

## **Life Insurance Market in Visegrád Group of Countries**

By Puneet Nayyar, Alok Vijay, Richa Bhargava and Shamit Gupta

**Written for 9<sup>th</sup> GCA, Mumbai**

### Abstract

In this paper we discuss the life insurance market in Visegrád group of countries. Visegrád group comprises of Hungary, Poland, Czech Republic and Slovak Republic. We start this paper with overview of the economy of these countries and then move on to the state of life insurance markets in these countries. We also cover the Life insurance products sold in this region. Special emphasis is given on products and features not widely used in Indian markets.

### Keywords

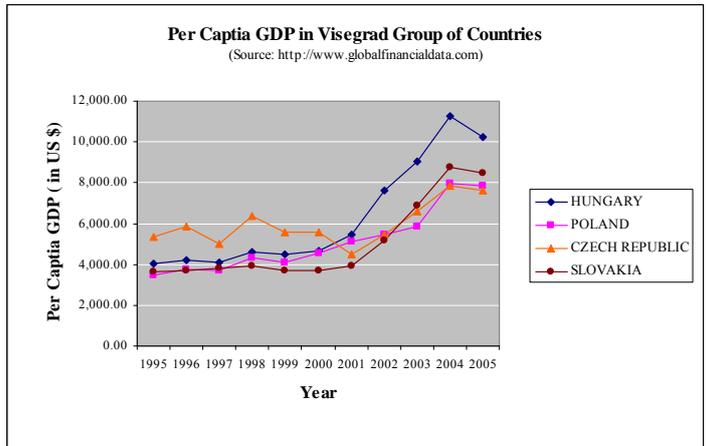
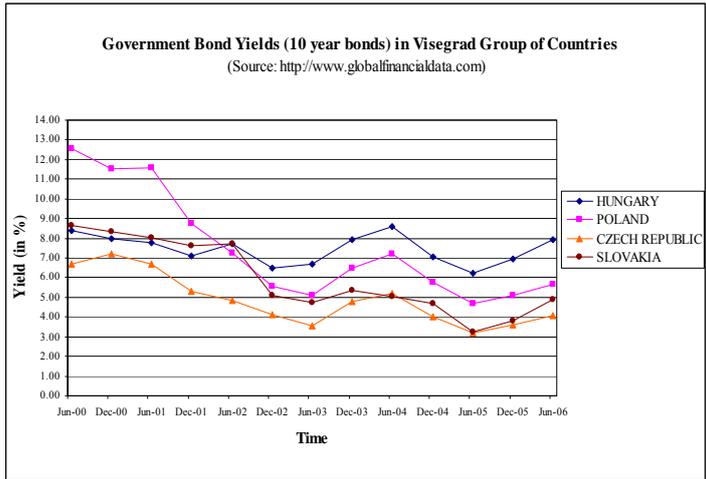
Life insurance market; Life insurance products; Hungary; Poland; Czech Republic; Slovak Republic

### Contact Address

Watson Wyatt Insurance Consulting Private Limited, 9<sup>th</sup> Floor, JMD Regent Square, MG Road, Gurgaon – 122001, India. Phone : +91 124 432 2800 Fax : +91 124 432 2801  
Email : [Puneet.Nayyar@watsonwyatt.com](mailto:Puneet.Nayyar@watsonwyatt.com); [Alok.Vijay@watsonwyatt.com](mailto:Alok.Vijay@watsonwyatt.com);  
[Shamit.Gupta@watsonwyatt.com](mailto:Shamit.Gupta@watsonwyatt.com); [Richa.Bhargava@watsonwyatt.com](mailto:Richa.Bhargava@watsonwyatt.com)

