Geography of the wealth, time preference and commercialization of the *Viager* product

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Extended Abstract

1. The viager product

A Viager real estate transaction, which can also be called a « lifetime annuity real estate » transaction, consists in selling a property in return for a down payment and a lifetime annuity that the buyer has to pay until the seller dies. Today, the viager product is used and standardized in many countries such as France, Germany, Belgium, Italy and Spain, and the development of the viager market is becoming a major issue. On the one hand, about 75 % of the French retired population is homeowner and among this population an important part are « house rich, cash poor »[1]. On the other hand, the French residential real estate park value is estimated at 6 300 billion euros with an added value of more than 3 700 billion euros since 1998[2]. New investment funds such as Certivia, dedicated to the viager market, a 120 million institutional fund, have also recently been created. The contemporaneous interest of the viager lies in the fact that this technique allows transforming an accumulated housing wealth in revenue (annuities), mainly for the retired.

This paper presents a quantitative analysis of the geography of the wealth (approximately 1050 billion euros), of the time preference and the commercialization of the viager product. The analysis is based on

1 Retired homeowners having low pensions.

2 **SIMON Arnaud and ESSAFI Yasmine**, 2017, « Concurrence générationnelle et prix immobiliers », *Revue d'Economie Régionale et Urbaine, no. 2017/1, 109–40.*

2 678 transactions from 2010 to 2018. It explores in particular the preference between a lifetime annuity and a down payment. In their article "Annuitization Puzzles"[3], Bernatrzi, Previtero and Thaler underline that annuities should be popular for many reasons. However, few people choose to annuitize a substantial share of their wealth. Many participants in defined contribution retirement plans should for instance consider to annuitize their pension but are still reluctant because of psychologic barriers; an annuity payout does not seem very attractive compared to accumulated assets. If an annuity can be viewed as a risk-reducing strategy, it may also be considered as a gamble on the annuitant's life expectancy. However, as annuities are a way to hedge the longevity risk, and as a viager allows to thin an immovable heritage, it remains an unsaturated market with potentialities.

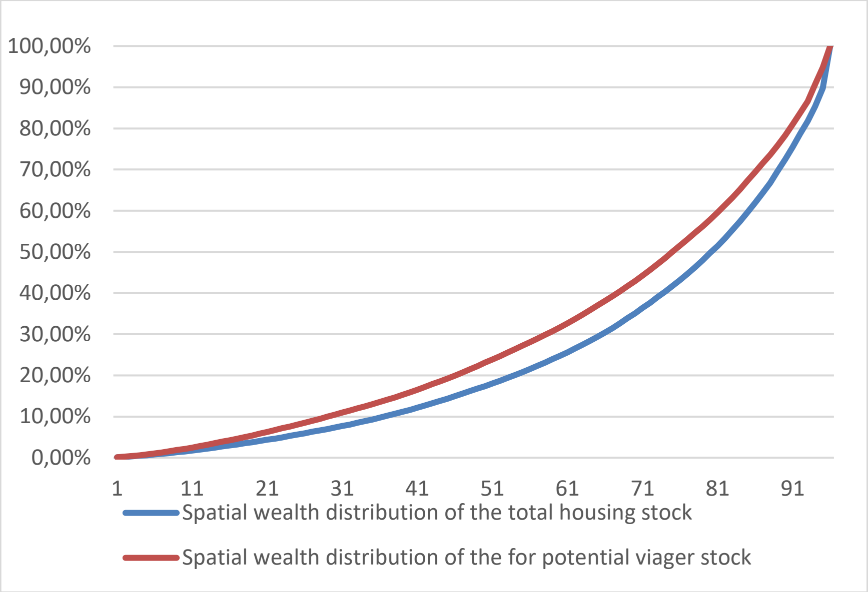
2. Geography of the wealth

The housing wealth in France can be estimated around 5 659 billion euros. 58% of the French population is homeowner, but this rate reaches 75% for the retired. It is possible to get an estimation of the market size for the viager product. Owner-occupied housing for the retired people is associated to a wealth of 1 059 billion euros, in other words, approximately, 19% of the total residential real estate stock value.

