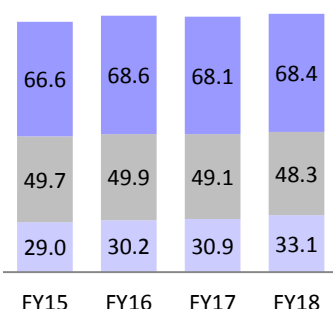


Distribution of India's total debt by sectors (% of GDP)

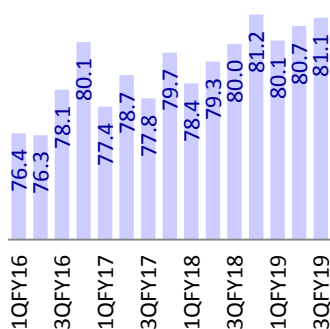
- General government (GG)
- Non-financial corporates (NFCs)
- Households



India's total debt is ~150% of GDP and there is no slowdown in credit growth in 3QFY19

NGNF debt to GDP ratio is close to an all-time high in 3QFY19

- NGNF debt-to-GDP ratio (%)



Fathoming the 'Depths of Debt'

Debt size is a crucial determinant of financial stability in any economy. Unfortunately, though, in India, there has been no measure to learn about the country's total debt owing to the unavailability of the official estimate of non-government non-financial (NGNF) debt. In this note, we thus attempt to bridge this gap and use data from various official sources to project India's total debt.

PRESENTING ESTIMATES OF INDIA'S NGNF, AND THUS, TOTAL DEBT

- Our estimates suggest that India's total debt stood at 149.8% of GDP (or USD3.9t) in FY18 – the highest-ever level. While government debt remained elevated at ~68% of GDP, NGNF sector debt was also at an all-time high of 81.4% of GDP in FY18. Within the NGNF sector, while the corporate sector deleveraged – debt down from the peak of 51% of GDP in FY14 to 48.3% in FY18, household debt touched a new peak of 33.1% of GDP in FY18.

COMPARISON OF INDIA'S DEBT VIS-À-VIS 19 OTHER MAJOR NATIONS

- A comparison of the debt statistics for 10 emerging markets (EMs) and 10 advanced economies (AEs) suggests that, although India's government debt is the second-highest in the EM pack, its NGNF debt is on the lower side. Consequently, India's total debt is at the middle of the debt range of major EMs.

QUARTERLY ESTIMATES OF NGNF DEBT SUGGEST NO MAJOR SLOWDOWN

- Apart from estimating India's debt on an annual basis, we also project India's NGNF debt on a quarterly basis. Quarterly debt statistics for the government sector, however, are not available. Notwithstanding the IL&FS default in late September 2018, NGNF debt in India continued growing unabated in 3QFY19, beating all the fears related to the adverse impact on India's financial system. Although credit growth of ~18% YoY for NBFCs (including HFCs) was at a five-quarter low (albeit still strong) in 3QFY19, it was at a nine-quarter high (~12% YoY) for banks. Consequently, NGNF credit grew 13.3% YoY in 3QFY19, only marginally slower than 14% in 2QFY19 and much higher than sub-12% in FY17 and FY18.

INDIA'S DEBT INTENSITY OF GDP GROWTH IS NOT WORRISOME

- Finally, India's total debt has increased modestly by 4.5 percentage points (pp) of GDP over the past three years (FY15-18), which is better than the serious deleveraging in Russia and the massive increase of 22pp in China. Finally, a comparison of India's nominal GDP growth with total debt growth reveals that India's debt intensity of GDP growth (defined as the growth in debt needed to produce an additional percentage point of nominal GDP growth) has not changed significantly over the past 15 years and ranged between the best of 0.8x in FY11 and FY15, and the worst of 1.4x in FY09. Debt intensity stood at 1.1x in FY18 – exactly the average of the highest and lowest levels over the past 15 years.

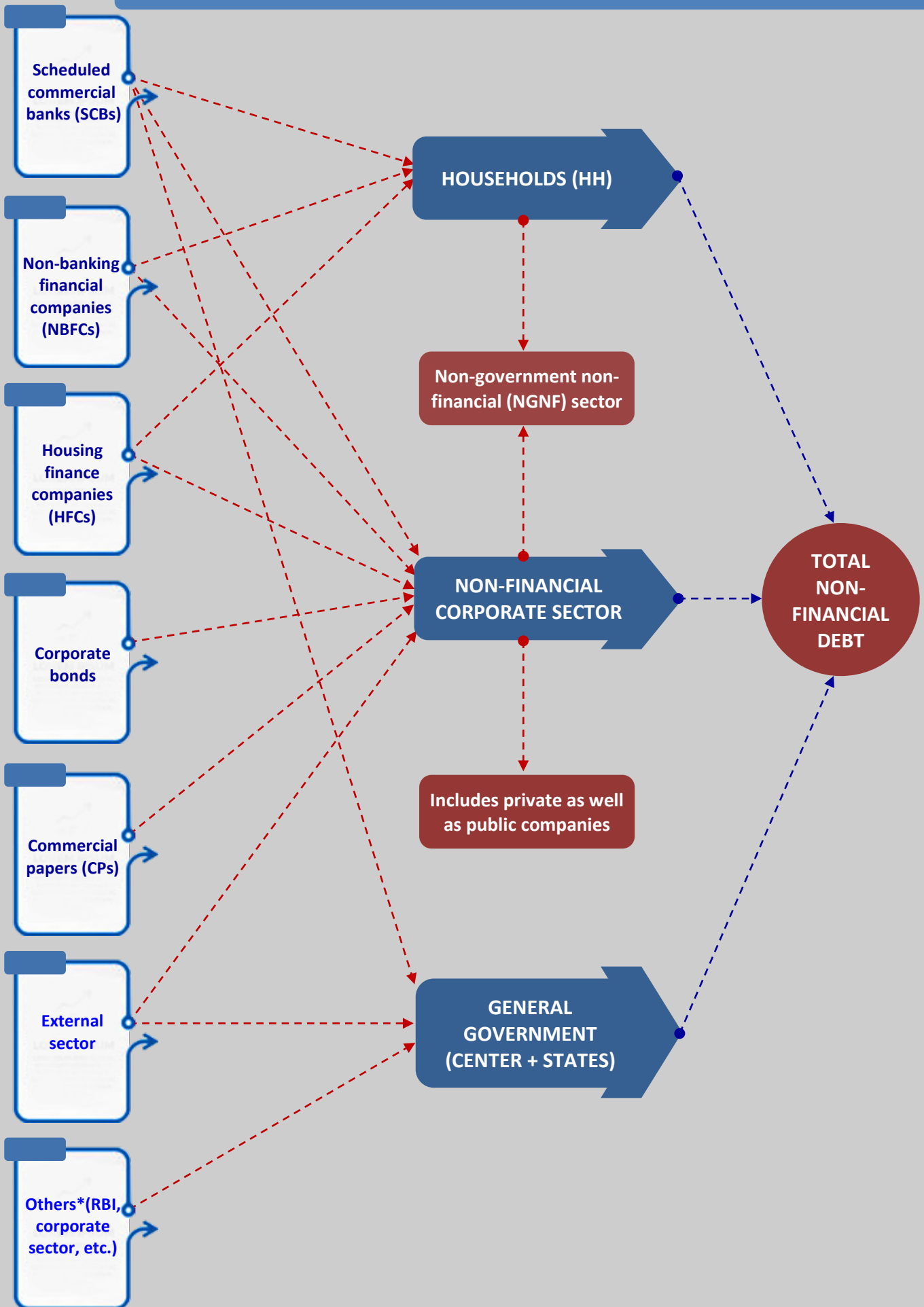
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Investors are advised to refer through important disclosures made at the last page of the Research Report.

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METHODOLOGY USED FOR ESTIMATING TOTAL DEBT IN THE COUNTRY



Estimating India's total debt-to-GDP ratio

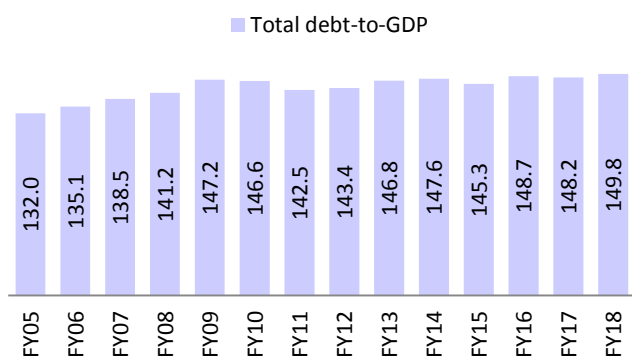
Although India is the fastest growing major economy in the world, it is nothing less than ironical that there is no measure to learn about the economy's debt

Although India is the fastest growing major economy in the world, it is nothing less than ironical that there is no measure to learn about the economy's debt. While debt is one of the most important sources of financing, it is also a critical determinant of financial stability in an economy and could potentially lead to a slowdown (or total collapse), if left unchecked. We attempt to bridge this vacuum by providing estimates of total debt in India over the past 15 years and also the main sources (by institutions)/users (by sectors) of this debt. To our knowledge, this is one-of-its-kind study – a beginning of improving on India's statistical database, which has a long way to go. We also compare India's debt vis-à-vis other major emerging markets (EMs) and major advanced economies (AEs).

