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MEDICAL SAVINGS ACCOUNT AS A FUNDING MECHANISM FOR HEALTH

Summary: Insurance, as a financial domain, assumes a transfer of risk between dates or situations. In life insurance, a policy owner agrees to regularly contribute with a pre-defined share, receiving at the same time a guarantee of a stipulated amount of money in case of death, or serious or terminal illness. Indeed, uncertainty and unpredictability has always been a part of human life. A specific and continuously controversial form of life insurance is a tontine. Its initial success and further abolition is the reason why its proper name is associated with immoral practice of profiting from others' misfortune. The aim of this paper is to present an institution of a tontine as an insurance instrument and, while considering its genesis, discuss its practical application.

Keywords: tontines, insurance, life insurance.

*The capacity to predict is the main characteristic of the rich.
The breakthrough induced from a flash of genius
bases on noticing an actual or hidden demand
and a rapid idea on how to satisfy it
so that a margin was higher than the cost of provision.*

R. Heller

1. Essence of tontines

Tontine is a form of life insurance introduced first in 1653 in Paris, bringing a pension from the fund collected by the subscribers; the annuity grows when the number of subscribers is decreasing as a result of the natural process of extinction, until the moment when the last surviving subscriber receives all income [Kopaliński, accessed 1 December 2010].

According to O. Doan [*Ubezpieczenia życiowe* 1996, p. 13], tontine is a specific insurance fund established by a group of people with a certain (previously decided)

contribution of each group member. The interests obtained every year through the fund were divided then among the surviving members, while the member of the longest longevity was finally receiving the entire fund. A variation of the basic concept of tontine is a tontine insurance scheme, where the amount of annual payments increases with the extinction of the members of the fund.

On the other hand, in *Basics of insurance* edited by J. Monkiewicz [*Podstawy ubezpieczeń* 2005, p. 87], a tontine is defined as “the state pension based on the creation of a specific risk fund for a given age class. As the dying people in the age group they had the right to pension increased by dividing the collected funds to a smaller number of people. It was a specific premium for the long-lived”.

Therefore, tontines can be considered as an association whose members contributed for a common fund, invested it and divided the profits among the surviving members of the fund. Over the time, the latter ones were decreasing and so, the revenues *per capita* from the investment were gradually increasing. At the end, the last surviving member of the fund was to receive all income from the capital [Szaleniec, accessed 3 February 2004].

Tontine is a commonalty of at least 200 members who commit themselves to a regular payment of contributions (monthly, quarterly, annually), of a pre-specified amount. It is set up for a predetermined time, which in the case of tontine founded with a view of survival of its members may not be less than 10 years, but, at the same time, not longer than 25 years¹.

2. The genesis of tontines

The development of tontine, as a new type of insurance, falls onto the seventeenth century. At the court of Louis XIV, French cardinal Mazarini received from the Italian, Lorenzo Tonti, a proposal aiming at rescuing the state finance and envisaging an implementation of state pensions, named later – after his name – tontines [Bratkowski, accessed 1 December 1997].

“In 1653, this bright banker from Naples (...) reported to the “minister”, ruling France, Cardinal Mazarini (...) with the idea for a new income scheme for the French government, which had usually been in need of money. The Thirty Year War had already been finished, Mazarini managed to handle the Fronde, rebellion of the aristocracy and rich bourgeoisie, but all of this had its associated cost. Tonti suggested that people entering a kind of random association paid certain amounts to the state, on the basis of which they would be entitled to receiving later on a lifetime pension – with an assumption that the surviving associate members of the group shall receive higher pensions as other members when other members were abandoning the group because of their death (the state would obviously discount an appropriate interest rate)”. Tontine was thus a form of the state loan in return for an annual

¹ This period is counted from 1 January of a calendar year when the tontine was established.

pension. However, it is important to emphasize that "throughout the extinction of the members of a given age, the remaining ones at that age could benefit through a fair division of the fund until the natural abolishment, the extinction of the group". The essence of the tontine can be presented as follows: as the participants are passing away, those living longer acquire a pension, and who survives all of them, receives the entire pension dedicated for the whole group. With a death of all fund members, the state treasury automatically stops paying the pension and, interestingly, inherits the entire share capital after them" [Langie 1885, p. 6-7]. In 1726, the last participant of the first existing tontine, a 96-year-old woman, died. Throughout the last years of her life she was entitled to a giant pension for all who had died before. No succession of the investment made was guaranteed for other family members, therefore the state interests' protection was ensured. In fact numerous public buildings were funded from tontines.

