I. Private sector deleveraging: where do we stand?(1)

This focus section contributes to the debate on private sector deleveraging by reviewing the adjustment achieved so far in household and corporate indebtedness, by estimating remaining deleveraging needs and by discussing their materialization in the coming years. The main findings of the analysis can be summarised as follows.

First, deleveraging of firms and households is under way in many Member States but the adjustment process still has a long way to go given the magnitude of the debt increase before the crisis.

Second, the fall in household and corporate debt-to-GDP ratios, which picked up pace in 2013, has been increasingly driven by negative credit flows. This process, which we term ‘active deleveraging’, has had adverse knock-on effects on economic activity and asset markets.

Third, the remaining deleveraging needs are still high, including in economies that have already deleveraged by a considerable amount. We estimate that corporations and households in several vulnerable countries may still need to cut their debt-to-GDP ratio by at least 30 percentage points. Elevated credit market deleveraging pressures, often compounded by fragilities due to the distribution of debt, are likely to force this adjustment to occur mostly through active debt repayment over the short-to-medium term, with negative effects on economic activity in the years to come.

To ease the adjustment process and minimise its economic and social impacts, additional policies to boost growth and restore inflation to normal levels should be considered in tandem with policies to strengthen bank balance sheets and to improve the functioning of insolvency frameworks.

I.1. Introduction

The private sector balance sheet repair process taking place in several euro area countries is one of the main factors shaping current economic activity in the euro area. The extent, speed and results of this adjustment vary across Member States depending on their degree of excessive indebtedness, but also on the economic outlook and broader credit market conditions, which determine the private sector’s ability and readiness to carry debt.

Against this backdrop, this focus section reviews the adjustment achieved so far in household and corporate indebtedness, and estimates how much further they still need to go and how this adjustment will occur over the coming years.

Throughout this note, the term deleveraging refers to the reduction of a sector’s debt-to-GDP. Three related concepts are used in the analysis: deleveraging likelihood, deleveraging needs, and deleveraging pressures. The deleveraging likelihood is the likelihood that a sector’s indebtedness will turn out to be unsustainable at the end of the expansion phase of the economic cycle. Deleveraging needs represent the excessive (or unsustainable) portion of current debt. Deleveraging pressures are related to credit demand and supply conditions, which determine whether and how the deleveraging needs gap will be closed. Special attention is paid to the link between the urgency or acuteness of deleveraging pressures, and the resulting deleveraging modes, which are characterised by the degree to which deleveraging is achieved through the active repayment of debts.

An active deleveraging mode is one mostly driven by negative net credit flows (the result of credit supply and/or credit demand pressures), which lead to a nominal contraction of balance sheets. Active deleveraging may face headwinds from the effects of falling or stagnating economic activity, or very low inflation, on nominal GDP (because of the denominator effect).

A passive deleveraging mode is one where the debt-to-GDP ratio is gradually reduced while net credit flows remain moderately positive. The nominal debt stock increases at a rate lower than nominal GDP growth, leading to a fall in the indebtedness ratio.

An unsuccessful deleveraging mode is one where the debt-to-GDP ratio stagnates, or even increases, despite significant negative net credit flows. In that case the contraction of aggregate demand, in part induced by private deleveraging especially if occurring together with fiscal consolidation or

(*) Section prepared by Peter Pontuch.
another factor affecting aggregate demand, has deflationary effects on GDP.

In passive deleveraging the size of the sector’s balance sheet is preserved (or slightly increases) in nominal terms, leading to less drag on aggregate demand, lower stress for asset markets, and an overall smoother process. Active deleveraging, by contrast, is likely to be more challenging, leading to a stronger fall in asset prices (also driving up non-performing loans) and to second-round effects via credit supply. The process may have consequences on productivity and economic growth in the medium and long term, due to a prolonged period of subdued investment and low employment. The most extreme case, that of unsuccessful deleveraging, may generate even more fragilities in the financial sector, further reinforcing the overall contraction in activity and amplifying social and economic costs.

I.2. Taking stock of the adjustment

I.2.1. Indebtedness is being reduced

The starting point of the analysis is the evolution of total private non-financial sector consolidated indebtedness relative to GDP. Measures of debt relative to the capacity to repay are central for the assessment of long-term sustainability, although in the short term, debt servicing-to-income ratios are equally if not more relevant for sustainability and solvency. Changes in debt-to-GDP, reflecting the amount of external funds owed by the sector, are also central for gauging the effects on aggregate demand. In the upward phase of the cycle, these funds finance additional spending, while in the downturn, debt repayment may compress it.