India's total debt-to-GDP ratio was 149.8% (USD3.9t) in FY18, not significantly different from 147.2% in FY09 but higher than 143.4% in FY12

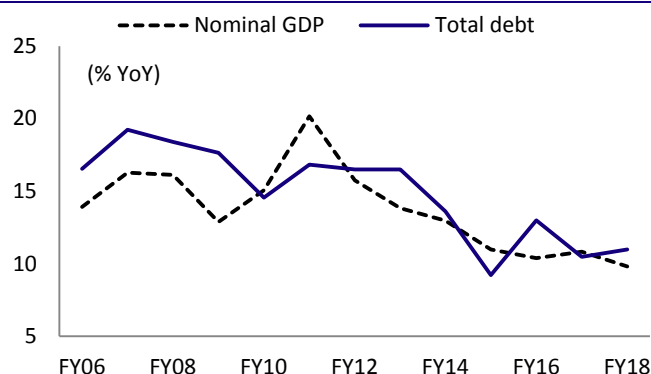
India's total debt-to-GDP ratio at all-time high in FY18: Our estimates of India's debt suggest that total debt increased from USD1.6t (INR80.3t) a decade ago to USD3.9t (or INR251t) in FY18. This 2.4x rise in the country's total debt (and 3.1x in INR terms) was similar to nominal GDP growth. Thus, India's debt-to-GDP ratio was 149.8% in FY18, not significantly different from 147.2% in FY09 but higher than 143.4% in FY12 (*Exhibit 1-2*). In fact, India's total debt-to-GDP ratio in FY18 was at its all-time high.

Exhibit 1: India's total debt-to-GDP ratio has risen steadily to all-time high of ~150%...



Please read our methodology to estimate India's total debt in [Appendix#1](#) at the end of the report

Exhibit 2: ...as national debt has grown faster than nominal GDP in most years



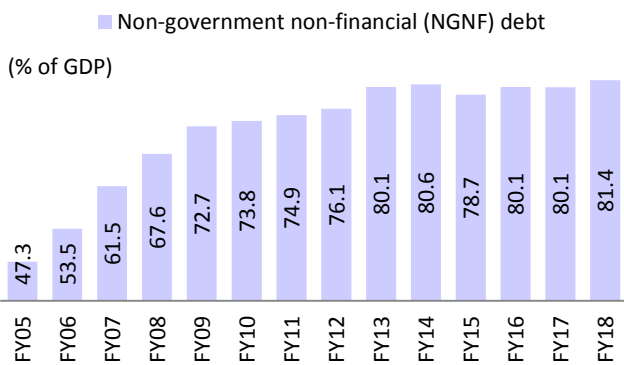
Source: Central Statistics office (CSO), Reserve Bank of India (RBI), Ministry of Finance (MoF), National Housing Bank (NHB), CEIC, MoSL

Break-up of India's total debt by creditors

Our estimates suggest that India's NGNF debt was 81.4% of GDP (or USD2.1t) in FY18, marking the highest-ever level

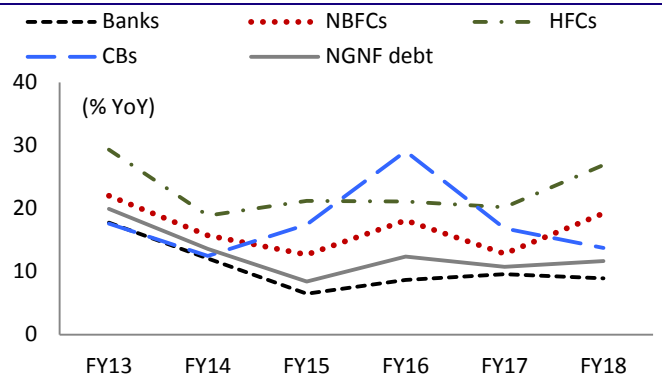
As mentioned above, India's total debt stood at USD3.9t in FY18, amounting to 149.8% of GDP. Although there is a long historical series available on government debt in India, we, in this note, attempt to estimate NGNF sector debt. Our estimates of NGNF debt are arrived from the creditors' loan book to the end-user, and thus, we begin by commenting on the creditors to India's NGNF sector. There are primarily six major sources of institutional lenders in the country available for the corporate and household sectors – SCBs, NBFCs, HFCs, corporate bonds (CBs), CPs and ECBs. As explained in [Appendix#1](#) at the end of the report, various adjustments have been made to avoid double counting in the estimates of NGNF debt in the country. Our estimates suggest that India's NGNF debt was 81.4% of GDP (or USD2.1t) in FY18, marking the highest-ever level and much higher than 72.7% in FY09 (*Exhibit 3*).

Exhibit 3: India's NGNF debt was at all-time high in FY18...



Please read our methodology to estimate India's total debt in [Appendix#1](#) at the end of the report

Exhibit 4: ...supported by higher growth in HFCs and NBFCs

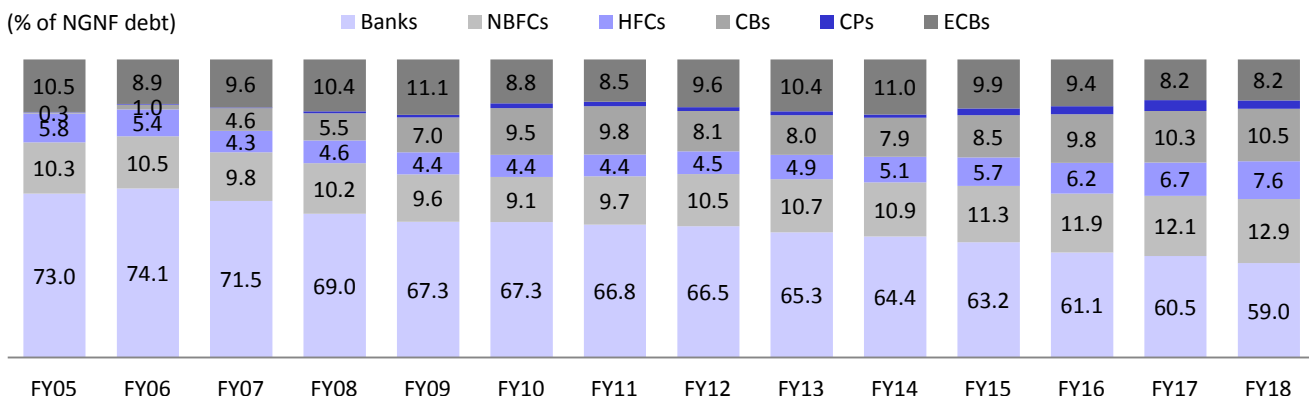


CPs and ECBs excluded because of high volatility
Source: CSO, RBI, MoF, NHB, CEIC, MoSL

Although banks remain the dominant creditor in the economy, their share in end-user credit has fallen from 73% in FY05 to sub-60% in FY18

A look at various creditors reveals that while bank credit growth has averaged ~9% over the past five years, it averaged ~22% for HFCs, 18% for CBs and 15.7% for NBFCs (*Exhibit 4*). Consequently, although banks remain the dominant creditor in the economy, their share in end-user credit has fallen consistently from 73% in FY05 to 66.5% in FY12 and further to first-time sub-60% in FY18 (*Exhibit 5*). The share of HFCs, corporate bonds and NBFCs has increased.

