



Eighth IFC Conference on "*Statistical implications of the new financial landscape*"

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Enhancing euro area data on loans to the private sector adjusted for sales and securitisation¹

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¹ This paper was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

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Clive Jackson and Anna Michalek¹

Abstract

Monitoring banks' lending to the economy is a key element of the ECB's monetary analysis. For the interpretation of developments in lending it is important to properly account for the potential distortionary effects arising from loan transfers between banks and non-banks. This paper discusses two methods of adjusting loans series for sales and securitisation. The first method was introduced by an ECB statistical regulation implemented in 2010 to correct banks' balance sheets developments for the impact of loan transfers. The second method – introduced by the ECB in September 2015 and replacing the former method – focuses on loans originated by banks whether or not these are on or off their balance sheets, thus providing a more comprehensive view on loans to the real economy. This paper also presents some information regarding ongoing work to provide users with improved measures of euro area lending.

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1. Introduction

Monitoring banks' financing of the economy is a key element of the European Central Bank's (ECB) monetary analysis, as bank lending is a key channel through which monetary policy decisions are transmitted. Policy makers therefore need to monitor the provision of funding to households and non-financial corporations from the banking system. Reliable statistics are required for this task, and they need to be periodically reviewed in light of financial innovations or updated user needs. An innovation which has had particularly strong implications for monitoring banks' lending has been the practice of securitisation by banks. The ECB has aimed to remove the distortionary impact of securitisation (and other transfers) by "adjusting" loans series for sales and securitisation. This provides a better picture of actual credit developments from the perspective of the borrower, and enhances the comparability of cross-country data. This paper discusses these developments in the context of ECB's monetary financial institution (MFI) balance sheet statistics which are the basis for monetary analysis.

The following section provides background on the relevance of securitisation in light of its impact on MFI balance sheets. Section 3 reviews the change in methodology used to calculate adjusted loans series and the impact of the new approach. Section 4 provides information on the efforts of the ECB in close cooperation with national central banks (NCBs) to produce long historical back data on adjusted loans to the euro area private sector², households and non-financial corporations (NFCs), while Section 5 concludes.

2. Relevance of securitisation activities for statistics

Securitisation, in general terms, is a practice where an asset or a pool of cash flow-producing assets is converted into marketable securities. In particular, securitisation allows banks to transfer credit risk and create liquid instruments out of normally illiquid loans. This was the reason why the practice became an important element of some banks' business models up to 2007. With the onset of the financial crisis however, most securitisation activity in the euro area was related to the need to create collateral for central bank borrowing. Instead of being placed with investors, the instruments resulting from the securitisation transactions were "retained" by banks.

From the statistical perspective, securitisation and other loans transfers which result in a change in the reported stocks on MFI balance sheets impede the proper analysis of lending to the real economy. The ECB has been publishing data on loans adjusted for sales and securitisation since December 2008.³ This first covered only loans to the private sector as a whole and was based on data collected from NCBs in a short-term approach (on a non-harmonised and "best effort" basis). The requirements were then formalised in Regulation ECB/2008/32 on MFI balance sheet statistics,⁴ which was implemented in 2010. The adjustment was possible through the

² Private sector refers to euro area non-MFIs excluding general government.

³ See ECB (2009).

⁴ Regulation (EC) No 25/2009 of the European Central Bank of 19 December 2008 concerning the balance sheet of the monetary financial institutions sector (Recast) (ECB/2008/32), OJ L 15, 20.1.2009, p. 14.

collection of data on the net amount of loans transferred from MFI balance sheets during the month in order to correct a negative flow resulting from loan derecognition (or positive flow due to loans being transferred back to the balance sheet). The adjusted series also covered breakdowns of the total private sector, including households and NFCs. Other data relating to securitisation were also collected from MFIs, including data on securitised loans which are not derecognised from the balance sheet⁵ or continue to be serviced by MFIs after their derecognition.⁶

These new data were released for the first time in June 2011⁷ and the loans series adjusted for sales and securitisation became one of the headline series in the monthly press releases on monetary developments in the euro area.

3. Change in methodology from an MFI balance sheet to a borrower perspective

As part of the process to update Regulation ECB/2008/32, the ECB and NCBs – through the Working Group on Monetary Financial Statistics (WG MFS) of the ESCB Statistics Committee – carried out a consultation on user requirements. Responses to the consultation included a request that the adjustment for loan sales and securitisation should take into account the ongoing developments in derecognised loans subsequent to their transfer. This would provide a view of loans originated by MFIs and still outstanding from a borrowers' perspective. The data necessary for the amendment to the adjustment method were included in the recast regulation on MFI balance sheet statistics (Regulation ECB/2013/33).⁸

As described in the previous section, the method of adjusting for loan sales and securitisation before the introduction of Regulation ECB/2013/33 (the "former method") consisted of a one-off adjustment to the loan transactions to remove the impact on MFI balance sheets of (net) transfers of loans off-balance sheet in the period in which the transfer took place. No further information relating to the derecognised loans was taken into account in the subsequent periods (e.g. loan repayments by borrowers). Similarly, the outstanding amounts of loans derecognised in a securitisation or other transfer were not reflected in growth rates.

In contrast, the method applied under Regulation ECB/2013/33 (the "current method") takes into account not only the impact of loan transfers, but also the ongoing developments in derecognised loans, insofar as data are available.⁹ It also

⁵ The derecognition of transferred loans from the (statistical) balance sheet of MFIs normally follows the accounting rules in the reporting of transferred loans. For instance, where the MFI applies the International Financial Reporting Standards (IFRS) at the solo level, the transfer may not meet the test for derecognition (based on transfer of risk and rewards and surrender of control of the assets).

⁶ These data were also collected to complement the new statistics on financial vehicle corporations which were also introduced by an ECB Regulation at that time. These data became crucial for the change in the adjustment method and calculation of historical data, as detailed in Section 3 and in the Annex.

⁷ See ECB (2011) for more information on the new data released at that time.

⁸ Regulation (EC) No 1071/2013 of the European Central Bank of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector (recast), OJ L 297, 7.11.2013, p. 1.

⁹ Data on securitised loans which have been derecognised are collected from euro area MFIs under Regulation ECB/2013/33 where the loans are still serviced by the MFIs. Some NCBs also provide

considers the outstanding amounts of loans derecognised in a securitisation or other transfer in the calculation of the adjusted growth rates. This provides a more comprehensive view on loans to the real economy originated by euro area banks and improves the comparability of country-level data, regardless of the accounting practices applicable to loan transfers.

The calculation of outstanding amounts, transactions and annual growth rates for the unadjusted series, as well as the former and current methods of adjustment, are summarised in Table 1.