## **1 Introduction**

- 1.1** The Visegrád Group, also known as Visegrád Four or V4 originated in a summit meeting of the heads of government of Czechoslovakia, Hungary and Poland held on February 15, 1991. After the dissolution of Czechoslovakia in 1993, the Visegrád Group has since then been comprised of four countries: The Czech Republic, Slovak Republic, Hungary and Poland.
- 1.2** Formation of Visegrád group was motivated by these main factors:
  - a.** Eliminate the communist bloc in Central Europe and overcome historic animosities between Central European countries
  - b.** Successfully accomplish social transformation and join in the European integration process (European Union)
  - c.** Proximity of ideas of the then ruling political groups about economic cooperation and cross border trade.
- 1.3** The Visegrád countries felt the effects of very low growth between 2001 and 2003 as a result of macroeconomic factors and the widespread downturn in international capital markets. All four members of the Visegrád group entered the European Union on May 1, 2004. After this, the recovery of the Visegrád countries in particular has been strong. This entry into the European Union has not only brought prosperity to their people and enhanced countries' international political profiles, but it has also opened up significant strategic opportunities for international financial markets and investors worldwide. Many financial institutions recognise the enormous growth potential of the Central and Eastern European region, in particular the four Visegrád nations.
- 1.4** Many Western insurance companies, looking for more rapid growth and higher margins outside their own domestic markets, are realising that it is too late to enter the central four countries with a start-up operation, and there are very few companies left that are available to buy. As a result, many are looking to the less established countries including Russia, Turkey, Ukraine and Serbia anticipating that the success seen in Central Europe will be repeated.
- 1.5** Visegrád group of countries are developing economies and have demonstrated steady economic growth. GDP has been consistently growing in last few years. The government bond yields have also shown a stable pattern since these countries joined the EU.



**1.6** The Visegrád region has achieved remarkable success in aligning and strengthening financial services to meet the challenges of an enlarging European Union and to compete effectively with larger and more developed countries both regionally and internationally. Governments, regulators and market participants have shared information and knowledge to achieve growth and competitiveness, cementing sustained GDP growth of between 4 and 5 percent.

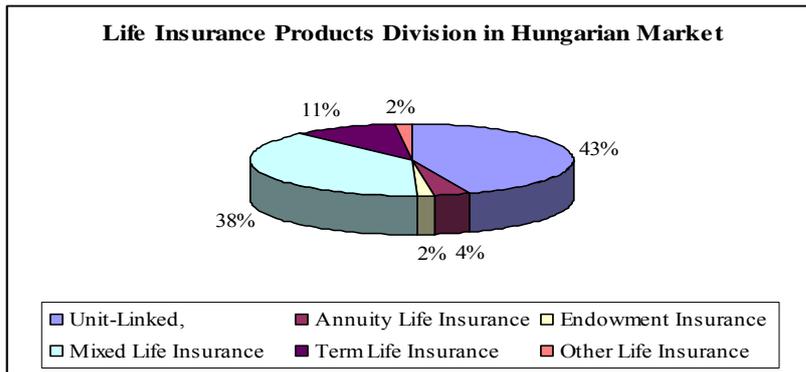
## 2 Life Insurance Market in Hungary

- 2.1** Before 1986, insurance in Hungary was in the hands of the state. In 1986, the process of privatisation of the insurance market commenced. The Hungarian legislation did not have many restrictions on the inflow of foreign capital for the establishment of companies. Investors took advantage of this opportunity and a large number of subsidiaries of global insurance firms opened up in the country. In 1992, the state-owned life insurer ÁB, which was incorporated in the 1940s, was privatised. In 2004, the country joined the European Union (“EU”) and became a part of the European single market.
- 2.2** Hungary adopted its insurance-related legislation called the ‘Act on Insurance’ in 1995. This already included most of the relevant EU directives including the ones concerning division of life and non-life insurance branches, rules on investment limits and transformation of the material supervision system to solvency control. By 1999, the insurance sector had gone through significant changes since the act was adopted. The number of products and players in the market had expanded, increasing premiums and reserves. The sector had also become a big contributor to economic development. As a result, the Government committed itself to harmonising all relevant legislation with EU requirements. This process was completed by May 2004. The new legislation was more stringent than in other countries and implied a competitive disadvantage in the European single market.
- 2.3** However, up to 2006, the accession the EU had no significant negative effect on the insurance market. The significant growth of the insurance markets continued. Total premiums grew at 24% as compared to 8.5% continuing the high growth from previous year, but this growth was not attributed to the EU accession. Also, more than two hundred member state insurance firms have applied to the Hungarian Financial Supervisory Authority about their intention to open branches in the country since the EU accession.

