



HEPTA CONSULT
Actuaires Conseils

HEPTA CONSULT S.A. 5, Z.A.I. de Bourmicht à L-8070 BERTRANGE
Tel. : 263 179 - 1 Fax : 263 179 - 24 Website : www.heptaconsult.lu





The risks of Companies that do not insure risks



Jean-Léon MEUNIER

Consulting Actuary

HEPTA CONSULT



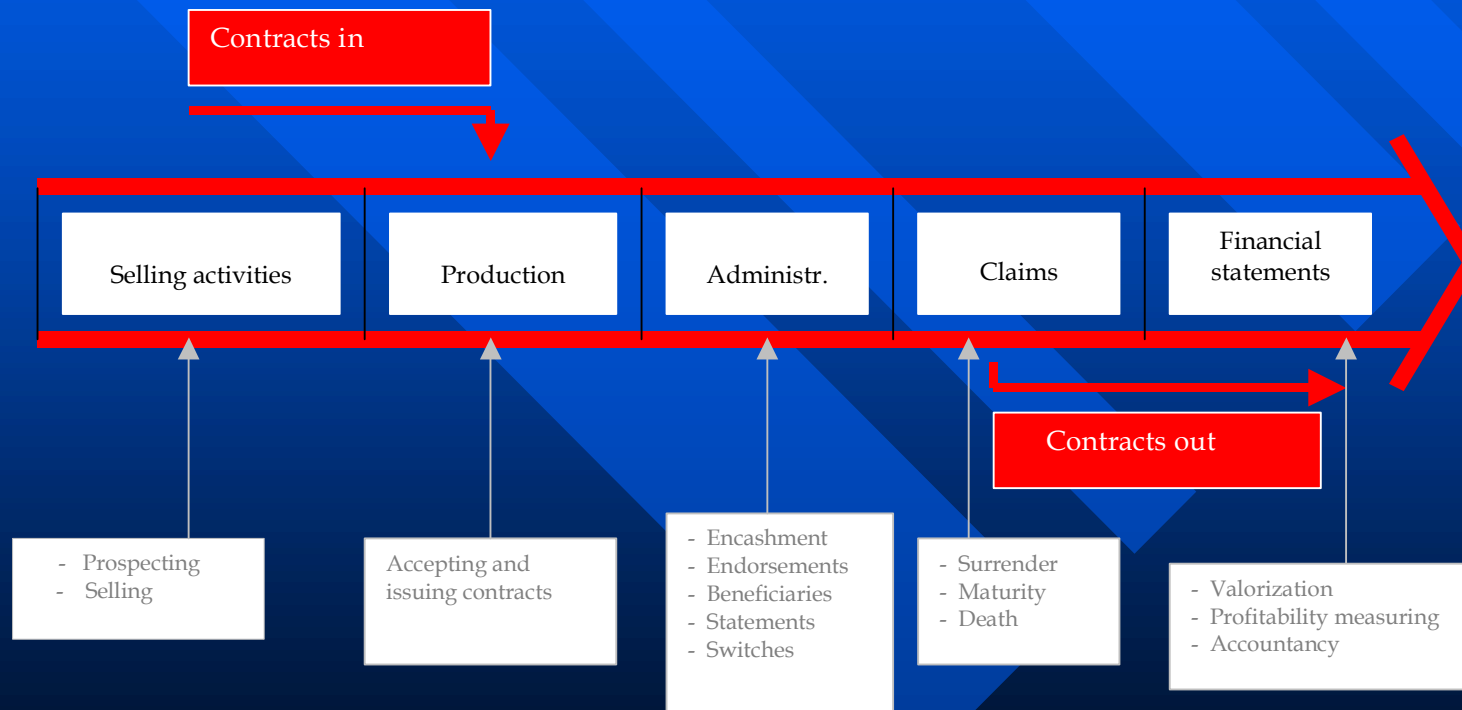
“Non-technical” risks

- The risks other than financial and biometrical
 - Those risks are of different kinds:
Commercial, legal, operational, financial, ...
 - But they are all of economic nature and must be analysed
by taking their interdependence into account
- ➔ We will study them by nature but we will
identify them in the chain of treatments of the
day to day administration

