

HIGHLIGHTS

- *Fifteen states¹ issued Rs. 2,107.6 billion² of Ujwal Discom Assurance Yojna (UDAY) bonds in FY2016 and/or FY2017, the redemption of which started in FY2018 and will extend up to FY2032. More than three-fourths of these bonds were issued by five states, namely Rajasthan, Uttar Pradesh (UP), Haryana, Tamil Nadu (TN) and Punjab.*
- *ICRA estimates that more than 70% of the total UDAY bonds outstanding of Rs. 2,039.1 billion at end-March 2018 (Source: Reserve Bank of India or RBI) would mature during FY2020 to FY2027, with peak redemption in FY2027. This would coincide with the relatively heavy redemption pressure related to the State Development Loans (SDL; total outstanding amount of Rs. 15,942.1 billion as on March 31, 2018 of the 15 states that have issued UDAY bonds) in FY2025, FY2026 and FY2027.*
- *In ICRA's view, the aggregate repayment of the UDAY bonds of the 15 states would exacerbate the redemption pressure and the gross rollover requirements during FY2020 to FY2027, assuming that the states would resort to market borrowings to repay the UDAY bonds. This may necessitate a larger gross annual borrowing limit to be permitted to these 15 states by the Government of India (GoI).*
- *The combined estimated maturity profile of SDLs and UDAY bonds³ of Rajasthan (FY2025 and FY2026), UP (FY2026 to FY2028), Haryana (FY2022 to FY2026), TN (FY2025 to FY2028) and Punjab (FY2022 to FY2024, FY2026 and FY2028) suggests relatively high redemption pressure in certain years. In ICRA's view, the issuance of fresh SDLs by states with maturity overlapping with the years in which the combined redemption of SDL and UDAY bonds is already high, would push up their gross borrowing requirement in those specific years, which may lead to an increase in their cost of borrowings.*
- *However, the dips in the combined estimated maturity profile of SDL and UDAY bonds of Rajasthan (FY2022 and FY2027), UP (FY2020 to FY2024), Haryana (FY2020 and FY2021), TN (FY2020 to FY2022) and Punjab (FY2020, FY2021, FY2025 and FY2027) provide scope for issuing SDLs maturing in those specific years at possibly attractive yields.*

This note analyses the maturity profile of the UDAY bonds that were issued by 15 Indian states, which would be maturing during FY2020 to FY2033. It highlights those fiscals where the aggregate maturity of the UDAY bonds across these 15 states, would coincide with relatively high SDL redemption. Moreover, the maturity profile of the UDAY bonds across the 15 states is not uniform; this note focusses on the state-level maturity profile of SDLs and UDAY bonds of the five states that were the largest issuers of UDAY bonds. In ICRA's view, the issuance of fresh SDLs by states with maturity overlapping with the years in which the combined redemption of SDL and UDAY bonds is already high, would push up their gross borrowing requirement in those specific years, which may lead to an increase in their cost of borrowings. In

¹Andhra Pradesh (AP), Bihar, Chhattisgarh, Haryana, Himachal Pradesh (HP), Jharkhand, Jammu and Kashmir (J&K), Madhya Pradesh (MP), Maharashtra, Meghalaya, Punjab, Rajasthan, Tamil Nadu (TN), Telangana and Uttar Pradesh (UP).

²Source: data available in the Finance Accounts for FY2017 of each of these 15 states. Refer Exhibit 10, for details of UDAY bonds issued and outstanding of each of the 15 states, and Exhibit 11 for key details of UDAY bonds issued by Rajasthan, UP, Haryana, TN and Punjab.

³The data on the stock of UDAY bonds published by the RBI mentions the coupon rate and the calendar year of maturity for the various bonds in their nomenclature, for instance 8.21% Rajasthan UDAY bonds 2018. However, the fiscal year in which the UDAY bonds of the states would mature is not clear. For our analysis, we have assumed the fiscal year of maturity would be FY2019, for bonds that are indicated to mature in calendar year 2018. This is applied to all the UDAY bonds analysed in this note.

