

Special Commentary — February 12, 2024

Should We Worry About American Debt?: Time to Reconsider?

Part III: Non-Financial Corporate Debt

Summary

- We focus on the non-financial corporate (NFC) sector in this third installment of our five-report series on total U.S. debt. Total debt outstanding in the NFC sector has risen tenfold over the past forty years to its current level of nearly \$14 trillion.
- Heavy issuance in the corporate bond market over the past few years has shifted the sector's debt mix toward a majority of debt securities. Debt securities accounted for about 60% of NFC debt in 2023, with loans representing the remaining 40%.
- When measured as a percent of GDP, total NFC debt has trended up from approximately 30% in the early 1980s to about 50% today, which is close to an all-time high. If we consider the debt-to-GDP ratio to be a measure of “leverage,” then the NFC sector is essentially as highly levered as ever.
- Many businesses took advantage of the low interest rates of the past decade to lock in long-term financing at attractive financing costs. When long-term rates rose sharply in late 2021/early 2022, some companies adjusted their financing mix. The proportion of debt that is financed at short-term rates has crept higher in recent years, but roughly two-thirds of NFC debt today has been financed by rates that are locked in for 12 months or longer.
- The NFC sector's debt service ratio has receded over the past two years due to the sharp rise in borrowing costs, but it stands at a generally healthy level when viewed in a historical context.
- Tight spreads in the corporate bond market, solid issuance and general balance between ratings upgrades and downgrades of issuers are consistent with our sanguine view of the financial health of the NFC sector at present.
- Borrowing in the private credit market has exploded in recent years. Because private credit represents only 8% of the total credit that has been extended to the non-financial business sector, we do not believe it represents a significant systemic risk to the financial system at this time. But private credit providers do not have the same degree of supervisory and regulatory oversight as their public counterparts.
- Given the rapid growth in the private credit market and its relative lack of regulatory and supervisory oversight, developments in this market in coming years warrant close attention, in our view.

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[Part I: Introduction](#)

[Part II: Household Debt](#)

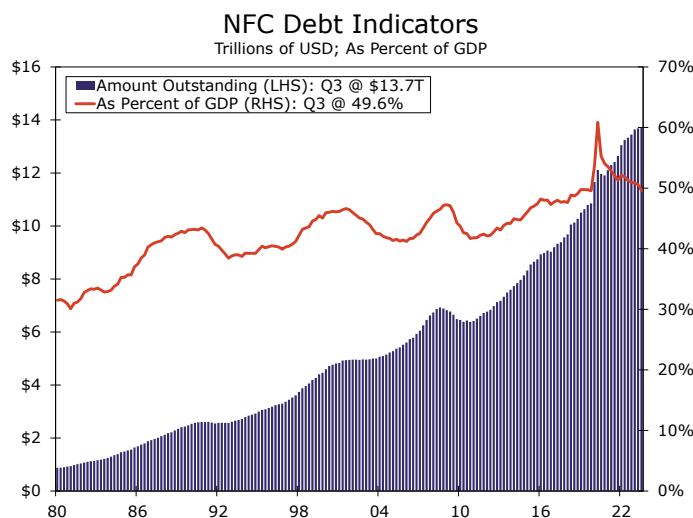
The NFC Sector Is More Levered Than It Has Been Historically

In the third installment in our series on American debt, we focus on the debt of the non-financial business sector where outstanding debt currently totals about \$21 trillion. The non-financial business sector comprises two broad sub-sectors: the non-financial corporate sector (NFC) and the non-financial non-corporate sector. As the name implies, the former includes non-financial businesses that are legally organized as corporations while the latter includes non-corporate business organizations such as sole proprietorships, partnerships and LLC's. Due to data limitations for the non-corporate non-financial sector, we focus this report on the NFC sector, which accounts for roughly two-thirds of the outstanding debt of the overall non-financial business sector.

