
IFC-Banco de Portugal Conference: "Communication on central bank statistics: unlocking the next level"

19-20 September 2022

More insight into Dutch mortgage debt data¹

Eva Hagendoorn and Tim Hersevoort,
De Nederlandsche Bank

¹ This contribution was prepared for the workshop. The views expressed are those of the authors and do not necessarily reflect the views of the Banco de Portugal, the BIS, the IFC or the other central banks and institutions represented at the event.

From:

E.M.Hagendoorn

Klik of tik om tekst in te voeren.

Klik of tik om tekst in te voeren.

Statistiek
Financieel
Sectorrekeningen**Subject:**

'More insight into Dutch mortgage data'

Abstract presentation for IFC conference on 'Communication on Central Bank Statistics'

Datum

15 juli 2022

History and context**Kenmerk**

T050-846890432-132

Due to capacity constraints the publication task of our Statistics Division was deprioritized for several years. Most resources were spent on (seemingly ever increasing) production activities and the development of a new and future-proof ICT-system. As such, the development of our Statistics website, which was renewed in 2015, has been somewhat neglected. For one, most data are presented as flat tables, which can be searched by means of theme filters on the 'data search' page. Furthermore, we publish statistical news bulletins, in which we describe current developments in the data. Finally, we have as of late started to increase the use of visualizations (via HighCharts) in the form of dashboards around some of the commonly used statistics. We will revert back to the dashboards later.

Our Statistics division is made up of about a dozen teams, which are mostly vertically oriented. This means they are organized around the statistical products they produce, such as the Anacredit team or the Balance of Payments team. This set-up was also reflected in our publications, which were very much product-oriented.

Another relevant development in recent years is the formal close cooperation between DNB and Statistics Netherlands. This has allowed for more specialization through a clear division of tasks, which is also reflected in our publications. We focus on the financial system, securities and balance of payments/external statistics, whereas Statistics Netherlands is the specialist when it comes to households, non-financial corporations and sector accounts as a whole. As such, our publications are mostly focused on developments within the financial system and less on developments in other sectors.

Role publication team Statistics

Since 2020, the Statistics division has fortunately succeeded in increasing its resources and reserving some of these to enhance its publishing task. Previously, the management of the various activities surrounding the website and statistical publications was fragmented within the division. A publication team was appointed in 2021, tasked with coordinating the various statistical publications, the further development of the website and to stimulate publications. The team is in close contact with the bank-wide communication department to leverage on existing know-how and optimize the timing of publications.

One of the goals of the publication team is to better take into account user wishes with regard to our publications. In 2021, with the help of an external research agency, a user survey was conducted among internal and external users to find out what the image of these users is about the Statistics department and its products and services. This showed, among other things, that users need more overview and context for the various statistical products that DNB draws up as a Statistical Authority. The way in which statistics are currently presented is often dictated by the organizational structure (vertical, product-by-product) and less by the user's demand (i.e. more thematic and integrated). At the same time, the DNB-wide strategy is to communicate more around current themes that play a role in the outside world, such as the housing market, pensions or inflation. By shifting towards a more integrated approach we can focus our limited resources on the themes that are most in demand from the social debate.

Renewal residential mortgage dashboard

We have found that thematic dashboards are an especially effective way to present data about a specific theme to a wide audience. Visualizations are usually easier to digest than flat tables. Furthermore, with the use of dashboards we can combine the data from different statistical products we compile.