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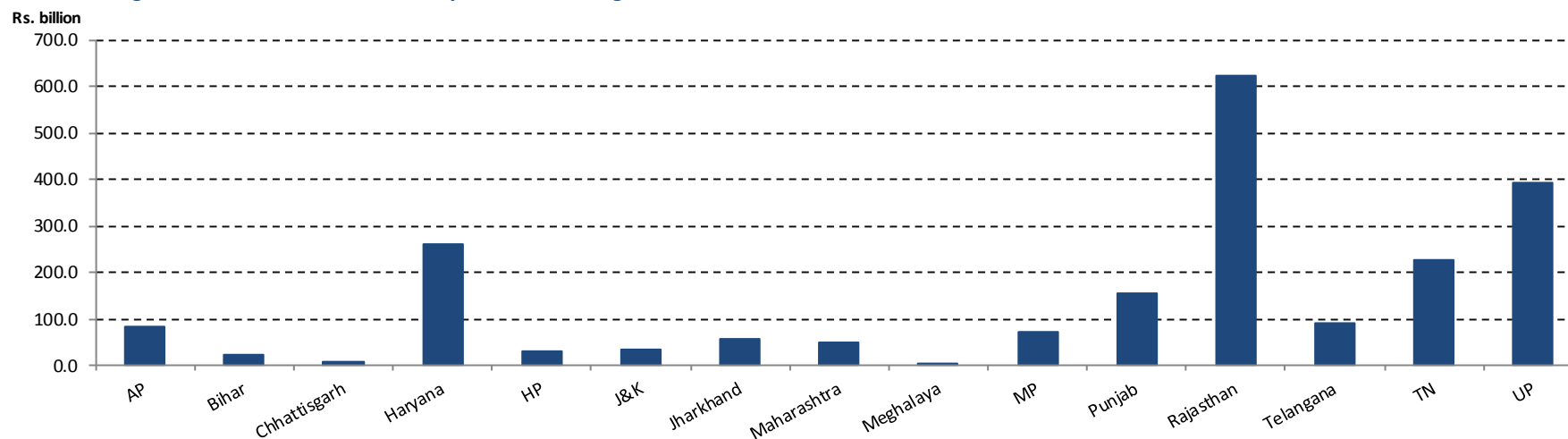
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contrast, the dips in the combined maturity profile of SDL and UDAY bonds in some years, provides scope for issuing fresh SDLs maturing in those years at possibly attractive yields, in addition to smoothening the maturity profile of their combined debt.

On November 5, 2015, the Gol had approved the UDAY scheme with an objective of financial turnaround of the state power distribution corporations (Discoms). The states participating in the UDAY scheme were to take over 75% of the Discom debt outstanding as on September 30, 2015 over two years: 50% in FY2016 and 25% in FY2017⁴, by issuing non-SLR SDL in the market or directly to the existing Lenders holding the Discom debt to the appropriate extent. Moreover, the UDAY scheme permitted the exclusion of the takeover of the UDAY debt for the calculation of fiscal deficit of the states in FY2016 and FY2017.

As many as 27 out of the 29 Indian states (except Odisha and West Bengal) joined the UDAY scheme during FY2016 and FY2017. Moreover, 15 out of these 27 states issued non-SLR UDAY bonds of Rs. 2,107.6 billion (refer Exhibit 1) in FY2016 and/or FY2017. Out of the remaining states, 11 had joined the UDAY scheme with the key objective of improving the operational efficiencies of their Discoms, which did not necessitate issuance of the UDAY bonds. Also, as per the MoU signed by the Ministry of Power, the Government of Assam and the state Discom, the issuance of non-SLR bonds for the state government was optional. As per the publicly available information, the Government of Assam did not issue the UDAY bonds.

Exhibit 1: Magnitude of UDAY bonds issued by 15 states during FY2016 and/or FY2017



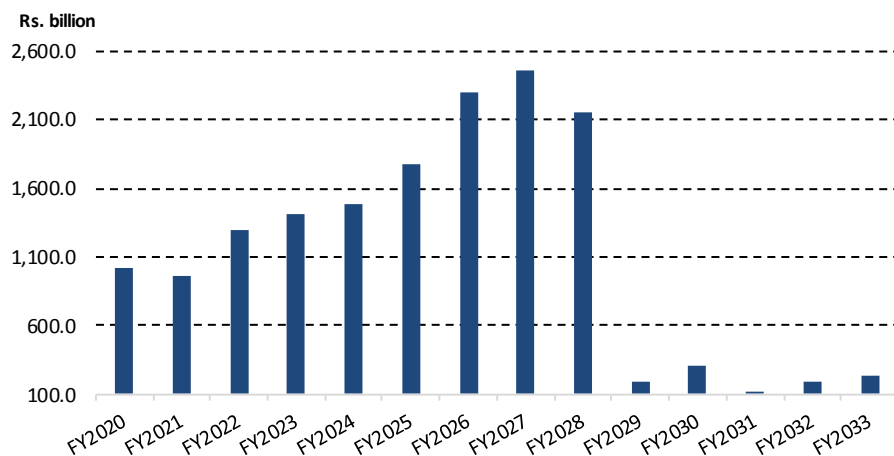
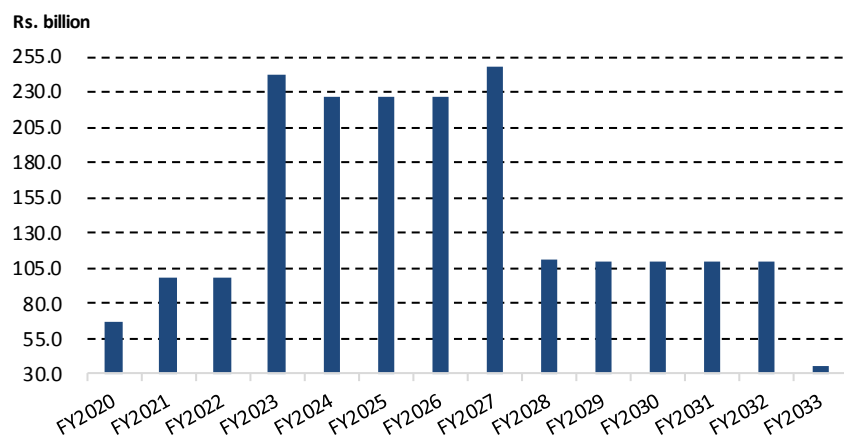
Source: Finance Accounts FY2017 of these state governments; ICRA research