Among tontines two general types stand out: on one hand, a state tontine, on the other, the private, which arose in the Middle Age. Private tontines were based on:

- a collection of contributions of other people by an individual person,
- an annual payment of a predetermined amount for the remaining survivors.

Private tontines, unlike in the case of the state-capital, could not benefit from the guarantee offered by the state and the revenue generated by the state apparatus. Hence, there appeared a need to secure future payments. Means for these payments were obtained mostly by investing all money harvested from the survivors in business ventures or in debt or equity securities. In this way, therefore, a portfolio of securities used to be created with revenue sufficient to cover the annual payments to the survivors.

Tontines resembled collective investment institutions although they were, in fact, a vehicle for collective investment in securities. There were two basic characteristics that distinguished them from the funds in today's meaning, namely:

- participation in the tontine was assigned to a particular individual and was non-negotiable,
- the primary motive was to obtain the annual capital income redemption at a level allowing for the annual payment for the survivors.

Tontines did not guarantee either the active management of investments or their diversifying [Borowski, accessed 31 May 2011, p. 2-3].

As an interesting mixture of group annuity, group life insurance, and lottery, the tontine had a peculiar place in economic history. Given that a number of policies had actually failed after having paid some arisen premiums, a preliminary success of tontine was not surprising. In the seventeenth and eighteenth centuries it played the major role in raising funds to finance public goods in Europe [Lange, List, Price 2007, p. 1750-1782] and surely played an important role in the development of the modern life insurance industry.

The institution of tontine passed borders and made a part of pension regimes in other countries, such as England, Denmark, Germany and the Netherlands. In Poland, tontines functioned in the nineteenth century in the forms of:

- survival companies;
- Tonti's companies.

Such a sort of life insurance was offered up to 1875 by the Mutual Insurance Society of Cracovia and after that year a decision to eliminate tontines from the offer was undertaken. According to A. Mrazek [Doberman 1911, p. 115-116], "with great satisfaction of the leader managers, weave restituting the principles of morality strained by such operational speculations because of their immorality and character the fact that they had nothing in common with an appropriate life insurance" they were prohibited. The above Mutual Insurance Society, on one hand, stopped survival companies operations and promoted them as an unprincipled chance game; on the other hand, it joined a wider campaign organized by European societies, directed against American societies that advocated a combination of survival companies operations with insurance for survival, i.e. American tontines. European societies entered in a vigorous discussion (in press, special publications, and even the courts) due to strong competition from the American tontines which influenced the proper up insured. One cannot forget that the basic premise of tontine was understood as profiting from other people's deaths.

American life insurance companies were among the first businesses to employ widespread advertising and an organized sales effort in pursuit of business. The tontine scheme provided them with a successful marketing mechanism, focused on possible dividends. The use of hypothetical examples promising high returns was a common feature of their sales program. Purchasers of a tontine policy expected to receive and actually did receive, if they survived, a greater rate of return on their investment than was available on ordinary assets. The popularity of tontine insurance also reflected its genuine advantages over both ordinary insurance and conventional forms of saving [Ransom, Sutch 1987, p. 379-390].

Evidence shows that tontines in Great Britain and even in the USA were outlawed after having revealing conspiracies between some subscribers to assassinate others. Policy makers agreed that profits derived from policies based on the tontine saving were falling into an unethical scheme.

3. Tontine in the European Union's legislation

In the legislation of the European Union, First Council Directive of 5 March 1979 on the coordination of laws, regulations and administrative rules related to the taking up and carrying on of the business of direct life assurance (79/267/EEC), classified the life insurance tontines and defined them as operations involving the creation of subscribers associations for the purpose of joint capitalizing the shares, and subsequently, distribution of the accumulated assets among the survivors or among

the persons entitled by the deceased [Art.1 of the First Council Directive of 5 March 1979, accessed 1 February 2010].