	2003	2004	2005
Total premium income (HUF millions)	224,515	243,715	302,115
Growth from previous year	-	8.55%	23.96%

*Source: Association of Hungarian Insurance Quarterly Report*

- 2.4** As we can see from the table, the life insurance market saw a significant growth in 2005 of about 24% and is poised for a similar significant growth for 2006.
- 2.5** The share of single premium policies increased considerably to 26.7% helped by a huge growth in premiums in investment-linked and unit-linked life insurance policies. Mixed policies, which consist mainly of traditional whole life policies showed a decline from the last year.

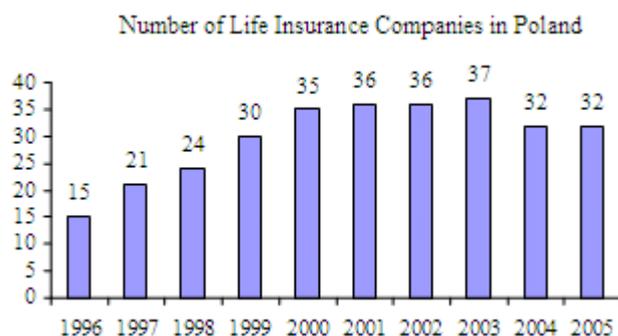


Source: Association of Hungarian Insurance Quarterly Report

**2.6** The life insurance sector collected a total premium of HUF302 billion in 2005. The market leader accounted for 28.1% of the total premium. The top five insurance companies had a market share of 73.7% while the rest of the fourteen life insurance companies have shares of less than 5% each.

### **3 Life Insurance Market in Poland**

- 3.1** Insurance activity in the Polish Life Insurance market is regulated by the Insurance Activity Act of 28th July 1990. This act de-monopolised the market and opened it partially to foreign capital. Under the act, life insurance business may be conducted either in the form of a joint stock company or a mutual insurance company. The licence to carry out life insurance business in Poland is issued by the Ministry of Finance (“The Ministry”) after consultation with the State Supervisory Office of Insurance (“PUNU”).
- 3.2** The Ministry was responsible for the overall control of the insurance sector. However, in 1995 certain security measures were introduced to protect the consumers which resulted in the creation of the PUNU, the Insurance Guarantee Fund, office of Spokesman for the Insured and the Polish Insurance chamber. The PUNU’s responsibilities included protecting the consumers and monitoring the solvency of insurance firms, issuing licences to these firms, approving foreign investments in existing insurance companies or acquisitions involving purchases of over 15% of shares and issuing licences to agents and brokers.
- 3.3** From 1 January 1999, foreign companies, from countries where Polish companies can operate, were allowed to apply for branch offices in Poland. This included all the countries in the World Trade Organisation (“WTO”), the Organisation for Economic Co-operation and Development (“OECD”), the European Union (“EU”) and countries which have trade agreements with Poland. Setting up a branch office is subject to the same licensing process that Polish insurance companies follow. Foreign companies are only allowed to write policies in Poland if the specific insurance need cannot be met by Polish companies.
- 3.4** Powszechny Zakład Ubezpieczeń (PZU) is the oldest and the biggest insurance company in Poland. PZU was founded in 1803 and in 1952 was granted monopoly on insurance by the Communist government. Due to its former monopolistic position and its distribution through employer and community based agents it is still the biggest insurance company. Currently there is a dispute (in international arbitration) between PZU and a Dutch financial group, which started in 2003 over the purchase of a majority stake in PZU.
- 3.5** On 19th September 2006, the Polish Financial Supervisory Authority (“PFSA”) commenced its operations under the Polish Financial Supervision Act of July 21 2006. The new supervisory body took over the tasks of the PUNU and the Securities and Exchange Commission. This organisation is entrusted with the supervision of capital markets, insurance companies, pension schemes and complementary supervision of financial conglomerates. The aim of this organisation is to ensure regular operation of this market, its stability, security and transparency, confidence in the financial market, as well as to ensure that the interests of all parties are protected.
- 3.6** The life insurance industry in Poland is divided into two branches, branch I – life insurance and branch II – non-life insurance. Currently there are 32 life insurance firms in operation in Poland. Most of the foreign companies have entered the market by acquiring already operating firms. The graph below illustrates the number of life insurance firms in operation in Poland over the past few years.



Source: Insurance and Pension Funds Supervisory Commission Yearbook 2005

**3.7** Life insurance policies, in Poland are divided into the following classes based on the amount of risk:

- Class 1: Life assurance – Including Whole Life assurance, Endowment assurance, Mixtures of the two types.
- Class 2: Marriage or Dowry insurance, Child or Student insurance.
- Class 3: Life insurance linked to investment funds.
- Class 4: Annuity insurance.
- Class 5: Accident and sickness insurance.