Debt in the NFC sector has risen tenfold over the past forty years to its current level of nearly \$14 trillion (Figure 1). Because many NFC businesses issue commercial paper and corporate bonds, the overall debt of the NFC sector includes debt securities as well as loans. Forty years ago, the composition of NFC debt was more or less split evenly between these two types of borrowing, but issuance in the corporate bond markets has been heavy in recent years. Debt security obligations of the NFC sector currently total more than \$8 trillion today, and they account for about 60% of the total outstanding debt of the NFC sector. When measured as a percent of GDP, the NFC sector's debt has trended up from approximately 30% in the early 1980s to about 50% today, close to an all-time high (Figure 1). If we consider the debt-to-GDP ratio to be a measure of "leverage," then the NFC sector is essentially as highly levered as ever. ¹

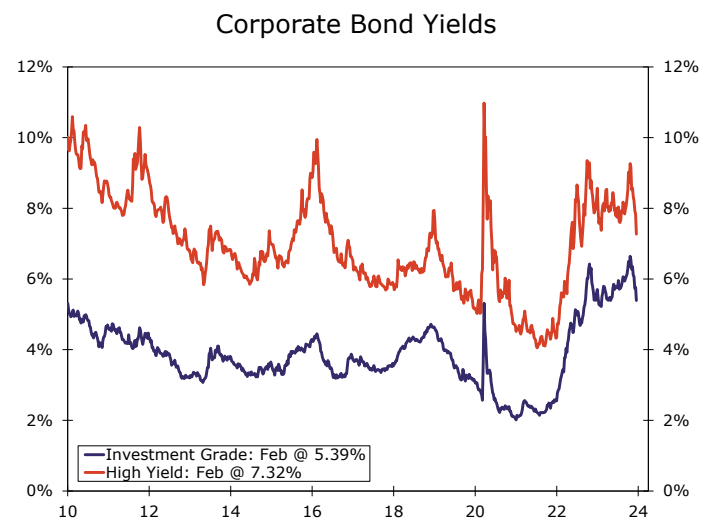
The debt of the NFC sector includes debt securities as well as bank loans.

Figure 1



Source: U.S. Department of Commerce, Federal Reserve Board and Wells Fargo Economics

Figure 2



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Not only has leverage in the NFC sector risen in recent years, but interest rates are also much higher. Most businesses borrow from banks at some spread over a short-term benchmark rate, such as the so-called "prime rate" or the secured overnight funding rate (SOFR). Due to the Fed's recent tightening cycle, these benchmark lending rates have risen by more than 500 bps since March 2022. Furthermore, yields on corporate bonds are also higher today than they were a few years ago (Figure 2). If, as we suspect, corporate bond yields do not return to the lows that were plumbed prior to the pandemic, then corporate treasurers in the foreseeable future will need to offer higher coupons on the bonds they issue than they did a few years ago. Could the combination of elevated leverage and a higher interest rate environment eventually lead to debt servicing difficulties in the NFC sector?

Businesses are facing higher interest rates today than they did a few years ago.

Many Businesses Locked in Long-Term Financing at Low Rates

We showed in Part II that the debt service ratio of the household sector (i.e., the percentage of disposable income that households must use to make amortization and interest payments on outstanding debt) has fallen to essentially its lowest level in at least 30 years. As we discussed in that report, mortgages account for about 70% of total household debt. The nosedive in long-term interest rates that occurred following the onset of the COVID pandemic induced many households to refinance

their mortgages at the lowest rates in decades. More than 95% of outstanding mortgage debt today was originated at fixed interest rates, giving the household sector an extraordinary ability to service debt at present.

Similar to the household sector, many businesses in the NFC sector took advantage of the years of low interest rates to lock in long-term financing at attractive costs. Net issuance of corporate bonds in the NFC sector averaged more than \$260 billion per annum between 2010 and 2019, up from roughly \$100 billion per year during the previous decade, and this figure skyrocketed to more than \$700 billion in 2020. As long-term rates trended lower, the proportion of total NFC debt that was financed via short-term interest rates (*i.e.*, rates that are fixed at less than 12 months) fell from more than 40% in the late 1990s to less than 30% throughout most of the 2010s (Figure 3). Due to the sharp rise in long-term rates that began in late 2021/early 2022 (before the FOMC began to raise its target range for the federal funds rate), some NFC companies chose to adjust their financing mix toward more short-term rates (Figure 2). The proportion of debt that is financed at short-term rates has crept higher in recent years, but roughly two-thirds of NFC debt today has been financed by rates that are 12 months or longer.

Roughly 2/3 of NFC debt today has been financed by rates that are 12 months or longer.