4. Characteristics of tontines in selected countries

Tontine as an insurance form still functions in France. It is present in the French legal system, as it is considered a separate industry in the legal division of insurance. Such an activity, however, may only be conducted by tontine companies.

Nowadays, tontine is a private institution, i.e. an insurance company, and it is essential that in the case of the absence of conditions for payment of the agreed provision to the insured or a beneficiary (the person designated), the accumulated funds are transferred to the other participants in the tontine within the same class [Rubel 2004, accessed 1 January 2009]. In France, the most popular division of tontines as a concept encompasses:

- in a subjective meaning – an insurance company; it is an institution, a particular form of mutual insurance companies, whose activities are limited exclusively to the tontine operations;
- as objects – an insurance operation that consists of creating insurance members associations in order to jointly capitalize the accumulated contributions, and, afterwards, distribute them among the eligible members.

The French Insurance Code allows for the possibility of creating two types of tontine associations. One is for the case of death and another for the survival of the members. In the event tontine associations of survival differ from the associations in the event of death by:

- an objective they aim to achieve,
- a period of time until which they are planned to be concluded,
- a restriction according to which the tontine may be joined in the event of survival no later than 5 years before its closure and in the event of death tontine associations are established exclusively for one calendar year.

Thus, in the French legislation, there are two co-existing distinct legal entities, such as:

- tontines – associations,
- tontine companies that develop, manage and liquidate a particular tontine. Each tontine fund is managed individually by the tontine company and is separated from funds of other tontine associations.

The amount to be paid to the insured or the beneficiary can be known only at the moment of closure of the tontine. Moreover, it depends on:

- mortality in the group,
- age of the member,
- the amount paid and the number of payment contributions,
- contributions lost due to failure in regular payments by the other members.

Contemporary tontines have nothing in common with the loan granted to the state treasury in return for an annuity. Tontine is now a private institution, which means that it is an insurance company. But it must be emphasized that the essence of tontine – distinguishing it from the life annuity at that time, and from the classical life insurance or endowment nowadays – is still valid. In this understanding, in the absence of the agreed conditions for payment of benefits to the insured or a person designated by the insured, the accumulated funds are transferred to the other participants in the tontine in the same class [Rubel 2004, accessed 1 January 2009].

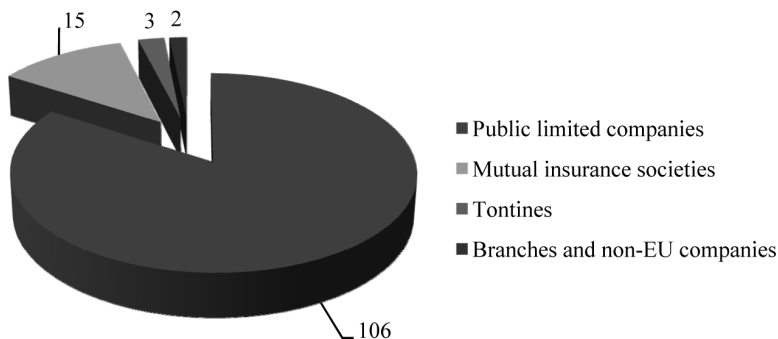


Figure 1. Participation of tontines in the life insurance market according to the organizational and legal form

Source: K. Rubel., *Tontyna – kontrowersyjna forma ubezpieczenia wzajemnego*. Serwis IGUiOR, *Ubezpieczenia 2004*, http://www.igu.org.pl/konfer_materialy1.php?id=1, accessed 1 January 2009.

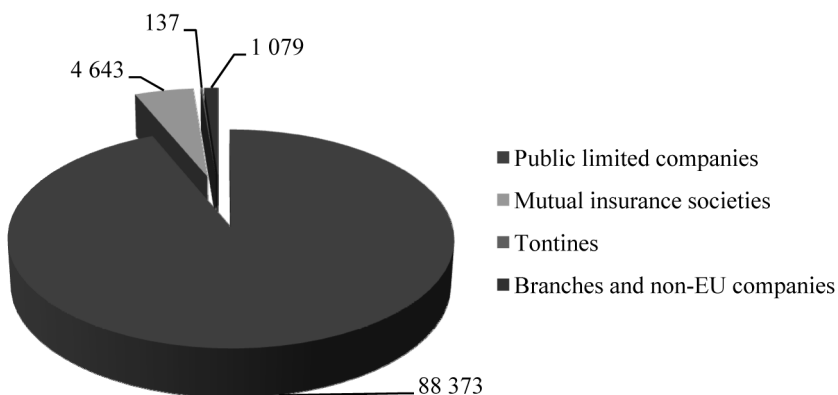


Figure 2. Participation of tontines in the life insurance market according to assigned premiums in 2002 (in millions euro).