UDAY Bonds and SDL redemption trends: The maturity profile of the UDAY bonds is determined by the magnitude, timing and tenor of the UDAY bonds issued and the moratorium period of such bonds, if any. The maturity of the combined UDAY bonds of these states is spread over 15 years, with a varying moratorium period. The redemption of the UDAY bonds started from FY2018 and will extend up to FY2033. According to the RBI, the total UDAY bonds outstanding of the 15 states stood at Rs. 2,039.1 billion at end March 2018. More than 70% of this stock (equivalent to Rs. 1,434.9 billion) would mature during FY2020 to FY2027. On an aggregate basis, the peak redemption of Rs. 248.1 billion of the combined UDAY bonds across the 15 states would be due in FY2027 (refer Exhibit 2).

⁴ In June 2016, the Gol extended the timeline for taking over 50% of the outstanding debt of Discoms (as on 30th September 2015), by the states by one year from the earlier set date of March 31, 2016. Accordingly, the states were expected to take over 75% of Discom debt outstanding as on September 30, 2015 by FY2017, by issuing non-SLR SDL.

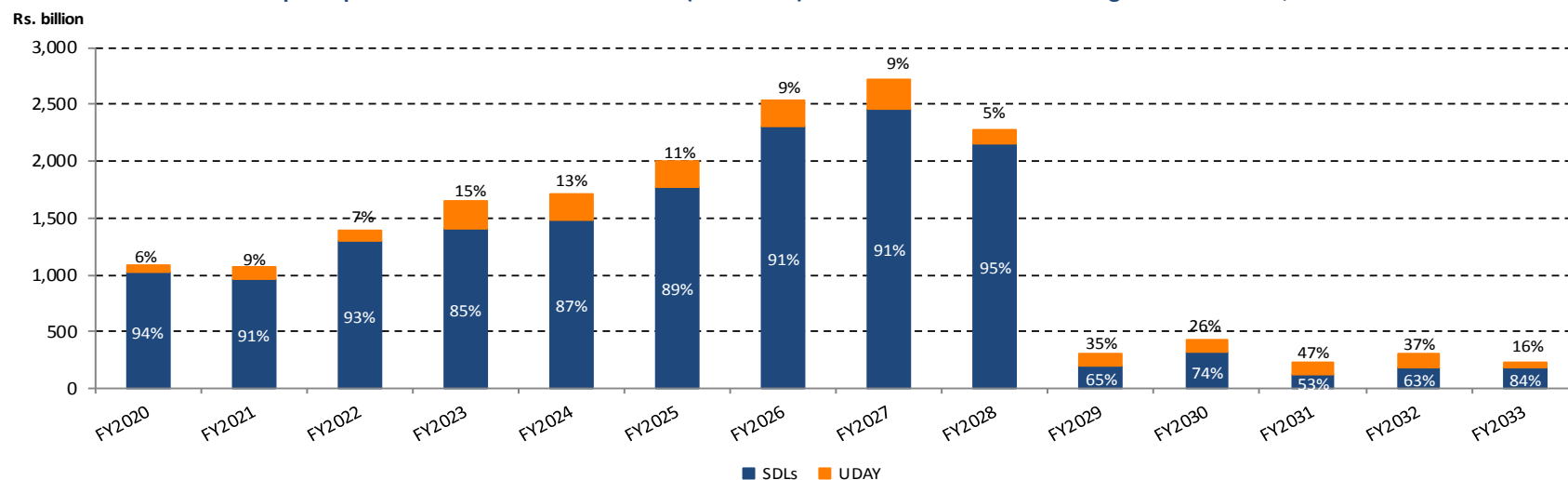
The maturity profile of the SDLs outstanding of a state government is determined by the proportion of its fiscal deficit funded through the SDL in each year and the tenor of the SDLs issued by a state. The maturity profile of the aggregate SDLs of the 15 states in our sub-set indicates a broadly increasing trend during FY2020 to FY2027 (refer Exhibit 3). On an aggregate basis, Rs. 15,942.1 billion SDLs outstanding of these 15 states (as on March 31, 2018) would mature during FY2020 to FY2033, with relatively heavy redemption pressures in FY2025 (Rs. 1,779.2 billion), FY2026 (2,303.6 billion) and FY2027 (Rs. 2,467.9 billion).