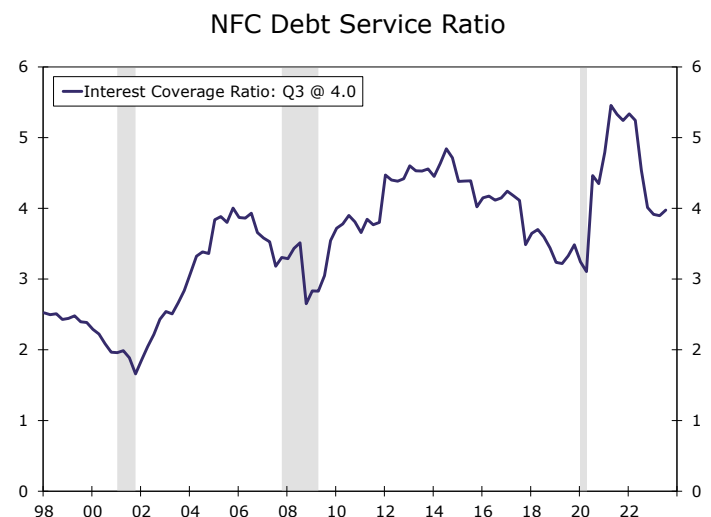
We discussed the debt service ratio (DSR) for the household sector in Part II of this series. A similar ratio exists for the NFC sector, and we direct interested readers to the [appendix](#) where we outline the methodology we followed to construct a time series of the ratio. Simply, the DSR measures the amount of cash flow that businesses have to service debt and amortization payments. As shown in Figure 4, the DSR trended lower from 2014 to the end of the last expansion in 2019 as earnings-before-interest-and-taxes (EBIT) was generally flat during those years while increasing leverage in the NFC sector and Fed tightening in 2017–2018 caused interest expenses to rise.² The ratio shot higher in the second half of 2020/first half of 2021 as GDP growth and cash flow strengthened considerably. The ratio has receded anew over the past two years due to the sharp rise in borrowing costs. When viewed in a historical context, however, the DSR for the NFC sector currently sits at a generally healthy level.³

Figure 3



Source: Federal Reserve Board and Wells Fargo Economics

Figure 4



Source: U.S. Department of Commerce and Wells Fargo Economics

Credit Spreads Indicate Little Investor Concern At Present

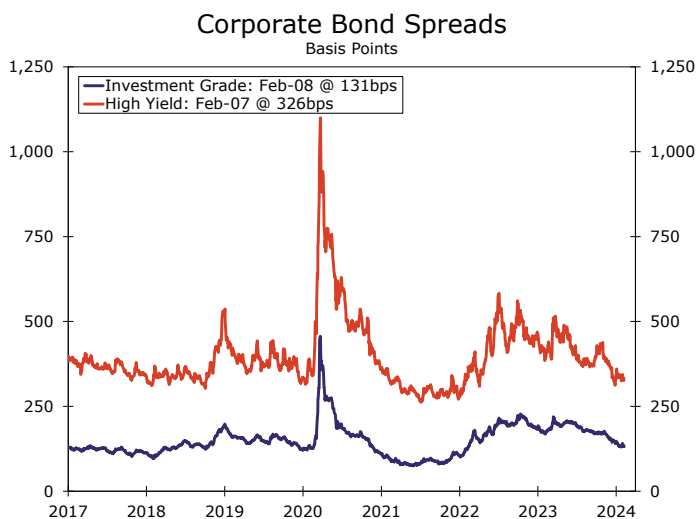
In short, we are not overly concerned about the ability of the aggregate NFC sector to service its debt, at least not in the foreseeable future. We can also look to the bond market to gauge investors' perceptions of corporate health. Credit spreads, for instance, capture the risk premium of corporate bonds as they reflect the difference between the 10-year Treasury security (*i.e.*, the "risk free" rate) and corporate bond yields of the same maturity. When spreads rise, or widen, they indicate perceived risk as a higher rate of return is demanded to take on the additional risk of lending to corporations relative to the comparative government security. A narrowing of spreads implies the opposite. As shown in

Bond market measures suggest little perceived risk in the eyes of investors.

Figure 5, spreads have tightened on trend since mid-2022, when the FOMC began to tighten policy aggressively, and they have more or less receded to pre-pandemic levels.