Between the start of the financial crisis in 2008 and 2013, total private indebtedness fell in six euro area countries. However, for most cases the extent of the adjustment is just a fraction of the pre-crisis increase (see top of Graph I.1). Luxembourg leads the ranking of countries that have reduced indebtedness, although the reduction is not a genuine deleveraging process but instead reflects the specific structure of this economy. (2)

Graph I.1: Private non-financial sector indebtedness (% of GDP)

It is followed by Latvia and Estonia, where adjustment was in the 25 to 30 pp. range, and Spain at less than 20 pp. Germany and Malta have also reduced private indebtedness since 2008, by almost

(2) The size of the corporate sector relative to the Luxembourgish economy is due to the fact that many corporate centres of multinational groups are located here. Changes over time of the degree of centralisation of group financing by these entities can lead to large changes in aggregate statistics. .
I. Private sector deleveraging: where do we stand?

10 pp. The German case deserves specific attention, as Germany’s private sector is the only one that has been deleveraging throughout the 2000s period.

Graph I.1 also reveals that in several countries, overall private indebtedness has significantly increased since 2008. High double-digit increases have occurred in Cyprus and Ireland, while increases in Finland, France, the Netherlands and Greece were more moderate but still more than 10 pp.

The split between household and corporate indebtedness in the second and third panel of Graph I.1 is useful for interpreting these heterogeneous developments since the crisis. In particular, corporate indebtedness was behind several notable cases of changes in private indebtedness, such as the post-2008 increase in Ireland and in Cyprus (in the latter, household indebtedness also increased over that period), as well as the fall in Luxembourg.

By contrast, post-2008 private deleveraging in Spain, Latvia and Estonia has been almost equally driven by firms and households (although, for instance, in Spain firms increased their net lending at a later stage than households).

I.2.2. Deleveraging activity has intensified

The previous analysis suggests that only a portion of the pre-2008 increase in private indebtedness has been reduced so far. This presentation, however, conceals more recent deleveraging efforts, as most countries’ household and corporate indebtedness peaked after 2008. In a number of cases, household and corporate indebtedness have recently followed quite dissimilar paths, leading to a range of peak years. For this purpose, Graph I.2 first ranks countries by the year in which their household, firm or total private debt-to-GDP peaked, and then compares the adjustment of the debt ratio since that peak with the change since 2008.

Individual peaks in the indebtedness of firms (most of them occurring in 2009/10) reveal more generalised deleveraging activity in the recent period. Deleveraging efforts since the peak exceed 10% of GDP in Luxembourg, Latvia, Malta, Spain, and Estonia. Corporate indebtedness in Ireland continued increasing through 2012, then reversed in 2013.

Graph I.2: Change in private indebtedness as of 2013e (% of GDP)

Peek year

<table>
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<tr>
<th>Country</th>
<th>Total private sector</th>
<th>Household</th>
<th>Corporate</th>
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<tr>
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<tr>
<td>SI</td>
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</table>

(1) Data consolidated at the sector level. Source: Eurostat, own calculations

A notable adjustment is also apparent in the household sector. Eight Member States saw a peak in indebtedness in 2009 or 2010 and in all cases the subsequent deleveraging effort is significantly higher than when 2008 is taken as the reference year. Overall household deleveraging in excess of
10% of GDP since the peak has been observed in Ireland, Estonia and Latvia. Indebtedness of other countries’ households has so far retreated little (e.g., Netherlands, Slovenia or Italy), or not at all (e.g., Cyprus, Greece, France and Finland).

For the private sector as a whole, overall deleveraging in excess of 20 pp. since the peak has been observed, among others, in Latvia, Estonia, and Spain. A more moderate but still significant private debt reduction occurred in Ireland, while some deleveraging also occurred in Portugal, Slovenia, and Austria. Deleveraging of the private sector in other Member States has been limited.

