II.4. Corporate balance sheet adjustment in the euro area and the United States (51)

This section compares balance sheet adjustment in the non-financial corporate sector in the euro area and the United States. It shows that the adjustment since the crisis has been faster in the latter. Despite similar steep rises in corporate debt in pre-crisis years, US corporations have cut debt more than those in the euro area. Shifts from loans to bonds and extensions of debt maturity have also been more pronounced in the United States. Much of the difference in balance sheet consolidation can be traced back to more positive profitability trends providing US firms with the internal funds necessary to adjust balance sheets. Differences in dividend distribution strategies and in corporations' physical investment behaviours also played a role. Profitability differences reflect differences both in cyclical conditions and labour market adjustment. Comparatively slow progress in balance sheet consolidation is likely to weigh on investment recovery in the euro area.

Introduction

Both the euro area and the United States experienced a surge in corporate indebtedness in the years preceding the global financial crisis and in its early stages. The ratio of debt to gross value added by non-financial corporations (NFCs) rose by about 40 pp between 2005 and 2009. Deteriorating growth prospects and changing attitudes to risk have prompted NFCs in both economies to adjust their balance sheets. As previously argued in the Quarterly Report, balance sheet adjustment can have a substantial effect on economic activity and it is important to monitor regularly the ongoing adjustment in the euro area. (52) This section contributes to the monitoring by comparing progress in corporate deleveraging in the euro area and in the United States, two regions where firms entered the crisis with excessive debt.

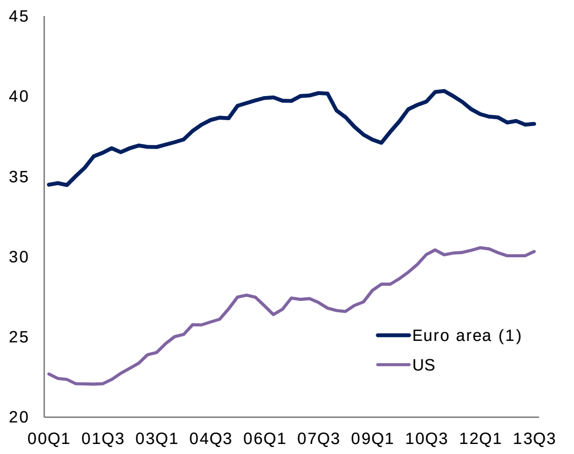
Firms consolidate their balance sheets primarily by raising their net lending/borrowing (NLB), i.e. the cash obtained from their production activity and available for financial operations. (53) A rise in NLB is achieved either by increasing savings or cutting/postponing physical investment. Firms increase savings by raising profits and reducing the dividends distributed to shareholders. In firms' financial accounts, a rise in corporate NLB is associated with a rise in financial assets and/or a cut in financial liabilities. The section reviews recent developments in euro area and US profitability, savings and NLB, and looks at the instruments that the corporate sector has used to consolidate its balance sheet, on both the asset and the liability side.

Corporate profits have disappointed in the euro area …

National account data show that corporate profitability in the euro area reached a pre-crisis peak in 2007Q3, i.e. later than in the United States, where it had already started to decline in 2007. (54)

Graph II.4.1: **NFC profitability, euro area and US**

(2000Q1-2013Q3, % of GVA)



(1)Excluding Latvia.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations.

(51) Section prepared by Plamen Nikolov.
(52) See European Commission (2010): "Focus: Balance sheet adjustment in the corporate sector", *Quarterly Report on the Euro Area*, Vol.9 (3), pp 9-19. A more detailed overview of the literature on the impact of balance sheet adjustment can be found in Cuerpo C., I. Drumond, J. Lendvai, P. Pontuch and R. Raciborski (2013), "Indebtedness, deleveraging dynamics and macroeconomic adjustment", *European Economy Economic Papers* 477.
(53) Firms can also consolidate their balance sheets by raising equity.
(54) Profitability, like the other national account variables for the corporate sector presented in this section, is measured as a proportion of corporate sector activity, represented by gross value added (GVA). It is calculated as the gross operating surplus plus financial revenues and subsidies and minus financial and tax expenses. Financial expenses do not include earnings distributed to shareholders.

