A reference buffer for households

A study of Dutch households' net wealth and saving patterns

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In 2008 the Dutch National Institute for Family Finance Information (Nibud) developed a Buffer Calculator to give Dutch households a general idea of how much money similar households have in their savings accounts. The Buffer Calculator was based on 2006 figures. The recent economic crisis has probably changed households' financial behaviour – a good reason to recalculate the reference amount for households' savings accounts in the light of the most recent data. Households' saving patterns have also been examined.

The study is based on three sets of data: the ING Bank's Budget Barometer for the second quarter of 2012, the 2011 Household Survey drawn up by the Dutch central bank (DNB), and the data used for the study entitled *Geldzaken in de praktijk* ('Dealing with money in practice').

Saving patterns
The largest group of households (some 40%) report that they save irregularly, i.e. only if they have money left over, or in varying amounts. About a quarter save a fixed amount each month. One household in seven does not save at all; these non-savers are mainly single people and low-income households. Those that save a fixed amount set aside an average of 9% of their income each month.

Reasons to save
Reasons to save have three dimensions. The first dimension concerns the buffer, mainly in the short and medium term; the main reasons here are being able to cope with unforeseen expenditure, and avoiding dependence on other people. The second dimension concerns whether there are children in the household. The third dimension concerns one-off major expenditure, such as buying a home or starting up a business. What is striking about the first dimension is that the households involved have few features in common – maintaining a buffer appears to be a universal wish.

Size of the buffer
About 20% of households say they have no financial buffer at all; another 20% say they have a buffer of less than €2,000. Half of the people who say they find it hard to make ends meet report that they have no buffer.

Some 85% of households would like to have a buffer. Only the lowest-income households, young people under 25 and old people over 65 feel somewhat less of a need for one.

Net wealth
However, net wealth has increased considerably. Whereas in 2006 half of home-owners had more than €8,500 in savings accounts, by 2011 this figure had risen to €17,000.

Net liquid wealth has also increased. These form the basis for the reference buffer. They depend on age, the household's income, whether the household owns its own home, the value of the car and whether there are children in the household.

Households with a similar income save less and have a smaller buffer if they have children. The costs of children are so high that other spending is reduced, including the amounts that are set aside.

Method for calculating the minimum buffer and the reference buffer

Definition of the buffer
We define the buffer as the amount of money that a household has immediately available to cover major expenditure arising unexpectedly at any time over the next ten years (medium-term contingency expenditure). The main purpose of the buffer is to get through low-income or high-expenditure months, to replace furniture and household goods, to maintain or replace the car and to maintain or decorate the home.

That is why we use *net liquid* wealth as a basis for the reference buffers. *Liquid* means that the assets can be quickly converted into money to pay for whatever is required. *Net* means that allowance is made for any debts. If only possessions were considered, this would give a false picture of the household's financial position.

The reference buffer is thus not intended to absorb a drop in income due to such things as retirement, incapacity or unemployment. Nor is it intended to deal with emergencies that lead to major expenditure, such as fire or illness. In all such cases, insurance is a better alternative.

The reference buffer is intended for the whole household, whether this consists of one person or more than one. This is because the contingency expenditure that the buffer is intended to cover is often for the benefit of the whole household, rather than just one member of it.

A larger buffer in times of uncertainty
The current uncertainty have made many people spend less and invest less riskily. Fear of the future has probably led people to save more. Their expectations about their own financial situation over the next twelve months have become much more pessimistic. Higher balances in savings accounts have raised median savings. This applies above all to middle- and high-income households, and those that own their homes.

It is therefore fair to ask whether median net liquid wealth can still serve as the basis for the recommended buffer. On the one hand, balances in savings accounts will be larger than they used to be so that furniture and household goods can be replaced. On the other hand, they are a sign that people nowadays want to maintain a larger buffer than they used to. Because of the crisis, it is likely that potential uses of the buffer have increased in recent years. People no long save just to replace or repair furniture, household goods, the car or their home, but also because they are less certain about the future. A reference amount that fails to take account of this change is bound to be unrealistic. Nor is it possible to itemise the amounts involved. Since hardly anyone keeps separate savings accounts for the various types of contingency, it is impossible to tell how much has been set aside for each specific purpose. We have therefore decided to continue using the median as the reference amount, while emphasising its referential nature ('this is what similar households do') rather than recommending it for the aforementioned specific goals.