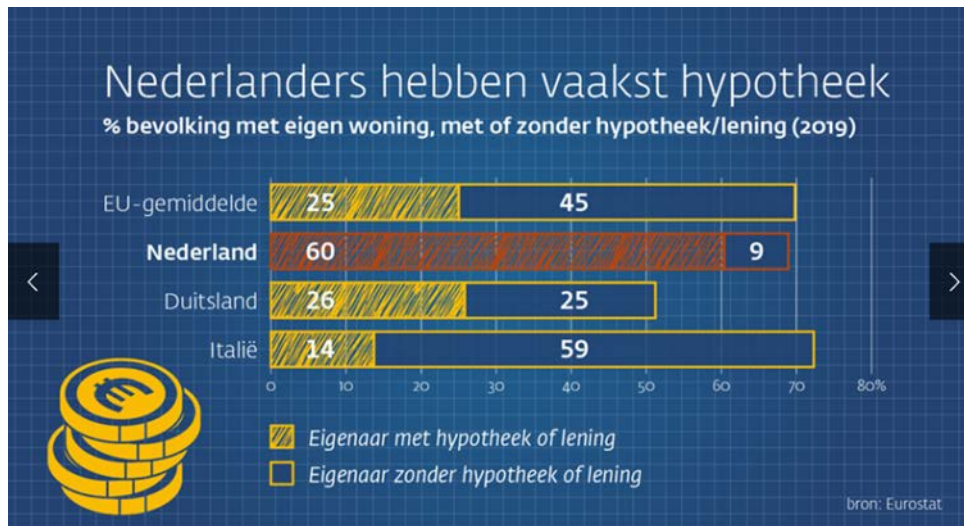
One of the themes where there is a need for more integrated overview and more qualitative data concerns the mortgage market. DNB has many statistics on this subject, but these data are still in various tables and are sometimes difficult for users to compare with those of the other important statistical authority in the Netherlands, Statistics Netherlands. A [residential mortgage dashboard](#) has already been published, but this only concerns a limited part of the data that DNB has at its disposal, namely only the level and development of the mortgage debt on banks' balance sheets (including securitisations).

Increasing demand for information about the housing market

The demand for good, reliable and detailed insights into the residential mortgages granted to Dutch households has increased sharply in recent years. This has to do with the important role that the housing market plays for the Dutch economy and for the financial sector. Dutch mortgage debt per capita is among the biggest in the world.

The Dutch housing market has been overheated for some time. Over the past 5 years, house prices have gone up by 8 percent on average. At the end of last year, the average price of owner-occupied was more than 20 percent higher than a year earlier. This is the largest price increase since the start of the measurement by Statistics Netherlands.

Moreover, we have high mortgage debts in the Netherlands compared to other countries. In fact, in no other European country does such a large proportion of the population have a mortgage loan (see Figure 1). Partly due to the price increases of houses, households are taking on more and more risks when taking out a mortgage.

**Figure 1**

For the stability of the Dutch financial system, the mortgage debt of the Dutch has a major influence, because house prices rise when the economy goes well, giving homeowners more to spend. If the economy is not doing well, falling house prices have an additional depressing effect on the economy.

Increasing data availability

As previously outlined, DNB's Statistical Division compiles statistics relating to Dutch financial institutions. These institutions report detailed information to DNB about the mortgages they issue. Macro figures on mortgages provide information on the size and development of mortgage debt and mortgage rates at Dutch financial institutions. In addition, more and more information is becoming available.

In 2021, DNB started publishing data from other providers in the mortgage market, such as insurers, pension funds, investment institutions. Also, we started to collect information (of which also mortgage debt information) on other financial institutions, that had not been in our population before, as of the start of 2020.

Also in relation to the banking sector, DNB started collecting more information. In addition to bank balance sheets (BSI) statistics and interest rate statistics (MIR), DNB also intends to publish data on mortgages issued by banks on the basis of the so-called RRE dataset. This is a granular dataset, somewhat similar to Anacredit (for corporate loans), in which additional details about the collateral of the loan or the recipient of the loan are available. For example, a distinction can be made according to the age of the recipient of the loan (older or younger than 35 years). This is an indication of whether someone is a starter on the housing market or a transferee. In the long term, geographical information could also be published to provide insight into in which region of the Netherlands the highest mortgage debts are.

Dashboard content

In order to maintain an overview of the relationship between all these different datasets and to connect with the theme that also plays a broader role among visitors to the DNB website, we want to launch an overarching mortgage dashboard. This dashboard shows a number of different headings, starting with the section 'Size of

mortgage market', which provides a total overview of the outstanding mortgages at financial institutions (figure 2).

