



Housing Capital, Care and Longevity – The Dutch Case

by Bernhard Wolters, Gen Re, Cologne

In recent years there has been a mounting public debate on income and wealth inequality. After a long period of insouciance following the 30-year postwar boom, incumbent politicians are not the only ones beginning to feel alarmed. Economists have also heard the wake-up call and are currently reexamining income and wealth distribution as a serious research topic.¹

Inequality is an issue running across all age groups. But there is also a growing divide between the young and the elderly. People born in the 1950s and early 1960s, the so-called baby boomers, account for a rising proportion of the total population of pensioners. Many baby boomers have been blessed with two pieces of good fortune: on the one hand well-paid and secure jobs, which allowed them to accumulate significant wealth on their own, and, on the other hand, sizeable bequests from a well-to-do parent generation that was able to fully reap the fruits of the 30-year postwar boom.² By contrast, the baby boomers' offspring, i.e. those currently in their 20s and early 30s, are faced with sluggish economic growth and soaring housing costs in the big cities where more and more of the highly productive jobs are clustered.³ Figure 1 illustrates the marked shift of wealth in terms of net residential property value from the young to the elderly in the Netherlands.

This article sets out to deal with the question of how idle capital locked up in residential property owned by pensioners can be freed up in efficient ways. Surely, one important motive is to transfer money to the young so that the latter can put it to productive use when they are in their prime. But other reasons will also be explored, notably the need to beef up pension incomes and to plug repayment gaps in maturing interest-only mortgage loans. Schemes designed to free up housing capital are known as "equity release". We will see that equity release touches on a variety of issues, all linked with the fact that, nowadays, people live much longer than they had in the past. Most importantly, we will set out how supplementary private long term care cover can serve to further enhance the benefits of equity release.

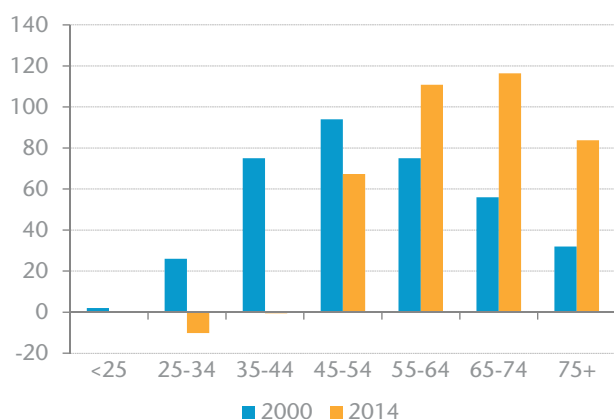
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About This Newsletter

Risk Insights is a technical publication produced by Gen Re for life and health insurance executives worldwide. Articles focus on actuarial, underwriting, claims, medical and risk management issues. Products receiving emphasis include life, health, disability income, long term care and critical illness insurance.

Figure 1 – Net residential property value in the Netherlands in billion euros



Source: CBS (Dutch Statistical Bureau)

Table 1 – Types of equity release schemes⁵

Feature	Type 1	Type 2
Loan repayment	Fixed date	When home is sold at death or admission to a care home
Interest payment	Regular/deferred	Regular/deferred to contract expiry
Longevity risk [carried by:]	Home owner	Lender/buyer

Existing equity release schemes and their shortcomings

According to one definition, “Equity release is a way of getting cash from the value of your home without having to move out of it”.⁴ The equity (or value) locked up in the home is the market value less any mortgage or other debt held against it.

There are essentially two types of equity release schemes (see Table 1). According to the first type, the loan repayment is set at a fixed date regardless of whether or not the borrower died or moved to a care home by that time. Schemes belonging to the second type expire only after the borrower has died or moved to a care home so that the loan can be repaid from the proceeds of the sale of the property. In schemes of the first type, the borrower carries the longevity risk, whilst in schemes of the second type the longevity risk is transferred to the lender or buyer.

In the Netherlands there is currently at least one provider of a scheme belonging to the second type⁶ and one provider of a scheme belonging to the first type.⁷

The longevity risk for lenders in type 2 schemes can be gleaned from Figure 2. In this example, the amount of the loan including the compounded interest (4%) exceeds the value of the property (rising at an annual rate of 0.5%) after 27 years.

Most pensioners can be expected to reject type 1 in view of the risk of having to sell their homes while they are still living at their loan contracts’ maturity date (longevity risk).⁸ We will therefore take a closer look at type 2 instead.