Exhibit 5: Evolving share of various creditors to India's NGNF debt



Source: BIS, MOSL

Break-up of India's total debt by debtors

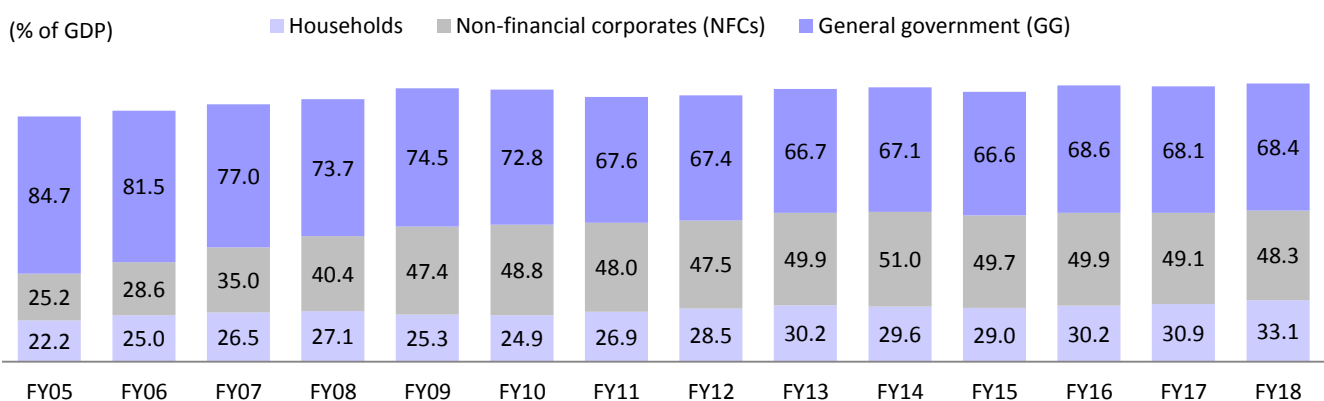
Apart from estimating India's NGNF debt, and thus total debt, we also project the distribution of debt in three categories (which are major economic participants): households, non-financial corporate (NFCs) and general government (GG). The understanding of the break-up of total debt by debtors (or sectors) is also important because higher debt in one particular sector may require macro prudential measures there which are different from the other sectors. As shown in the flow chart on page 2, while the corporate sector borrows from a variety of sources, households do not enjoy as many options. The key sources of borrowings for households are banks, NBFCs and HFCs.

Our estimates suggest (as discussed above) that India's NGNF debt was at the all-time highest level of 81.4% of GDP in FY18 (*Exhibit 3 above*). After combining general government (center + states) debt equivalent to ~68% of GDP in FY18 with NGNF debt, India's total debt comes to an all-time high of ~150% of GDP.

Household debt has risen to an all-time high of 33.1% of GDP in FY18, while India's corporate sector has deleveraged, with the debt-to-GDP ratio at a six-year-low of 48.3%

However, the composition of NGNF debt has changed significantly (Please see [Appendix#2](#) at the end of the report to understand our methodology). Household sector now accounts for ~22% of total debt in the country, the highest-ever in the past 15 years and in comparison to 17% a decade ago. Consequently, while household debt has risen from 29% of GDP in FY15 to an all-time high of 33.1% in FY18, India's corporate sector has deleveraged, with the debt-to-GDP ratio at a six-year-low of 48.3% in FY18 (*Exhibit 6*). The government debt-to-GDP ratio, however, at 68.4% is close to the highest level in the past eight years.

Exhibit 6: Distribution of India's total debt into three major sectors/debtors



To understand our assumptions regarding the household and NFCs debt, please see [Appendix#2](#) at the end of the report
Source: RBI, CSO, CEIC, Various other sources, MOSL

Household debt is much more than 'personal loans': The absence of debt statistics in India is one of the most serious shortcomings in policy making. Various [news reports](#) and [statistical database](#) (or [here](#)) suggest that household debt in India is about 10-11% of GDP and has hovered around that level for the past many years. International organizations such as [Bank for International Settlements \(BIS\)](#) and the [International Monetary Fund \(IMF\)](#) also suggest a similar level of household debt for the Indian economy. However, an important question remains unanswered – if household debt has remained stable for so many years, where does the farmer debt stress come from?

We understand that these estimates of household debt consider only a portion of banks’ credit in India called ‘personal loans’ extended. Banks’ personal loans stood at INR16.2t at FY17-end and INR19.1t at FY18-end, implying 10.6% and 11.4% of GDP, respectively, for these two years, very similar to the numbers suggested by various research notes, news articles, statistical databases and international organizations. These projections, however, are a gross under-estimation of household debt in the country, in our view.

Household debt extended by banks was 25.3% of GDP in FY18, not ~11% – as suggested by ‘personal loans’

Bank loans to household amount to ~25% of GDP...: As explained [earlier in our detailed notes analyzing India’s household balance sheet](#), banks’ personal loans are only a portion of total household debt. Although the RBI classifies bank loans on a monthly basis by occupation (agriculture, industry, services and personal loans), it also provides the break-up of bank credit on an annual basis by organization (households, private and public financial and non-financial corporate sector and governments). We use the latter classification to estimate total loans by banks to households in India and they turn out to be very different from the usual estimates.

Although personal loans at INR19.2t accounted for ~21% of banks’ total credit (and 11.4% of GDP) in FY18, total exposure of the banks to the Indian household sector amounted to 48.3% (or INR42.3t) of all bank loans (*Exhibit 7-8*). Household debt extended by banks, thus, was 25.3% of GDP in FY18, not ~11% – as suggested by ‘personal loans’.

Exhibit 7: Personal credit accounts for ~21% of total bank loans...

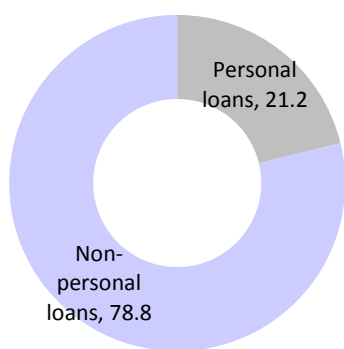
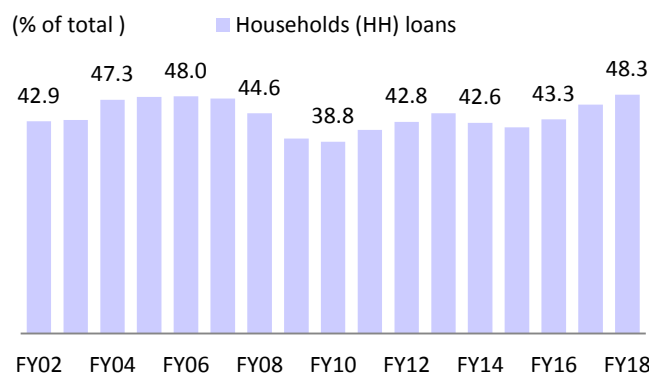


Exhibit 8: ...while household loans account for as much as ~48% of bank loans



Source: RBI, CEIC, MoSL

...and NBFCs/HFCs also lend to households: This, however, is also an incomplete measure of household debt because it does not include the loans and advances from NBFCs and HFCs. Data from National Housing Bank (NHB) reveals that ~75% of total outstanding loans by HFCs are retail housing loans. HFCs’ outstanding housing loans were INR6t (or 3.9% of GDP) in FY17, which is estimated to have risen to INR7.4t (or 4.4% of GDP) in FY18.

Such calculations, however, are not so straight-forward for NBFCs. Unlike banks or HFCs, NBFCs do not resort to uniform loan details. It was only in December 2015 when the RBI made it mandatory for NBFCs to also report the loans details in the same format as SCBs – classification of credit by occupation. However, since

personal loans are only a portion of household debt, such classification is not useful to divide the exposure of NBFCs to household and NFCs sectors. Instead, we use individual company-wise data for 24 NBFCs and break their gross loans and advances into five sectors – infrastructure, commercial real estate, commercial vehicles, capital market exposure and others (the residual). The first three segments represent the corporate sector, while the last two are considered as ‘household debt’ (Please see [Appendix#2](#) at the end of the report for details). These assumptions lead to estimates suggesting that almost one-third of NBFCs’ loan book is exposed to the household sector, amounting to INR5.7t in FY18.

Aggregating bank, HFC and NBFC loans suggest household debt amounting to 33.1% of GDP in FY18

Household debt in India was 33.1% of GDP in FY18, not ~11%: These three sources of institutional borrowings suggest total household debt of INR55.4t (or USD853b) in FY18, equivalent to 33.1% of GDP – the highest-ever level. Further, more than three-fifth of household debt is still provided by banks, which has come down from its peak share of ~83% in FY10 and FY11.

Exhibit 9: Banks still account for more than three-fourth of household debt...