The performance of these individual classes over the last 6 years is illustrated in the table below:

<b>Gross premiums written by policy type (in million PLN)</b>					
<b>Year</b>	<b>Class 1</b>	<b>Class 2</b>	<b>Class 3</b>	<b>Class 4</b>	<b>Class 5</b>
2000	4,357.47	80.20	2,537.68	18.00	1,341.19
2001	4,602.20	98.83	2,984.80	16.66	1,557.22
2002	4,690.70	142.60	3,144.14	17.09	1,750.38
2003	5,302.19	147.53	3,520.49	19.61	2,013.39
2004	6,149.80	146.09	4,013.05	24.50	2,280.49
2005	6,911.20	150.53	5,608.83	28.86	2,516.23

Source: Insurance and Pension Funds Supervisory Commission Yearbooks 2000-5

**3.8** In 2005 the value of gross written premiums in Poland amounted to 3.25% of the GDP. It was the highest level of this indicator in history. The share of the insurance in the GDP has been increasing for several years as a result of the fast development of Life insurance. Within last year the share of this type of premiums in the GDP increased by as much as 0.25%.

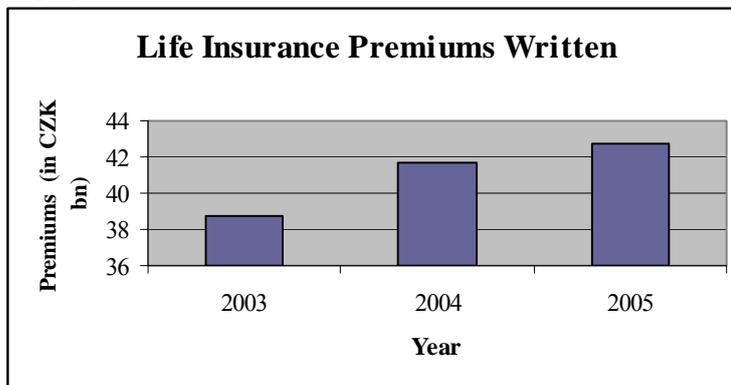
The main reason for the high growth of the life insurance industry is the increasing popularity of bancassurance products which allow customers to avoid the payment of capital tax. Bancassurance was mainly responsible for the approximately 40% growth in premiums

for the class 3 type of products. However, life assurance products continue to be the most popular type of product in the market.

## 4 Life Insurance Market in Czech Republic

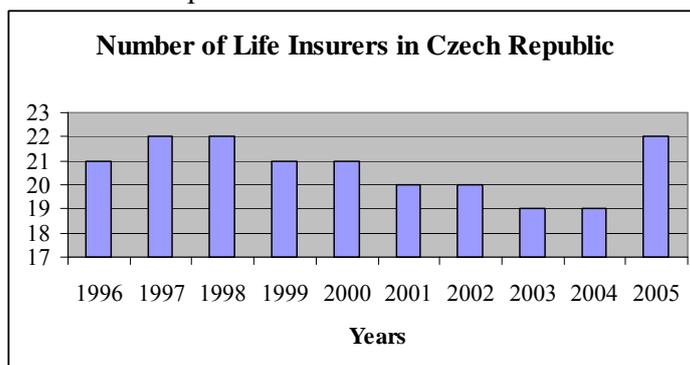
- 4.1** Czech Republic became a member of the European Union in 2004. For the insurance companies, the Czech Republic's accession to the European Union meant that while they had to start implementing a number of new requirements and restrictions, they also had the opportunity to operate in the EU's single insurance market. Conversely insurance companies operating in other EU member states were given the same opportunity and could start penetrating the Czech market.
- 4.2** In terms of development of the insurance market on the whole, 2004 was one of the best years. Life insurance grew strongly, recording a 7.5% rise in premiums written compared to 2003. The total premium written by life insurance companies was CZK 44.2 billion.

The growth pattern stabilised in 2005. A reason for this was perception of increased security of customers due to Czech Republic's accession to EU. Another big reason for this growth was the tax relief for individuals and corporate on the contribution made towards the life insurance business. The tax relief had a far greater impact than EU accession, which went largely unnoticed.