Measurable
We want to devise a method of calculation that will allow people to fill in a number of particulars and then see what an appropriate buffer would be in their own situation. This will quickly make clear to them how much money they should keep available for contingencies. They can then quickly work out for themselves whether they already have enough or need to save more.

Analysis shows that age, income, number of children, type of home (owner-occupied or rented) and value of the car affect the amount of net liquid wealth. These are all things that consumers either know, or can easily find out.

Acceptable
The reference buffer is estimated from empirical data. In many cases this model will provide a fair estimate of households' current net liquid wealth. However, this does not necessarily apply to all households. Especially in the case of low-income or very high-income households, the model may yield unrealistic results. For example, the reference amount for a buffer must never fall below zero. To prevent this, we have calculated a minimum buffer in addition to the estimated buffer based on empirical data. This will depend on the household's situation rather than its income.

Minimum buffer
The minimum buffer is based on the minimum package of furniture and household goods drawn up by Nibud. It is therefore only intended for getting through low-income and high-expenditure months, and for replacing essential furniture and household goods. This means it cannot be used to finance such things as home maintenance or replacing the car.

Just as in 2008, the minimum buffer is set at half the value of the package. If purchases are spread evenly over time, this is a fair approximation of the current value. This means that the difference between the current value and the value of a new package will also be half. The aforementioned amount for furniture and household goods will be enough to get through low-income and high-expenditure months.

Table 1: Minimum buffer (in euros)

	Minimum buffer
Childless single person	€3,550
Childless couple	€4,000
Single parent with 1 child	€3,950
Single parent with 2 children	€4,350
Single parent with 3 children	€4,950
Single parent with 4 children	€5,350
Couple with 1 child	€4,400
Couple with 2 children	€5,000
Couple with 3 children	€5,400
Couple with 4 children	€5,900

Reference buffer

The reference buffer indicates the amounts that similar households have in their saving accounts. The size of the buffer is based on median, rather than average, net liquid wealth. Analysis shows that net liquid wealth does not have a Normal Distribution, and that the average is not a reliable yardstick for most households. For example, median wealth is €30,000, whereas average wealth is over €47,000.

For the purposes of analysis we assume a log-normal distribution of net wealth. In this way, we can calculate the expected median.

In estimating the model for the reference buffer, we have only included households with positive net liquid wealth. This is because we want to offer advice on how large the buffer should be. Households with positive net wealth have something they can use as a buffer. Those whose

liabilities exceed their assets do not, and in that case nothing meaningful can be said about how large the buffer should be.

We have decided to include all the households in the analysis, including over-65s. Including age logarithmically reduces the effect of older respondents, but in any case the results would be hardly any different if the over-65s were omitted.

Realistic: a buffer that anyone can achieve and maintain
The model should result in a realistic buffer that any type of household should be able to achieve and maintain. We expect our method of calculation to yield a realistic buffer for every type of household, for it is based on empirical analysis of net wealth in the Netherlands, taking account of differing circumstances (see the 'acceptable' criterion). We have also considered median rather than average net wealth. This ensures that the size of the buffer is not influenced by a handful of households with very high net liquid wealth. According to the model, half of similar households would have this amount available as a buffer.

This yields the following formula for calculating the reference buffer:

ln (reference buffer) = 0.303 - 0.873 (if owner-occupied home) - 1.746 (if rented home) + 1.023 x ln (age) - 0.485 x ln (number of children + 1) + 0.912 x ln (disposable monthly income) + 0.028 x ln (current value of car).

Time-related: the buffer should always be in place
The buffer is not restricted to a specific time – it should always be in place. Whenever it has been used to cover contingency expenditure, or if the household's situation has changed, the buffer must be topped up again as soon as possible. Changes in individual situations, such as changes in income, moving house or divorce, may affect the size of the buffer.

If the buffer is not yet in place, it will depend on the household's financial situation how soon it can be. Analysis of the current pattern of income and expenditure will also be needed to determine how much money the household can actually save. Nibud's *Persoonlijk Budget Advies* ('Personal Budgeting Advice') can be of great help here.