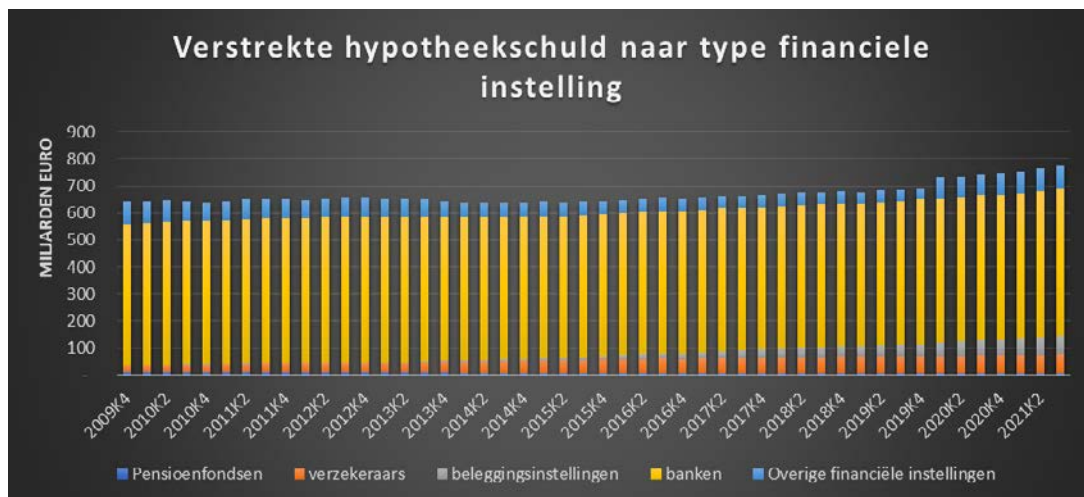


Figure 2

The other sections of the mortgage dashboard relate entirely to mortgages provided by banks, the most important sector in the mortgage market. The reason behind this is that much more information is collected about mortgages granted by banks than the mortgages provided by other financial institutions, where only the information from the balance sheet data is reported to DNB.

The other sections provide insight into subjects as mortgage rates and 'loan to values'. One section, which is in fact more of a barometer for the mortgage market, is based on the so-called Bank Lending Survey. The figures based on the BLS provide qualitative information about the developments in the mortgage market that banks observe (see Figure 3).

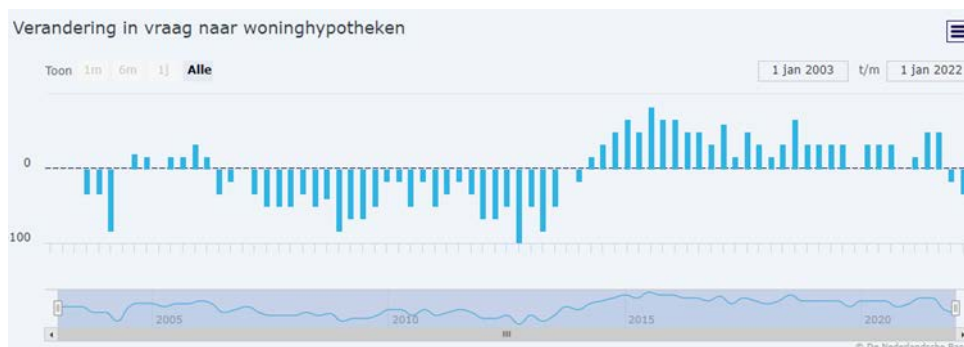


Figure 3

Navigation dashboard

Last year, DNB amended the dashboard overview page of the dashboards. Instead of graphs, icons are now shown, making it easier for users to understand at a glance what the dashboard is about (Figure 4).

**Figure 4**

After clicking on the icon for the residential mortgages, in the case of the new home mortgage dashboard, an intermediate page with a number of sub-sections and an introductory text (figure 5) is added.

**Figure 5**

Challenges

The statistics publications team encountered various challenges in preparing a new mortgage dashboard.

- 1) On the one hand, we have to deal with organizational challenges, in which the various statistical teams that own the relevant statistics in terms of content, are under a lot of pressure on the teams due to an ongoing renewal process. As a result, the priority for even more innovations from these teams was relatively low.
- 2) Knowledge in the field of the further development of the visualizations in the HighCharts program had to be purchased, as this was not present in the publication team. This makes it both costly and sometimes difficult to get enough commitment at the right time.
- 3) In terms of content, there are also challenges to the datasets. The statistics published by DNB concern source statistics that are not always 100% consistent with the integrated statistics in the sector accounts. You also have to make sure that the series of the different sectors are also similar to each other, if you present them in one overview. If, as a result, there are differences in the totals at macro level, for example if you compare them with CBS, you want to be able to explain this properly.

- 4) One of the datasets, the RRE dataset, has never been made available to a wide audience before and because of this and because of the degree of detail of this dataset, legal discussions are still taking place. For this reason, there is currently no clarity as to when this data can be published and included in the dashboard.