In the unique case of Germany, both households and firms have been deleveraging since the early 2000s. Household indebtedness peaked in 2000 and has been decreasing ever since, both before and after 2008, with a total reduction of some 16 pp. over the 14-year period. The indebtedness of the German corporate sector (and also the Dutch) peaked at the beginning of the 2000s, although the total reduction in debt is milder compared to that of households. Overall, the German private sector has deleveraged by about 22% of GDP since its peak in 2001, confirming a unique indebtedness path for this country. One should note, however, that the country was among the more indebted ones in 2000, which could at least to some extent explain the trend.

### I.2.3. Deleveraging is increasingly active

In order to identify cases of active deleveraging, the analysis proceeds by splitting the change in the debt/GDP into four underlying factors:

- net credit flows, i.e. the flows of new loans minus repayments;
- other changes in outstanding nominal debt such as valuation changes (e.g. due to foreign currency denomination), debt write-downs or restructuring,
- real GDP growth, and
- inflation (measured by the GDP deflator).

The latter two components affect the denominator of the ratio. One can identify the deleveraging mode, as defined in the introduction, by assessing the factors driving the change of the debt ratio.

First, looking at the cumulative change in the household debt/GDP ratio since 2008, negative credit flows have so far been the main driver of deleveraging. In several cases, active credit repayment faced headwinds from subdued economic activity and low inflation. For instance, indebtedness reduction in Ireland, Estonia, Spain, and Portugal has in all cases been driven by significant negative credit flows (see Graph I.3). But among these countries, the active credit...
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Repayment has been aided by nominal GDP growth only in Estonia.

By contrast, a real contraction of the economy since 2008, accompanied by subdued inflation related to restoration of competitiveness, has led to a partial offsetting of the deleveraging effort in Ireland, Spain, and Portugal. The GDP contraction in Greece, driven by both private and public consolidation efforts, has more than offset the cumulative negative credit flows, and household debt-to-GDP has actually increased.

Despite the absence of obvious deleveraging pressures, German households have undergone passive deleveraging with only slightly positive cumulative net credit flows, outpaced by the nominal GDP growth.

The trend over the four quarters of 2013 (right panel of Graph I.4) points to an acceleration of active debt repayment by households in Spain and Portugal, while the effort continues to be partially offset by the contraction of the economy. Active deleveraging can also be seen in 2013 in Ireland, at a somewhat slower pace than in previous years. The Netherlands, Latvia and Slovenia have recently also been actively deleveraging. In Greece, the contraction of the economy continued to complicate the reduction of debt-to-GDP, but the contribution of other changes (which capture debt write-downs) have helped to contain further increases in the ratio.

The cumulative reduction of corporate indebtedness since 2008 has been driven to a somewhat lesser extent by negative credit flows. Active corporate deleveraging efforts have been significant in Spain (see Graph I.4), while some can also be seen in Estonia and Slovenia. By contrast, Malta, Belgium and Ireland experienced strong positive cumulative credit flows over that period, which in the latter two cases led to significant increases in the corporate debt-to-GDP ratio. These developments reflect, to a certain extent, the activity of large corporate groups. (3)

The deleveraging efforts of firms have become more pronounced recently. The short-term trend over the four quarters of 2013 suggests that deleveraging accelerated in Slovenia, Ireland, and Italy (right panel of Graph I.4). Almost all countries saw their corporate indebtedness recede in 2013, led by changes of more than 10 pp. in Malta, Slovenia, and Latvia by more than 10 pp. over the year. The contribution of negative credit flows in 2013 was in general more significant than suggested by the cumulative data for the 2008-13

(1) Non-consolidated data. Cumulative change of D/GDP ratio decomposed into the contributions of i. net credit flows, ii. other changes in outstanding debt (e.g., valuation effects or write-offs), iii. real GDP growth, and iv. inflation.

(2) The x-axis on the right-hand panel graph represents the contribution of net credit flows to the decrease of the D/GDP ratio over the period.

Source: Eurostat, DG ECFIN calculations.

(3) For the analysis of deleveraging drivers, non-consolidated data are used. Eurostat quarterly sector data are only available in this format. This further exacerbates the problem of corporate groups.
period. Flows in Malta, Slovenia, Spain, Ireland and Greece were close to 4 pp. A passive deleveraging, through low but positive credit flows at a rate below nominal GDP growth (and also including other debt changes such as valuation effects and write-offs) can be seen among firms in Estonia, Austria and Belgium.