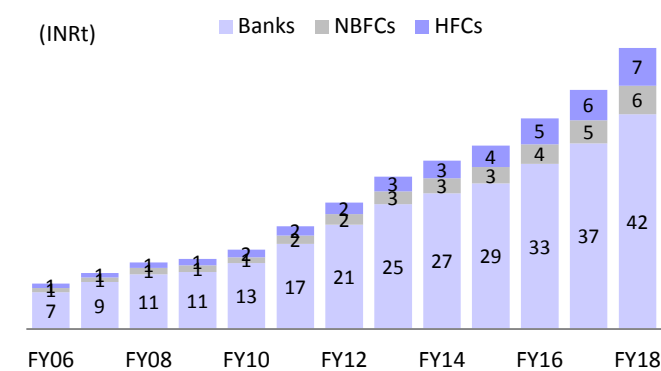
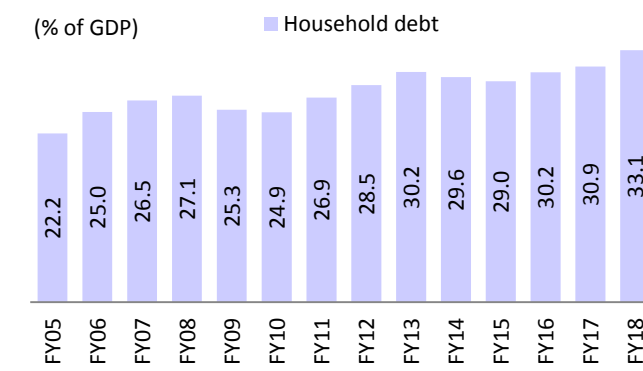


Exhibit 10: ...which has risen from 29% in FY15 to all-time peak of 33.1% of GDP in FY18



Source: RBI, CEIC, MoSL

NFCs debt in India has fallen from its peak of 51% of GDP in FY14 to 48.3% in FY18, marking the lowest level in the past six years

India’s corporate sector, however, has deleveraged over past four years...: After estimating household debt, we project debt for the non-financial corporate (NFC) sector by deducting household debt from our estimates of NGNF debt. These estimates suggest that the non-financial corporate sector has deleveraged over the past four years, as NFCs’ debt has fallen from its peak of 51% of GDP in FY14 to 48.3% in FY18 (*Exhibit 11*). In other words, corporate debt in India in FY18 was at the lowest level in six years.

The reduced share of banks in India’s total debt is because of their reduced corporate lending

...and banks have lost share in corporate debt: Like for households, we also look at the share of major creditors to India’s NFC sector (*Exhibit 12*). Interestingly, while the share of banks and external commercial borrowings (ECBs) has fallen, the share of NBFCs and corporate bonds (CBs) has increased. Almost 18% of corporate debt is raised through CBs, which was ~10% a decade ago, while the share of bank borrowings has fallen from ~60% to ~47% during the same period. NBFCs have also increased their exposure to the corporate sector, which now stands at 14.8% versus ~10% a decade ago. Although the share of ECBs in corporate debt is volatile, it appears to have fallen over the past few years – from ~16-17% five years ago to ~14% in FY18. Overall, the reduced share of banks in India’s total debt is because of

their reduced lending to the corporate sector – this appears in sync with the deterioration of many public sector banks (PSBs), which were mainly focused on corporate or investment-related credit.

Exhibit 11: Non-financial corporate sector has deleveraged over the past four years...

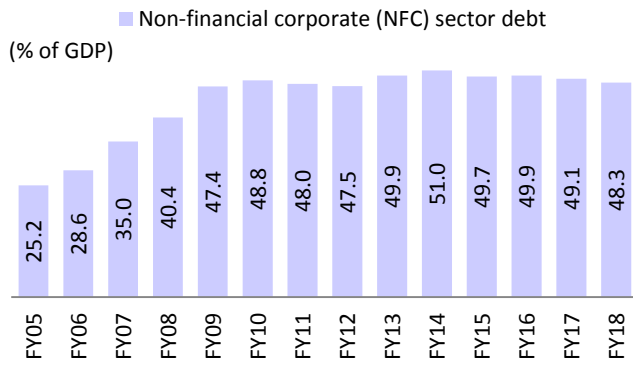
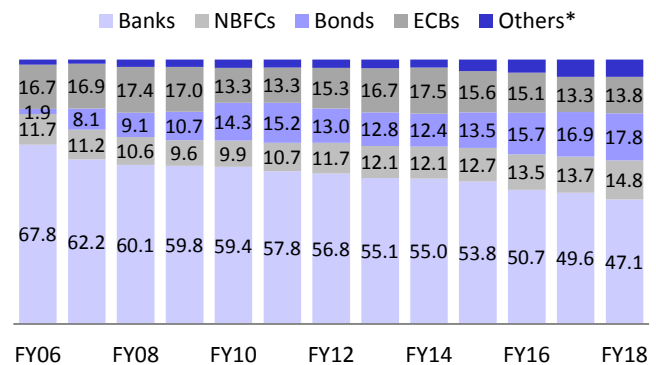


Exhibit 12: ...and the share of banks has fallen dramatically in corporate debt



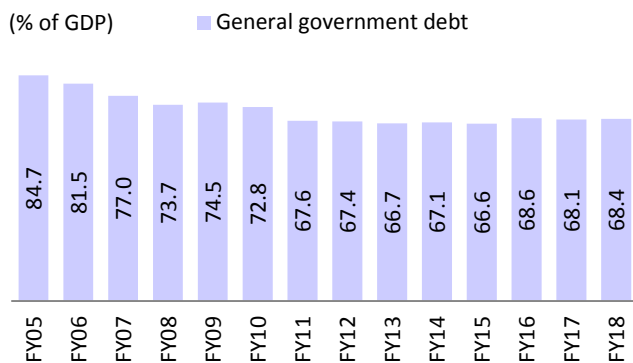
* HFCs + CPs

Source: RBI, CEIC, MoSL

Government debt stood at 68.4% of GDP in FY18 and has been in a very tight range over past three years

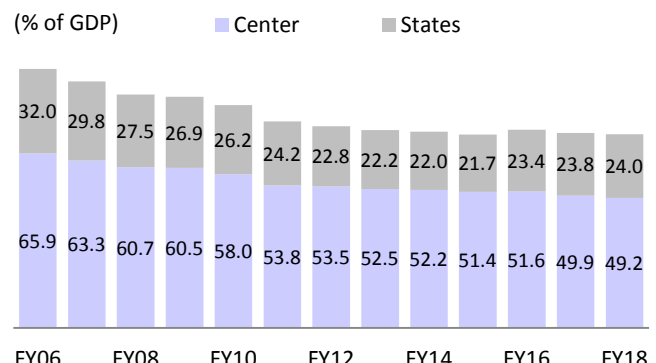
Government debt has been stable at high levels over past three years...: General government (center + states) debt stood at 68.4% of GDP in FY18, very close to the all-time peak of 68.6% in FY16, but slightly higher than the 15-year low of 66.6% in FY15 (*Exhibit 13*). Government debt has remained in a very tight range of 68.1-68.6% of GDP over the past three years.

Exhibit 13: Government debt in India has been stable over the past many years...



Source: RBI, MoSL

Exhibit 14: ...as the fall in center's debt was offset by the rise state government debt



Source: RBI, MoSL

...as lower debt by center was offset by higher debt by states: The central government has reduced its leverage consistently, while states have seen an increase in the debt levels. Center's debt stood at 35-year lowest level of 49.2% of GDP in FY18, while states' debt was at a six-year high of 24% last year (*Exhibit 14*). The rise in the latter was partly on account of the UDAY scheme, wherein the state governments took over 75% debt of state electricity boards (SEBs) on their book in two installments – 50% by March 2016 and another 25% by March 2017.

How does India’s debt compare vis-à-vis other major nations?

Our estimates of India’s debt suggest that the total debt-to-GDP ratio was ~150% of GDP in FY18, marking the highest-ever level.