Source: Czech Insurance Association Annual Report 2005

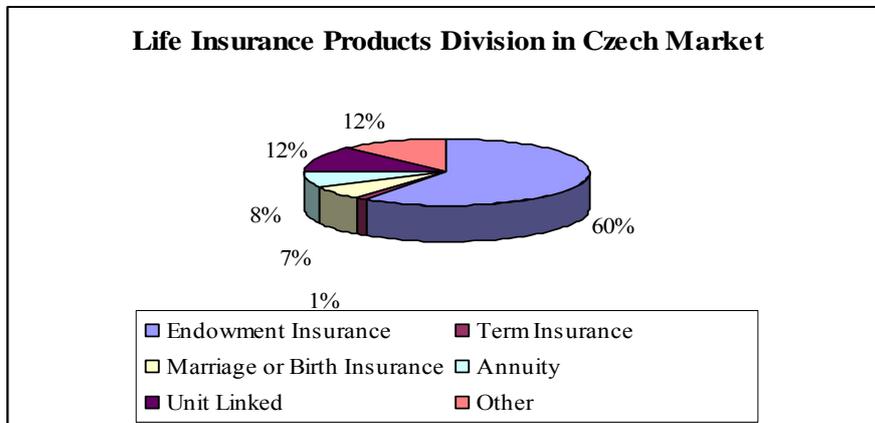
- 4.3** Under specific conditions an individual's tax base can be reduced by the annual amount (Up to CZK 12,000) of private life insurance premiums paid. Annual insurance premiums paid by an employer for an employee's private life insurance are exempt from the employee's individual income tax up to CZK 12,000 and are a tax-deductible cost for the employer up to CZK 8,000.
- 4.4** The life insurance market in Czech Republic is very concentrated. The number of Life insurance companies has remained stable over the last few years.



Source: Czech Insurance Association Annual Report 2005

**4.5** In 2005 the value of gross written insurance premiums amounted to 3.9% of the GDP. The contribution of Life Insurance premiums was 1.5% of GDP. The Life insurance market has increased rapidly since 1997 when Life Insurance premiums amounted to 0.8% of GDP. Although, the average life insurance premium size is small (EUR 136) compared to the average in the whole EU (EUR 1147).

**4.6** The life Insurance market is dominated by endowment and the whole life products. The premium written for these products is 60% of the total life insurance premiums written in the market. In terms of classes of life assurance, the highest pace of growth in 2005 was in insurance linked to investment funds (nearly 24%). This growth was similar in 2004 indicating that clients are interested in higher capitalization of their investments. For endowments or whole life, in 2005 there was a reduction of almost 3% in premiums written compared to 2004. This can primarily be attributed to the fact that single premiums were approximately CZK 8 billion, 22.1% lower than in 2004. However, endowment insurance, given its 60% share in total life assurance premiums written, continues to be of key significance in Czech life assurance market.



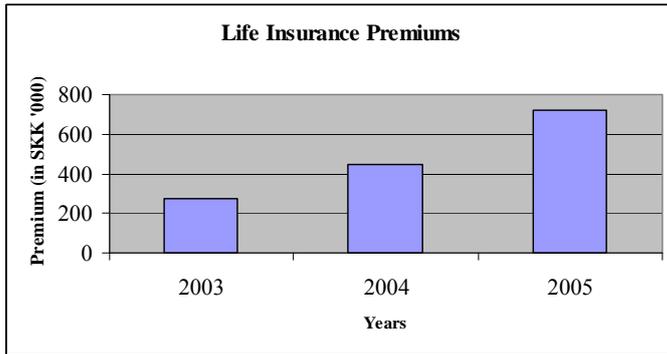
Source: Czech Insurance Association Annual Report 2005

**4.7** An important feature of the Czech market recently has been the growth of ‘multi level marketing-type brokers’ and bancassurance channel sales. The sales from these channels have led to a high growth rate of insurance linked to investment funds.