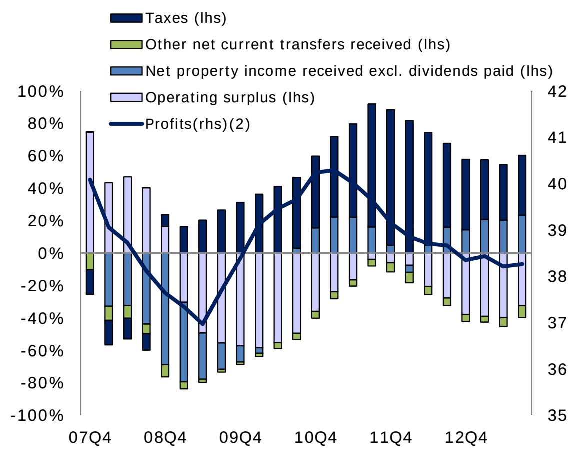
The 2008-09 recession brought a sharp drop in corporate profitability in the euro area. Profitability recovered briefly in 2010 to reach a new peak in 2011 but has declined again since then (Graph II.4.1). In the United States, the impact of the crisis was rather muted, with profits recovering vigorously after 2008. As a ratio to gross value added (GVA), US corporate profits had already passed their pre-crisis level in 2009, before flattening out in the past two years. Overall, by 2013, profitability in the euro area was still about 2 pp below its pre-crisis peak, while in the United States it stood around 3 pp above.

… mostly due to weak operating surplus

The disappointing profit performance in the euro area relative to the United States is largely due to differing developments in gross operating surplus. Looking at the breakdown of the contribution to the cumulative change in corporate profitability since the start of the crisis, there is a marked difference between firms in the euro area and those in the United States (Graphs II.4.2 and II.4.3). [55]

Graph II.4.2: **Profitability breakdown of NFCs, euro area (1)**

(cumulative change in % from 2007Q3 peak to 2013Q3)

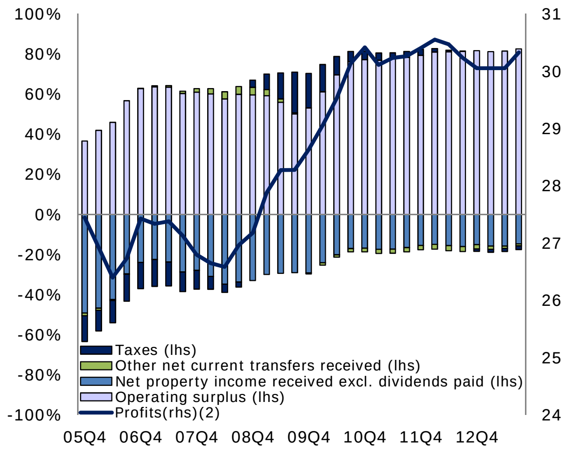


(1)Excluding Latvia.
(2)Profits in % of GVA.
Source: Eurostat, DG ECFIN calculations.

In the euro area, a fall in the ratio of operating surplus to GVA dragged overall profitability down after 2008. Despite an improvement in 2011, in 2013 operating surplus was still contributing negatively to the cumulative change in profitability since the pre-crisis peak. In contrast, operating surplus in the United States responded to the crisis earlier than in the euro area, but its contribution to the change in profits remained positive.

Graph II.4.3: **Profitability breakdown of NFCs, US**

(cumulative change in % from 2005Q3 peak to 2013Q3)



(1) Profits in % of GVA.
Source: Federal Reserve Board, US Bureau of Economic Analysis, DG ECFIN calculations.

Unlike operating surplus, income tax payments and net income from non-operational activities did not differ significantly between the euro area and the United States. [56] In both economies, lower corporate tax payments resulting from lower profits generated by NFCs naturally had a positive impact on the cumulative change in profits from the pre-crisis peak.

Differences in labour market developments are at the root of differences in profitability

Differences in operating surplus and profitability between the United States and the euro area can be attributed partly to differences in the business cycle. In 2011Q1, NFCs' gross value added was still 1.2 % below its pre-crisis peak in the euro area but 1.1 % above in the United States. The main channel through which cyclical developments can affect operating surplus is the labour market.