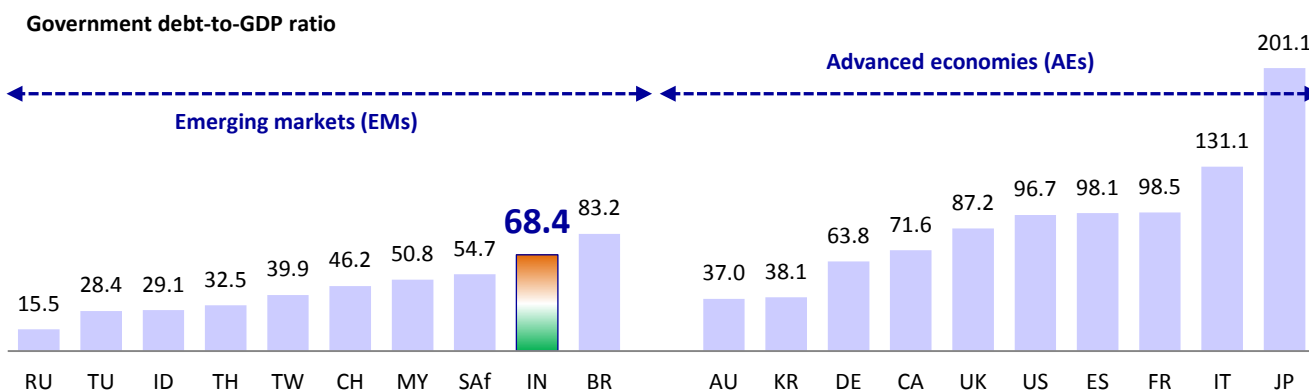
Is this unsustainable or manageable? What about sectoral debt? Is 33% household debt too low or too high? What about corporate or government debt?

One way to answer these questions is to compare India’s debt ratio vis-à-vis other major EMs. We, thus, compare the debt-to-GDP ratios of 10 EMs and include (for representative purposes) data for 10 major developed economies into our analysis.

India’s government debt is second only to Brazil among EMs and also higher than some AEs such as Australia, Korea and Germany

India’s government debt is among highest compared to other EMs...: While India’s general government debt has been stable over the past three years, it does not compare favorably with most major EMs. As seen in *Exhibit 15* below, India’s government debt at 68.4% of GDP is among the highest compared to other major EMs, second only to Brazil, which has government debt-to-GDP ratio of 83.2%. In fact, India’s government debt is also higher than some advanced economies (AEs) such as Australia, Korea and Germany. **Consistently high fiscal deficits of over 6% (in 33 of the last 37 years) have resulted in a much higher government debt-to-GDP ratio compared to other EMs.**

Exhibit 15: India’s government debt is among highest in comparison to other EMs

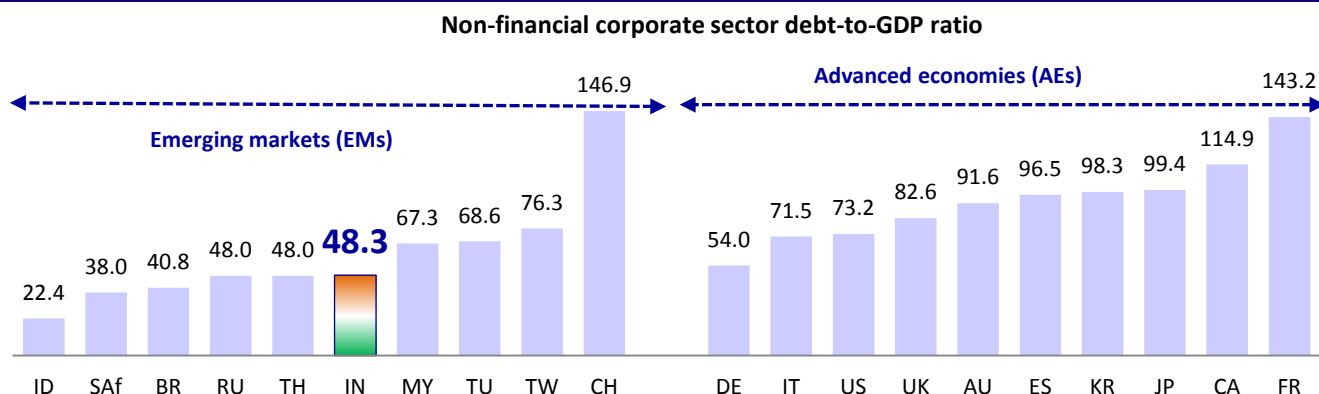


Brazil (BR), China (CH), India (IN), Indonesia (ID), Malaysia (MY), Russia (RU), South Africa (SAF), Taiwan (TW), Thailand (TH), Turkey (TU); Australia (AU), Canada (CA), France (FR), Germany (DE), Italy (IT), Japan (JP), Korea (KR), Spain (ES), United Kingdom (UK), United States (US). Data for India is for FY18. For all other countries data is for calendar year 2017. Source: BIS, CEIC, MOSL

Corporate deleveraging in India of 2.7pp of GDP was low compared to the fall of 10pp in Russia, ~8pp in Brazil & ~6pp in China

...however, corporate debt is at middle of EM pack: Although India’s government debt is among the highest compared to other EMs, corporate debt in India is among the lowest. At 48.3%, corporate debt of India is similar to that of Russia (RU) and Thailand (TH) and much lower than that of Malaysia (MY), Turkey (TU), Taiwan (TW) and China (CH). Interestingly, like in India, the corporate debt to GDP ratio has fallen in almost all EMs, except South Africa (SAF) and Turkey (TU). However, the fall in India’s corporate debt – down 2.7pp of GDP from its peak of 51% in FY14 to 48.3% in FY18 – was among the lowest among other EMs. Corporate debt in Russia (RU), Brazil (BR) and China (CH) has declined by as much as 10pp, 7.7pp and 5.7pp respectively, over the past 1-2 years. Further, **corporate debt in all developed economies is higher than that in India. On the contrary, corporate debt in China is the highest among all 20 nations that are part of this study.**

Exhibit 16: Non-financial corporate debt for India is at middle vis-à-vis other EMs



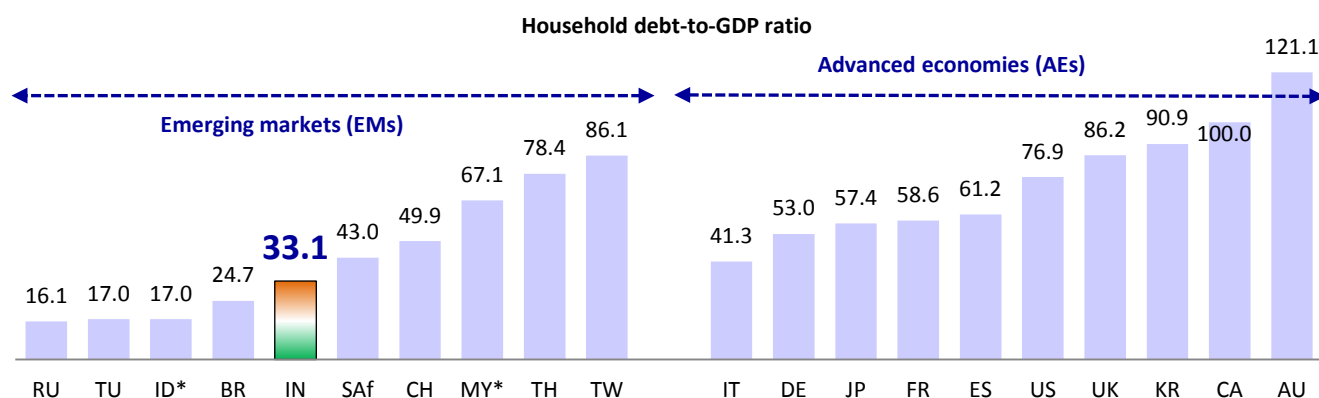
Brazil (BR), China (CH), India (IN), Indonesia (ID), Malaysia (MY), Russia (RU), South Africa (Saf), Taiwan (TW), Thailand (TH), Turkey (TU); Australia (AU), Canada, (CA), France, (FR) Germany (DE), Italy (IT), Japan (JP), Korea (KR), Spain (ES), United Kingdom (UK), United States (US)
 Data for India is for FY18. For all other countries data is for calendar year 2017
 Source: BIS, CEIC, MOSL

India’s household debt is among the lowest...: Our most important contribution through this note is the comparable data on household debt for 20 countries. Just like for India, we checked household debt of various EMs reported by the BIS with their national sources. We found that household debt in TH and Saf is actually higher than that reported by the BIS, while we could not verify it for Indonesia (ID) and MY because of the lack of national sources on the comprehensive data.

Our analysis suggests that while household debt in India is 3x of that reported by the BIS, it is still among the lowest compared to other EMs

Our analysis suggests that while household debt in India is 3x of that reported by the BIS, it is still among the lowest compared to other EMs (*Exhibit 17*). India’s household debt-to-GDP ratio at 33.1% is higher when compared to BR and RU, but is much lower than in Saf and CH. Although a relatively low household debt-to-GDP ratio points to ample scope for further leveraging, our [earlier analysis](#) had indicated that low financial assets and a falling household savings rate in India present serious constraints to such potential rise in household debt.