Between mimesis and the asymptotic zero risk

- Identify the risks
- Measure them economically, financially
- Take protection measures against their realization or limit the damage that they can cause
- And to equip oneself with means of recourse to go for compensations or indemnities

Scheme of daily administration and inversion of the economic cycle



The profound changes of the last years

- The goal is of a financial nature: generate economic value
- The economic horizon is growing shorter
- One has therefore to produce business more quickly: Mergers & acquisitions, B-to-B
- And one needs to measure permanently the economic value = results and embedded value

The time factor has become essential

Operational diagram of



Please have a look at the diagram on our Internet site: <http://www.heptaconsult.lu>

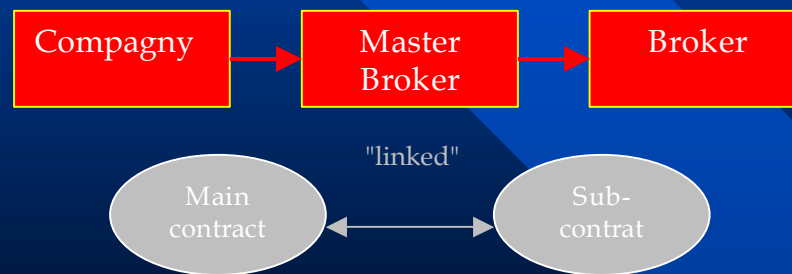
To give oneself the means to evaluate the financial impact of the different risks

- Modelling (detailed profit testing and business plan) and preliminary sensitivity measures (numbers of policies, average premiums, lapse rates, performance rates, administration costs, ...)
- Evaluation: technical and analytical accountancy
- Integration of the modelling and the evaluation into one single “chain of treatments”
- Measurement of the preliminary risks for a good strategic orientation and an efficient monitoring

The risks linked to the distribution

Exemple : Monthly premium product with commission pre-financing and distribution by a “broker of brokers” network

On the legal side: The contracts must be of the same nature



What are the risks? (1)

- ◆ The Insurer could bear the responsibility for the acts of the Master Broker despite the fact that the latter one is independent
 - ➔ The Master Broker must be a broker and not a marketing company
 - ➔ He must be independent: No exclusivity granted by the Insurer
- ◆ The Master Broker could “bear” the consequences of a poor administration without being in the position to react

What are the risks? (2)

- ◆ The Master Broker -
 - ceases or reduces its production
 - does not reach its objectives
 - produces much more than foreseen
- ➔ The distribution contract must explicitly foresee the terms and conditions in such a case
- ➔ The company must have the means to exercise its rights ensuing from those terms and conditions (global debt, bank guarantee)
- ➔ The Master Broker must benefit of continuity guarantees

What are the risks? (3)

- ◆ The Master Broker sells its portfolio
 - ➔ The Insurer must not be obliged to accept a global transfer.
Everything must be renegotiable regarding the future distribution

- ◆ The Insurer changes its shareholder
 - ➔ The conditions for renegotiation or for continuity must exist

What are the risks? (4)

- ◆ The distribution downstream of the Master Broker:
 - Either as broker
 - Or by mandate
- ➔ The Insurer must eventually be in the position to requalify the broker into a “commercial agent” of the Master Broker (total responsibility)
- ➔ In case of default of the Master Broker, the Insurer must be in the position to replace him by the broker (not mandated)

Condition: requires total transparency

- The terms of agreement between the Master Broker and the distributor must be a sub-agreement of the terms of agreement between the Insurer and the Master Broker
- The content must be compatible and without conflict of interest with the guidelines for brokerage
- The Insurer must have a means of access to all information required for a strict application of those contracts by the three concerned parties

Measure and limit the risks linked to pre-financing the commission of products with regular premiums

- Staggering the payment
- Building a reserve
- Commission earning period longer than the writing-off period
- Implement progressive commission schedules
- Align the commission systems of the Master Broker with the systems of its distributors
- Assure the technical balance policy by policy (never based on assumptions of lapse rates)
- Limit as much as possible the external financing

Measurement and prevention of those risks

- Simulation of the activity and preliminary measuring of the impact of variations of the production and of the lapse rates on the fixed costs
- Keep a close eye on the production from the moment of reception of the application forms and feed the “broker accounts” on a provisional basis

Condition: A performant information system with the capturing of application data at distributor level

Risk of shortfall of the Insurer in its duties towards the Master Broker

- The distribution agreement must foresee the engagement of the Insurer to deliver the agreed product during a fixed period of time without changing its conditions
- In case of non-respect by the Insurer (strategic decision, incapacity to finance the business, real administration costs higher than predicted,...) some penalties in favour of the Master Broker are foreseen in relation with the “brokerage” value of the constituted portfolio and the projected value of the portfolio as at the end of the term initially foreseen
- The calculation method of the penalties must be described in the contract, otherwise it is without any value

How to “contractually define” those elements in an unstable or unclear legal environment?