For a couple, each aged 60 and with a mortgage-free home worth EUR 300,000, one provider offers a maximum loan of roughly EUR 75,000.⁹ This is equivalent to a loan-to-value ratio of 25%. The compounded interest at an annual rate of 4.3% is paid from the proceeds of the sale of the property (roll-up mortgage).¹⁰ When, for instance, the home is sold 30 years later, the compounded interest will amount to EUR 191,000. If the market value of the property increases at an annual rate of 1%, it will amount to EUR 404,000 after 30 years. The heirs will therefore obtain EUR 138,000 (the remainder after deducting the 191,000 compounded interest and 75,000 loan). Compare that scenario with a solution in which neither the borrower nor the

Figure 2 – Longevity and shortfalls in repayment



Source: Author on the basis of CBS data

lender would have to carry the longevity risk, but would be able to transfer the risk to a third party. For a 30-year fixed-rate and interest-only mortgage, the current interest rate would be 3%.¹¹ The interest is paid on an annual basis (second offer). Table 2 compares both offers.

The compounded interest accounts for EUR 93,500 ($75,000 * (1.043^{30} - 1) - 75,000 * 0.043 * 30$) of the total difference in interest of EUR 123,000 ($191,000 - 68,000$). The remaining EUR 29,500 can be attributed to the compensation for the longevity risk. The sum of all payments in the second offer adds up to EUR 472,000, which is more than the market value of the house. The difference of EUR 68,000 is the annual interest paid by the borrower. Even if the borrower had passed the interest bill on to the future heirs, they would still have obtained a net benefit from the inheritance of EUR 261,000.¹³ Compared to the first offer, they would have been better off by a margin of EUR 123,000, which is equal to the difference in interest.

Before we explore the second offer in more detail, notably the way the longevity risk can be transferred to a third party for the benefit of both borrower and lender, we will first look at the various reasons for the elderly to free the capital locked up in their homes long before death is near.

The case for equity release – individual considerations

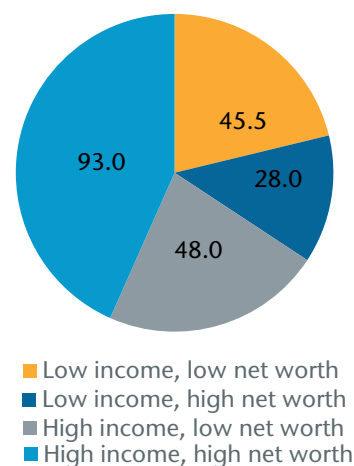
Pensions

In the Netherlands, the average annual income (capital gains not included) for people aged 65 to 70 is equal to EUR 25,000.¹⁴ Especially for those without any assets other than their own homes, this is just enough to make ends meet.¹⁵ As state pensions and corporate pensions come under increasing demographic pressure, the situation is unlikely to improve within the foreseeable future. For their financial well-being, pensioners will therefore have to rely more and more on raising money from their homes. A simple calculation serves to illustrate the benefits. A couple living in their own home, with a total annual income of EUR 25,000, pays approximately EUR 4,000 in income tax and EUR 2,500 for utility bills. The available monthly net income thus amounts to roughly EUR 1,550. In order to beef up their monthly income by EUR 500 for a period of 10 years, they will

Table 2 – Offer comparisons¹²

Amounts in euros	No mortgage	First offer	Second offer
Bequeathed	404,000	138,000	329,000
Total interest	0	191,000	68,000
Loan	0	75,000	75,000
Sum	404,000	404,000	472,000

Figure 3 – Net property value in the Netherlands for ages 65 and above in billion euros



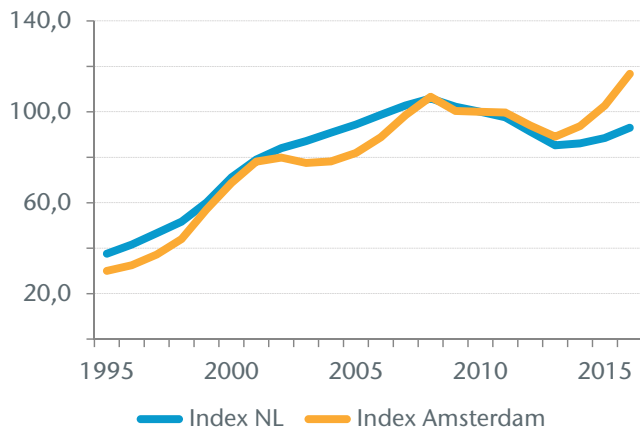
Source: WoonOnderzoek Nederland 2012

need EUR 60,000 unless they earn interest, which would reduce the required amount. Figure 3 sets out the net property value for pensioners aged 65 and above, split up by the size of their income and wealth. It is fairly safe to assume that low net worth pensioners with high or low income are likely to benefit most from equity release. Both groups account for a total net residential property value of EUR 93.5 billion.