Exhibit 2: Aggregate estimated redemption profile of UDAY bonds of 15 states **Exhibit 3: Aggregate SDL redemption profile of these 15 states as on March 31, 2018**



Source: RBI; ICRA research

Exhibit 4: Combined redemption pattern of SDLs and UDAY bonds (estimated) of these 15 states outstanding as on March 31, 2018



Source: RBI; ICRA research

An analysis of the maturity profile of the UDAY bonds of the 15 states indicates sizeable redemption of such bonds during FY2020 to FY2027, which partly coincides with years when the aggregate SDL redemption of the 15 states would be relatively high (refer Exhibit 4). Moreover, if these states issue short-to-medium tenor SDLs in the next few years that would mature by FY2027, such redemption pressure could rise further. For instance, out of the Rs. 1,585.9 billion of SDLs issued by the 15 states in FY2019 (till November 13, 2018), nearly 13% would mature by FY2027.

In ICRA's view, the repayment of the UDAY bonds would exacerbate the redemption pressure and the gross rollover requirements in these years, assuming that the states would resort to market borrowing to repay the UDAY bonds. This may necessitate a larger gross annual borrowing limit to be permitted to the state governments by the GoI⁵. A majority of the years, which would witness a heavy redemption of the UDAY bonds, falls under the award period of the Fifteenth Finance Commission (15th FC; FY2021 to FY2025). The recommendation of the 15th FC regarding the fiscal deficit and the borrowing limit of the states during its award period (and acceptance thereof by the GoI) may alter the aforesaid analysis.

The issuance of fresh SDLs by states with maturity overlapping with the years in which the combined redemption of SDL and UDAY bonds is already high, which would push up their gross borrowing requirement in that specific year, may also lead to an increase in their cost of borrowings. In contrast, the dips in the combined maturity profile of SDL and UDAY bonds in some years, provides scope for issuing fresh SDLs maturing in those years at possibly attractive yields, in addition to smoothening the maturity profile of their combined debt.

State - specific trends: The combined share of the five states, namely, Rajasthan (Rs. 555.7 billion), UP (Rs. 391.3 billion), Haryana (Rs. 259.5 billion), TN (Rs. 228.2 billion) and Punjab (Rs. 156.3 billion) in the total UDAY bonds outstanding of the 15 states, is a substantial 78.0%. Moreover, out of the Rs. 15,942.1 billion SDLs outstanding of these 15 states (as on March 31, 2018) that would mature during FY2020 to FY2033, the combined share of Rajasthan, UP, Haryana, TN and Punjab is estimated at 53.6%, indicating that these five states were among the relatively large issuers of SDLs in the recent past.

Rajasthan issued multiple UDAY bonds during FY2016 and FY2017 aggregating to Rs. 624.2 billion, with coupons ranging between 6.80% -8.39%. Rajasthan UDAY bonds started maturing from FY2018 onwards, and the final maturity of such bonds is expected to be in FY2028. As on March 31, 2018, the Rajasthan UDAY bonds outstanding stood at Rs. 555.7 billion, of which Rs. 66.3 billion each is estimated to mature during FY2020 to FY2027 and a relatively small Rs. 1.7 billion in FY2028 (refer Exhibit 5). The summation of Rajasthan's SDLs and UDAY bonds maturing during FY2020 and FY2028, indicates peak redemption of Rs. 293.4 billion in FY2026. Out of the total estimated redemptions during FY2020 to FY2028 of Rajasthan (based on SDL and UDAY bonds outstanding as on March 31, 2018), the share of UDAY bonds would be in a range of 1% - 37%. ***The combined maturity profile of Rajasthan's SDLs and UDAY bonds outstanding indicate relatively high redemption pressure in FY2025 and FY2026 and scope for issuing shorter tenor SDLs maturing in FY2022, and medium tenor SDLs maturing in FY2027 and FY2028, to smoothen out the maturity profile.***