The potential viager wealth is less concentrated across the French departments compared to the total wealth. If the 17 more expensive departments represent 50% of the total value, reaching half of the viager wealth requires to gather 21 departments. Similarly, for the total wealth, the 37 less expensive departments are required to get the first 10% of the wealth, whereas for the viager summing the 30 first ones is enough to reach this threshold of 10%. If we represent the cumulative wealth distribution in these two cases (Figure 2), in a Gini-like approach, the viager wealth appears as less concentrated.

Figure 2: Distribution of total and viager wealth across departments

3 **BENARTZI Shlomo**, **PREVITERO Alessandro and THALER Richard H.**, 2011, « Annuitization Puzzles », *Journal of Economic Perspectives, 25(4), pp. 143–164*



At the departmental level, the potential viager wealth can vary between 8,6% and 33,5% of the total departmental real estate wealth. In the first case, we find very urban and metropolitan departments (for example Paris and Lyon). In the second case, it corresponds to a mix between departments confronted to a desertification process (for example the center of France) and littoral departments very attractive for retired people.

3. Now or tomorrow: time preference between life-time annuity and down-payment

The second subject of this article is to investigate on the time preference i.e. the preference between a lifetime annuity and a down payment. The analysis is focused on France, and only on the occupied viager product which is the main form of viager. The economic is calculated: it corresponds to the market value minus the right of use and habitation[4]. This right of use and habitation is kept by the seller in the case of occupied viager. The economic value is also equal to the

[4] The right of use and the right of habitation are two distinct rights. Combined, it allows someone to use and live in a property

down-payment plus the sum of the discounted values of the lifetime annuities.

In order to explain the time preference, we estimate two linear regressions for apartments on the one hand and for houses on the other hand, in order to understand what are the determinants in the arbitrage between down-payment and annuities. The first regression does not take the distance between buyers and sellers into account as an explanatory variable. But this distance is kept for the second regression. The other explanatory variables are: joint life expectancy, time of commercialization, year of construction, number of rooms, percentage of owners in the municipality and median income in the municipality. The time preference is measured by the ratio present value of annuities/economic value, the present value of annuities being the sum of the current value of the future annuities. Both present value of annuities and economic values are calculated with mortality tables TF/TH 00-02, and with a discount rate coming from a zero-coupon curve provided by the French Institute of Actuaries at the year of signature and until the maturity date. The initial estimated value is made by the real estate agent. We also use the AIC criterion and the stepwise method to verify in our results that the significant variables are properly chosen.

The results indicate that the distance between buyers and sellers is not significant in the regression to explain the ratio present value of annuities/economic value and thus, the time preference. However, a local bias exists: the buyers and the sellers often live in the same department (when we have the distance, in 75% of the cases the municipality of the buyer is the same as the municipality of the seller). The joint life expectancy[5] and the percentage of owners in the municipality have a significant and positive effects. It means that when sellers are older or when there are more frequently owners in the municipality, the annuity is preferred. Moreover, the coefficient of the median income is significantly negative with the ratio which means that richer sellers prefer a down payment rather than an annuity. On the contrary, poorer sellers prefer annuities. The number of rooms does not have the same signification for apartments and houses: the less rooms in apartments or the more rooms in houses are, the more the down payment is preferred.

[5] The life expectancy of the seller and his or her spouse (when there is one and when the lifetime annuity ceases at the death of the last survivor).

4. Time-on-the market: the determinants of the commercialization time

Thirdly, we study the commercialization effects regressing the ratio between the final economic value at the signature date, and the initial estimated value (estimated by the real estate broker).

The distance between buyers and sellers is still not significant despite the local bias previously mentioned. However, a commercialization time greater than 6 months and the joint life expectancy are significant, both for apartments and houses. The higher the time of commercialization, the lower the final economic value is. A greater time of commercialization indeed leads to a lower final price as the seller downsizes its price because of the difficulties to sell. The higher the joint life expectancy, the lower the final economic value is also. This is coherent with the fact that younger sellers have a lower economic value as their right of use and habitation are higher.