Table 1: Overview of adjustment methods for loan sales and securitisation

	Outstanding amounts	Transactions	Growth rate (in period t)
Unadjusted	L_t^{MFI}	F_t^{MFI}	$\frac{F_t^{MFI}}{L_{t-1}^{MFI}}$
Former method	L_t^{MFI}	$F_t^{MFI} + N_t$	$\frac{F_t^{MFI} + N_t}{L_{t-1}^{MFI}}$
Current method	$L_t^{MFI} + L_t^{DR}$	$F_t^{MFI} + N_t + F_t^{DR}$	$\frac{F_t^{MFI} + N_t + F_t^{DR}}{L_{t-1}^{MFI} + L_{t-1}^{DR}}$

L_t^{MFI} = Outstanding amounts of loans on MFI balance sheets at the end of period t

F_t^{MFI} = Transactions in loans on MFI balance sheets in period t , not adjusted for sales and securitisation

N_t = Net transfers of loans off MFI balance sheets with derecognition (disposals minus acquisitions) in period t

L_t^{DR} = Outstanding amounts of derecognised loans at the end of period t

F_t^{DR} = Transactions in derecognised loans *excluding transfers* during period t , i.e. the repayments of derecognised loans

The difference in adjusted annual growth rates between the current and former methods can be decomposed into two effects:

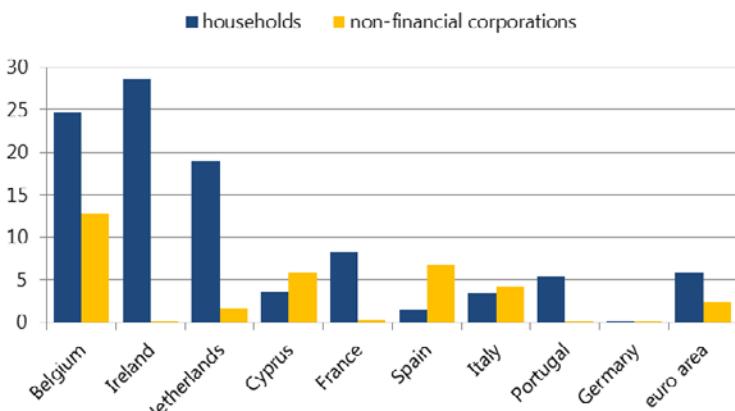
1. Flow effect – the inclusion of repayments of derecognised loans (F_t^{DR}) in the current method results in lower adjusted flows of loans compared with the former method.
2. Stock effect – the inclusion of derecognised loans' stocks (L_{t-1}^{DR}) contributes to making positive growth rates lower, or negative growth rates less negative, under the current method compared with the former method.

The quantitative impact on growth rates therefore depends on the relative scale of derecognised loans compared to on-balance-sheet loans (see Chart 1), and the characteristics of the derecognised loans – e.g. the shorter the average residual maturity of the derecognised loans, the lower the growth rates delivered by the current method relative to the former one, as the rate of principal repayments in comparison to outstanding amounts is generally higher.

available data on loans not serviced by MFIs (e.g. where the servicing of loans is performed by another part of the banking group) or for loans that have been transferred to non-MFIs in transactions other than securitisation.

Chart 1: Share of derecognised loans to total outstanding loans

June 2016, percentages



Sources: ECB and ECB calculations.

Note: Total outstanding loans means those both on- and off- MFI balance sheets. Derecognised loans volumes are not relevant for the euro area countries not shown.

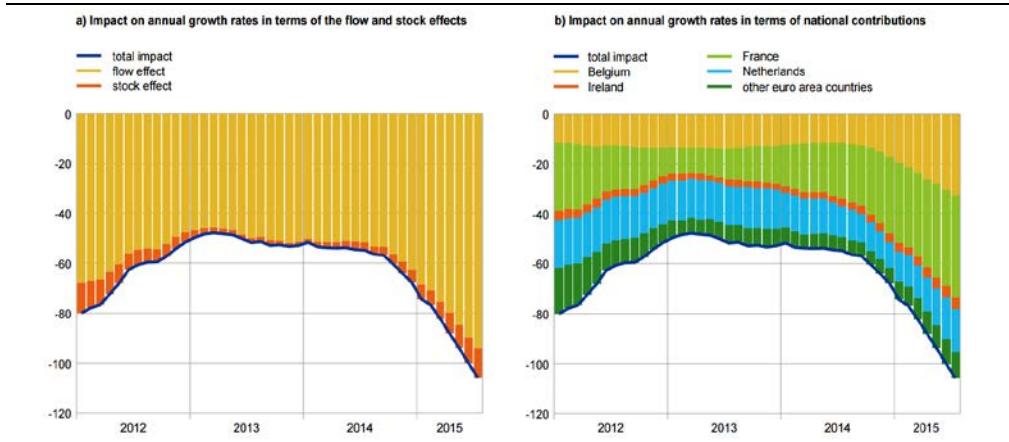
The new enhanced adjusted loans data were published by the ECB in September 2015. In line with the above effects, the current method of adjustment tended towards lower growth rates than the former method, although the euro area trends remained basically unchanged.

For loans to households (Chart 2), the difference in growth rates came from countries with a relatively large share of derecognised loans, which resulted in greater loan repayments being included under the new method. The main national contributors to the overall impact of the new method were Belgium, France and the Netherlands which have a large share of derecognised loans to euro area households (Chart 1). On average for the period January 2012 to July 2015 (when the former method was discontinued)¹⁰ the current method produced annual growth rates around 60 basis points lower for the euro area.

¹⁰ These data refer to the impact of the current method at the time of its introduction and do not include subsequent changes or revisions. See also ECB (2015a) on the changeover to the current method.

Chart 2: MFI loans to euro area households: impact of the current method on annual growth rates

Basis points difference in annual growth rates, non-seasonally adjusted



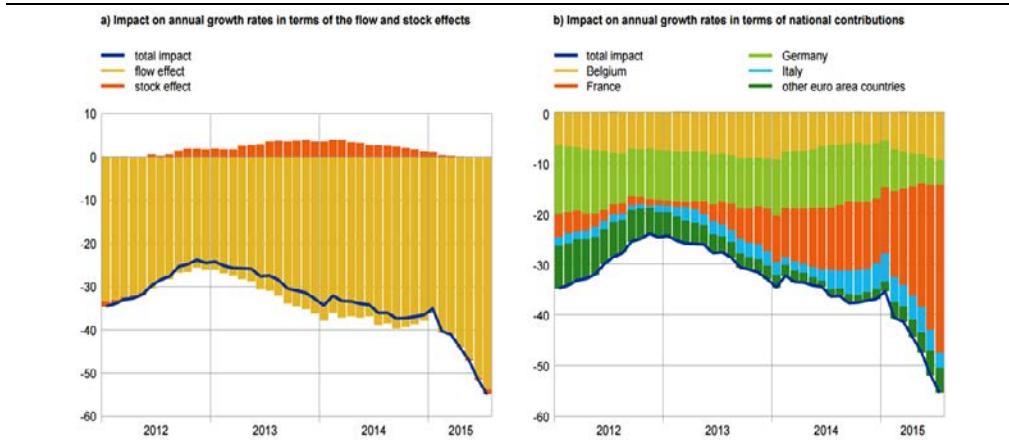
Sources: ECB and ECB calculations.