UP issued multiple UDAY bonds during FY2016 and FY2017 aggregating to Rs. 391.3 billion, with coupons ranging between 8.03% -8.90%. UP UDAY bonds have a moratorium of three years and are estimated to be redeemed over a 12-year period, beginning from FY2021 and ending in FY2033. As on March 31, 2018, the UP UDAY bonds outstanding stood at Rs. 391.3 billion, of which Rs. 32.6 billion is estimated to mature in each year during FY2021 to FY2032 (refer Exhibit 6). The summation of UP's SDLs and UDAY bonds maturing during FY2021 and FY2032, indicates peak redemption of Rs. 491.8 billion in FY2028. Out of the total estimated redemptions during FY2021 to FY2032 of UP (based on SDL and UDAY bonds outstanding as on March 31, 2018), the share of UDAY bonds would be in a range of 7% - 73%. ***The combined maturity profile of UP's SDLs and UDAY bonds outstanding suggests relatively high redemption pressure during FY2026 to FY2028, and scope for issuing shorter tenor SDLs maturing during FY2020 to FY2024.***

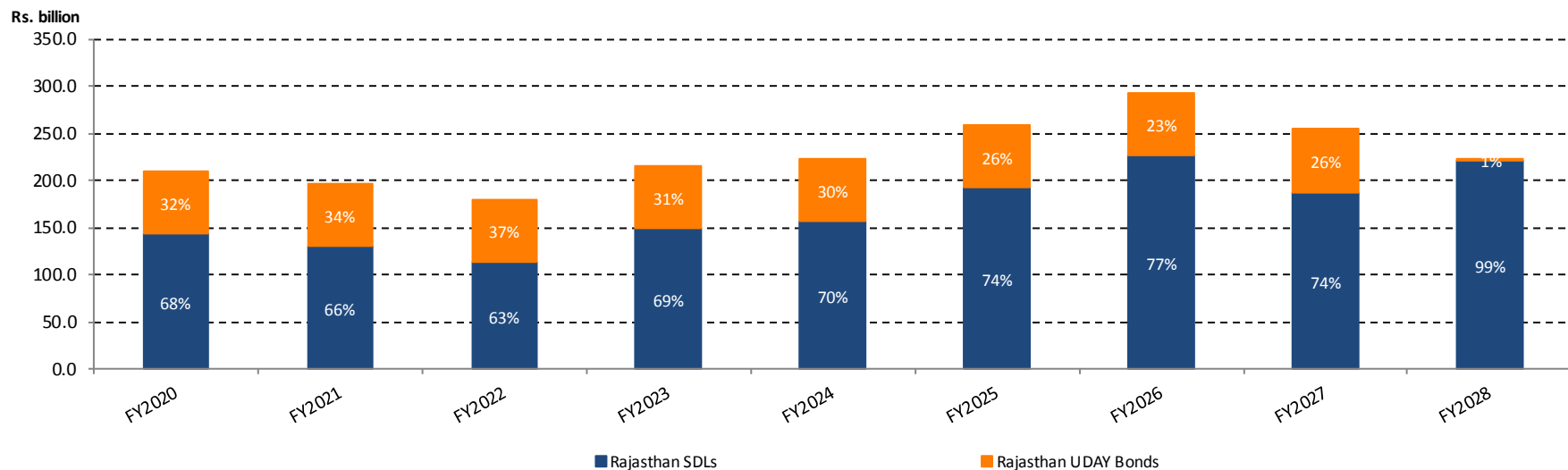
⁵ The market borrowings of the state governments are controlled by the GoI vide Article 293 (3) of the Constitution, which indicates that if a state government is indebted to the GoI, the former is required to take the approval of the latter for any further borrowing. Accordingly, the Ministry of Finance, GoI determines the net and gross borrowing limit of each state government in a fiscal (through multiple sources, which include SDLs, loans from banks and financial institutions, loans from Centre etc.), based on the prevailing norms for that year, and communicates the same to the states.

Haryana issued multiple UDAY bonds during FY2016 and FY2017 aggregating to Rs. 259.5 billion, with coupons ranging between 8.06% - 8.21%, the redemption of which is yet to commence. Rs. 52.0 billion each of the Haryana UDAY bonds are estimated to mature over a five-year period, beginning FY2023 and ending in FY2027 (refer Exhibit 7). The summation of Haryana's SDLs and UDAY bonds outstanding during FY2020 and FY2027, indicates peak redemption of Rs. 244.9 billion in FY2026. Out of the total estimated redemptions during FY2020 to FY2027 of Haryana (based on SDL and UDAY bonds outstanding as on March 31, 2018), the share of UDAY bonds would be in a range of 21% - 26%. ***The combined maturity profile of Haryana's SDLs and UDAY bonds outstanding suggests relatively high redemption pressure during FY2023 to FY2027, while the dips in the maturity profile of Haryana's bonds in FY2020 and FY2022 reveals scope for issuing shorter tenor SDLs maturing in these years.***