## **5 Life Insurance Market in Slovak Republic**

- 5.1** In the beginning of the 1990s, the right to provide contractual and compulsory insurance lay exclusively with the state insurance company, in accordance with the Czechoslovak Act on Insurance. The insurance company was required to establish a basic reserve fund to cover liabilities. The finance ministry also laid down the general-technical principles regarding the setting of premium levels and reserves. Insurance contracts for were governed by the Civil Code Economic Code and, where the insurance relationship had a foreign element, by the International Trade Code. Insurance conditions were regulated through decrees issued by the finance ministry.
- 5.2** The Finance Ministry's role was interesting for the fact that, alongside its position as a state administration authority, it was also the founder and later a shareholder of the former monopoly state insurance company (Slovenská poisťovňa, a. s., which following privatisation in 2003 merged with Allianz a. s.). The peculiarity of this situation was the fact that the ministry had to conduct control exclusively in the public interest under the then applicable Insurance Act.
- 5.3** The laws were changed when the county decided to enter EU. The Financial Market Authority took over the functions of licensing and supervising insurance companies from the Ministry of Finance in November 2000. The new law covered practically everything which was required by EU directives for entering the insurance market, starting an insurance company, managing an insurance company, the conduct of regulatory activities with regard to insurance companies, and the methods for winding up an insurance company. Also, provisions on certain relations regarding the operation of insurance companies from other Member States and their branches, and those from other foreign countries and their branches were covered. The provisions on the supervision of the insurance industry were also contained in this law. The law appointed the Ministry of Finance of the Slovak Republic, as regulator, and the National Bank of Slovakia, as supervisor.
- 5.4** 100% foreign-owned companies can be established under the same procedure as domestic companies in Slovakia. Foreign insurers can also establish branch operations following the revisions to the Insurance Act in 2000.
- 5.5** Life assurance premiums have grown by 30% to 40% year on year for the last five years but spending on life assurance accounts for just over 1% of gross domestic product (GDP).
- 5.6** In 2005, 28 insurance companies were active in Slovakia. Due to high concentration of the insurance market the ten largest companies had approximately 90% market share. The life insurance market of Slovakia has experienced high growth after joining the European Union

in 2004. The year on year growth was 61.3% in 2004 and of 62% in 2005.



- 5.7** The large majority of life insurance business is distributed through agents and agencies. Insurers are required to submit annually a list of agents working for their company. Brokers are licensed by the supervisor on meeting certain basic conditions. The supervisor maintains a register of licensed brokers. Legislation to bring the Insurance Law in line with the EU directives has introduced stricter licensing and capital adequacy requirements for brokers.

## **6 Major Life Insurance Products Sold in the Region**

- 6.1** Endowment 1:1 - This is a life insurance policy that pays the sum assured at the earliest of the time of the death of the insured or at the end of the term of the policy. The insured can choose to receive this payment as a lump sum or as an annuity, based on the current age of the insured and an agreed duration. This contract is available in both with profits and non profits versions.
- 6.2** Endowment 1:2 - This product is identical to the Endowment 1:1, except that only half of the sum assured is paid if the insured dies during the term of the policy. The surrender benefit for this plan is limited, as in latter years of the policy term the actual surrender amount might be higher than death benefit. This product is less risky than Endowment 1:1 if volatile mortality experience is expected. This contract is available in both with profits and non profits versions.
- 6.3** Modified Pure Endowment - This Endowment product combines a maturity benefit through a Pure Endowment with a death benefit through a one-year renewable Term Life. The product pays out the death sum assured amount in case of death of the insured person or maturity sum assured amount in case the insured person survives at contract maturity. Both the death and maturity sum assured can be equal or different. The annual premium will sum a level premium for maturity benefit and a variable premium for death benefit; the variable premium will depend on death benefit amount, actual age and gender of the insured person. Bonuses are generally paid on the maturity part of the contract.

Another version of the contract exists where refund of premiums is paid on death or sum assured in case the insured person survives till contract maturity.