Note: Impact on the growth rate of the current method when it was introduced (latest observation: July 2015).

While derecognised loans to NFCs as a share of total NFC loans was quite low, the annual growth rates under the current method were on average around 30 basis points lower than the former methods for the period January 2012 and July 2015 (Chart 3). This resulted from the fact that NFC loans tend to have shorter maturities, resulting in repayments that are large relative to the outstanding amounts. The main national contributions to the lower growth rates under the current method came from Belgium, France and Germany which had the majority of derecognised loans to euro area NFCs. In France, increased securitisation activity at shorter loan maturities resulted in an increasing impact from 2014.

Chart 3: MFI loans to euro area non-financial corporations: impact of the current method on annual growth rates

Basis points difference in annual growth rates, non-seasonally adjusted



Sources: ECB and ECB calculations.

Note: Impact on the growth rate of the current method when it was introduced (latest observation: July 2015).

4. Compiling historical data on adjusted loans

As there are significant differences between the adjusted loans series resulting from the former and current methods, the need arose to avoid a break in methodology in loans series in order to produce times series of sufficient length to be useful for analytical purposes. The time series of adjusted loans can be split into three periods:

- Up to December 2009, for which data were compiled by NCBs on a "best effort" basis from available sources;
- January 2010 to November 2014, for which data were collected under Regulation ECB/2008/32 and the adjustment was based on loan transfers only; and
- From December 2014, for which all data necessary for the current adjustment are collected under the ECB/2013/33 framework.

The first priority was to compile consistent series for adjusted loans to households and NFCs from 2010 onwards. In advance of the implementation of the new Regulation ECB/2013/33, the WG MFS began to explore the possibility to provide data on the current adjustment method based on the older reporting requirements. As Regulation ECB/2008/32 included quarterly requirements on securitised loans which are serviced by MFIs – whether these loans are still on-balance sheet or not – in addition to monthly data on non-derecognised loans, there was already some basis for estimating data specifically on derecognised loans. (The method for deriving monthly adjustment data from available quarterly loan servicing data is outlined in the Annex.)

Besides the quarterly data collected under Regulation ECB/2008/32, some NCBs also collected these or similar requirements on a monthly basis. Based on data reported directly by MFIs and/or estimations, the publication in September 2015 of loans to households and NFCs adjusted for sales and securitisation included data on a comparable basis from the beginning of 2010. This release was able to fully replace the time span of data previously available to users under the former method.

In the next stage, the data for the period up to December 2009 were examined to see if internally available data on derecognised loans to households and NFCs could also be made consistent with subsequent data. ECB internal users, in particular, requested longer time series for the analysis of loans developments in a historical context – and ideally encompassing the situation before the financial crisis.

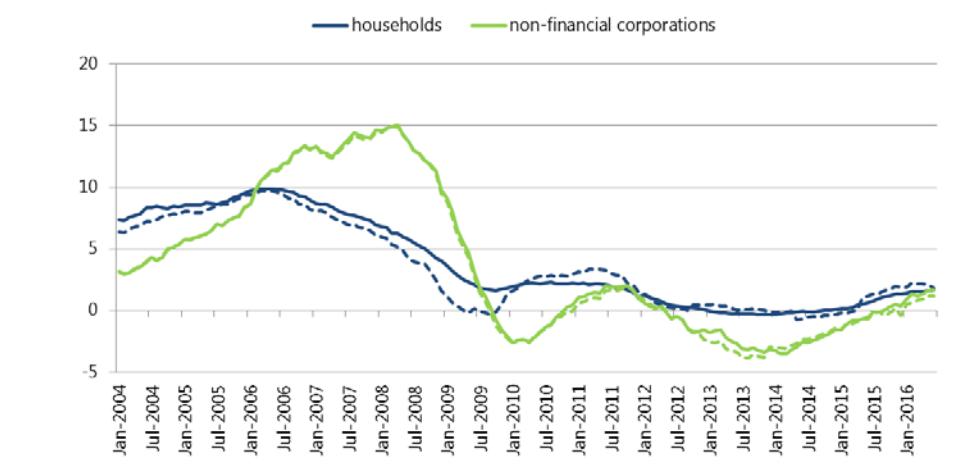
Following this request, the ECB together with the euro area NCBs where securitisation was relevant before 2010¹¹ performed an exercise to extend euro area back data on loans to households and NFCs adjusted for sales and securitisation to the period from 2003 to 2009. This was possible due to the fact that some data on adjusted loans to the private sector were already available for this historical period as well as by using additional back data available at the NCBs. The historical data back to January 2003 (January 2004 for annual growth rates) were published by the ECB in May 2016. These data marked a significant enhancement in availability of data on adjusted loans to users and marked an improvement on the internal estimates that they had been using prior to the back data exercise. This concerned especially loans to euro households where the euro area adjusted growth rate has a markedly different pattern to the unadjusted growth rate in the period before 2010 (Chart 4).

¹¹ These were Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, and Portugal.

The differences for certain countries are even more significant in that period (see Chart 5).

Chart 4: MFI loans to euro area households and non-financial corporations

Annual growth rates, non-seasonally adjusted

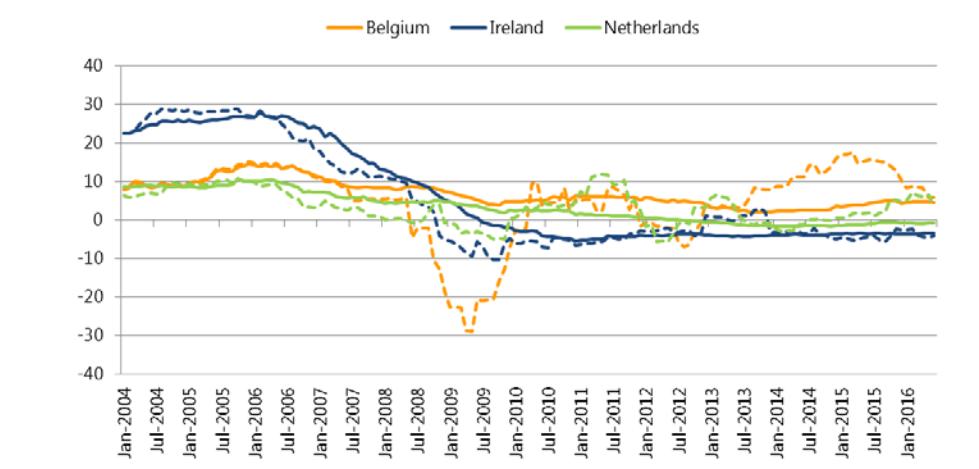


Sources: ECB and ECB calculations.