TN issued multiple UDAY bonds in FY2017, aggregating to Rs. 228.2 billion, with coupons ranging between 7.67% - 8.24%, the redemption of which is yet to commence. Approximately Rs. 23.0 billion each of the TN UDAY bonds are estimated to mature over a 10-year period, starting from FY2024 and ending in FY2033 (refer Exhibit 8). The summation of TN's SDLs and UDAY bonds due for redemption during FY2020 and FY2033, indicates peak redemption of Rs. 455.5 billion in FY2028. Out of the total estimated redemptions during FY2024 to FY2033 of TN (based on SDL and UDAY bonds outstanding as on March 31, 2018), the share of UDAY bonds would be in a range of 5% - 100%. ***The combined maturity profile of TN's SDLs and UDAY bonds suggest relatively high redemption pressure during FY2025 to FY2028 and scope for issuing shorter tenor SDLs during FY2020 to FY2022, given the dips in maturity profile in those years.***

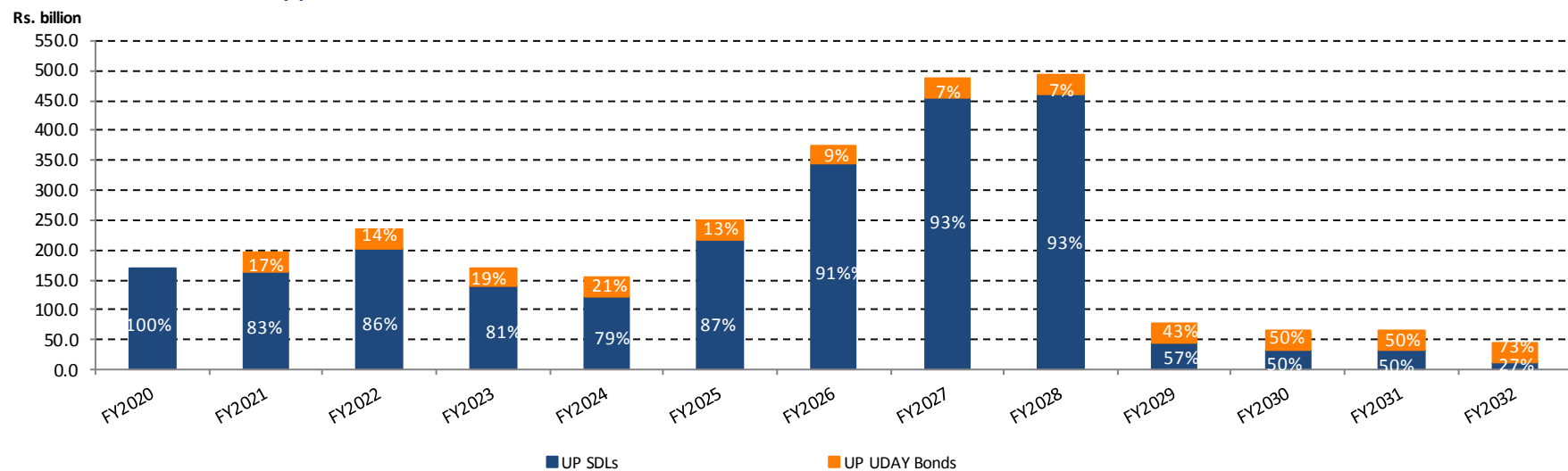
Punjab issued multiple UDAY bonds during FY2017, aggregating to Rs. 156.3 billion, with coupons ranging between 7.21% - 8.72%, the redemption of which is yet to commence. Rs. 21.4 billion of the Punjab UDAY bonds are estimated to mature in each year during FY2023 to FY2027 and Rs. 9.9 billion in each year during FY2028 to FY2032 (refer Exhibit 9). The maturity profile of Punjab's SDLs and UDAY bonds indicates a somewhat uneven maturity profile, with peak redemption of Rs. 194.5 billion in FY2028. Out of the total scheduled redemptions during FY2023 to FY2032 of Punjab (based on SDL and UDAY bonds outstanding as on March 31, 2018), the share of UDAY bonds would be in a range of 5% - 50%. ***The combined maturity profile of the SDL and UDAY bonds outstanding of Punjab suggest relatively high redemption pressure in FY2022 to FY2024, FY2026 and FY2028. However, the dips in the maturity profile of Punjab's bonds in FY2020, FY2021, FY2025 and FY2027, provides scope for issuing SDLs maturing in these years, to smoothen out the redemption pattern.***

Exhibit 5: Estimated Maturity profile of Rajasthan's SDL and UDAY bonds as on March 31, 2018



