

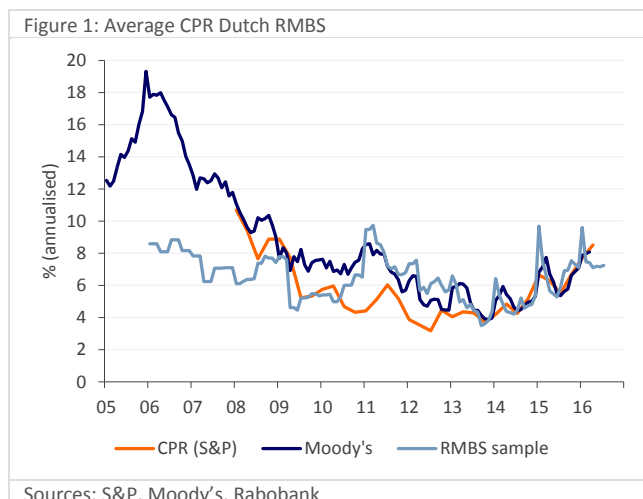


## Further rise in prepayment rates on the horizon

- The conditional prepayment rate (CPR) in Dutch RMBS transactions has increased further, to 8.3% in Q1 2016, from the levels around 4% observed in 2013. This increase is in line with our expectations.
- We observe a stronger seasonal pattern in prepayments, with the peaks in CPRs clearly centred around year-ends
- Relocations are the main driver behind the increase in prepayments. In contrast, refinancing activity is much lower than expected.
- We are revising our CPR outlook slightly upwards. For the coming years, we expect an average CPR of 9-10%. This level is still low relative to the high CPRs recorded in 2005-2006.

### Introduction

The Dutch housing market is steaming ahead. Not only are house sales and prices clearly on the rise again, but also the production volume of Dutch mortgages is gradually regaining growth. On the back of house price appreciation, mortgage borrowers are becoming less constrained by negative equity and their mobility in the housing and mortgage market is increasing. This is also demonstrated by higher prepayment rates on Dutch mortgage loans. **In Dutch RMBS transactions, the average conditional prepayment rate (CPR) reported by rating agencies reached 8.3% in the first three months of this year**, which clearly marks an upward trend.



This CPR development is in line with our expectations. About a year ago, we laid out a forecast of a CPR in Dutch RMBS transactions of around 8.0% in the years ahead. Back then, we already explained that the relatively low CPRs of 4-5% observed until 2014 were unlikely to be repeated. Although our headline estimation proved to be correct, we have underestimated the power of the main driver behind prepayments: relocations. Housing sales volumes have been stronger than we had expected, and explain most of the increase in observed CPRs. On the other hand, refinancing activity (i.e. taking a new mortgage loan on the same property) has been slower than expected. In this publication, we dig deeper into the CPR on Dutch mortgages and give a revised outlook for the years ahead.

### More seasonality in CPR

In Figure 1, not only is there a higher trend visible in the CPR, but it also seems the seasonal pattern in prepayments is getting stronger. In CPR data by rating agencies, we observe a strong peak in prepayments around March/April, but in our view, this is more related to reporting and/or recording lags. Using investor reports of a broad sample of Dutch RMBS transactions, we have also observed a stronger seasonal pattern in recent years. However, through this bottom-up analysis, we record the peak in prepayments slightly earlier, in January. At first sight, a peak in January is still somewhat odd, but if mortgage prepayments take place in (late) December, it is not unlikely that they are reported in January. A prepayment peak in December makes sense for two reasons: more curtailments and more relocations.

### More curtailments

The first reason are curtailments, i.e. partial repayments in excess of scheduled amortisation. In recent years, we have recorded materially higher curtailment activity by borrowers. Reasons to prepay mortgage principal are related to deleveraging (especially given the high incidence of negative equity), the relatively big presence of interest-only mortgage loans and also the presence of a wealth tax in the Netherlands (see box on the next page). Curtailments of up to 10-20% of the original loan balance can typically take place without a prepayment penalty.