Note: Solid lines represent the adjusted series and dotted lines represent unadjusted series. The latest observation is for June 2016.

Chart 5: MFI loans to euro area households: selected country data

Annual growth rates, non-seasonally adjusted



Sources: ECB and ECB calculations.

Note: Solid lines represent the adjusted data and dotted lines represent the unadjusted data. The latest observation is for June 2016.

5. Conclusion

Monetary and financial statistics need to remain relevant for policy purposes within a changing landscape of financial innovation and new demands of policy-makers. As remarked in ECB (2012) in connection with the treatment of repos and reverse repos with central counterparties: "*A strength of the ECB's monetary analysis is the virtuous circle it creates between the policy analysis and the statistical framework.*"

In close cooperation with users and NCBs, the ECB has been able to enhance statistics on lending to circumvent the distortionary impact of loan sales and securitisations through the publication of long and consistent times series on loans to the euro area private sector, and in particular households and NFCs.

Work continues to provide improved indicators to users for their analysis. This includes for example a further enhancement to adjusted loans series implemented in July 2016 which excludes the impact arising from "notional cash pooling" (a type of cash management service mainly offered by MFIs in the Netherlands).¹² Besides this, efforts are being made based on data provided by NCBs and estimations to provide long time series with additional breakdowns, with the highest priority being loans to households by purpose (i.e. house purchase, consumer credit and other lending).

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¹² This change was implemented with the ECB press release on monetary developments on 27 July 2016, with an accompanying explanatory note. For further information on types of cash pooling and the implications for MFI balance sheets, see Colangelo (2016).

Annex: Estimating monthly adjustments from quarterly loan servicing data

Where data from NCBs were not available as far back as 2010, estimates of derecognised loans were carried out using monthly and quarterly data collected under Regulation ECB/2008/32 in order to replace the former method of adjustment with a long time series of data constituent with the current method of adjustment. The main source of data was statistics collected on securitised loans serviced by MFIs, which included both derecognised and non-derecognised volumes.

These estimations had three steps:

1. Quarterly estimates for the outstanding amounts of derecognised loans were calculated from the quarterly data on the outstanding amounts of securitised loans serviced by MFIs minus the outstanding amounts of loans securitised and not derecognised from the MFI balance sheet (monthly data).
2. Quarterly estimates for financial transactions excluding loan disposals and acquisitions (i.e. loan repayments) were derived using the above quarterly estimates of the outstanding amounts of derecognised loans, quarterly reclassifications of derecognised loans, and the monthly data on the net flows of loans securitised with derecognition from the balance sheet.
3. These above quarterly items were used to calculate financial transactions excluding loan disposals and acquisitions and outstanding amounts for months between quarter-ends. For this purpose, it was assumed that the loan repayments in a month are dependent on the outstanding amount of the previous month and that this "amortisation rate" is constant for the quarter. In this way, the monthly amortisation rate which satisfies the given data for a quarter can be derived.

The necessary data for calculating adjusted monthly loan growth rates are provided in Table 2, including the elements which are available from Regulation ECB/2008/32; i.e. the quarterly outstanding amounts of derecognised loans and the monthly net flows of loans securitised with derecognition.

Table 2: Data necessary for monthly adjustments of loan growth rates

	Outstanding Amounts	Net Flows	Reclassifications	Financial transactions excluding loan disposals and acquisitions
End-quarter ($t=0$)	L_0 (*)	-	-	-
Month 1 ($t=1$)	L_1	N_1 (*)	X_1	F_1
Month 2 ($t=2$)	L_2	N_2 (*)	X_2	F_2
Month 3 ($t=3$)	L_3 (*)	N_3 (*)	X_3	F_3

(*) denotes items that are available from Regulation ECB/2008/32 data.

These elements in Table 2 can be used to illustrate the estimation of the monthly outstanding amounts and financial transactions excluding loan disposals and acquisitions. The quarterly servicing data and monthly data on non-derecognised loans include requirements for loan reclassifications. The quarterly reclassification, X , may therefore be calculated as:

$$X = X_1 + X_2 + X_3$$

As the monthly reclassification adjustments in derecognised loans are not known from Regulation ECB/2008/32 data, for the purposes of the estimations carried out so far, the quarterly reclassification, X , was applied in the third month of the quarter – i.e. it is assumed that X_1 and X_2 are zero and $X_3 = X$.¹³

Quarterly data on financial transactions excluding loan disposals, F , can be derived from the available Regulation ECB/2008/32 data:

$$\begin{aligned} F &= F_1 + F_2 + F_3 \\ &= L_3 - L_0 - \sum_{t=1}^3 N_t - X \end{aligned}$$

A monthly rate of amortisation, f , is defined as the share of the outstanding amount of the month $t-1$ which is repaid by borrowers during month t . The monthly rate of amortisation is assumed constant for the three months of a given quarter. This rate of amortisation must be less than or equal to 1 (where a value of 1 means full repayment), and should normally be greater than zero.

$$\begin{aligned} f &= \frac{-F_t}{L_{t-1}}; \quad 0 \leq f \leq 1 \\ F_t &= -fL_{t-1} \end{aligned}$$

First, the outstanding amounts of derecognised loans may be expressed in terms of available Regulation ECB/2008/32 data and f :

$$\begin{aligned} L_1 &= L_0 + N_1 + X_1 + F_1 \\ &= L_0 + N_1 + X_1 - fL_0 \\ &= L_0(1-f) + N_1 + X_1 \\ L_2 &= L_1 + N_2 + X_2 - fL_1 \\ &= L_0(1-f) + N_1 + X_1 + N_2 + X_2 + f[L_0(1-f) + N_1 + X_1] \\ &= L_0(1-f)^2 + (N_1 + X_1)(1-f) + N_2 + X_2 \end{aligned}$$

And similarly, the end of quarter outstanding amount can be derived:

$$L_3 = L_0(1-f)^3 + (N_1 + X_1)(1-f)^2 + (N_2 + X_2)(1-f) + N_3 + X_3$$

Rearrangement of the above equation for L_3 provides the following cubic equation in $(1-f)$ which is the basis for determining the monthly rate of amortisation which satisfies the given data for the quarter. This equation can be solved to find the rate of amortisation, f .

$$L_0(1-f)^3 + (N_1 + X_1)(1-f)^2 + (N_2 + X_2)(1-f) + N_3 + X_3 - L_3 = 0$$

¹³ Such reclassifications in the data are very rare, although the volumes can be large when they occur. If possible (e.g. where known from other sources) the reclassifications were applied to a specific month in the quarter, rather than the default of third month of the quarter.

The monthly developments in outstanding amounts and financial transactions excluding loan disposals and acquisitions can therefore be derived from the data collected in the Regulation ECB/2008/32 and the rate of amortisation, f , as summarised in Table 3.