Summary

Publications by DNB's Statistics Division have been prioritised away for a while, but in 2021 this has changed due to two things:

- 1) Resources are committed to the publishing task (the publishing team)
- 2) Users are consulted at least once every two years via a user survey

In order to simultaneously meet the user's need for more overview and interpretation and to respond specifically to the current theme of the housing market, a new residential mortgage dashboard will be launched in 2022. This dashboard provides an overview of relevant developments regarding residential mortgages granted by Dutch financial institutions, from DNB's role as a specialist in the field of the financial sector.



More insight into Dutch mortgage debt data

Eva Hagendoorn



DeNederlandscheBank

EUROSYSTEM

Agenda

1. Introduction Dutch delegation
2. Role of publications team at Statistics division
3. Institutional playing field
4. Statistics website DNB and publication activities
5. Thematic dashboards on statistical website
6. The case for a new residential mortgage dashboard
7. Challenges

Introduction Dutch delegation



Eva Hagendoorn

- Product Owner Publications Team at DNB Statistics (April 2021-present)
- Policy Advisor at Balance of Payments team at DNB Statistics (May 2013-April 2021)
- Reporter at Newsagency ANP on Economic and Financial news (Dec 2006-April 2013)
- Master of science in Economics at Utrecht University (2001-2005)
- Degree in journalism at Erasmus University (2006)



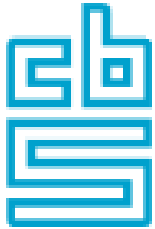
Tim Hersevoort

- Web editor Publications Team at DNB Statistics (April 2022-present)
- Content and PR specialist at Robert Walters (Nov 2020-April 2022)
- Data Storyteller/copywriter/marketeer at Valcon (Sep 2019-Aug 2020)
- Sportsdesk Editor at Gracenote (July 2012-Aug 2019)
- Bachelors degree Journalism at Hogeschool Utrecht (2008-2012)

Publications team

- Started in 2021 as a **new, horizontal team**
- One of the goals is to focus more on **user wishes** (internal and external)
- In 2021 the publications team coordinated a **survey** among different groups of users (internal and external)
- Conclusion: Users want us to tell the **story behind the figures** more often and want to have more overview of the different statistical products/datasets

Institutional playing field



DeNederlandscheBank

EUROSYSTEEM

Close cooperation with Statistics Netherlands in compiling macroeconomic statistics (**univocal figures on the Netherlands' relations with the rest of the world**) and clear division of responsibilities in recent years