Other reasons for higher curtailments is the fact that many originators set mortgage interest rates (including resets) on the basis of current LTV ratios, i.e. lower LTVs attract lower rates than high LTV mortgages. Furthermore, curtailments could have been driven by temporary exemptions in the gift tax framework. The latest measure, which allowed for a (conditional) tax-free gift of up to €100,000, expired on 31 December 2014 and could explain the peak in the (overall) CPR that occurred around January 2015. This is unlikely to be the explanation for the other peaks, however. Still, 31 December continues to be an important date, since it is the measurement date for the tax authorities, there might be an incentive to use wealth to pay down mortgage debt prior to this date.

Although reliable data on curtailments is unavailable, (especially in the historical context), we stick to our view that curtailments are a relatively small contributor to overall prepayments, simply because they are a lot smaller than the full repayments related to



## Dutch wealth tax

For a long time, mortgage loans enabled Dutch households to optimise their tax structure. As mortgage interest payments are fully tax deductible, it often paid off to take a mortgage in order to achieve (income) tax savings, even in case of substantial wealth. Several tax reforms have made this tax-driven leverage less attractive in recent years, but it is the low-interest environment that makes reductions in mortgage debt now more attractive. The Dutch tax system contains an (implicit) wealth tax, in which it is assumed that financial assets generate a 4% investment return. This 'income' is subsequently taxed at a 30% rate. There is a tax-free wealth threshold of €24,437 (€48,874 for families; 2016 numbers), but any wealth above is effectively subject to a tax rate of 1.2% (4.0% x 30%). As deposit rates are currently far below this direct tax rate, it could easily be the case that a household's tax bill can be lowered by reducing wealth through prepaying mortgage principal, i.e. through the shortening of the household's balance sheet.

refinancing or relocation. On the basis of annual reports by banks, we assume that the curtailment rate is approximately 1.0% per year, with slightly higher peaks around year end. This also means that only curtailments are not sufficient to explain the seasonal pattern in overall prepayments.

## And more relocations

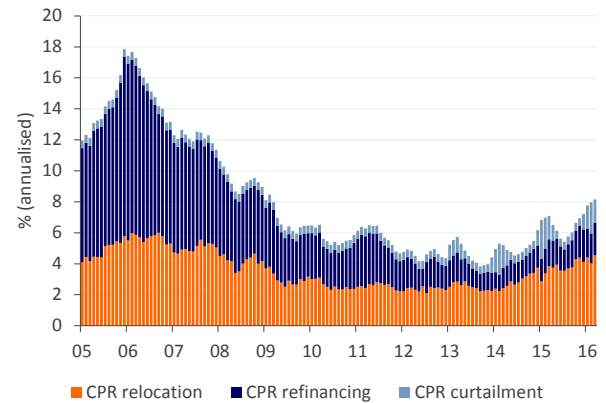
Fortunately, there is another explanation why prepayments peak around year-end, and this is relocations. Although not many people actually look for a new home in these darker days, we notice that a large share of all housing transactions takes place in December (an average of 14% of annual housing sales in last three years). The exemption in the gift-tax framework is also a good explanation for the higher sales volume recorded in December 2014, but the annual (scheduled) reduction of the statutory LTV, which takes places on 1 January each year (currently 102%), is another reason to close a home purchase by the end of December.

Similar to our previous exercises on this topic, this time we have again split the overall CPR into three different drivers. This breakdown is shown in Figure 2.

## Refinancing activity increasing, but still low

In addition to the already discussed CPR drivers of curtailments and relocations, we have also included a proxy for CPR related to refinancings in Figure 2. This reason for prepayment dominated in 2006-2007, and even caused the CPR to touch 18% back then. In our previous research, we showed that the interest rate differential between existing and new mortgage contracts was an important driver behind this high refinancing activity. However, as we noted several years ago, this relationship has broken down, mainly due to the presence of negative equity amongst a substantial share of mortgage borrowers.