- The European Union offers a legal framework with multiple facets which is far from a harmonization of the functioning rules of the brokerage and the distribution
- One must therefore explicitly refer to the intention of the parties, being the essence of the contract, rather than to the legal framework or to the common practice (too recent environment)
- The intention of the parties must be translated into economic value
 - ➡ The actuary in support of the lawyer: The business plan and the transparency of all its parameters are a solid basis for the description of the “intention of the parties”

The risks linked to the money laundering cannot be quantified!

1. ABSOLUTE right for the Insurer to refuse a piece of business, right mentioned in all distribution agreements with renunciation to the right of recourse
2. Understanding of the economic reason of the insurance solution as compared to other solutions
3. Very strict procedures

The risks linked to the administration of unit linked products

- Bad execution of a purchase or sales order for a external fund where the NAV is volatile
 - Bad transcription of a NAV
 - Non-respect of the investment limits chosen by the policyholder
 - Non-respect of the CAA investment limits
- ➔ Assets - Liabilities management and controls integrated in the chain of treatments

Collective internal funds:

Solution for a better control of the risks (1)

- Simplification in the control of the purchases, sales and valorisations of external units (from an assets – liabilities problem one moves to an assets problem impacting only the NAV of the collective fund)
- Possibility to delegate the valorisation of the assets
- Possibility to delegate the management of the investment profiles
- Globalisation of the clients for a prudential control of the assets

Collective internal funds: Solution of a better control of the risks (2)

- Better operational control
- Backing on other professionals (Fund Administration, Asset Management)
- But risks supported by the Insurer as the internal fund is his segregated asset
- ➔ Even if it delegates, the Insurer continuous to be under risk
- ➔ Prevention required in order to avoid getting bogged

Leads to diminish the risks related to collective internal funds

- Transform the internal asset into an external asset: the structured products
 - ➔ With a risk to re-generate the specific problems of external units
- Individualize the asset by client : the dedicated fund
 - ➔ With all the risks of demutualizing the insurance, especially the fiscal risk

What is the spread of risks between the different parties?

- The risks borne directly by the Insurer
 - ✓ The insurer issues the policy : precision of the general conditions and transparency regarding the financial supports are essential
 - ✓ The Insurer informs the policyholders and answers, according to the policy conditions, to their questions giving that way effect to the contract
 - ✓ The Insurer carries out the tasks which have not been delegated to third parties
- The risks where the Insurer might be involved
 - ✓ The distribution: Bad advice
 - ✓ Delegation of the asset management (the mandate is a means of recourse, not a means of prevention)
 - ✓ The valorisation of the policy
 - ✓ The prudential control of the assets
 - ✓ The fiscal regime

And what does the shareholder think about all of that?

- He wants to know
 - ✓ what the Insurer does with his money (share capital) : results of the activities and profitability
 - ✓ the economic value that it generates (embedded value)
 - ✓ and the risks that it bears (appraisal value corrected by the cost of impending risks)
- He must find this information in the accounts and the financial statements of the Insurer

Requirement:

- ✓ Precision of the analyses of the result
- ✓ Accuracy of the financial statements

The measurement of the effects of volatile savings on the results

- Easy: The sensitivity of the income on assets under management to the variation of the yield of those assets
 - A little bit more actuarial: The impact of the volatility on the risks linked to “floor” guarantees if the risk premium is not taken from the policies but where a part of those risks is reassured (result and cash flow)
 - An a more financial component : multi-currency asset (comprising USD!)
- ➔ Implement schemes of accounting operations which deliver the exact measurement of those effects