(55) The illustration of the contributions to the cumulative change in profitability only serves to depict the relative importance of the various components of the change in profits since the crisis. The starting point for the cumulative change should not be interpreted as a reference point for a desirable profit recovery.

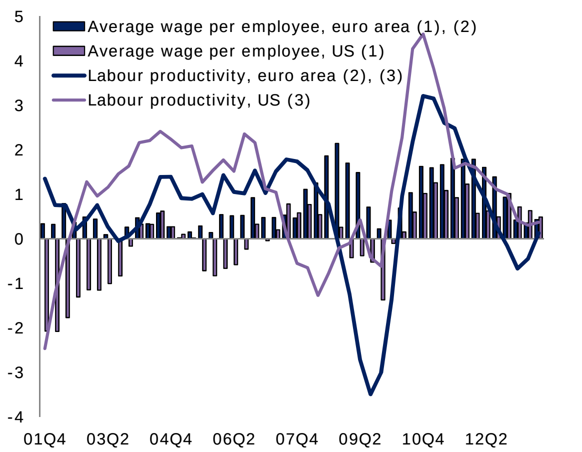
(56) In fact, the ratio of profit tax payments to profits (a crude measure of an aggregate tax rate) in the euro area and the United States has been almost the same since the start of the crisis, falling substantially in 2008-09, indicating that tax policy was not more favourable for profits in one economy than in the other.

The cyclicality of operating surplus depends on the impact of the cycle on labour productivity as well as on wages. The worse performance of operating surplus in the euro area since 2008, as compared with that in the United States, reflects a stronger deterioration in labour productivity accompanied by unfavourable developments in wages per employee.

Labour productivity growth in the euro area turned sharply negative in 2009, opening a big gap with the positive (albeit modest) wage growth (Graph II.4.4). In the United States, on the other hand, labour productivity growth became negative earlier, but to a lesser extent and some downward wage adjustment took place in 2009.

Graph II.4.4: **Labour productivity and wages, euro area and US**

(2001Q4-2013Q3, y-o-y % change)



(1)Real wages calculated by the GDP deflator. (2)Euro area excluding Latvia. (3)In terms of total employment (thousands).
Source: Eurostat, US Bureau of Economic Analysis, US Bureau of Labour Statistics, DG ECFIN calculations.

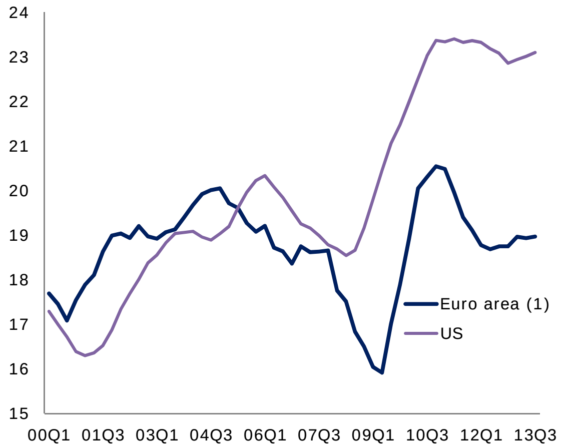
There are a number of reasons for the different labour adjustments in the euro area and the United States. In the former, apart from a higher level of employment protection, short-term work schemes were put in place in the early stages of the crisis. (57) In addition, as labour force adjustment tends to be more costly in the euro area, some firms (particularly small firms and those with highly qualified employees) preferred to retain their labour force. (58) Because of a lack of wage flexibility, the higher degree of 'labour hoarding' in the euro area came at the expense of lower operating surplus and profits and consequently put a downward pressure on the capacity accumulate internal funds to deleverage.

Corporate savings are much lower in the euro area

Negative developments in euro area corporate profitability were reflected in corporate savings, which together with physical investment determines the internal funds available for balance sheet adjustment. In 2009-10, there was a sharp drop in euro area savings because profits acted as shock absorbers and fell more rapidly than dividend payments, leaving less spare cash available. In contrast, savings by US NFCs increased substantially on rising profits after an early-crisis low point and reached a historically high level of around 23 % of GVA in 2010Q3 (Graph II.4.5).