- 6.4** Dowry / Marriage Insurance - The insured will be a parent (or relative, legal representative, etc.) and the beneficiary must be a child. Premiums are payable until the beneficiary has reached the minimum marriageable age (18 or any other predefined age), but are waived upon the death of the insured before this time. The sum assured (with accumulated interest) is paid if the beneficiary is married between the minimum marriageable age and endowment end age (25 or any other age). If the beneficiary is not married till the endowment end age, the sum assured is then paid. If the beneficiary dies before marriage or the attainment of endowment end age; a surrender value is payable to the insured. This contract is available in both with profits and non profits versions. Unit linked versions of this contact are also available.
- 6.5** Student / Child Insurance - The insured will be a parent (or relative, legal representative, etc.) and the beneficiary must be a child. If the insured and beneficiary survive to the end of the policy term, a monthly annuity becomes payable to the beneficiary for available terms (generally 5 years). If, during this time, the beneficiary dies, the parent can decide to continue with the annuity payments, or convert the remaining payments into a lump sum. If the insured dies within the premium term, while premiums are still due, future premiums are waived and annuity payments will start at the beginning of the month following the death. If the beneficiary dies during the premium term, a surrender value is paid. This contract is available in both with profits and non profits versions. Unit linked versions of this contact are also available.

- 6.6** Short-term Disability Insurance - In case of disability longer than 14 days or 28 days the insured daily benefit is paid. The term of benefit payment is maximally 1 year. There is no payment for claims during waiting period (generally, 3 month after commencement date of the insurance), unless the disability is caused by accident. The sum assured should be less than 70% of net monthly income of the insured in most versions of the contracts in the market. Duration of this product is generally 1 year.
- 6.7** Hospitalisation Insurance - In case of hospitalisation longer than 3 days the insured daily benefit is paid. The term of benefit payment is maximally 1 year. There is no payment for claims during waiting period – 3 months after commencement date of the insurance (9 months for childbirth). Duration of this contract is 1 year with automatic renewal.
- 6.8** Other regular products like Whole Life Insurance, Pure Endowment, Immediate Annuity and Term Insurance are also available in the market. Unit linked versions of most of these contracts are also available.
- 6.9** Investment Rider - This rider has a combination of risk and investment feature. It is sold with all types of products, no matter whether traditional or unit linked. The rider provides an option to the policyholder to pay additional premium on his/her policy (top up), without decreasing the actual sum at risk on the main coverage (as is the case with most top ups on unit linked contracts). The premium is invested into the dedicated funds. In the case of the death of the insured, the higher of the value of this riders' fund at the date of the death or the "net invested amount" calculated as sum of all premiums paid for this rider decreased by the sum of all partial surrenders and regular withdrawals from this rider's fund is paid to the beneficiaries.

As a consequence, a risk charge is charged monthly to the policyholder, which amounts to the monthly mortality rate applied to the actual sum at risk. Actual sum at risk is the difference between the death benefit as described above and the actual value of this rider's fund at the date of charging. Should the actual sum at risk be negative, no risk charge is charged. Other charges, similar to the unit linked products, and the risk charge reduce the number of units on the policyholder's account monthly.

## **7 Some Features of Products Sold in the Region**

**7.1** Automatic Inflation Protection (AIP) - At each anniversary, if the outstanding term is more than three years, policyholders with regular premium payments can choose to increase their coverage, without submitting additional underwriting (or incurring a medical examination). The extra premium is used to purchase an additional amount of sum assured based on the gross premium rate for the insured at the current age and outstanding term. The increase in sum assured cannot be more than the inflation increase (specified by the insurance company) in previous year. The increase can either be on an opt-in or opt-out basis. After three years of not taking up the indexation option the customer loses the right to opt for further increases.

**7.2** Size and frequency discounts - There are two types of discounts, size and frequency discounts, which apply to regular premium products. Size discount is applied before the frequency discount. Size discount is applied if premium amount exceeds a certain threshold which is fixed and remains the same. The threshold is yearly increased by inflation and for new issued policies the new threshold applies. For existing policies, the threshold applicable in their issue year will be used to calculate the size discount. Frequency discount is calculated in relation with frequency of payment. The frequency discount will be determined every year, based on the expected annual interest rate. This means that in case of changing interest rates, the premium payments for the basic coverage will change every policy year. Both discounts apply to the entire premium amount (including riders).  
*size\_discount = % discount \* premium\_amount*  
*frequency\_discount = % discount \* (premium\_amount – size\_discount)*

**7.3** Loyalty Bonus - Some products have an additional feature that is the incentive to the policyholder to pay the premiums and not lapse the contract. Each 5th policy anniversary, when the premiums for the five-year period are paid, the Policyholder is granted with the loyalty bonus. For traditional policies, the sum assured is increased while for unit linked policies, loyalty units are added to the policy fund.