The risks of a simplification of the accountancy

- Not being able to correct an erroneously euphoric result (overvaluation of the Insurer)
- Induce a negative strategic decision (closedown of business) due to an erroneously alarming result
Example: Pre-financing of the commission carried over into the representative assets in the balance sheet (deferred acquisition cost)
- Corollaries
 - ✓ Wrong anticipation of future needs in share capital
 - ✓ Not being able to correct the result for tax reasons
 - ✓ Have little means to adequately correct the technical provisions

Global approach which requires a detailed accountancy

- Starting point

Detailed theoretical business plan (weekly figures to allow an adjustment of the real production to the financial year)

- Algorithm

At each closure (results and financial statements) replacement of the theoretical values by the realized figures

Adjustment of the theoretical values to the business environment

To reach such a level of control, one needs:

- ➡ A performant system to document the tasks and responsibilities of all intervening parties = documentation and permanent updating of the procedures
- ➡ An administration system which is able to deliver the information and technical statements in real time
- ➡ And an automatic integration of those technical, financial and accountancy elements in a single data base

Relaxtuariat

Within 50 years, the “school of the Relaxtuaries”

(the Actuaries had a full year to decode the results of a company)

... changed to a “**school of Actua-Activities**”

(we have one week to permanently balance the financial figures)



Apart from its actuarial activities ,
HEPTA CONSULT has developed service lines under form of advice or provision of services for the account of insurance companies in the three following domains:

- The development of products
- The technical and operational control of the administration
- ..and its integration into the accounts and financial statements

The services are offered in partnership with:

- EXTEL, a company developing software for the administration of life insurances with which we put ALIAS into place, an ASP solution that can be rented
- SERENDI, a company of consultants that developed the @Qualitrack software for the documentation and the management of procedures
- And HEPTA GESTION, an outsourcing company in constitution which will be controlled by HEPTA CONSULT and EXTEL

@QUALITRACK.

Software to document and to manage the procedures

- Data base comprising :
 - The description of the procedures
 - The documents which are used
 - The data for the tracking tool
- Functions: Maintenance and updating of procedures, tracking of undesirable events, statistical analyses, automatic indicators
- Environment: Universal web-compatible tool
- Operation of the tool: Either implementation within the company or total or partial outsourcing with filtered access

ALIAS: The Insurer rents the hardware, the software and the EPD staff

- Possibility of implementation on a single site outside of the Company
- Possibility of implementation on different sites (Front Office – Back Office) which is essential in Luxembourg for professional secrecy reasons
- Initially: OPUS 2000, fully integrated software package from the administration to the accountancy in an IBM AS 400 environment
- Evolution: SUNSHINE, software based on Internet technologies which can be operated on different environments
 - Currently available for the management of distribution networks and administrative tasks
 - Subsequently extension to all Back-Office functions

HEPTA GESTION

- Company offering TPA services
- Outsourcing of the administration of life insurers and pension funds
- European offer
 - In its concept – single Back Office in Luxembourg and Front Office in multiple locations
 - In its pricing – independent from the country
- Minimum offer: Provision of the EDP services
- Maximum offer: Full outsourcing including the administration and technical management of the business, the accountancy, the prudential control of the assets and the reporting

HEPTA GESTION

Gains in productivity and the reduction of the administration costs of life insurance and pension funds can only be achieved if resources can be shared and outsourcing solutions adopted

***HEPTA GESTION* intends to rapidly develop those solutions and position itself as a European service provider, leader in this domain, the basis for this development being the experience of the Finance Place of Luxembourg**



Names and phone numbers

Jean-Léon MEUNIER : Actuary – Managing Director

Tél. : 263 179-21 Mobile : 021/168 402 E-mail : jl.meunier@heptaconsult.lu

Francis BIRCK : Consulting Actuary

Tél. : 263 179-23 Mobile : 021/496 620 E-mail : f.birck@heptaconsult.lu

Alain ARNSWALD : Consulting Actuary

Tél. : 263 179-25 Mobile : 021/160 225 E-mail : a.arnswald@heptaconsult.lu

Carlo MERSCH : Business Development Consultant

Tél. : 263 179-26 Mobile : 021/356 092 E-mail : c.mersch@heptaconsult.lu

Edwin RENNEBOOG : Consultant Administration & Finances

Tél. : 263 179-27 Mobile : 021/351 506 E-mail : e.renneboog@heptaconsult.lu

