortality to certain forms of malignancy and terms may be offered and some individuals may have a normal lifespan. On the other hand, once HIV infection has progressed to AIDS, the outlook is poor.