Table 3: Summary of the derivation of data on derecognised loans

	Outstanding amounts of derecognised loans	Financial transactions excluding loan disposals and acquisitions
End-quarter ($t=0$)	L_0	-
Month 1 ($t=1$)	$L_1 = L_0 (1-f) + N_1 + X_1$	$F_1 = -f L_0$
Month 2 ($t=3$)	$L_2 = L_0 (1-f)^2 + (N_1 + X_1)(1-f) + N_2 + X_2$	$F_2 = -f [L_0 (1-f) + N_1 + X_1]$
Month 3 ($t=3$)	L_3	$F_3 = -f [L_0 (1-f)^2 + (N_1 + X_1)(1-f) + N_2 + X_2]$

Due to the fact that some NCBs were collecting quarterly Regulation requirements also at a monthly frequency, for most countries the above estimation method was not required to derive monthly adjustments data but was used only for checking purposes.

The above method may be extended and adapted for the estimation of loans to households broken down by loan purpose, however these estimates are more challenging as the level of data which was collected in the historical period is more restricted (unless NCBs have collected data beyond the ECB Regulation requirements applicable at the time), and so additional assumptions are necessary. Efforts will continue in this direction in order to supplement the available data with further breakdowns of loans adjusted for securitisation.

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Overview

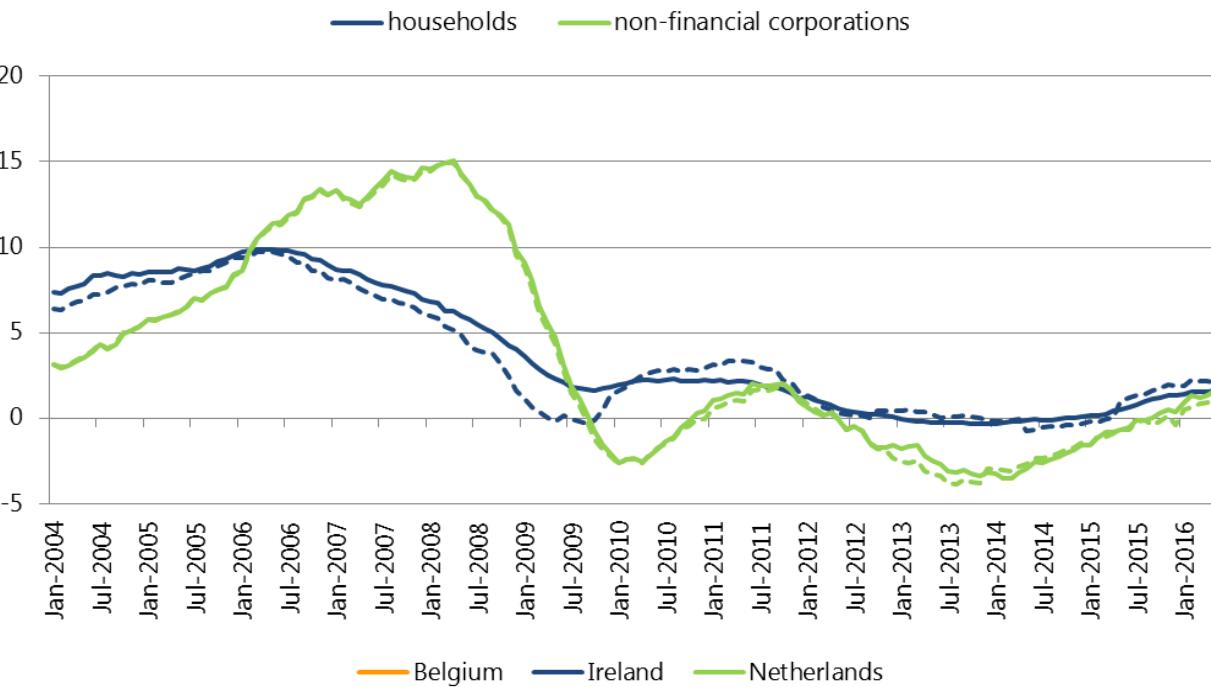
- 1** Introduction
- 2** Relevance of securitisation activities for statistics
- 3** Adapting the methodology for adjusting loans
- 4** Compiling historical data on adjusted loans
- 5** Conclusion

- **Monitoring banks' financing of the economy**
 - bank lending is key in the transmission channel of monetary policy and, hence, in focus of the ECB's monetary analysis
- **Statistics** are periodically reviewed in the light of **financial innovation** or new **user needs** so as to remain **relevant**
- **Securitisation activities** are particularly relevant for monitoring lending
- The ECB publishes data on loans which are **adjusted for securitisation and other transfers**
 - based on **monetary financial institutions (MFI) statistics**
 - distortions arising from securitisation or other loan transfers are removed
 - facilitates **cross-country comparability** of lending developments

Relevance of securitisation activities for statistics 1/2

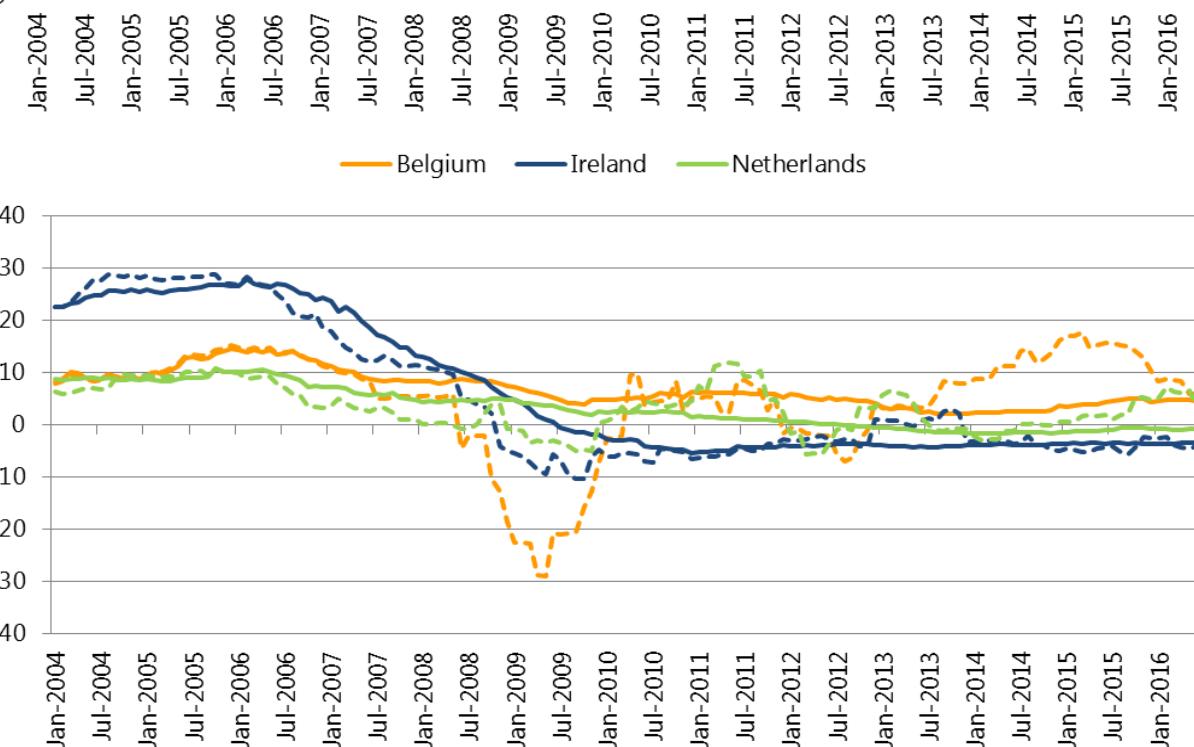
- Where an **asset or a pool of cash flow-producing assets** is converted into marketable securities → banks **transfer credit risk** and **create liquid instruments** out of illiquid (not tradeable) loans
- Important element of banks' funding:
 - **Pre-crisis:** asset-backed securities (and credit risk) placed with investors
→ “**originate and distribute**” model
 - **Post-crisis:** securitisations mainly create collateral for central bank refinancing
→ debt securities “**retained**” by banks
- Loans transfers resulting in **derecognition** (i.e. a change in stocks on MFI balance sheets) hinder analysis of lending to the real economy
 - The ECB aims to remove the distortionary impact of securitisation and other transfers by “adjusting” loans series for sales and securitisation
 - *published since December 2008*