DNB

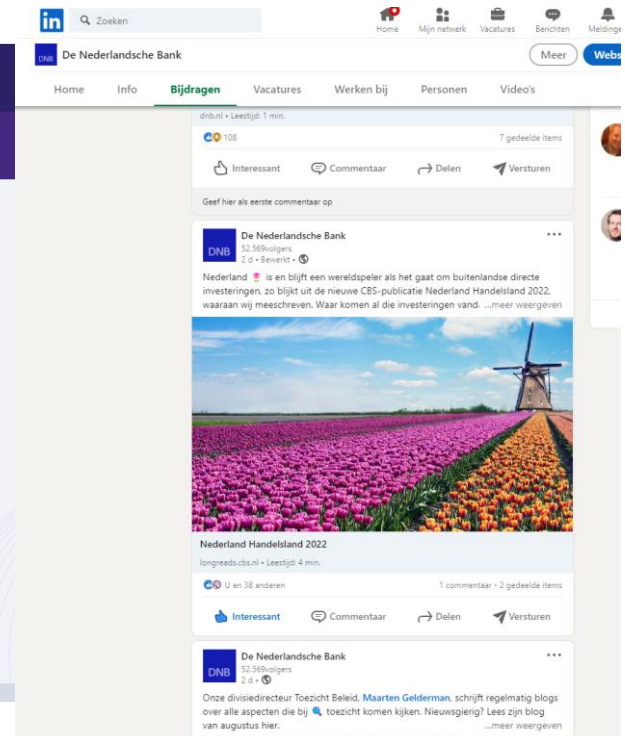
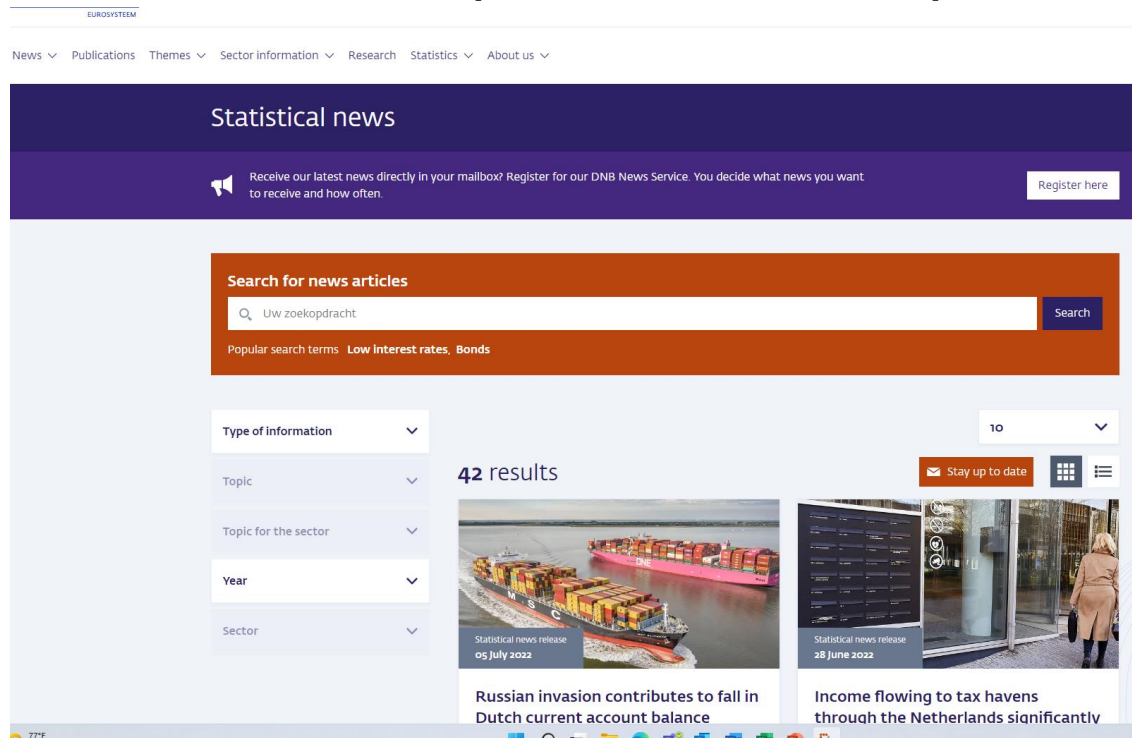
- Compilation of source statistics of financial sectors
- External statistics (e.g. balance of payments and direct investment)
- Securities

CBS

- National accounts
- Source statistics of non-financial sectors (households, government, non-financial companies)

Statistical Publications

- Statistical news articles in cooperation with Communications-department and occasionally with colleagues from research, supervision or financial stability divisions
- Recently (2021) started posting content (mainly promotion Statistical News) on social media (LinkedIn and Twitter)



Statistics website DNB - visualizations

- For visualizations we use a tool called 'High Charts'
- Currently 15 dashboards build around a statistical theme

DNB.nl > Statistics > Dashboards

Dashboards

In the dashboards below, we present the main trends in the financial sector and the balance of payments. The charts in the dashboards are updated in real-time as soon as new data become available, which means they are always up to date. The series used in the dashboards only represent a small selection of the data tables available in the database. Series not included in the dashboards can be found on the Data search page. There are several export options for each of the charts in a dashboard, and you can save the charts as images. It is also possible to download series of charts. You can use the "embed" option to include the chart in another website. It will then be updated automatically.



DNB's balance sheet

The DNB Balance sheet dashboard presents the balance sheet of De Nederlandsche Bank.



Investment Funds

Investment funds are investment companies or funds that attract funds from the public by issuing participations (shares or units) and invest these...