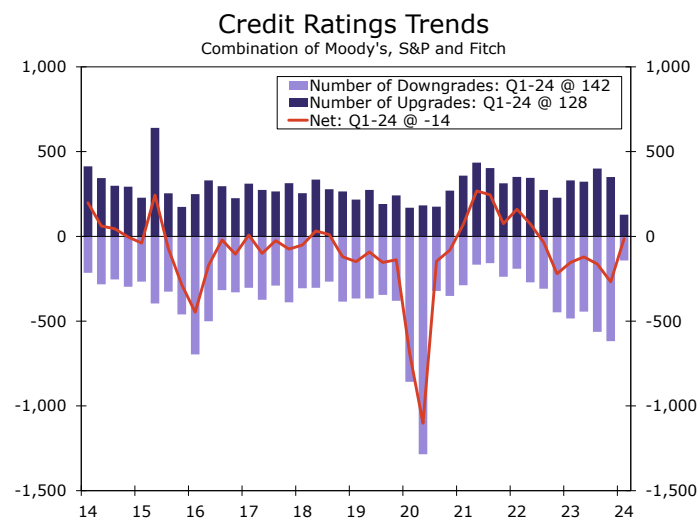
Corporate bond issuance has also continued at a solid pace amidst continued demand from investors. The amount of new investment grade and high-yield issuance, for example, continued to run ahead of pre-pandemic levels last year. The tightening of spreads in conjunction with strong issuance would appear to indicate that market participants are not unduly worried about the financial health of the NFC sector at present. Credit analysts do not appear to be overly concerned either. Credit agencies, such as Moody's, S&P and Fitch, downgraded a rising number of corporate issuers during the second half of last year. However, in the context of more upgrades, the net share was not at a concerning level last year and has improved thus far in the first quarter (Figure 6).

Figure 5



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Figure 6



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Private Credit Lurks in the Shadows

Although gauges of the corporate bond market show solid conditions, a fast growing segment of business credit appears to be flying below the radar. Private credit, or direct lending to businesses by non-bank institutions, has swelled over the past decade. Data from the Federal Reserve show total assets under management at private credit funds more than trebled from around \$345 billion in 2012 to just over \$1 trillion in 2022.⁴ Total NFC debt increased just 89% over the same period. Moreover, the size of the private credit market appears to be closer to \$1.6 trillion today, but estimates vary; data are limited because private funds generally do not disclose as much information as banking institutions under current federal law.⁵

Private credit funds typically raise capital from institutional investors and high net-worth individuals via closed-end funds. The pooled investments, along with some modest amounts of bank loans, are then used to make loans directly to businesses on privately negotiated terms. The borrowers are often middle-market corporations who may not have the assets or cash flow required to secure traditional sources of credit, such as bank loans or bond offerings. In a 2021 survey, private debt managers reported that roughly half of their portfolio companies would not have been able to get traditional bank financing, and their borrowers benefited from "more flexible covenant structure" and greater "certainty and speed of execution."⁶

Most loans provided by private credit funds are floating rate and carry a higher interest rate than a comparable bank product. The elevated interest expense has raised concerns about a deterioration in the quality of private credit over the past year, but again, data are limited when trying to assess that risk. We estimate that private credit currently represents only 8% of the total loans extended to the non-financial business sector (non-financial corporations plus non-financial non-corporate forms of business organization). Therefore, we would not characterize any risk that private credit potentially poses to the financial system as "systemic," at least not at this time. But private credit issuers do not have the same degree of regulatory and supervisory oversight as depository institutions and public

Private credit has risen rapidly and poses a potential risk.

issuers of debt securities. Given the rapid growth in the private credit market and its relative lack of regulatory and supervisory oversight, developments in this market in the coming years warrant close attention, in our view.

Conclusion

Total debt of the non-financial corporate sector (NFC) has risen tenfold over the past forty years to its current level of nearly \$14 trillion. Heavy issuance in corporate bond markets in recent years has boosted debt, with security obligations now accounting for about 60% of total outstanding NFC debt. When measured as a share of GDP, the NFC sector is essentially as highly levered as ever. Furthermore, interest rates are also much higher due to the Fed's recent tightening cycle, highlighting the risk of potential debt servicing difficulties in the NFC sector.