Relevance of securitisation activities for statistics 2/2



MFI loans

to euro area households
and non-financial
corporations
(annual growth rates)



MFI loans

to euro area households
in 3 selected countries
(annual growth rates)

Note: Solid lines represent the adjusted data and dotted lines represent the unadjusted data

Adapting the methodology for adjusting loans 1/3

- In updating ECB statistical regulations, **users are consulted** on their needs and priorities
 - securitisation adjustment now takes into account derecognised loans after their transfer → **borrowers' perspective** on outstanding **loans originated by MFIs**
- **Former** adjustment method → **MFI balance sheet perspective**
 - one-off adjustment to the **loan transactions** (net transfers)
- **Current** adjustment method → **Borrowers' perspective**
 - **one-off adjustment** to the **loan transactions** (net transfers)
 - **plus** inclusion of **repayments** and **stocks** of **derecognised loans**
 - more comprehensive view on **loans to the real economy**
 - improved **comparability of country-level data**, regardless of the accounting practices for loan transfers

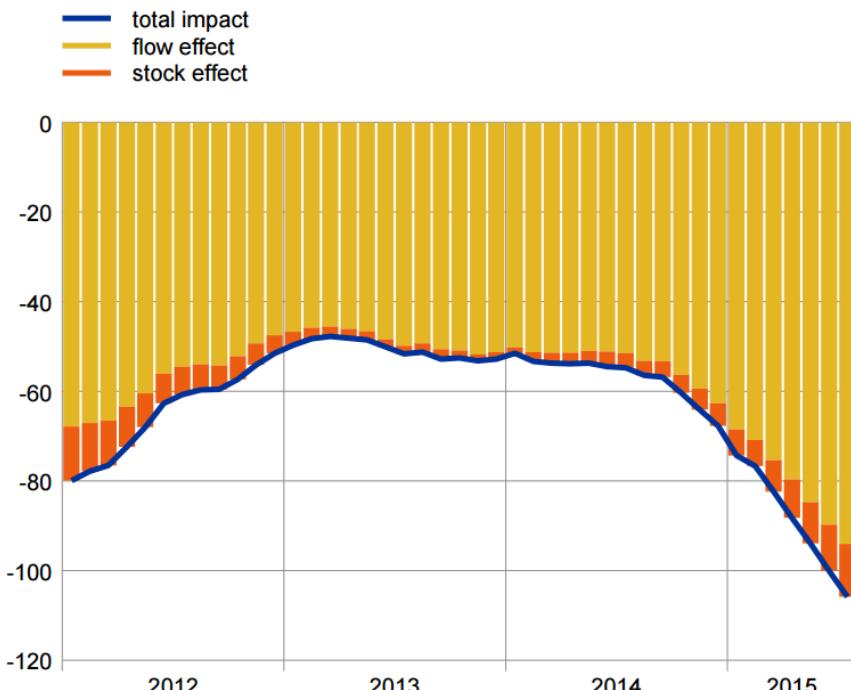
Adapting the methodology for adjusting loans 2/3

- **Difference in adjusted annual growth rates** between the **current** and **former** methods can be decomposed into two effects:
 - **flow effect:** inclusion of repayments of derecognised loans
→ *lower adjusted flows under the current method*
 - **stock effect:** inclusion of derecognised loans' stocks
→ *smaller growth rates in absolute terms under the current method*
- **Quantitative impact** on growth rates depends on:
 - the **relative share of derecognised loans** compared to total loans
 - **characteristics** of the derecognised loans
 - e.g. *lower residual maturity may imply faster principal repayments*
- The new method of adjustment leads to lower growth rates than the former method, while the euro area trends remain basically unchanged

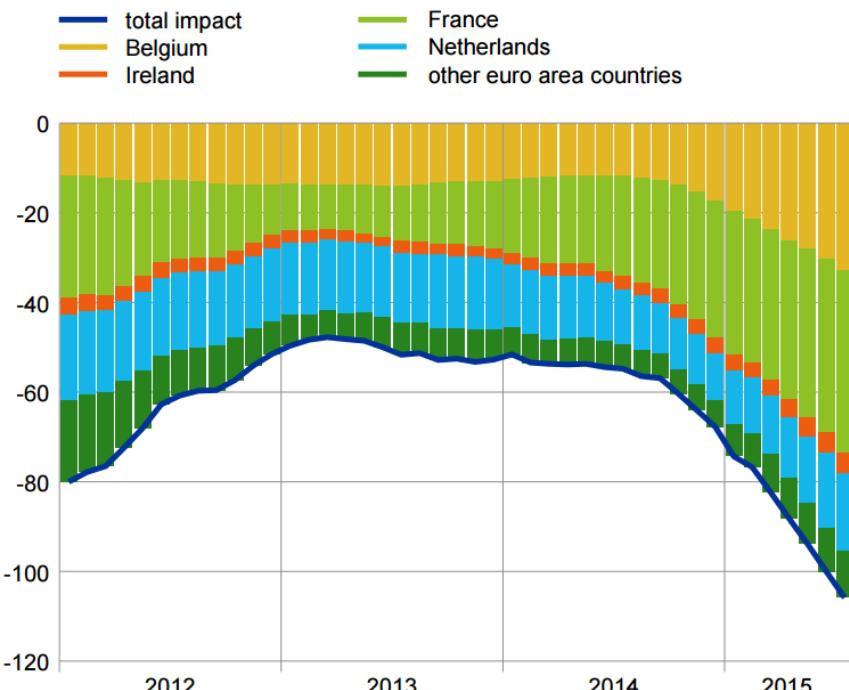
Adapting the methodology for adjusting loans 3/3