Graph II.4.5: **Savings of NFCs**

(2000Q1- 2013Q3, % of GVA)



(1)Euro area excluding Latvia.
Source: Eurostat, Bureau of Economic Analysis, DG ECFIN calculations.

The impression that US corporate behaviour has been more geared towards accumulating savings than that in the euro area is reinforced when one looks at dividend distribution. Dividends paid by euro area NFCs have been on a declining trend since the start of the crisis, but those paid by US firms have also decreased. This is remarkable given

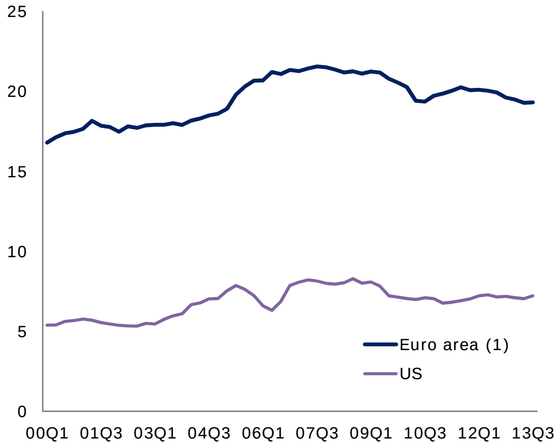
(57) According to the OECD: "Public short-term work schemes have played an important role in preserving jobs during the crisis in a number of countries, although significant hours reductions were also achieved via lower overtime hours, hours averaging arrangements and employer initiatives.", see OECD Employment Outlook 2010 – Moving Beyond the Job Crisis.

(58) See Box 1.2. Labour hoarding across different types of firms, in OECD Employment Outlook 2010 – Moving Beyond the Job Crisis.

the positive profit developments in the United States (Graph II.4.6). A drop in dividends alongside profit growth suggests that, after 2008, US companies preferred to direct a bigger proportion of the profit recovery to corporate savings and, thereby, balance sheet adjustment. The ratio of dividends to profits in the United States has fallen from about one third before the crisis to one quarter now. This ratio also dropped in the euro area, although by less. (59)

Graph II.4.6: **Dividends paid of NFCs**

(2000Q1-2013Q3, % of GVA)



(1)Euro area excluding Latvia.
Source: Eurostat, Federal Reserve Board, DG ECFIN calculations.

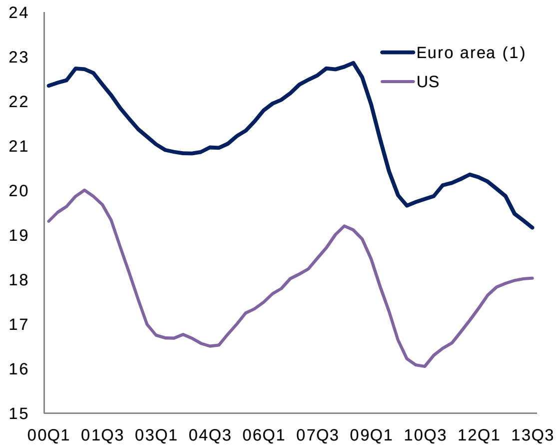
Disappointing physical investment in the euro area and the United States

Cutting investment in physical assets is another way of reducing excessive indebtedness. Corporate investment as a proportion of activity dropped sharply both in the euro area and in the United States in the early stages of the crisis (Graph II.4.7).

After a modest recovery in 2010-11, the investment rate decreased again in the euro area. The investment recovery was more solid in the United States but has lost momentum since the end of 2012 and the investment rate remains below its pre-crisis peak. Overall, it seems that euro area corporations partly compensated for less supportive savings developments than in the US by curbing physical investment more than their US counterparts.

Graph II.4.7: **Investment of NFCs**

(2000Q1- 2013Q3, % of GVA)



(1)Excluding Latvia.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations.