Exhibit 17: India’s household debt is still among the lowest in comparison to other EMs



Brazil (BR), China (CH), India (IN), Indonesia (ID), Malaysia (MY), Russia (RU), South Africa (Saf), Taiwan (TW), Thailand (TH), Turkey (TU); Australia (AU), Canada, (CA), France, (FR) Germany (DE), Italy (IT), Japan (JP), Korea (KR), Spain (ES), United Kingdom (UK), United States (US)
 * Data for ID and MY couldn’t be verified by national sources

Data for India is for FY18. For all other countries data is for calendar year 2017

Source: CSO, RBI, CEIC, MOSL

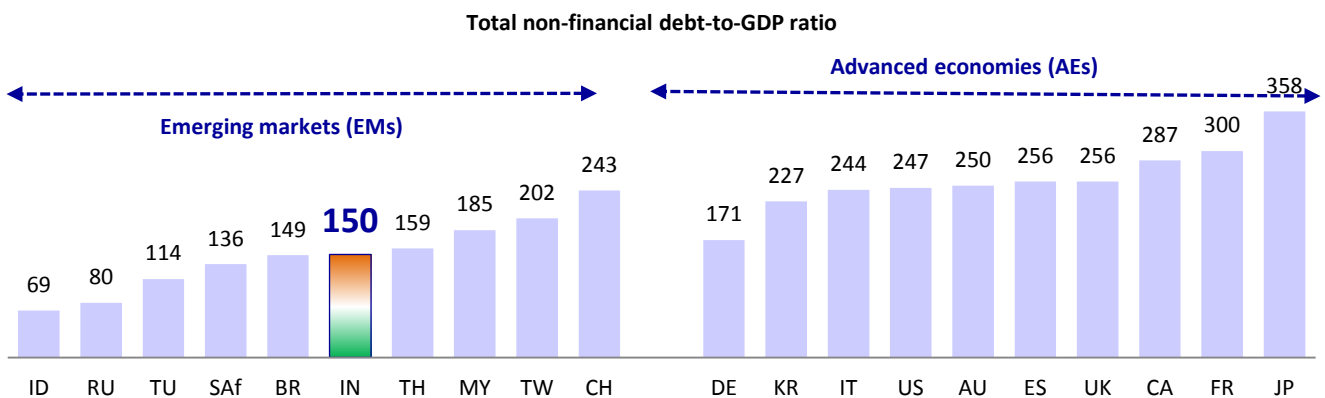
While government debt in India is one of the highest compared to other EMs, relatively low NGNF debt brings India's total debt in the middle of EM pack

...and, thus, total debt is right at middle vis-à-vis major EMs: On aggregating the government and NGNF debt for the world's 20 major economies, we note that India's total debt at ~150% of GDP is right at the middle of the EM pack and much lower than all AEs considered in this study (*Exhibit 18*). It confirms the fact that while government debt in India is one of the highest compared to other EMs, relatively low NGNF debt brings India's total debt in the middle of the EM pack. Government debt accounts for ~45% of India's total debt, which is in stark contrast to some other EMs such as TH, TW and CH, wherein government accounts for less than 20% of national debt. However, total debt in these countries is much higher than that of India's, which makes them more vulnerable.

Lower total debt, not government debt, is a sign of financial stability in the economy

Lower total debt, not government debt, is a sign of financial stability in the economy. When Ireland and Spain faced one of the worst economic crisis in 2008, their government debt (at ~25% and ~35% of GDP respectively) accounted for only 15-20% of total national debt. Although government (or public sector) debt receives very high attention, it does not necessarily imply high vulnerability to financial stability in the country, as reflected by India and Brazil.

Exhibit 18: India's total debt sits right in the middle of the EM pack



Brazil (BR), China (CH), India (IN), Indonesia (ID), Malaysia (MY), Russia (RU), South Africa (SAf), Taiwan (TW), Thailand (TH), Turkey (TU); Australia (AU), Canada, (CA), France, (FR) Germany (DE), Italy (IT), Japan (JP), Korea (KR), Spain (ES), United Kingdom (UK), United States (US) Data for India is for FY18. For all other countries data is for calendar year 2017 Source: CSO, RBI, MOSL

What are the recent trends in India's debt?

Our estimates suggest that growth in India's NGNF debt in the first three quarters of FY19 was the highest in six years and very solid in 3QFY19 as well

Since there are no official estimates of India's outstanding credit to the commercial (private + public) sector, the above analysis provides a basis of the historical perspective. The analysis, however, is incomplete without understanding the recent trends in India's debt. What has happened in FY19? Has credit slowed down significantly in 3QFY19 when India's financial system, post IL&FS default, witnessed immense tightening? Using the above discussed methodology and some further assumptions, we estimate India's debt on a quarterly basis up to 3QFY19. Since data on general government debt is not available on a quarterly basis, we comment on India's quarterly NGNF debt. Our estimates suggest that there was no slowdown in NGNF debt growth in FY19 or 3QFY19. In fact, growth in India's NGNF debt in the first three quarters of FY19 was the highest in six years and very solid in 3QFY19 as well.

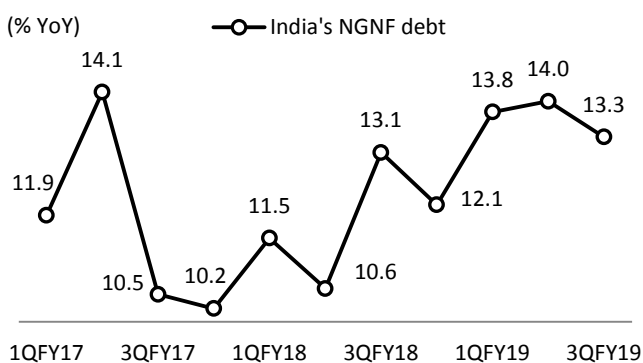
No slowdown in NGNF credit growth in FY19 or 3QFY19...:

Our analysis suggests that NGNF credit in India grew at an average of 13.7% YoY in the first three quarters of FY19, faster than ~12% growth recorded in the corresponding period in the last two years (*Exhibit 19*). In 3QFY19, NGNF debt grew 13.3% YoY, only marginally slower than 13.9% in 1HFY19.

India's NGNF debt to GDP ratio was 81.1% in 3QFY19, similar to the all-time high ratio of 81.2% at end-FY18

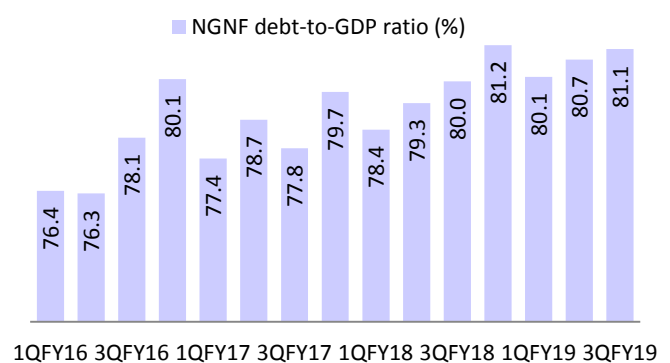
Consequently, India's NGNF debt to GDP ratio was 81.1% in 3QFY19, similar to the all-time high ratio of 81.2% at end-FY18 (note that our annual data showed NGNF debt-to-GDP ratio at 81.4% because of minor changes in annual and quarterly ECB data). Importantly, there are no signs of sustained deceleration in India's NGNF debt over the past few years, implying that there was no systemic deceleration (let alone decline) in outstanding credit of India's NFCs and households (*Exhibit 20*).

Exhibit 19: India's NGNF debt continued growing strongly in 3QFY19...



Source: RBI, NHB, CSO, NBFCs/HFCs company reports, CEIC, MOSL

Exhibit 20: ...and NGNF debt to GDP ratio is close to an all-time high seen at end-FY18



Please note the only minor difference between annual and quarterly NGNF data is due to ECBs; all else are the same

...as banks and corporate bonds mostly make up for slowdown in NBFCs:

As explained in the first section, our estimates for NGNF debt are arrived at by adding the loan book of major institutional lenders in the country along with various required adjustments in order to avoid double counting. This methodology helps us classify India's NGNF debt by major creditors.

With the default of IL&FS in late September 2018, the fears of a serious effect on India’s financial system health was raised since NBFCs (including HFCs) accounted for over 20% of total NGNF debt in the country, up from 17% in FY15. Our analysis of 28 individual NBFCs (+HFCs), which together account for more than 70% of entire industry, confirms that growth has slowed from ~23% YoY in 2QFY19 to ~18% in 3QFY19. However, it was majorly offset by higher growth in banks’ credit and corporate bonds (*Exhibit 21*).