MFI loans to euro area households: impact of the current method on annual growth rates (*basis points difference in annual growth rates*)

a) Impact on annual growth rates in terms of the flow and stock effects



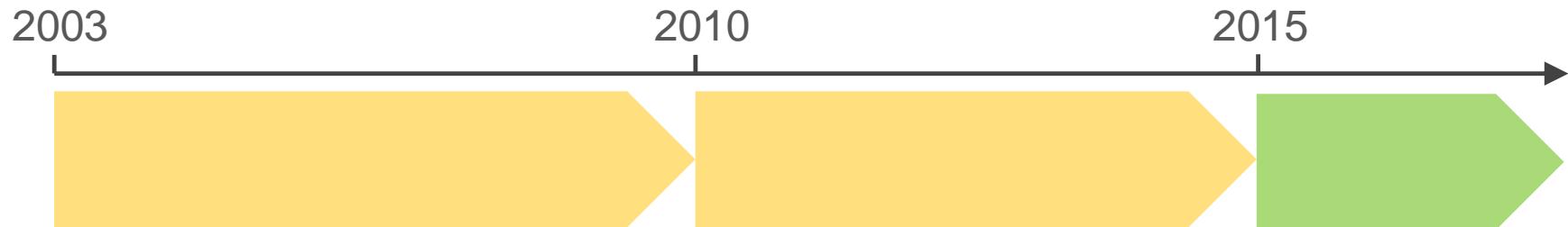
b) Impact on annual growth rates in terms of national contributions



- Annual growth rates were **~60 basis points lower** between Jan. 2012 and July 2015 on average with the new method
- Impact on growth rates is driven by countries with large volumes of derecognised loans → **greater loan repayments**

Compiling historical data on adjusted loans

- Need for **consistent** and **long times series** for analytical purposes
- A methodological “break” was avoided by **compiling historical data** in line with the current adjustment method



- Unharmonised data on private sector loans replaced with **harmonised** data according to current method
- New adjusted data released for **households and NFCs**
- Based on available NCB data
- Former method replaced by current method
- Used data on securitised loans **serviced** by MFIs
- Based on available NCB data and/or estimates
- Current method data **directly collected** from MFIs

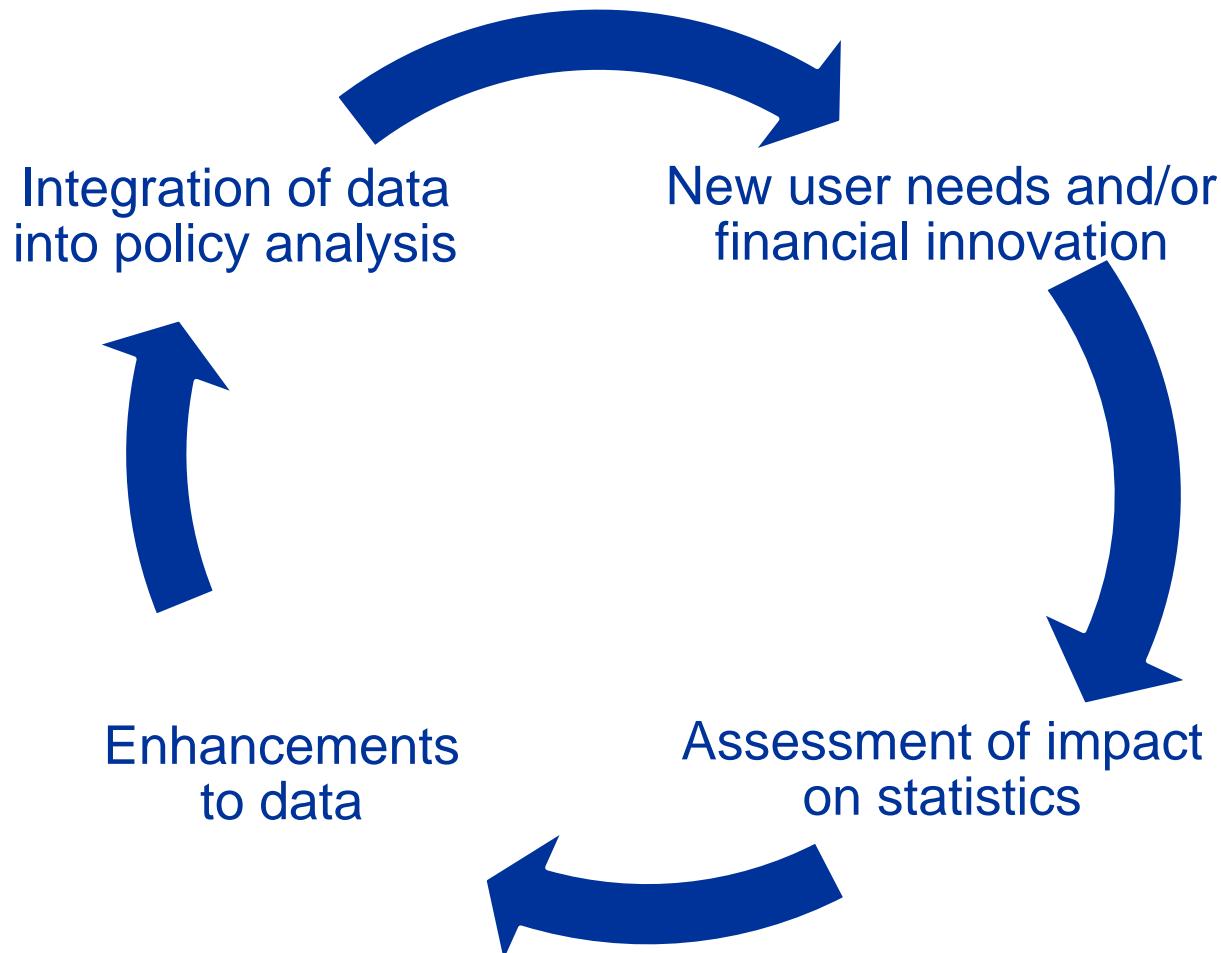
*Data published in
May 2016*

*Data published in
September 2015*

Conclusion

“A strength of the ECB’s monetary analysis is the virtuous circle it creates between the policy analysis and the statistical framework.”