Despite increased leverage and higher financing costs, we are not overly concerned about the ability of the NFC sector to service its debt at present. Many businesses took advantage of the years of low interest rates to lock in long-term financing at attractive financing costs. Even as the proportion of short-term debt has risen, roughly two-thirds of NFC debt today has been financed by rates that are locked in for 12 months or longer. Non-financial corporate businesses are generally generating sufficient cash flow to service their debt obligations at present. While the debt service ratio has receded over the past two years, it currently sits at a generally healthy level when viewed in a historical context. The message coming from the corporate bond market appears to be consistent with our relatively sanguine view. Credit spreads have tightened over the past two years and currently sit at pre-pandemic levels, and the net share of downgrades of corporate issuers are not at a worrying level.

While the overall financial position of the NFC sector looks to be generally solid at present, private credit represents a potential area of vulnerability due to its rapid growth over the past decade. Because private credit accounts for only 8% of the total credit that has been extended to the non-financial business sector, we do not believe it represents a significant systemic risk to the financial system at this time. But the market for private credit is growing rapidly and private credit providers do not have the same degree of supervisory and regulatory oversight as public providers of credit. In sum, we are not overly concerned about the financial health of the NFC sector at this time. But our view could evolve in coming years if leverage in the NFC sector continues to rise and borrowers turn further toward private credit markets.

Endnotes

1 – The spike in the debt-to-GDP ratio in early 2020 largely reflects the 9% decline in nominal GDP between Q4-2019 and Q2-2020. Subsequently, the ratio has returned to its pre-pandemic level of roughly 50%. ([Return](#))

2 – A debt service ratio should measure the interest and amortization payments that a business is required to make. We have data on interest payments but not on amortization. Including amortization payments would shift the level of the DSR shown in Figure 4 down somewhat, but we doubt that their inclusion would have a meaningful effect on the changes in the DSR over time. ([Return](#))

3 – The DSR's current ratio of 4.0 means that the cash flow of the NFC sector is 4.0 multiples greater than interest payments. ([Return](#))

4 – See Box 3.2 of the Federal Reserve's May 2023 [Financial Stability Report](#) for more detail. ([Return](#))

5 – Data on private credit have historically been limited, but recent rule changes from the [SEC](#) have increased reporting requirements for private credit funds. ([Return](#))

6 – Block, Joern, Young Soo Jang, Steven Neil Kaplan, and Anna Schulze, “[A Survey of Private Debt Funds](#),” Becker Friedman Institute, January 2023. ([Return](#))

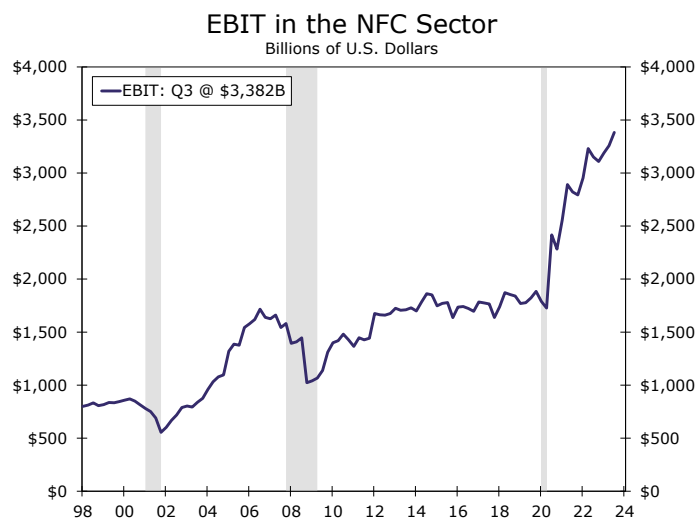
Appendix

As noted in the main body of the report, the debt service ratio measures the amount of cash flow that businesses have to pay interest on their debt. The numerator of the ratio represents cash flow. We use earnings-before-interest-and-taxes (EBIT), which we can construct from data in the National Income and Products Accounts (NIPA), as our measure of cash flow. EBIT in the NFC sector skyrocketed in the second half of 2020/first half of 2021 as stimulus monies caused real GDP growth to strengthen considerably. EBIT has subsequently remained at a high level (Figure 1A).