I.3. The outlook

I.3.1. Estimates of potential deleveraging needs

The objective of this section is to assess and quantify remaining potential deleveraging needs. To this end, a range of indicators of potential deleveraging needs is constructed, based on two estimation methods. (4)

The first method defines a sustainable level of debt by estimating debt that is consistent with households’ and firms’ assets corrected for valuation effects. (5) This method takes into account country- and time-specific factors such as the starting level of debt and the extent of the asset price boom in the pre-crisis period. By cumulating from the starting point in 2000 the annual gap between changes in actual debt and in its sustainable counterpart the method yields an estimate of excess indebtedness (see box for further details).

The second method is based on the typical extent of deleveraging in past episodes, and is a function of the preceding debt increase. Bornhorst and Ruiz-Arranz (2013) provide an overview of historical deleveraging episodes and assess ongoing deleveraging in the euro area. (6) For households, they find that protracted deleveraging episodes that follow a credit boom tend to almost completely offset the increase incurred during the boom. Their analysis also reveals, however, that in the current credit cycle, U.S. households have deleveraged by only about two-thirds of the previous debt increase. As for firms, a very similar pattern emerges from historical experience. On average, about two-thirds of the indebtedness increase during the boom phase is reduced after the bust. We, therefore, conventionally define for both firms and households, a second measure of deleveraging needs as the gap between the latest indebtedness figure (D/GDP) and the level where two-thirds of the boom-period increase has been adjusted. One should note that for both households and firms, this estimation method can overestimate deleveraging needs in the case of economies which started the period with a low indebtedness and then underwent some catching-up.

The range of potential deleveraging needs is presented separately for countries where deleveraging seemed likely at the latest peak of the credit cycle. For this purpose, the likelihood of deleveraging by households and firms is assessed using composite indicators by Cuerpo et al. (2014), simultaneously assessing several alternative indebtedness ratios (leverage as well as capacity-to-repay ratios, in both levels and changes over the accumulation phase). Countries above a judgemental cut-off threshold are considered as having had a high likelihood of deleveraging at the peak of the latest cycle.

Among countries which had a high likelihood of household deleveraging, the amount of debt that still needs to be reduced could exceed 10% of GDP in seven countries, including Greece, the Netherlands, Cyprus and Spain, and possibly Ireland (left panel of Graph I.5). However, even among other euro area Member States, particularly some of the new ones, potential deleveraging needs could be significant in a number of cases.

One should note that the gap based on the historical norm could overstate actual deleveraging needs in catching-up economies (e.g. Estonia, Latvia, and Slovakia) and economies that started at low household debt levels (like Finland). Moreover, the gap based on the sustainability analysis may understate deleveraging needs in countries that underwent abrupt housing market adjustments (this is the case for Ireland, Cyprus, and to some extent Spain).

These two limitations of the estimation methods could explain the uncertainty signalled by the size of the estimated range for some countries (e.g. Cyprus and Ireland). This notwithstanding, the


analysis points to the fact that, when taken at face value, household deleveraging needs in Greece, Cyprus, Spain or Ireland, could be of a similar order of magnitude than those in the Netherlands.

The implications of these deleveraging needs, however, may be quite different in terms of the pace, of the mix between active and passive deleveraging, and of the overall implications for economic activity (discussed below).

Corporate deleveraging needs could exceed 10% of GDP in six Member States. Among these, Cyprus and Ireland are close to or above 40%, and Portugal and Estonia above 20% of GDP (see the right panel of Graph I.5). These raw estimates will be further qualified below using evidence on cross-border lending (in particular leading to downward revision of the Irish corporate over-indebtedness gap). Among countries not flagged as obvious deleveraging candidates, only the specific case of Luxembourg shows a significant indebtedness gap.

In summary, significant private sector deleveraging needs remain in several economies. Overall deleveraging needs may be well in excess of 30% of GDP in Cyprus, of which a larger part would stem from the corporate sector but where estimates for households point to a high degree of uncertainty that could conceal additional vulnerabilities. Ireland, Greece, and Spain could also face private deleveraging needs of at least 30% of GDP. A significant excess of private debt is also signalled in Portugal, the Netherlands, and Slovenia. In line with the observations from previous sections, Germany is the only country where neither households nor firms signal indebtedness beyond sustainable levels.