Exhibit 21: Slight slowdown in NBFCs and HFCs loans was majorly offset by banks and bonds

(INR b)	FY17	FY18	1QFY19	2QFY19	3QFY19	FY17	FY18	1QFY19	2QFY19	3QFY19
Banks	73,868	80,468	80,178	83,054	86,394	9.6	8.9	9.9	11.2	11.9
NBFCs	14,800	17,643	18,274	19,209	19,821	12.8	19.2	18.9	20.8	17.7
HFCs	8,185	10,386	10,977	11,370	11,521	20.2	26.9	25.1	26.3	19.1
Corporate bonds	12,640	14,484	14,801	14,617	15,184	16.9	14.6	13.3	7.2	8.6
Commercial Paper	2,689	2,320	3,187	3,746	3,359	53.8	(13.7)	50.0	55.1	32.8
ECBs	9,320	10,912	11,310	11,721	11,774	(6.8)	17.7	12.5	10.8	10.0
Total	121,501	136,212	138,728	143,717	148,054	10.2	12.1	13.8	14.0	13.3
Memo: NBFCs + HFCs	22,985	28,029	29,251	30,578	31,343	15.3	21.9	21.1	22.8	18.2

Please refer to [Appendix#1](#) for details

Source: RBI, CEIC, MOSL

Although credit by NBFCs (+HFCs) grew at a five-quarter low of ~18% YoY in 3QFY19, it grew at 9-quarter highest pace of ~12% YoY for banks

Historical quarterly data shows the trends more clearly. Although credit by NBFCs (+HFCs) grew at a five-quarter low of ~18% YoY in 3QFY19, it grew at the nine-quarter highest pace of ~12% YoY for banks (*Exhibit 22*). For the first three quarters of FY19, the share of banks in incremental NGNF credit was 50%, much higher than sub-40% in FY17 and FY18, while it fell to 28% for NBFCs (+HFCs) as compared to 35%-40% in the corresponding period during the past three years (*Exhibit 23*). Overall, the slowdown in NBFC lending had a very limited impact on total NGNF debt growth in 3QFY19.

Exhibit 22: Credit growth by major institutional lenders in the past few quarters

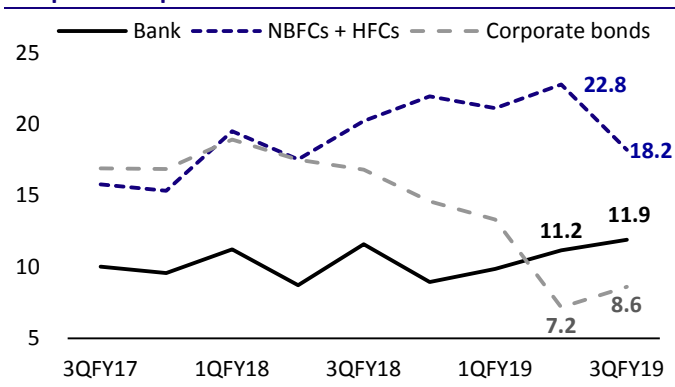
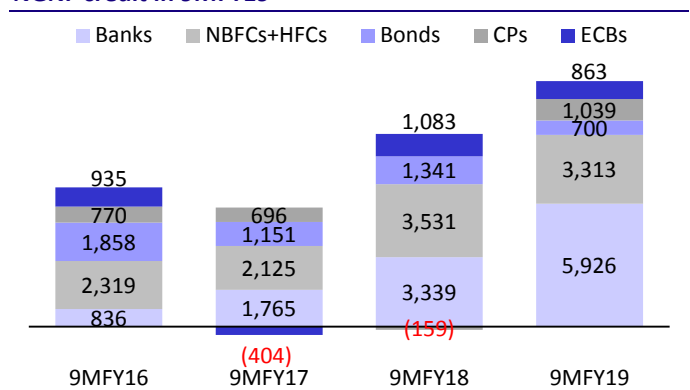


Exhibit 23: Banks have increased their share in incremental NGNF credit in 9MFY19



Source: RBI, CEIC, MOSL

Conclusion: India's debt trajectory is not worrisome

In this note, we have presented our estimates of India's non-government non-financial (NGNF) debt, which can be monitored on a quarterly basis. Notwithstanding all the concerns post-IL&FS default in late September 2018, our estimates suggest that India's NGNF credit continued growing strongly in 3QFY19 – much faster than in the previous years. Our major contribution through this note is a comprehensive estimate of India's household sector, which was ~33% of GDP in FY18 – almost 3x of the 10%-11% estimates normally believed or discussed in the markets. We believe that further refinements could be done by various regulators, which will help fill at least some of the vacuum that prevails in India's macroeconomic statistical database collection. Three major conclusions from our analysis are:

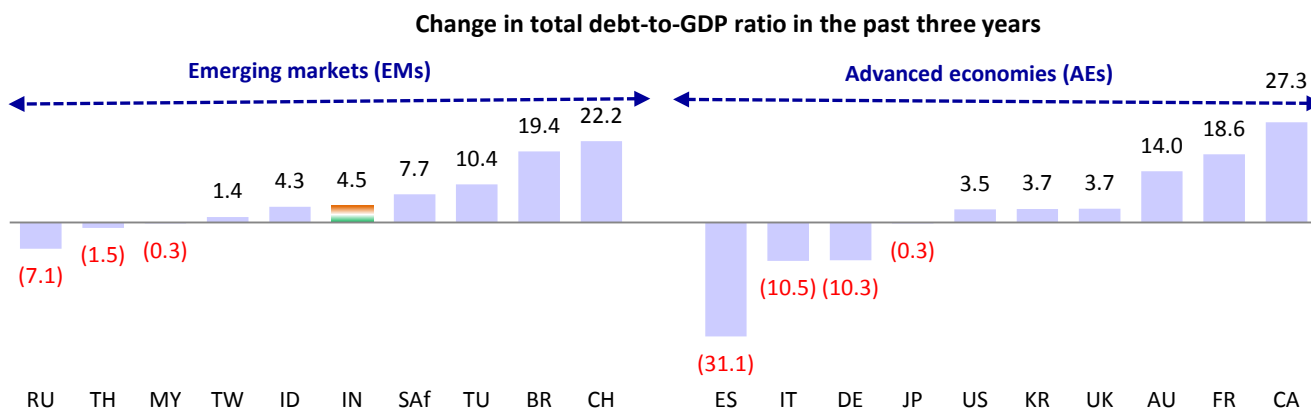
1. India's total debt has not risen much but the composition has changed:

Although there is regular annual data on India's government debt, the absence of official statistics on NGNF debt of the country has emerged as one of the biggest vacuum. Using data from six major institutional lenders in the country, we prepare an estimate of India's NGNF debt, which confirms that India's total debt (comprises households, non-financial corporates (NFCs) and general government) was ~150% of GDP in FY18, not very different from 145% three years ago and ~147% five years ago. Nevertheless, the composition of debt in India has changed since NGNF debt crossed 81% of GDP for the first time ever in FY18. Within NGNF sector, while the corporate sector has deleveraged, Indian household sector has added to its leverage amounting to 33.1% of GDP in FY18.

India has high public debt; however, a relatively modest total debt-to-GDP ratio compared to other EMs certainly provides comfort

2. India's debt has risen marginally over past three years: A comparison of India's debt vis-à-vis nine other EMs and 10 AEs confirms that while India's government debt is on the higher side, household sector is still among least leveraged, while corporate sector lies in the middle of the EM pack. Consequently, while high public debt is often cited as one of the weakest macroeconomic metric for India, a relatively modest total debt-to-GDP ratio compared to other EMs certainly provides comfort.

Exhibit 24: India has not seen a significant increase in debt-to-GDP ratio compared to other EMs



Source: CSO, RBI, MOSL

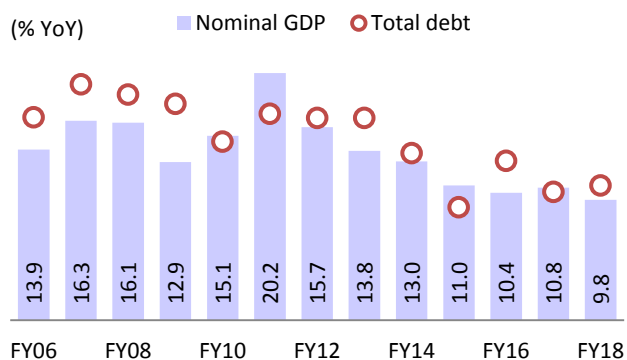
Moreover, total debt-to-GDP ratio in India has risen by 4.5pp over the last three years (Exhibit 24). This very modest rise in India’s debt-to-GDP ratio in the past three years is better than deleveraging by RU, TH and MY and massive increase in leveraging by CH, BR and TU.