Interest paid by NFC businesses appears in the denominator of the ratio. Recall that NFC businesses borrow from financial institutions via bank loans and via debt issuance in the corporate bond market. Interest rates on bank loans are generally set at some spread over a benchmark short-term interest rate such as the so-called “prime rate” or SOFR. The spread that any individual business pays over the benchmark rate depends on a variety of factors including their credit quality, the risk tolerance of the lending institution at the time the loan was made, etc. We use the prime-based borrowing rate for American businesses that is compiled by the Federal Reserve Bank of Kansas City as our interest rate on bank loans. This borrowing rate has fluctuated widely over the past few decades because it is based on the prime rate, which historically has been set 300 bps above the federal funds target rate (Figure 2A).

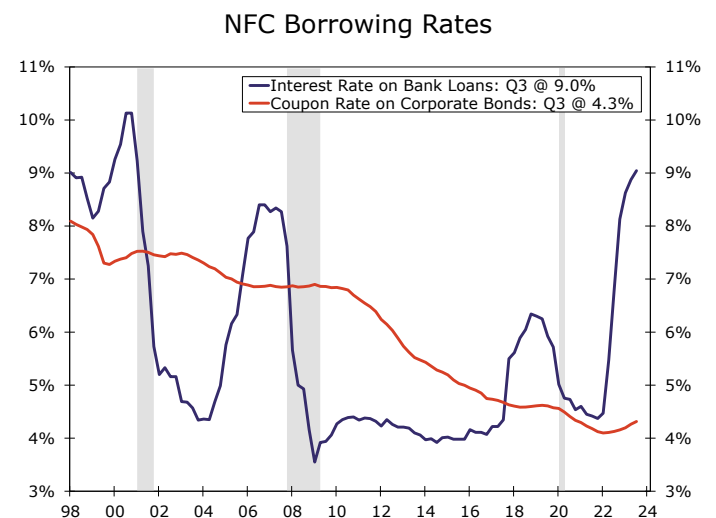
Corporate bonds are rated as either investment grade or speculative grade (*i.e.*, high yield). Investment grade companies generally pay lower coupon rates on the bonds they issue than speculative grade companies. We use Fact Set data on outstanding amounts of investment grade and high yield bonds and average coupon rates on those bonds. We then construct a time series of the weighted-average coupon rate on the outstanding amount of corporate bonds. Because corporate bonds, which generally have longer tenors than short-term bank borrowing, are usually issued at fixed coupon rates, the weighted average coupon rate on the outstanding amount of corporate bonds is much less variable than the interest rate paid on bank loans (Figure 2A).

Figure 1A



Source: U.S. Department of Commerce and Wells Fargo Economics

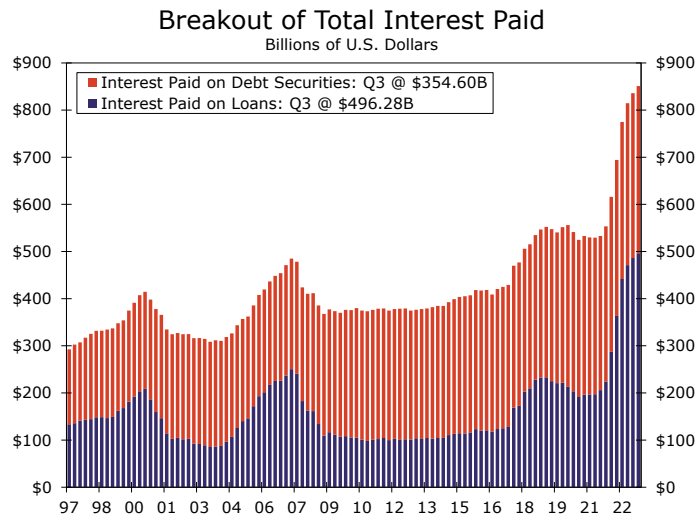
Figure 2A



Source: Federal Reserve Bank of Kansas City, FactSet Research Systems Inc. and Wells Fargo Economics

We multiply the interest rate on bank loans by the amount of bank loans outstanding to determine the aggregate amount of interest paid by the NFC sector on bank loans (Figure 3A). Likewise, we multiply the weighted-average coupon rate by the amount of corporate bonds outstanding to determine the aggregate amount of interest paid by the NFC sector on corporate bonds (Figure 3A). Total interest paid by the NFC sector is the sum of interest paid on bank loans and interest paid on corporate bonds. We then divide EBIT by total interest paid to calculate the debt service ratio shown in the main body of the report, see Figure 4.

Figure 3A



Source: Federal Reserve Board and Wells Fargo Economics

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