However, these estimates of deleveraging have to be interpreted with caution. First, their materialisation through active debt repayment, as well as the speed and economic cost of this adjustment, will largely depend on the state of credit demand and supply (essentially reflecting the strength of the economy as well as the state of the financial sector).

Second, the distribution of debt across households and firms will play a central role, as the aggregate measures of indebtedness may understate, or overstate, the actual debt burden at the level of the household.

Third, deleveraging pressures in the corporate sector may be less severe if debt signalled as excessive by our aggregate measure merely reflects cross-border lending of corporate centres of large groups.

The next section explores these additional factors to refine the conclusions about expected deleveraging outcomes.
I.3.2. Other factors affecting the extent and acuteness of deleveraging

Credit market conditions

As discussed in a recent issue of the QREA, credit demand and supply conditions are the main driver of pressures that will determine how potential deleveraging needs, as identified in the previous section, will ultimately materialise. (7)

The specific deleveraging pattern (i.e. the speed of deleveraging, the relative contribution of negative credit flows, possible over-/under-shooting, intensity of debt default) depends on broader economic conditions and policy actions. Credit market conditions can affect the extent and pace of deleveraging through various channels:

- **Credit availability**: Changes in credit supply can influence the ability of borrowers to meet their obligations. Tighter credit conditions may lead to reduced lending, while easy credit conditions can facilitate deleveraging.
- **Cost of debt**: Higher interest rates can increase the cost of servicing debt, potentially leading to slower deleveraging. Conversely, lower interest rates can provide more flexibility for borrowers to manage their debt.
- **Liquidity**: The availability of liquidity can impact the speed and extent of deleveraging. Adequate liquidity allows for the timely repayment of debts, whereas a lack of liquidity can prolong deleveraging processes.
- **Investment opportunities**: The attractiveness of alternative investment opportunities can influence the timing and pace of deleveraging. When investment returns are high, borrowers may be more inclined to use their resources for investment rather than paying off debt.

economic conditions and sentiment, driving households’ and firms’ ability to hold debt, and on the financial sector’s strength, capturing the availability of credit.

An analysis of the overall credit supply and demand conditions therefore refines the conclusions about the expected extent of deleveraging in the identified Member States, the likely deleveraging mode and the effects of this adjustment. For this purpose, indicators for credit demand and supply pressures are used and Graph I.6 presents the relative comparison of individual Member States. (*)

The analysis uses a set of variables that influence or reflect either credit supply or demand conditions. Although no variable is exclusively demand- or supply-related, the selected variables at least predominantly reflect one of the two sides of credit market conditions. The set of credit supply-related indicators includes variables reflecting financial soundness and direct survey data. On the credit demand side, measures of perceived economic conditions are included, together with macroeconomic variables (unemployment and housing market developments) and survey data.

The information is aggregated into composite indicators of credit demand and supply pressures based on the average ranking of Member States on each variable.

Relatively high pressures for immediate and active deleveraging can be expected to continue in the coming years in Cyprus, Greece and Slovenia. This process is likely to be characterised by negative credit flows and adverse impacts on economic activity, which may impair the adjustment process with a denominator effect via GDP. Spain, Portugal, Italy, and Ireland are in a similar situation to the previous group, albeit to a lesser extent. Negative credit flows are expected to weigh on economic growth in the near future. Within this group, Ireland appears to be more advanced in the process of credit market normalisation. The Netherlands may also continue to experience pressures for active deleveraging, but would face less immediate pressures if broader economic conditions improve in the coming quarters.

More advanced adjustment of indebtedness in the two Baltic members of the euro area can be explained by an earlier peak in credit market pressures.

Finally, countries such as Belgium, Germany, Austria, Finland, and France currently face low or moderate deleveraging pressures stemming from credit supply and demand. If any deleveraging is to be expected, it is likely to be mostly passive and gradual.

Fragilities from the distribution of household debt

An important factor determining deleveraging among households is the distribution of debt within the sector, and more specifically, how it has matched the distribution of assets and income, in terms of both levels and shocks since the onset of the crisis.

All estimates of deleveraging needs in section I.3.1 are based on aggregate measures of debt at the level of the sector. One should recall, however, that low aggregate indebtedness may still conceal deleveraging risks if debt is concentrated among households with low-value assets and incomes under stress. Another important element is the level of debt servicing costs relative to incomes, which will drive the short-term sustainability of debt.