A more modest increase in net lending in the euro area than in the US

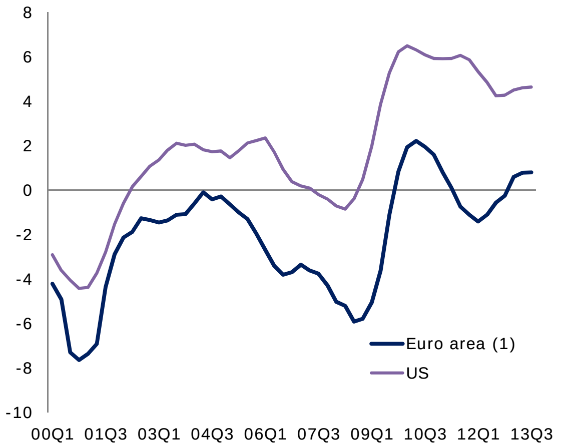
Since 2013, firms' net lending in the euro area has been in positive territory, but substantially less so than that in the United States (Graph II.4.8). Positive NLB in the euro area, unlike that in the United States, is mostly due to a low investment rate alone, rather than low investment combined with high savings. The combination of disappointing investment and high savings has translated into historically high and sustained NLB for US firms.

This persistent net lending position in the United States is atypical, as firms usually invest more than they save. It suggests that US firms have been adjusting their balance sheets significantly since the beginning of the crisis via their internal funds, while euro area firms seem to have opted for much slower balance sheet adjustment.

(59) Dividend payments are not the only way of distributing profits to shareholders. Equity buybacks can also be used for this purpose and firms that choose this option will tend to have higher savings and lower dividends paid.

Graph II.4.8: **Net lending / borrowing of NFCs**

(2000Q1- 2013Q3, % of GVA)



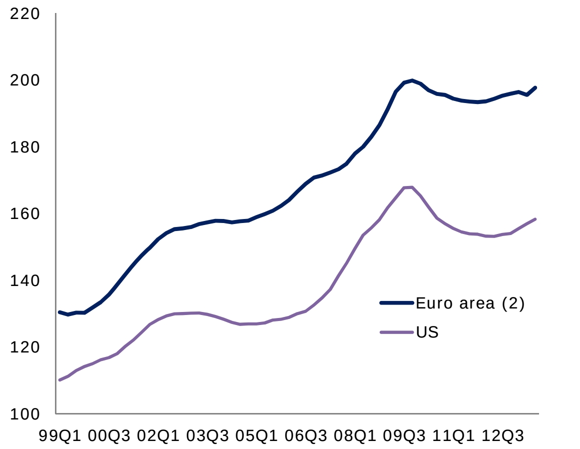
(1)Excluding Latvia.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations.

Debt deleveraging has been more pronounced in the US than in the euro area

The faster pace of adjustment of balance sheets in the United States is confirmed by the corporate debt data (Graph II.4.9). [60] [61] While both the euro area and the United States entered the crisis with swiftly rising and historically high levels of debt, deleveraging has progressed more rapidly in the latter since the crisis. By the beginning of 2012, US corporate debt had fallen by approximately 15 pp as a proportion of activity, while euro area debt had dropped by 7 pp. [62]

Graph II.4.9: **Debt levels of NFCs(1)**

(1999Q1-2013Q3, % of GVA)

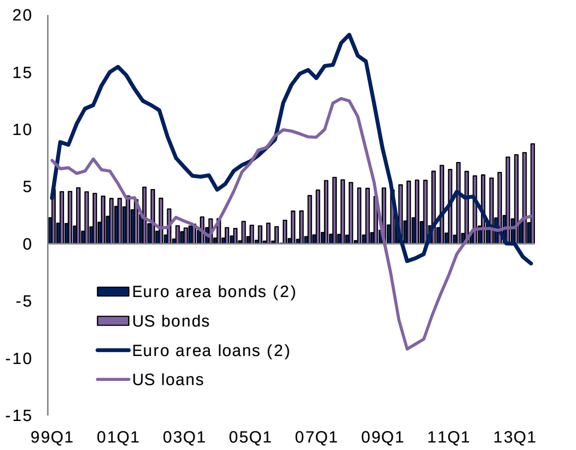


(1)Securities other than shares and loans.
(2)Excluding Latvia.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations

Firms in the euro area and the United States entered the crisis with almost the same level of short-term debt as a proportion of total debt. Since the crisis, the adjustment away from short-term debt has been significantly more pronounced in the United States, suggesting more active balance sheet restructuring.