3. India’s growth not heavily dependent on debt: Finally, a comparison of India’s nominal GDP growth and total debt growth confirms that the nation’s debt intensity has not changed significantly over the past 15 years (analysis couldn’t be performed on a quarterly basis as we do not have estimates of government debt on a quarterly basis).

India’s debt intensity of GDP growth has ranged between the best of 0.8x (in FY11 and FY15) and the worst of 1.4x (FY09) over the past 15 years and stood at 1.1x in FY18

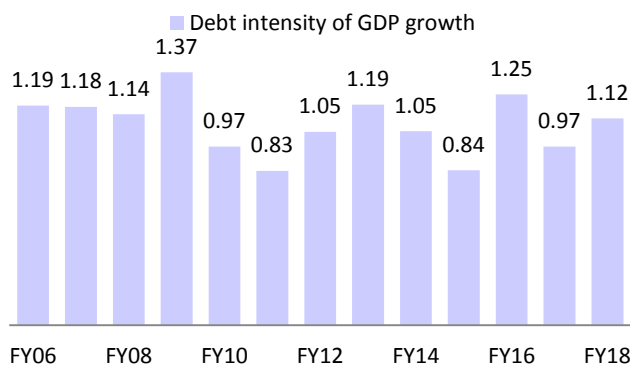
This is another way of saying that India’s debt-to-GDP ratio has not changed significantly over the past many years. India’s debt intensity of GDP growth – defined as growth in debt needed to produce an additional percentage point of nominal GDP growth – has ranged between the best of 0.8x (in FY11 and FY15) and the worst of 1.4x (FY09) over the past 15 years (Exhibit 25-26). The debt intensity stood at 1.1x in FY18, implying that while nominal GDP grew 9.8% YoY, total debt grew faster at 10.9% last year. Although debt intensity of less than one (<1) is suggested for highly leveraged economies such as China, India’s debt intensity (of slightly higher than 1) is nothing to be worried about considering its modest total debt ratio.

Exhibit 25: Comparison of India’s nominal GDP growth and total debt growth since FY06...



Data up to FY12 is on 2004-05 base

Exhibit 26: ...confirms that debt intensity has not changed dramatically



The higher the intensity, the worse it is
Source: CSO, RBI, CEIC, MoSL

Appendix#1: Estimation of total debt of India's non-financial sector

Estimation of non-government non-financial (NGNF) sector: Scheduled commercial banks (SCBs), non-banking financial institutions (NBFCs) and housing finance companies (HFCs) are the three major institutional sources of lending available to the household and corporate sectors (which together constitute NGNF sector) in the economy. Consequently, we use loans and advances data from these financial companies to estimate total debt of the NGNF sector. Apart from these three sources, the NGNF sector borrows through commercial papers (CPs), corporate bonds (CBs) and external commercial borrowings (ECBs). We gather data on all these six relevant parameters and make suitable adjustments to avoid double counting. Given below are the details:

- Loans and advances of SCBs excluding their lending to the financial sector
- Loan book of NBFCs available from the RBI's annual publication titled "Report on trend and progress of banking in India." For quarterly data beyond FY18, we have compiled data from 18 individual NBFC companies, which account for more than 70% of the entire industry (The list of NBFCs is provided below).
- Outstanding loan book of HFCs is available from National Housing Bank (NHB) up to FY17. For FY18 and quarterly data, we have used our sample of 10 HFCs, which account for ~86% of the entire industry (the list of HFCs in the table below).
- Outstanding corporate bonds adjusted for debentures issued by NBFCs, HFCs and tier-II capital of SCBs (assumed @2% of banks' loan book)
- Outstanding CPs, adjusted for NBFCs issuances
- Long-term and short-term external debt (ECBs + rupee debt) raised by non-financial non-government sector, adjusted for foreign institutional investors' (FIIs) exposure in corporate bonds.

Total debt of the non-financial sector in India is estimated by adding NGNF debt to the outstanding debt of the general government (GG, center + states).

In order to arrive at the **quarterly estimates of NGNF debt**, we used company-level data for 18 NBFCs and 10 HFCs, which account for more than ~65% and ~82% of the entire industry, respectively. The list of these companies is provided below:

List of 18 NBFCs and 10 HFCs used for quarterly analysis:

1. Bajaj finance	15. Reliance Capital
2. Cholamandalam	16. Shriram City Union
3. Edelweiss	17. Shriram transport finance
4. IIFL finance	18. Sundaram finance
5. HUDCO	19. Canfin
6. Indian Railway Finance corporation (IRFC)	20. Dewan housing
7. JM Financial	21. GIC finance
8. L&T financial	22. GRUH finance
9. Mahindra & Mahindra finance	23. HDFC Ltd.
10. Magma finance	24. ICICI housing loan
11. Mannapuram	25. Indiabulls housing
12. Muthoot	26. LIC housing
13. Power finance	27. PnB housing finance
14. REC Ltd.	28. REPCO finance

Appendix#2: Classification of NGNF debt into household and non-financial corporate sectors

After arriving at India's NGNF debt, the next step is to divide total debt into two major sectors – households and non-financial corporate (NFCs) sector. Since households borrow from three of the six sources – banks, NBFCs and HFCs, we estimated the sector-wise or activity-wise outstanding credit for these three lenders to arrive at household debt. The remaining NGNF debt, along with borrowings raised through corporate bonds (CBs), commercial papers (CPs) and ECBs, is NFC debt.

Outstanding credit of SCBs according to organization: Not much effort is required in this category, as the annual publication called Basic Statistical Returns (BSR) of SCBs released by the Reserve Bank of India provides this data. The table below provides data for the past three years for the reference:

INRb	Total credit	Financial corporations*	Household sector~	Non-financial corporates (NFCs)#	Share of households (%)
2015-16	75,226	15,006	32,795	27,425	45.2
2016-17	79,179	13,817	36,809	28,553	46.5
2017-18	87,669	14,798	42,526	30,345	48.5

* Excluded from Total credit to arrive at NGNF debt; ~ Includes non-profit institutions serving households (NPISH); # The residual after deducting financial corporations and household sector
Source: Table 1.13/1.15 from RBI's BSR of SCBs

Outstanding credit of HFCs to retail and commercial sector: Data on annual outstanding loans by HFCs are provided by National Housing Bank (NHB). Housing loans – also provided by NHB – is included in household debt, while other loans are included in NFC debt. The table below provides reference data for the past 3 years.

INRb	Outstanding loans	Housing/retail loans	Share in total (%)	Other loans#
2015-16	6,811	5,126	75.3	1,685
2016-17	8,185	5,985	73.1	2,200
2017-18	10,386	7,408	71.3	2,978

Included in NFCs debt
Source: National Housing Bank (NHB), Company reports
2017-18 Data is our estimate based on 12 individual HFCs accounting for ~86% of the industry

Outstanding credit of NBFCs by various activities/sectors: Using individual data for 24 NBFCs, which account for ~83% of the entire industry, we classify NBFCs' loan book into four categories and keep the residual as 'others'. The table below provides reference data for the past three years.

INRb	Total loans & advances	Infrastructure*	Commercial real estate#	Capital market exposure#	Commercial vehicles^	Others (Residual)	Household debt~
2015-16	13,118	6,991	827	1,465	1,427	2,408	3,873
2016-17	14,800	7,368	1,247	1,683	1,596	2,905	4,588
2017-18	17,643	8,519	1,502	1,661	1,895	4,065	5,727

* Loan book of 9 NBFCs – PFC, REC, SREI, PTC, L&T Infra, HUDCO Infra, IRFC, IFCI and IIFC; # From RBI's Financial Stability report (FSR) for various years; ^ Estimation from company-wise reports; ~ Addition of Capital market exposure and others
Source: RBI, Company reports

Estimation of household, and thus, NFC debt: Addition of our estimates of retail/household debt from banks, NBFCs and HFCs provides household debt in the country. We understand that this could be slightly over-estimated because of the opaqueness in NBFC data. However, until estimates of NGNF debt are robust, which, we believe, is the case, these are unlikely to change the broad conclusions. More research, nevertheless, is welcome.

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Investment Rating	Expected return (over 12-month)
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SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
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