ECB Monthly Bulletin September 2012



Overview of adjustment methods for loan sales and securitisation

	Outstanding amounts	Transactions	Growth rate (in period t)
Unadjusted	L_t^{MFI}	F_t^{MFI}	$\frac{F_t^{MFI}}{L_{t-1}^{MFI}}$
Former method	L_t^{MFI}	$F_t^{MFI} + N_t$	$\frac{F_t^{MFI} + N_t}{L_{t-1}^{MFI}}$
Current method	$L_t^{MFI} + L_t^{DR}$	$F_t^{MFI} + N_t + F_t^{DR}$	$\frac{F_t^{MFI} + N_t + F_t^{DR}}{L_{t-1}^{MFI} + L_{t-1}^{DR}}$

L_t^{MFI} = Outstanding amounts of loans on MFI balance sheets at the end of period t

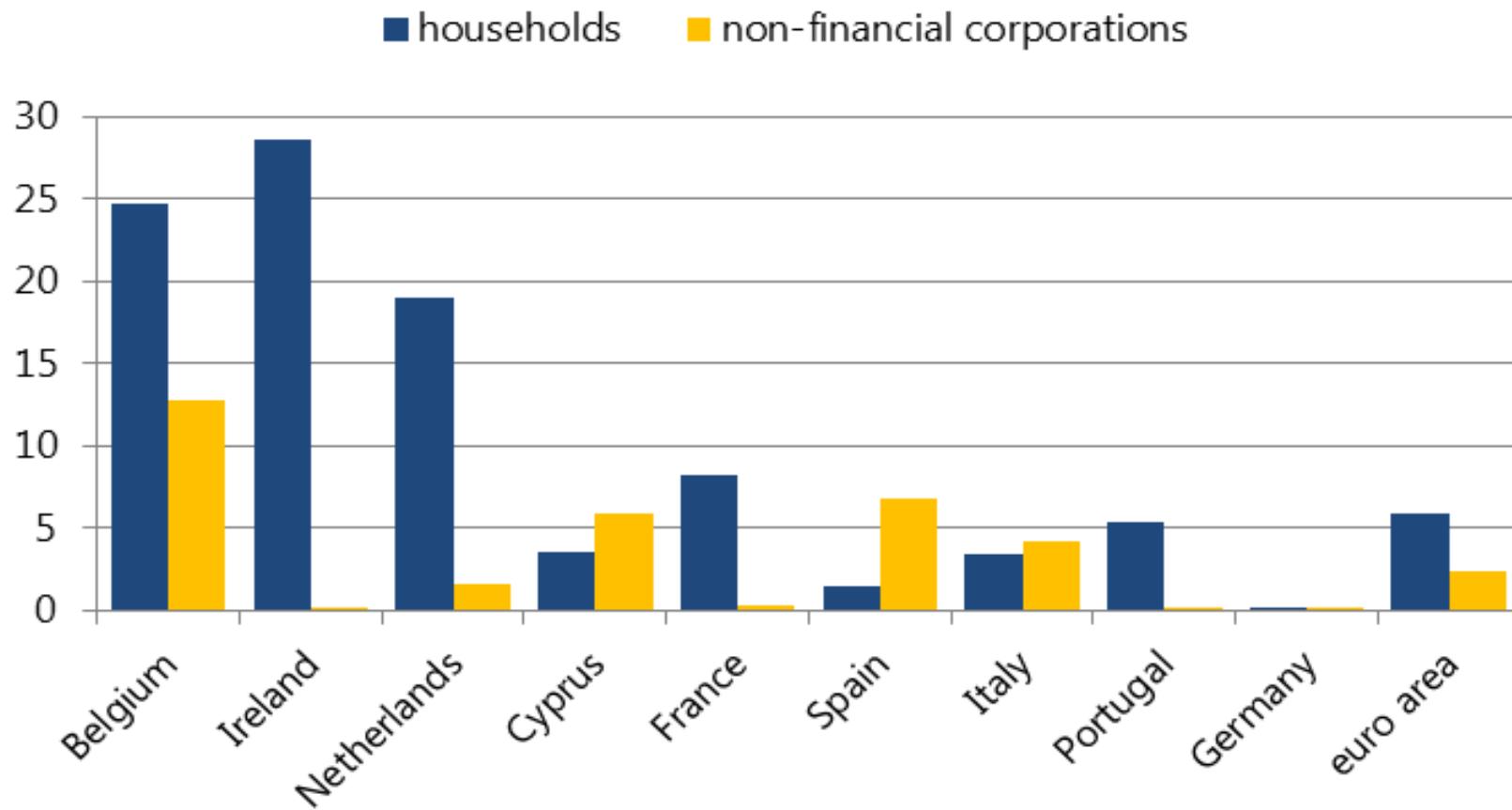
F_t^{MFI} = Transactions in loans on MFI balance sheets in period t , not adjusted for sales and securitisation

N_t = Net transfers of loans off MFI balance sheets with derecognition (disposals minus acquisitions) in period t

L_t^{DR} = Outstanding amounts of derecognised loans at the end of period t

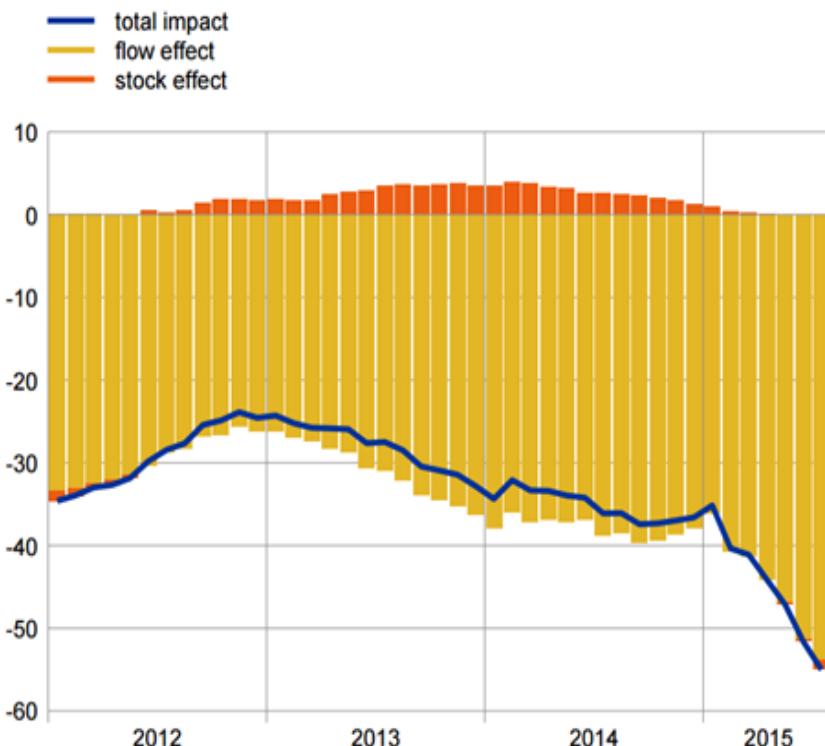
F_t^{DR} = Transactions in derecognised loans *excluding transfers* during period t , i.e. the repayments of derecognised loans

Share of derecognised loans to total outstanding loans (June 2016, percentages)



MFI loans to euro area NFCs: impact of the current method on annual growth rates (basis points difference in annual growth rates)

a) Impact on annual growth rates in terms of the flow and stock effects



b) Impact on annual growth rates in terms of national contributions