Capital transfer

In Western countries, well-educated young adults looking for jobs and trying to build their lives are increasingly faced with two trends, i.e. the clustering of highly productive jobs in big cities and, as a result, soaring house prices in these places. Figure 4 illustrates the point by comparing the evolution of house prices in Amsterdam with the national average.

Figure 4 – House prices (2010 = 100)



Source: CBS

In 2016 the average market value of residential property in Amsterdam amounted to EUR 360,000, or roughly EUR 120,000 above the national average. Using the average growth rate for the years 2014 to 2016, the average property value in Amsterdam is likely to have risen to at least EUR 450,000 in 2018.

An individual in Amsterdam with an annual gross income of EUR 50,000 would currently get a maximum loan of approximately EUR 200,000.¹⁶ For a couple with a total gross annual income of EUR 80,000, the maximum loan would amount to EUR 350,000. It is therefore hardly surprising that youngsters need financial support, and that parents are keen on helping them on the housing ladder in the places where the more attractive jobs abound.

Repayment gaps in maturing interest-only mortgages

In the UK, millions of interest-only mortgage loans are approaching maturity; a sizeable share (roughly 50%, or 1.3 million contracts as of five years ago)¹⁷ of them are likely not to be paid off because borrowers lack the necessary funds. The average shortfall is estimated at GBP 70,000. Interest-only mortgages in the Netherlands account for EUR 340 billion.¹⁸ Assuming an average loan of EUR 250,000, the total amount would translate into EUR 1.36 million in contracts.

Equity release can help solve these problems if the available solutions allow borrowers to free up sufficient amounts of money from their homes in order to be able to plug the repayment gaps.

The case for equity release – macroeconomic considerations

It becomes increasingly obvious that soaring house prices are keeping young people away from the highly productive jobs in the big cities. Those who can only afford a home in the suburbs waste time commuting long hours. The overall effect is that an increasing number of highly skilled labour has to put up with less productive jobs. According to one estimate, GDP in America could be up to USD 2 trillion higher if such barriers did not exist.¹⁹

Solving the longevity problem

Facilitating loan repayments

The problem in the case of equity release – or more generally, in the case of interest-only mortgages to the elderly – lies in the inability of the parties involved, i.e. the borrower and the lender, to mitigate or to eliminate the longevity risk. Borrowers can be asked to carry it, which is unacceptable to most. Therefore some lenders have come to accept it but charge a significant risk loading, which, again, turns off borrowers. The problem is caused by the fact that such schemes will only make sense to the borrower if the proceeds from the sale of the home are used to repay the loan. Otherwise, the money locked up in the home would not be freed up. However, if the borrower is still alive when the loan matures (type 1) or when the loan amount including compounded interest exceeds the market value of the house (type 2), the borrower will have to sell the house and move to another home lest the lender suffer a loss.

A possible solution to type 1 schemes consists in introducing a third party that is able to purchase the home when the loan matures and to sell it again when the borrower dies. The initial loan could be repaid by the borrower from the proceeds of the sale to the third party. The latter could build up the required funds for the purchases by taking mortality into account. This way the longevity risk could be mutualized. Type 2 schemes are

expensive because they do not pool the risks. If the borrower dies when the amount due to the lender is still well below the market value of the house, type 2 schemes will pay the difference to the heirs after the house has been sold. Because lenders do not benefit from premature deaths, their pricing has to be based on extremely conservative calculations of life expectancy.

Facilitating out-patient care

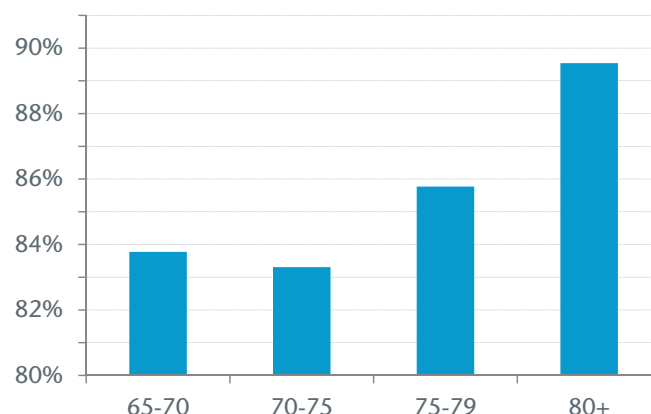
Figure 5 shows the percentages of Dutch pensioners in different age groups unwilling to move out from home.