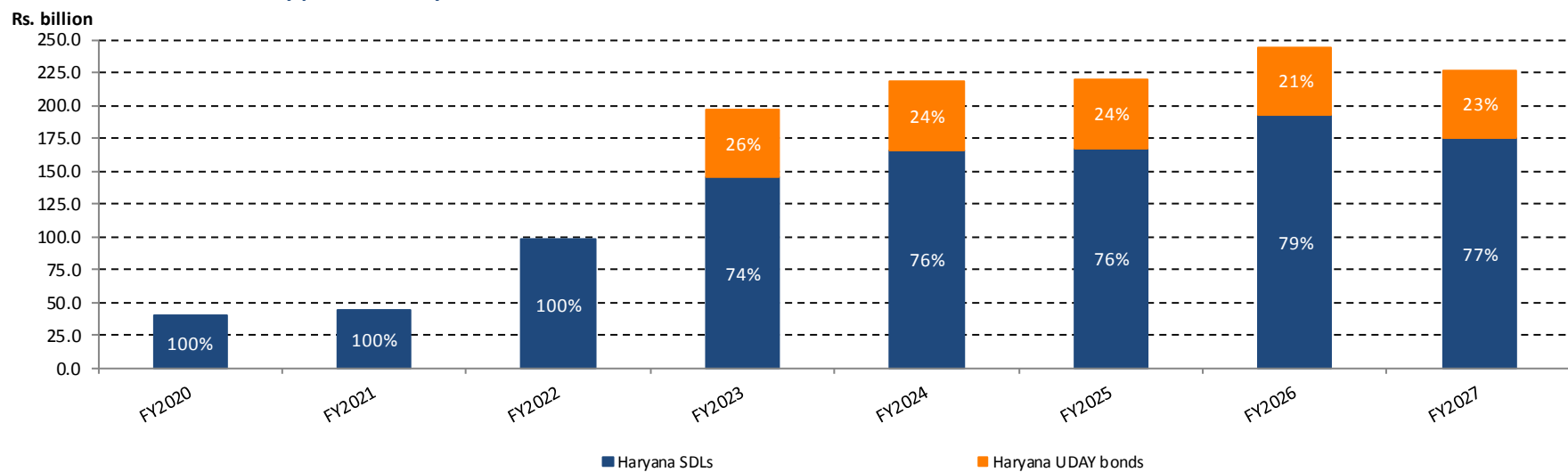
Source: RBI; ICRA research

Exhibit 6: Estimated Maturity profile of UP's SDL and UDAY bonds as on March 31, 2018



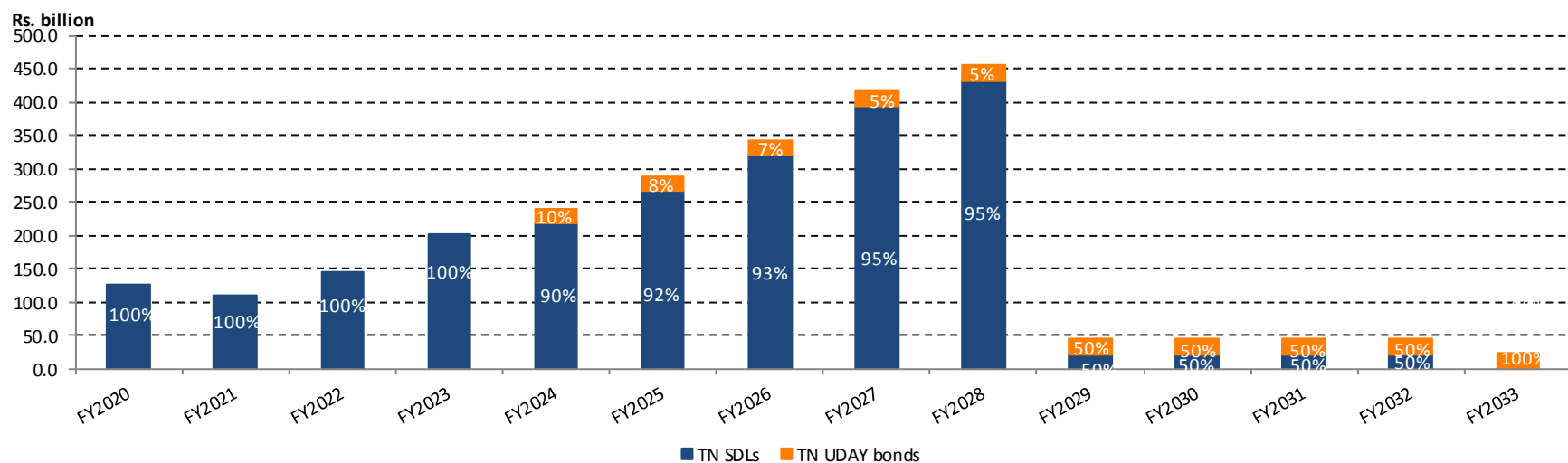
Source: RBI; ICRA research

Exhibit 7: Estimated Maturity profile of Haryana's SDL and UDAY bonds as on March 31, 2018