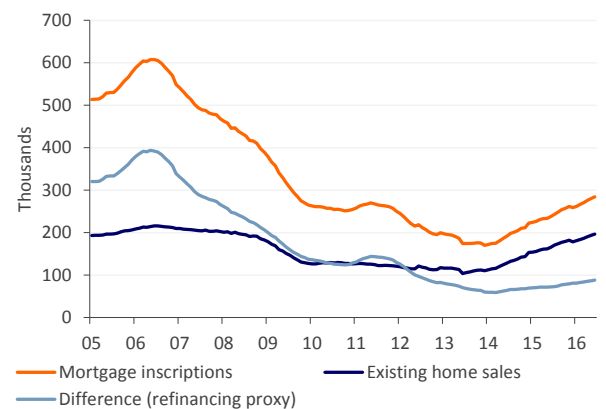
Figure 2: Average CPR Dutch RMBS



Sources: S&P, Moody's, Fitch, Land Registry, Rabobank

In our previous research, we showed that the interest rate differential between existing and new mortgage contracts was an important driver behind this high refinancing activity. However, as we noted several years ago, this relationship has broken down, mainly due to the presence of negative equity amongst a substantial share of mortgage borrowers. Recent data points have weakened the relationship further. We have not observed a meaningful increase in the prepayments related to refinancing recently, despite the fact that the share of borrowers in negative equity is getting smaller, and that the ongoing decline in interest rates means that the difference between existing and new mortgage contracts is at an all-time high.

Figure 3: Mortgage inscriptions and existing home sales (12mma)



Sources: Land Registry, Rabobank

## Several factors constrain refinancing

Negative equity is still an important hurdle for refinancing, but other factors seem to play a role as well. We have identified six additional hurdles for refinancing.

Firstly, we note the incentives for refinancing are not that strong as they initially seem. Similar to 2005, competition in the Dutch mortgage market is tough, but with the exception of some legacy originators, we are not observing a material outpricing in terms of interest rate offerings, at least not in general. Some originators



might be more competitive in terms of rates, for example at the longer end of the curve where insurers and pension funds are active.

Secondly, it is more difficult to refinance at these relatively new originators, as they have a strong preference for new standardised mortgage products (in particular full annuity mortgages). Older more complex mortgage product structures are more difficult or even impossible to refinance (in the same format) at these new originators.

Thirdly, we also note that older mortgage product structures carry tax benefits (through grandfathering) that cannot be recovered when refinanced into a new product structure.

The fourth hurdle is that refinancing an existing mortgage will be subject to strict underwriting laws. Not only the LTV is capped, but loan-to-income (LTI) norms are particularly stricter than say 5 years ago. When interest rates are reset on an existing mortgage, these underwriting requirements are not applicable.

Fifthly, there has been a ban on brokerage commissions for mortgage advice since 2013. Borrowers have to explicitly pay the advice and execution fees to the intermediary and/or originator. These costs come as an addition to the notary fees (necessary to change the mortgage rights to the new originator). While all these fees are tax deductible, it is nowadays harder to finance these costs in the mortgage loan itself.

The sixth and final reason is that an increasing number of originators is offering ‘interest rate averaging’ (“rentemiddeling”) to existing borrowers. Instead of directly paying a prepayment penalty, an add-on on the (new and lower) mortgage interest rate is set to recover the prepayment penalty over time. As such, the new interest rate on the same mortgage is some average of the borrower’s current rate and the lower rate that would prevail in an entire new offering. We doubt whether this factor will be a major reason to constrain prepayments, however. Although consumer bodies have long lobbied to create such facilities to enable all mortgage borrowers can benefit from lower rates, the technicalities involved in this rate averaging are not always beneficial, i.e. it might be better to pay the prepayment penalty in some cases.