**7.4** Revalorisation Bonus - In case of excess investment return above the guaranteed interest rate (GIR) and cost margin, a profit sharing account on behalf of the policyholders is formed. No additional sum assured is bought. Only the initial sum assured is guaranteed. In case investment income is higher than the GIR, profit sharing account is increased. This increase is based on average policy account if investment income exceeds GIR plus cost margin and an increase based only on the balance of profit sharing account if investment income exceeds GIR only.

The investment income is calculated on portfolio basis and profit sharing adjustment is done per policy and at anniversary dates. When the policy claims, matures or is surrendered, the outstanding profit sharing account balance is paid to the client.

The formula for calculation of the increase in profit sharing account is:

$$\Delta V_k^{PS} = \begin{cases} PS\% * \left[ (IE - i - mf) * \frac{(V_{k-1}^Z + V_k^Z)}{2} + IE * \max\{V_{k-1}^{PS}, 0\} \right], & IE \geq i + mf \\ PS\% * IE * \max\{V_{k-1}^{PS}, 0\} & , i \leq IE < i + mf \\ 0 & , IE < i \end{cases}$$

Where,

$\Delta V_k^{PS}$  = change in profit sharing reserve at anniversary k

$PS\%$  = percentage of investment return shared with policyholder (typically, around 90%)

$IE$  = interest rate “earned” (declared for the prior year)

$i$  = guaranteed interest rate

$mf$  = investment return margin

$V_k^Z$  = value of zillmer reserve at anniversary k

$V_k^{PS}$  = value of profit sharing reserve prior to allocation at anniversary k

For single premium contracts, the allocation ratio ( $PS\%$ ) is lower compared to regular premium contracts.

Profit sharing declarations are usually done after making allowance for tax and investment expenses ( $mf$  in the above formula), allowing some flexibility to the insurer to manage bonuses in order to meet the guaranteed interest rates. The maximum guaranteed interest rates are often set by the government based on the yields available from long dated sovereign debt.

## References

1. Visegrád Group (<http://www.visegradgroup.eu/>)
2. <http://www.globalfinancialdata.com>
3. Association of Hungarian Insurance Companies (<http://www.mabisz.hu/english/index.html>)
4. Czech Insurance Association (<http://www.cap.cz/english/>)
5. Slovenská asociácia poisťovní (<http://www.slaspo.sk/index.php?lang=en>)
6. Insurance and Pension Funds Supervisory Commission, Poland (<http://www.knuife.gov.pl/english/index.html>)

## **About the authors**

### **Puneet Nayyar**

Puneet completed his Bachelor in Information Technology degree from Delhi University in 2002. He is a student member of Actuarial Society of India and Institute of Actuaries. Currently, he is left with 2 exams to pass for qualification as fellow of Actuarial Society of India.

Puneet Nayyar joined Watson Wyatt in May 2006. He has been involved in development of the standard code in VIPitech, the actuarial modelling software. Prior to joining Watson Wyatt, Puneet was working at Max New York Life. He was involved in valuation, reinsurance, experience studies and bonus calculations there. Puneet has also worked as a Software Programmer before joining the actuarial profession.

### **Alok Vijay**

Alok completed his Masters in Actuarial Science from Heriot-Watt University, Edinburgh in 2003. He has also done MBA from Jiwaji University, Gwalior. He has cleared 7 exams from Actuarial Society of India.

Alok joined Watson Wyatt in 2006 and has been involved in valuations, ICA and FCR's. Before joining Watson Wyatt, he had 3 years of actuarial work experience with Genpact, AMP Sanmar and Bajaj Allianz General Insurance where his work involved valuations and product developments.

### **Shamit Gupta**

Shamit graduated from the University of Texas at Austin with a Bachelor in Actuarial Science in 2005. He has cleared 4 exams from the Society of Actuaries.

Shamit joined Watson Wyatt in 2006 and has been involved in statutory valuations, embedded value calculations and market research.

### **Richa Bhargava**

Richa graduated from Lady Shri Ram College, Delhi University, in 2003 and has cleared five papers from ASI.

Richa joined Watson Wyatt in 2006 and has been involved in valuations, statutory reporting & market research. She used to teach actuarial science in a private coaching institute for a year and a half before joining Watson Wyatt.

**“All implicit or explicit views expressed in this paper are ours and not necessarily those of our employer, Watson Wyatt.”**