Source: K. Rubel, *Tontyna...*

Nowadays, three tontines associations are actually functioning in France: Assurance and Pasiphae, Associations Mutuelles le Conservateur, La Mutuelle Phocéenne (Figure 1 and 2).

The share of tontines in the life insurance market taking into account the premiums is quite modest as their total premiums amounted in 2002 to 137 million euro, which represents only 0.1%.

The process of transition of tontines into the Netherlands, at the time being the world's business centre, was relatively quick and they soon became an interesting offer on the insurance market. Taking into account the principles of tontine, a great statesman Jan de Witt, established the theoretical principles for calculating state pensions in 1671. However, the probability of death in this case, was only based on approximate data.

Then tontines penetrated England. There, they were not understood as pure insurance, but drew attention to the predictability of the likelihood of death. The great English astronomer, Edmund Halley, the discoverer of Halley's Comet specializing in calculating the paths of comets, in 1693 compiled the first complete mortality table [Bratkowski 1997, accessed 1 December 2010]. In general, tontines could be a source of problems for the issuing governments as they habitually underestimated the longevity of the population. Contrary to the relative success enjoyed in France, tontine offerings in England often failed to raise the desired capital. England provided its first national tontine in 1693; this initial tontine generated but a tenth of the one million pounds set as its goal. Yet England did successfully use the tontine to fund many public projects [Lange, List, Price 2007, p. 1750-1782]. While with somehow limited success to the government, many people found the mechanism useful to help start their own business.

5. Conclusions

A descriptive method of this paper allowed us for isolating a phenomenon of tontines, describing and comparing them with similar phenomena, while highlighting the common and differentiating factors.

Tontine is an insurance instrument, whose members, while contributing for a common fund, invest and divide the profits among the surviving members of the fund. Throughout years, tontine has achieved a bad fame and it is continuously associated to such unethical and immoral role. Despite this, history shows tangible proves of adequate implementation and use of tontines in public investments and financing infrastructure.

As McKeever [McKeever 2010, p. 491-521] concludes, tontines, with their success in government fund raising and means for private investment and development, do not deserve their "shadowy" reputation. As an instrument they played an important role in bridging the insurance plans into modern reality and providing some of

the earliest reliable actuarial data on which the later insurance plans could be then established and developed.

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MEDYCZNE KONTO OSZCZĘDNOŚCIOWE JAKO MECHANIZM FINANSOWANIA OCHRONY ZDROWIA

Streszczenie: Ubezpieczenie, jako domena finansów, zakłada transfer ryzyka między datami lub sytuacjami. W ubezpieczeniu na życie posiadacz polisy ubezpieczeniowej zobowiązuje się do regularnej zapłaty ustalonej wcześniej kwoty, otrzymując jednocześnie gwarancję wypłaty przez ubezpieczyciela innej zdefiniowanej umową kwoty w przypadku śmierci bądź poważnej czy nieuleczalnej choroby. W rzeczy samej niepewność i nieprzewidywalność stanowią nieodłączny element ludzkiego życia. Specyficzną i wciąż kontrowersyjną formą ubezpieczenia na życie jest tontyna. Początkowy sukces i późniejsze zniesienie wiąże jej nazwę z niemoralnością praktyki czerpania korzyści z nieszczęścia innych. Celem niniejszego artykułu jest przedstawienie instytucji tontyny jako instrumentu ubezpieczeń, przedyskutowanie jej genezy, rozwoju oraz praktycznego zastosowania.

Słowa kluczowe: tontyna, ubezpieczenie, ubezpieczenie życiowe.