Graph II.4.10: **Debt flows of NFCs(1)**

(1999Q1- 2013Q3, % of GVA)



(1)Securities other than shares and loans.
(2)Excluding Latvia.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations.

Due to differences in the structure of corporate finance, loans (as opposed to bonds) tend to form a bigger proportion of debt in the euro area than in the United States. An important element of the

[60] Non-financial corporate debt consists of loans and securities other than shares (corporate bonds); both can be classified as short- or long-term, depending on whether their original maturity is less or more than one year.

[61] This section analyses developments in non-consolidated financial flows and stocks in the euro area and in the United States for two reasons: it is important to have a sense of financial positions within the institutional sector, e.g. loans between NFCs are an important part of intra-firm relationships, as head offices use them to finance subsidiaries, for example, perhaps for tax reasons. This is relatively more important in the euro area than in the United States. Consolidated financial asset and flow data eliminate these intra-sector positions; and different approaches may be taken to consolidation, as in the euro area there is the additional issue of cross-border consolidation between Member States, while there is no need for flows and positions between firms in different US states to be treated separately.

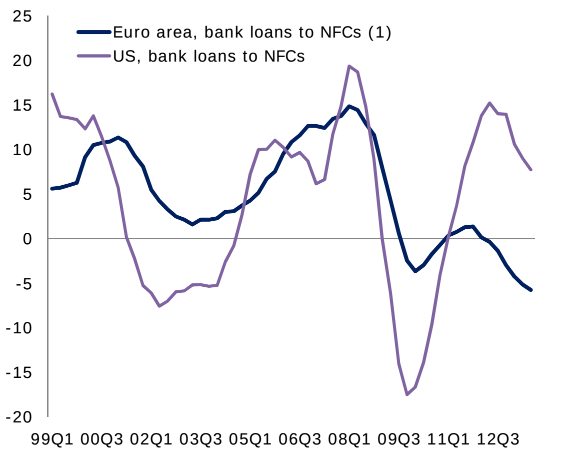
[62] The debt-to-equity ratio is another measure of corporate leverage widely followed by investors. Faster stock market recovery helped US firms reduce this ratio more than those in the euro area.

corporate balance sheet adjustment process in both economies has been a movement away from an excessive reliance on loans (Graph II.4.10) and towards bond financing. This trend has been substantially more pronounced in the United States, presumably reflecting the fact that bond markets are more developed in that country.

Developments in non-financial corporate debt were also influenced by developments in financial intermediation, in particular in the banking sector. Financial accounts show NFCs' debt exposure, but do not indicate whether the debt holder is a bank. According to bank balance sheet statistics, the nominal growth of loans vis-à-vis NFCs has been mostly negative in the euro area since 2009Q4 (Graph II.4.11). Coupled with the positive loan inflows seen in the national accounts between 2010Q3 and 2012Q3 (Graph II.4.10), this shows a degree of substitution in corporate loan liability ownership between banks and other financial firms and sectors (including other NFCs) in this period. According to the counterparty breakdown of NFC domestic loans published by the ECB, corporate borrowings from other NFCs represented 29 % of all loans by 2013Q3 (up from 26 % in 2008Q1), while the proportion of borrowings from monetary financial institutions (MFIs) had dropped (from 60 % in 2008Q1) to an all-time low of 53 %. The proportion of loans from other non-bank financial intermediaries also increased. There is less evidence of a shift from banks to other loan providers in the United States, where loans between NFCs are much more limited.

Graph II.4.11: **Bank loans to NFCs**

(1999Q1- 2013Q3, y-o-y % change)



(1)Excluding Latvia.
Source: ECB, US Federal Reserve Board, DG ECFIN calculations.