These results should hardly be surprising. Anecdotal experience suggests that this pattern will not change for people who require high levels of long term care (severe LTC cases), provided that help is available in the form of professional out-patient care as well as family care.

Moreover, this appears to be one of the rare instances where individual preferences go hand in hand with the Dutch government's objective to curtail expenses – in this case, the public cost for long term care.

Table 3 shows the total number of severe LTC cases (160,000) entitled to in-patient care according to the decision of the state claims authority (CIZ). Only 10,000 have chosen not to move to a care home, and continue to receive help at home. For in-patient care, the total monthly expense per patient amounts to EUR 4,800 on average. After an average deduction of EUR 1,000 paid by the patient, the monthly per capita cost for in-patient care carried by the state amounts to EUR 3,800. For out-patient care, the bill paid by the state is EUR 2,000. For every patient opting for out-patient care instead of in-patient care, the state can save monthly expenses of EUR 1,800.

Figure 5 – The elderly's unwillingness to move out from home



Source: WoonOnderzoek Nederland 2015

Gen Re has calculated incidence rates for in-patient care based on prevalence rates published by the Dutch Statistical Bureau (CBS). According to these rates, the probability of people aged 65 becoming severe LTC cases before the age of 90 is equal to 44% for men and women alike. Such severe cases have an average life expectancy of approximately three years. This relatively short time span could be reason for family members to consider assuming caring responsibilities. Data published by the OECD show that a significant amount of informal care is already provided. For 16 European countries, the number of caregivers is equal to 11% to 12% of the population on average.²⁰ In the Netherlands, this translates into almost 2 million caregivers. However, family care requires financial support as well as flexible arrangements in the workplace.

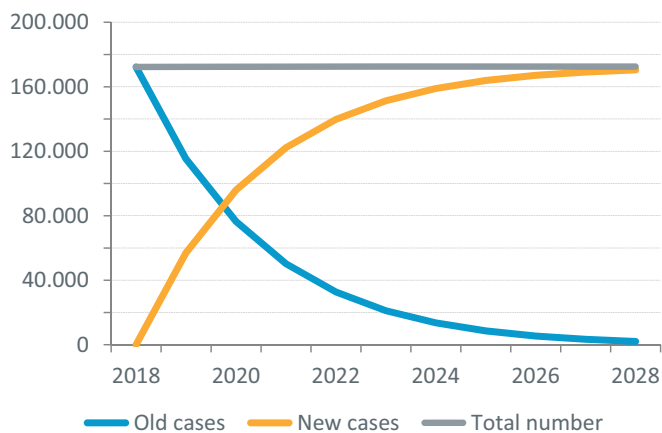
Combining equity release schemes with supplementary LTC insurance therefore appears to be an important first step in order to facilitate out-patient care. In some cases, insurance would help alleviate the financial strain caused by deductibles.

Table 3 – Long term care numbers and monthly expenses

Amounts in euros	In-patient indication	Per capita expenses	Per capita deductible	Per capita net expenses
In-patient care	150,000	4,800	1,000	3,800
Out-patient care	10,000	2,200	200	2,000

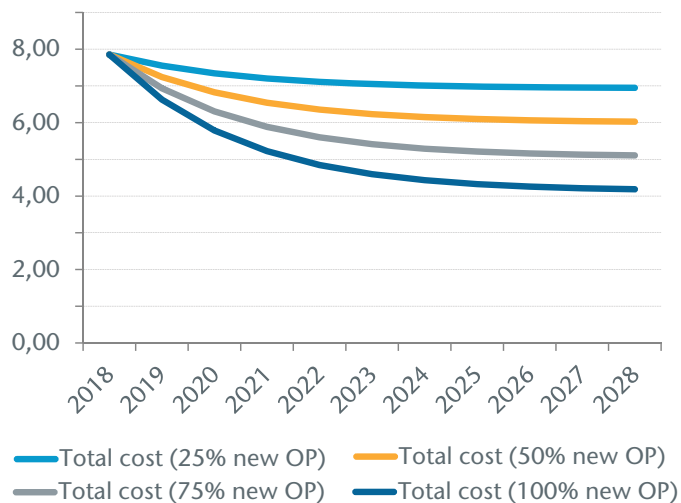
Source: CBS

Figure 6 – Increasing proportion of out-patient cases



Source: Author on the basis of CBS data

Figure 7 – Annual expenses in billion euros for severe LTC cases



Source: Author on the basis of CBS data

In others, it could serve to compensate for partial income loss suffered by family caregivers who sacrifice working hours to organize and facilitate out-patient care together with professional providers.