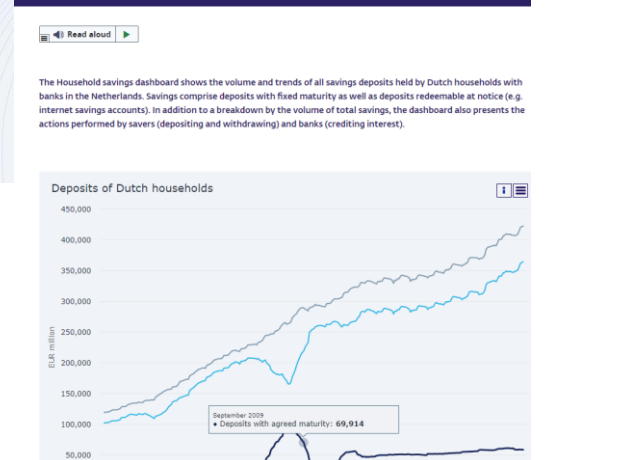
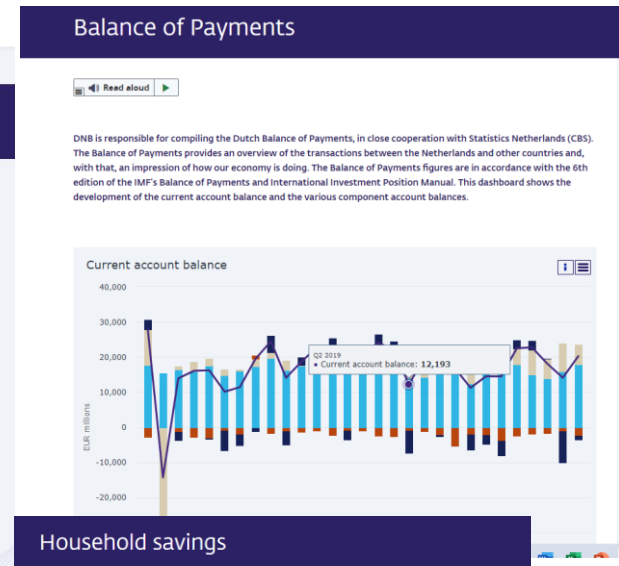
Balance of Payments

DNB is responsible for compiling the Dutch Balance of Payments, in close cooperation with Statistics Netherlands (CBS).



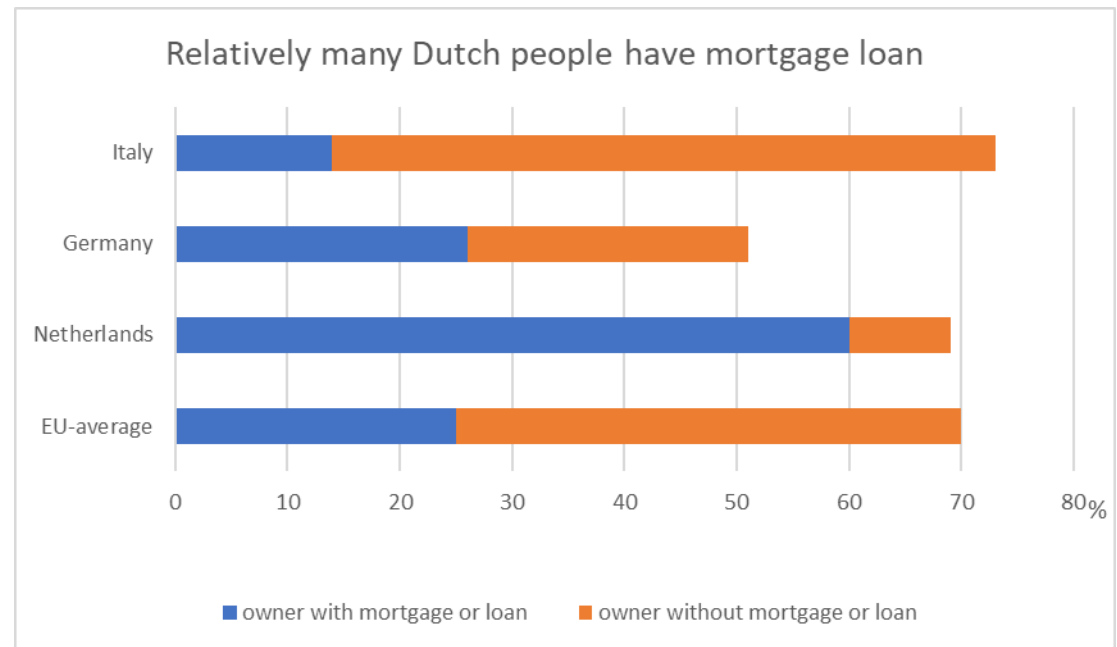
Financial markets

This dashboard presents the leading stock exchanges for the Netherlands (AEX, All-Share and Midkap), the United States (Dow Jones and Nasdaq) and ...