### CPR outlook

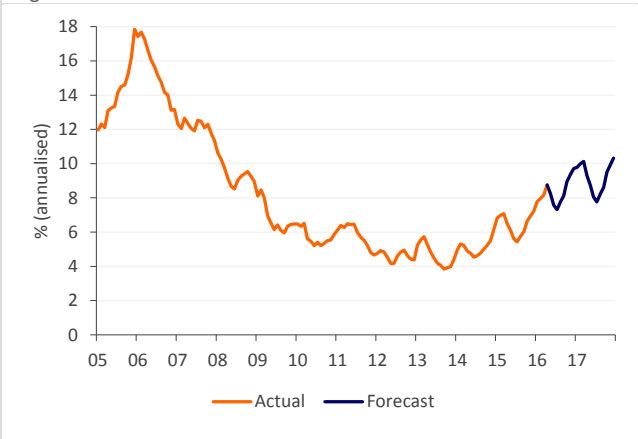
We are revising our CPR outlook slightly upwards. The main reason for this is that our economists predict a further increase in the number of housing transactions, from the 196k recorded in the 12 months through June, to an average of 200-220k next year. This rise in the number of transactions is expected to drive the prepayments due to relocations further upwards. The headroom for more housing transactions is limited, as the number of sales is already close to pre-crisis levels, and the housing stock is relatively static.

For curtailments, we do not foresee much change. Borrowers with wealth are likely to continue with their tax-optimisation balance-sheet shortening, which could be further encouraged by the (structural) return of the €100,000 allowance in the gift tax framework next year.

In line with recent developments, we expect a continued gradual, but muted, increase of the refinancing CPR. We want to stress it is unlikely that the developments of 2006-2007 will be matched in the near future.

All in all, **we expect that the CPR will rise further, to a level of 9-10% in the coming years.** Please note that this forecasts is an annual average for all RMBS transactions, with the peaks of higher CPRs likely around year-end.

Figure 4: CPR outlook



Sources: S&P, Moody’s, Fitch, Land Registry, Rabobank

### CPR drivers

Our CPR forecast is for all Dutch RMBS transactions, and it must be stressed that each deal (or mortgage portfolio) will exhibit its own CPR dynamics. There are many drivers for prepayments, which could explain some of the variation observed in CPRs across deals. Academic literature on this topic is mainly focused on the US mortgage market, but for the Netherlands several studies have identified a number of important variables. In addition to the remaining period to interest rate reset, seasoning is an important driver. More seasoned portfolios are showing higher CPRs than less seasoned portfolios. Furthermore, the average coupon is identified as an important driver (higher coupon = higher CPR).

To see whether negative equity acts as a constraint to refinancing, we have tried to plot recent CPRs against the average (indexed) LTVs of a broad range of RMBS transactions. Similar to the outcomes of the same exercise in the last years, we cannot find a strong relationship. The only exception is for legacy RMBS transactions (e.g. E-MAC), where higher average LTVs in the pools are associated with lower CPRs.

# Focus on ABS: Dutch RMBS and prepayments



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## Rates outlook main risk

The main risk to this outlook are mortgage interest rates. A further decline is likely to stimulate housing demand further, and might result in slightly more housing transactions and a higher CPR driven by relocations. Moreover, further house price appreciation is likely under such a scenario, and might slightly speed up the CPR related to refinancing, as negative equity amongst borrowers will disappear more quickly.

In the long run, higher interest rates are the main risk in our view, which could result in structurally lower CPRs. Although the first signals for higher rates might temporarily increase the CPR due to last-minute switching by borrowers, the long-term effect is clearly lower prepayments. In this scenario, it is not unlikely that the activity on the housing market will slow down, but refinancing also

becomes less attractive. Furthermore, we note that most mortgage contracts offer the borrower the possibility to carry the existing structure and interest rates to a new house when relocating. The low coupons, and increasingly longer term fixings (20 years fixed rates are typical nowadays), mean that the CPR could slow down significantly, if (and this is a big if) mortgage interest rates increase.

Currently, such a scenario seems unlikely. Our rates strategists forecast low (risk-free) rates for the coming months, and although there is some outlook for higher interest rates on a 12-month horizon, the rise is expected to be very modest. Mortgage rates are expected to remain low for the moment, and with increasing competition in the mortgage market, a further decrease in mortgage interest rates seems more likely.

# Focus on ABS: Dutch RMBS and prepayments



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