(*) See Cuerpo et al. (2014) for details about the construction of the indicators.
To shed some light on these issues, this section uses household data from the Eurosystem Household Finance and Consumption Survey, which represents the state of households’ balance sheets as of 2009 (the latest survey date). Although somewhat dated, owing to a long data production cycle, these figures still provide a relevant snapshot of balance sheet vulnerabilities at the peak of the latest credit cycle.

The distribution of debt-to-income across income quintiles (bottom panel of Graph I.7) points to similar vulnerabilities in the four economies, while the debt-to-assets data provide less clear signals. The bottom income quintile’s debt-to-income ratio, despite significant data variability, points to Cyprus, Portugal and the Netherlands as potentially vulnerable cases. The signals are consistent if one focuses on the next two quintiles (20-40 and 40-60), adding Spain to the vulnerable list.

The distribution of debt and the associated debt servicing burden leaves household balance sheets vulnerable in several countries with high credit market pressures, namely Cyprus, Spain, and Portugal (data for Ireland are not available in the survey). Similar fragilities are signalled for the Netherlands, which faces relatively lower credit market pressures.

**Corporate cross-border lending**

Cross-border lending and borrowing activity of large corporate groups is an important factor that needs to be taken into account when assessing the deleveraging outlook. Some countries home to the regional or global financial offices of large corporate groups report in their national statistics debt that is centrally issued by these resident entities, even though the funds raised leave the country shortly after issuance in the form of lending to foreign subsidiaries.

A simple estimate of cross-border lending can be constructed from sector financial accounts. Loan assets in the consolidated NFC sector balance sheet are loans held by NFCs against resident counterparties in the household, financial or government sectors, or against non-residents. It is reasonable to assume that the share of loans to resident non-NFC entities is very small. Hence, most consolidated loans held by NFCs are related to cross-border lending, the counterparties being most likely foreign corporates.

This proxy of cross-border lending is plotted against aggregate corporate indebtedness over several years in selected countries (Graph I.8). Cross-border lending seems to explain a significant part of the changes in corporate indebtedness seen since 2000 in Belgium, Luxembourg, and Ireland. By contrast, foreign lending was not a significant driver of corporate indebtedness in Cyprus, Spain, Slovenia, or Portugal (the latter not presented). Similarly, Finland only marginally increased its...
firms’ foreign lending position over the sample period.

Graph I.8: Corporate indebtedness and cross-border lending, (2000-2012, % GDP)

In summary, more than half of the increase in Irish corporate indebtedness since the early 2000s seems to have been driven by cross-border lending. This segment of corporate debt may be less subject to deleveraging pressures, and its impact on domestic economic activity should be less adverse. One should note, however, that excessive debt in Ireland remains high after adjusting for this factor (comparable to that of, say, Portugal or Spain). Belgium is another case where the raw estimates of corporate deleveraging needs are likely to be overstated (and appear low once corrected for cross-border lending). By contrast, the deleveraging pressures of firms in Cyprus, Spain or Portugal are not mitigated by this phenomenon, as their debt is mainly related to domestic activities.

I.3.3. Corporate saving and investment

Active deleveraging has a direct impact on a sector’s net lending/borrowing position (NLB), which measures the net flow of funds from/into the sector (i.e., it includes all types of liabilities, not only debt). Actively deleveraging sectors usually are net lenders, which may require a significant effort for the corporate sector (in general in a net borrowing position). By definition, this effort may come either from increased savings or from reduced investment (or more likely from both).

A previous issue of this report, which focused on corporate balance sheet repair, observed that the investment channel had been more dominant in the euro area than in the US, while NFC savings increased less. (9)

Graph I.9: Saving/investment as driver of change in NFC net lending/borrowing (2008-2012, % of value added)

A disaggregated look at the euro area members’ split between the two main drivers of NLB is presented in Graph I.9. One can distinguish two extreme cases of an increase in NLB position between 2008 and 2012. At one extreme, Ireland (followed by Latvia and Greece) has achieved an increase in NLB by mostly improving corporate saving as a share of value added. At the other extreme, the NLB change in Slovenia has been exclusively driven by reduced investment. Spain

and Portugal are in an intermediate situation, balancing the net lending increase between saving and investment.