Why are Dutch mortgage data so important?

- Dutch mortgage debt per capita is among the highest in the world (in %GDP).
- ~60% of inhabitants have a mortgage loan, highest in Europe.
- Housing prices have gone up by 8 percent on average over the last 5 years and recently this has increased to 20 percent per year
- Mortgage debt could have substantial effect on financial stability



Business case for new mortgage dashboard

- Current dashboard contains only data on mortgages provided by banks, while other financial sectors are becoming increasingly important (>20% market share)
- We recently began collecting more information from non-banks such as 'other financial companies' (S125 and S126)
- Started publishing mortgage data from pension funds, insurance companies and collective investment institutions in 2021
- Recently started collecting (granular) data about mortgage debt issued by banks (RRE and CRE datasets).



New dashboard

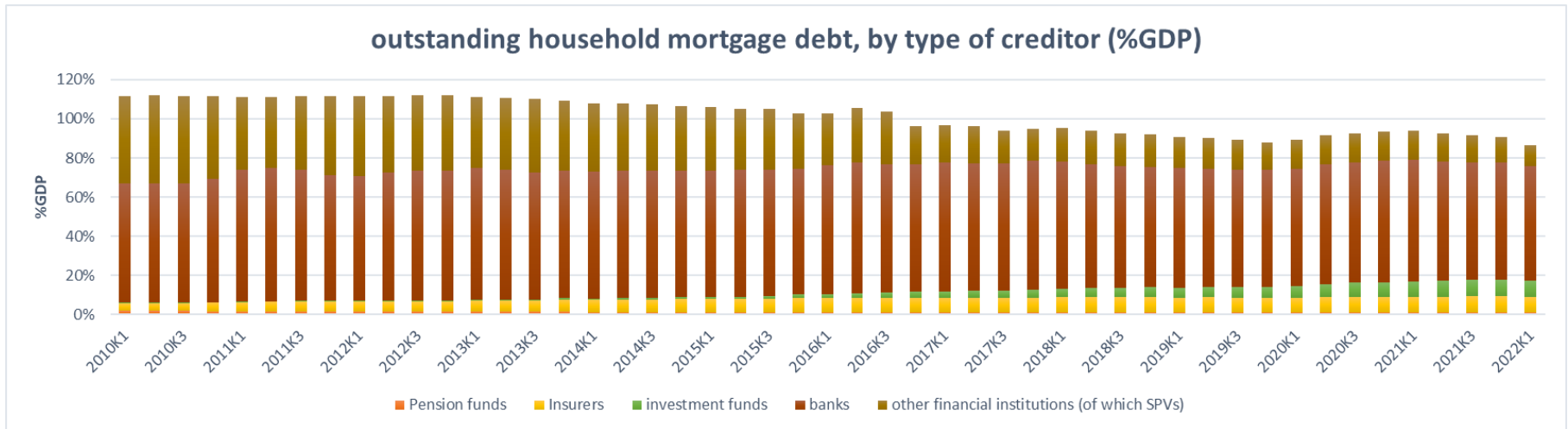
3 topics/subpages to start with:

- Overview of mortgage loans issued by the financial sector (next slide)
- Interest rate developments
- Supply and demand developments (Bank Lending Survey)

More information added when we can publish our Residential Real Estate data, for example information on data by region or by age category



Overview of mortgage loans by financial sector



Challenges

- Horizontally organized team – how to make sure statistical teams put sufficient efforts in the publication and communication aspect
- Knowledge about technical aspect High Charts not in-house – how to not become too dependent on external resources
- Consistency and comparability of datasets (also with Statistics Netherlands) – how to cope with differences between datasets
- Some of the datasets are relatively new and there are still quality issues that have to be checked – how to balance versus the strong external interest in the data
- Extremely granular datasets contain (too) much information – how to cope with privacy issues and the legal basis for publication



Conclusion/Summary

1. As of 2021 more priority to publishing task of DNB Statistics division:
 - Commitment of resources to publication task
 - Users consulted at least every 2 years

2. Release of new mortgage debt dashboard expected in 2022, which provides more insight in this important and for users also very relevant theme in which DNB Statistics can play an important role

Questions?

E.M.Hagendoorn@dnb.nl