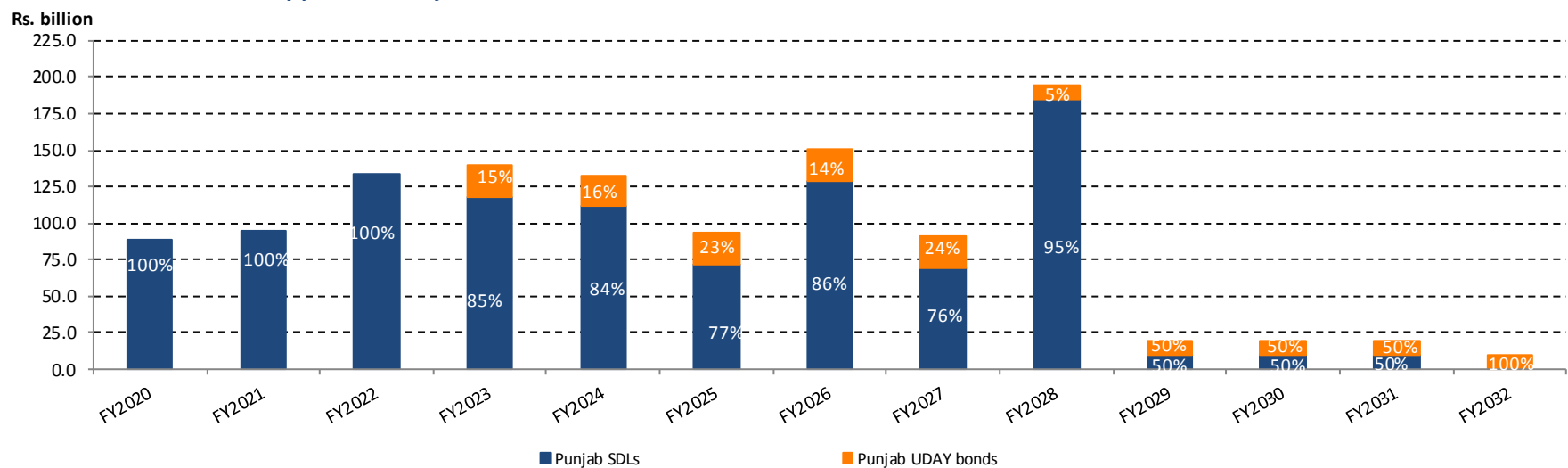
Source: RBI; ICRA research

Exhibit 8: Estimated Maturity profile of TN's SDL and UDAY bonds as on March 31, 2018



Source: RBI; ICRA research

Exhibit 9: Estimated Maturity profile of Punjab's SDL and UDAY bonds as on March 31, 2018



Source: RBI; ICRA research

Exhibit 10: UDAY bonds issued and estimated outstanding in Rs. billion

State Government	UDAY Bonds issued during FY2016 and/or FY2017*	UDAY bonds outstanding as on March 31,2018 ^
AP	82.6	82.6
Bihar	23.3	23.3
Chhattisgarh	8.7	8.7
Haryana	259.5	259.5
HP	28.9	28.9
J&K	35.4	35.4
Jharkhand	55.5	55.5
Maharashtra	49.6	49.6
Meghalaya	1.3	1.3
MP	73.6	73.6
Punjab	156.3	156.3
Rajasthan	624.2	555.7
Telangana	89.3	89.2
TN	228.2	228.2
UP	391.3	391.3
Total	2,107.6	2,039.1

Source: *Finance Accounts of various state governments, Comptroller and Auditor General of India; ^RBI; ICRA research

Exhibit 11: Key details of UDAY bonds and years in which combined redemption of SDL+UDAY bonds would be high and years in which there would be dips

State Government	Amount of UDAY bonds issued (in Rs. billion)	Coupons	Years in which UDAY bonds are estimated to mature	Years of high combined redemption of SDL and UDAY bonds	Years of dips in combined maturity profile of SDL and UDAY bonds
Rajasthan	624.2	6.80% -8.39%	FY2018 to FY2028	FY2025 and FY2026	FY2022, FY2027
UP	391.3	8.03% -8.90%	FY2021 to FY2032	FY2026 to FY2028	FY2020 to FY2024
Haryana	259.5	8.06% -8.21%	FY2023 to FY2027	FY2022 to FY2026	FY2020 and FY2021
TN	228.2	7.67% - 8.24%	FY2024 to FY2033	FY2025 to FY2028	FY2020 to FY2022
Punjab	156.3	7.21% - 8.72%	FY2023 to FY2032	FY2022 to FY2024, FY2026 and FY2028	FY2020, FY2021, FY2025 and FY2027

Source: RBI; Finance Accounts of various state governments; ICRA research



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