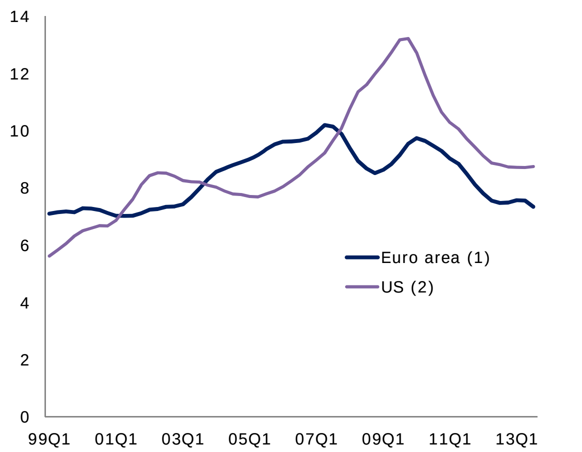
Positive NLB has been used to acquire safe financial assets in both regions

In both the euro area and the United States, the positive NLB has been used to deleverage, but also to invest in safe financial assets. At the beginning of the crisis, much of the positive corporate NLB in the United States was invested in money market mutual funds, which is essentially investment in short-term low-risk assets (Graph II.4.12). (63)

Currency and deposits (another type of safe asset) have increased substantially in the euro area in recent years as a proportion of total firm activity (Graph II.4.13). This rise was driven almost exclusively by a rapid increase in firms' savings deposits. To some extent, a similar trend is observable in the United States. In particular, US cash balances (a sub-component of currency and deposits) approached 12 % of GVA by the end of 2013, a level not seen since the early 1990s. On the other hand, savings deposits have grown more modestly, resulting in a moderately positive overall trend in currency and deposits.

Graph II.4.12: **Mutual fund shares of NFCs**

(1999Q1- 2013Q3, % of GVA)



(1)Excluding Latvia.
(2)In the USA, these asset series can be broken down into investment in money market mutual funds and investment in other mutual funds. The 2009-11 increase is fully attributable to the former.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations.

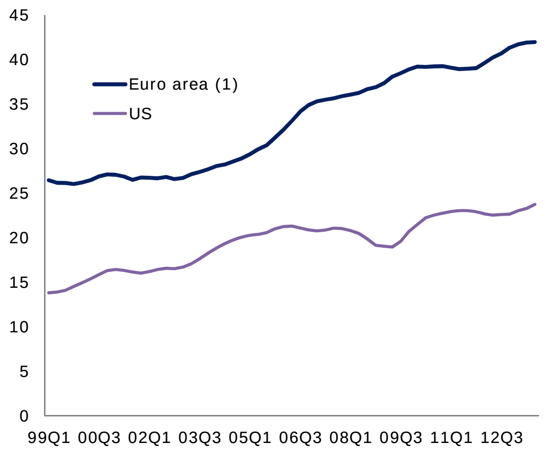
Overall, these two aspects of corporate financial investment behaviour signify considerable liquidity concerns on the part of firms in both the euro area

(63) Euro area financial accounts only show firms' investment in mutual funds overall and do not distinguish between types of mutual funds.

and the United States. They also represent a drive towards lower-risk assets, perhaps indicating increased risk aversion by corporations or a tendency to postpone physical investment in a context of perceived high uncertainty.

Graph II.4.13: **Currency and deposits – NFCs**

(1999Q1- 2013Q3, % of GVA)



(1)Excluding Latvia.
Source: Eurostat, US Bureau of Economic Analysis, DG ECFIN calculations.

Conclusion

Although both regions saw similar steep rises in corporate debt in the pre-crisis years, balance sheet adjustment since the crisis has been significantly slower in the euro area than in the United States. The more rapid adjustment in the United States can be explained by a stronger cyclical recovery, more supportive profitability developments and reduced dividend payment ratios. In the euro area, profitability has been hindered by a combination of lower flexibility in the labour markets and slow wage adjustment.

The slower balance sheet adjustment in the euro area corporate sector is visible in a slower fall in indebtedness but also a slower adjustment of the structure of balance sheets. In particular, the shift from loans to bonds and the extension of debt maturity have been more pronounced in the United States. In both regions, firms have used their positive NLB to accelerate the accumulation of safe and liquid financial assets. This could reflect continuing uncertainty regarding future demand and growth prospects.

Overall, the evidence discussed in this section shows that euro area firms are lagging significantly behind their US counterparts in terms of balance sheet consolidation. Given that investment rates remain disappointing even in the more advanced US corporate sector, a degree of caution appears warranted when assessing short-term prospects for corporate investment in the euro area.