How firms decide to increase their net lending position may have an impact on the short and medium-term outcomes of deleveraging. Increases in corporate savings can be achieved either through cutting costs, most prominently labour costs, or through reduced dividend pay-outs. If the former channel is dominant, this can exacerbate short-term deleveraging pressures on households. On the other hand, if net lending increases are driven solely by reductions in investment, deleveraging may have adverse effects on medium-term productivity and growth potential. For this reason, the situation with firms is comparatively different from households, whose deleveraging via investment rather than savings may merely reflect overcapacity in the housing stock, and may therefore be a direct consequence of rebalancing.

I.4. Conclusion

This focus section provided an assessment of the state of deleveraging process in euro area members' non-financial private sectors. Most countries have already seen a peak in corporate indebtedness and the sector is now in a downward phase of the credit cycle. However, the adjustment achieved so far remains moderate compared to the increase in the period between 2000 and 2008 and to the estimated excess debt levels in most countries.

Households are also deleveraging in several euro area economies, but again, in most cases, progress has been only partial and in others it has yet to begin. Even in countries where households have already reduced their debts significantly, more is to be expected given the amount of debt built up during the pre-crisis boom.

The estimated deleveraging needs of the private sector may be in excess of 30% of GDP in vulnerable countries like Greece, Cyprus, Spain, or Ireland, and lower but significant in Slovenia. Weak credit market conditions are driving deleveraging pressures which, compounded by fragilities in household balance sheets, would suggest that this adjustment could occur over a short horizon, and through active deleveraging that will continue to weigh on economic activity in the coming years. Given the risk of knock-on effects to economic activity, asset markets, and the financial sector, this rapid adjustment is not necessarily optimal, but credit market pressures leave few alternatives.

The Netherlands represents a borderline case, in the sense that its deleveraging needs affect only the household sector, but are considerable at face value (about 20% of GDP). The current weakness of credit market conditions suggests that the process will continue weighing on demand and growth prospects. But a bottoming-out in the housing market together with an improvement in overall economic activity would help stretch the process over a longer period of time and make it smoother and easier.

In most other Member States, including Belgium, Austria, Finland, and France, deleveraging pressures are likely to be limited. Any reductions in indebtedness are likely to occur mostly through passive and gradual adjustment, rather than active deleveraging. However, should overall economic conditions worsen in these countries (including, for instance, adverse shocks to the financial sector or the housing market) estimated excess indebtedness of households (in particular in Finland and France) or firms (Belgium and Austria) could lead to active deleveraging.

Given the extent of the deleveraging needs, one should discuss the economic and social feasibility of the adjustment needed. A previous modelling attempt of an active deleveraging shock suggests that the effect on economic activity would be significant and persistent. The adjustment to private indebtedness needed in vulnerable countries over a relatively short period, coupled with their current fragile economic and social fundamentals, suggests that further adjustment will remain challenging. Moreover, given the low inflation context in most of the EU, the contribution of nominal GDP growth to the adjustment process is likely to remain limited.

To facilitate the adjustment and minimise its implications for the economy, additional supportive policies that aim to reduce outstanding debt stocks through means other than negative credit flows, should be envisaged. At the forefront, are policy efforts to spur the euro area’s growth and bring inflation back to normal levels, through demand stimulation (including via non-debt cross-

(10) See Cuerpo et al. (2014).
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border flows) as well as through improving the structural flexibility of euro area economies.

It is, however, also important to open discussion on a broader range of policy initiatives and assess their cost-benefit balance. There is, for instance, general agreement that one of the policy priorities should be to foster the recognition of actual losses by creditors through write-offs of bad debts. This would have to be accompanied by a simultaneous strengthening of banks’ capital positions, in order to prevent a further contraction in credit flows to other parts of the economy. (11)

To complement this process, insolvency frameworks in many countries should be improved.


It should be also made fully accessible to both insolvent firms and households at affordable cost and in reasonable time.

For households in particular, the relief provided following insolvency or foreclosure should be a key feature in the current debate.

Going beyond the recognition of bad debts, creditors and debtors could be encouraged to adopt a forward-looking attitude and resort to preventive debt restructuring measures before actual insolvency occurs. Policy could also improve incentives for creditors to voluntarily reduce outstanding balances to close-to-insolvent debtors, debt-to-equity swaps, and debt rescheduling (depending on the economic situation of debtors).