Figure 6 illustrates how fast a population of severe LTC cases (old cases) is replaced by newcomers as a result of high mortality. After only four years, more than 80% of old cases have been replaced by newcomers. The high transition rate shows that any action by the government or private providers to promote out-patient care can bear fruit very quickly.

Based on the figures in Table 3, Figure 7 depicts the annual savings in public LTC expenses for patients entitled to in-patient care. The total amount of savings depends on the replacement ratio, i.e. the percentage of patients entitled to be admitted to a care home but opting for out-patient care (OP) instead. If, from 2018 onwards, all new cases opted for out-patient care, the total annual cost could be reduced by almost 40% after five years. Given a replacement ratio of 50%, the annual savings would still amount to 20% after five years.

Conclusion

Equity release schemes that succeed in circumventing the longevity risk appear to be a beneficial catalyst for a more productive and more equitable use of the capital locked up in the residential property owned by pensioners. In the Netherlands alone, the results shown in Figure 3 suggest that for the target group in question, i.e. pensioners with low assets other than residential property, the available capital could amount to EUR 90 billion.

About the Author



Bernhard Wolters is Vice President within the Life/Health department of Gen Re and has for many years been responsible for the Dutch and Scandinavian markets. He can be reached at Tel. +49 221 9738 848 or wolters@genre.com.

Endnotes

- 1 See for instance Thomas Piketty, *Capital in the 21st Century*, 2014, or Joseph Stiglitz, *The Price of Inequality*, 2012.
- 2 See Deloitte Center for Financial Services, *The Future Of Wealth in the United States*, 2015, https://www2.deloitte.com/content/dam/insights/us/articles/us-generational-wealth-trends/DUP_1371_Future-wealth-in-America_MASTER.pdf as well as *The Economist*, *The Generation Gain*, 28 October 2017, <https://www.economist.com/news/finance-and-economics/21730674-gap-closing-millennials-are-doing-better-baby-boomers-did>.
- 3 See *The Economist*, October 21st – 27th, 2017, *Left behind. How to help places hurt by globalization*.
- 4 The Money Advice Service, *Equity release scheme. Raising money from your home*. November 2011.
- 5 Unless otherwise mentioned, the source will be the author.
- 6 Florius Verzilver Hypotheek, <https://www.florius.nl/hypotheek/verzilver-hypotheek>, accessed on 30 January 2018.
- 7 Rabo OverwaardePlan, <https://www.rabobank.nl/particulieren/hypotheek/hypotheek-vergelijken/keuzeplus-hypotheek/overwaardeplan>.
- 8 It should be noted that not only borrowers dread the prospect of being forced to sell their homes. Also banks are wary of the obvious reputational hazards. This also explains why many mortgage lenders have been reluctant to provide interest-only loans to pensioners.
- 9 Ibid, at Note 6.
- 10 According to the Dutch consumer protection organisation (consumentenbond): <https://www.consumentenbond.nl/hypotheek-senioren/florius-verzilver-hypotheek>; accessed on 30 January 2018.
- 11 See for instance the comparison of mortgage rates on the Dutch consumer protection site; <https://www.consumentenbond.nl/hypotheek-bij-verhuizing/keuze/doorstromer>, accessed on 30 January 2018.
- 12 Ibid, at Note 5.
- 13 This does not take into account their loss of investment income, which they would have earned without paying the interest.
- 14 CBS (Dutch Statistical Bureau).
- 15 See the Dutch money advice service NIBUD; <https://www.nibud.nl/consumenten/persoonlijk-budgetadvies/>, accessed on 30 January 2018.
- 16 Nibud, *Financieringslastnorm* 2018.
- 17 The Guardian, *City regulator warns homeowners over interest-only mortgages*, 2 May 2013, <https://www.theguardian.com/money/2013/may/02/interest-only-mortgages-storing-up-trouble>, accessed on 31 January 2018.
- 18 Het Financieel Dagblad, *Reken u niet rijk met de overwaarde*, 13 January 2018.
- 19 The Economist, *How cheaper housing can boost productivity*, 20 July 2015.
- 20 OECD, *Help wanted? Providing and paying for long-term care*, 2011, p.88.



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General Reinsurance AG
Theodor-Heuss-Ring 11
50668 Cologne, Germany
Tel. +49 221 9738 0
Fax +49 221 9738 494

Editors:
Ulrich Pasdika, ulrich.pasdika@genre.com
Ross Campbell, ross_campbell@genre.com

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