

Aug. 23, 2022

This report does not constitute a rating action

Key Takeaways

- Credit profiles could deteriorate for up to 20% of Indian corporate debt, according to our stress test of more than 800 (mostly unrated) companies in India.
- Large rated corporate issuers are generally well placed to withstand rising rates and higher input costs, with renewables more exposed.
- In such a severe stress scenario, we anticipate the nonperforming loans (NPLs) in the banking sector could rise by 50 basis points (bps) to 75 bps; the impact on mortgages should be limited.

Companies analyzed, mostly unrated

Stress scenario

Higher inflation and average increment in interest spreads



Incremental increase in policy rate

Nonperforming loans to rise by

7.3%

Cushioned by India's strong GDP growth



Corporate credit profiles affected

All data is for fiscal 2023. Source: S&P Global Ratings.

Primary analysts

Deepali Seth Chhabria

Mumbai

+ 91-22-3342-4186 deepali.seth@spglobal.com

Geeta Chugh

Mumbai

+ 91-22-3342-1910 geeta.chugh@spglobal.com

Abhishek Dangra

Singapore

+ 65-6216-1121 abhishek.dangra@spglobal.com

Neel Gopalakrishnan

Singapore

+ 65-6239-6385 neel.gopalakrishnan@spglobal.com

Andrew Wood

Singapore

+ 65-6239-6315 andrew.wood@spglobal.com

Research analyst

Christine Ip

christine.ip@spglobal.com

India's companies and banks could feel the bite of rising rates and inflation. In a stress scenario we conducted, credit profiles will deteriorate for companies that account for 20% of the outstanding debt analyzed. This is according to a stress test of more than 800 largely unrated companies in India, representing US\$570 billion in debt.

Rated issuers are generally better cushioned to withstand rising rates and higher input costs. Renewables are relatively more exposed to rising rates due to large capital expenditure (capex). However, we don't expect defaults in our rated portfolio, which also benefits from access to domestic banks and capital markets. Banks will not be immune, but we expect that in the stress scenario NPLs could rise modestly.

Notwithstanding a deterioration in the notional credit profiles of about a fifth of debt S&P Global Ratings stressed, we do not expect large-scale defaults in our stress scenario.

This reflects the following:

- Our expectations of India's continued strong economic growth, which positively affects companies' revenues.
- Policy rates in India are rising from a low base, and most borrowers are accustomed to high interest rates.
- Indian borrowers have strong access to funding from domestic banks, including governmentowned banks, with lower spread volatility than capital markets.
- Significant deleveraging by Indian corporates amid a protracted downturn in the past decade. And in other cases, there are strong financial sponsors or parents who may support a weaker entity. In, for instance, the renewables sector.
- Limited vulnerability to exchange rates.

Healthy Growth Prospects, Despite Some Decline

We expect India's GDP to grow by 7.3% in fiscal 2023 (for year ended March 31, 2023) compared with 7.8% six months ago. The causes of this downward pressure on growth are high oil prices, slowing global demand for India's exports, and of course high inflation. This inflation is eroding the purchasing power of the poor because energy and food account for a chunk of their consumption basket.

Despite this, there are factors supporting growth. A normal monsoon is forecast for the current year. This will prop up agriculture production and help control food inflation. The rebound in contact-based services will also boost growth--especially as COVID-19 vaccination penetration improves and people learn to live with the virus. An improvement in service sector readings over April-June suggests consumer activity has picked up.

Further Rate Rises Loom Off A Low Base

More rate rises are coming, in our view. In response to persistent high inflation, the Reserve Bank of India (RBI) has increased the policy rate by a cumulative 140 bps in the current fiscal year. Despite that, inflation remains higher than RBI's target range of 6% (upper boundary).

We expect consumer inflation of 6.8% for fiscal 2023, and 5.8% for January-March 2023. India's initial rise in inflation was fueled by high fuel and commodity prices. Inflation has since become broad-based and persistent. Consumer demand is weak in many pockets, yet core inflation remains elevated as companies seek to protect margins by passing on rising input costs to consumers. Also stoking inflation is the rebound in contact-based services.

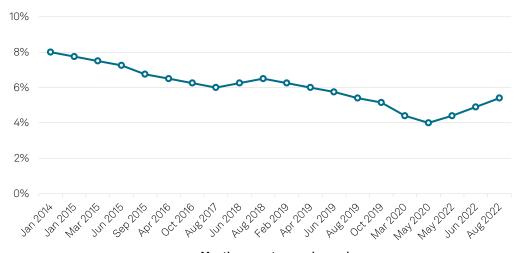
The U.S. Federal Reserve's tapering plan could drive capital outflows from emerging countries including India. This in turn could intensify currency pressures in emerging countries where interest rate hikes fail to catch up with those of the Fed. As such, we expect additional rate rises in the current year, resulting in a cumulative increase of 165 bps in fiscal year ended March 31, 2023. We anticipate a subsequent lowering of 40 bps in the next fiscal year.

Despite the 140 bps rise in 2022 so far, policy rates are well below historical levels. Loans disbursed before 2020 have factored in repayment capacity at much higher interest rates.

Chart 1

Rates Rising, Albeit From A Relatively Low Base

Reserve Bank of India's policy reporate



Month repo rate was changed

Data as of Aug. 5, 2022. Source: Reserve Bank of India.

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Sovereign: Sound External Position And Growth Momentum To Offset The Downside

We believe monetary and growth-related strains will have a modest effect on sovereign credit metrics. Solid external buffers and strong underlying momentum in the economy will mitigate risks of a more pronounced deterioration, in our view. Real GDP growth is likely to moderate as monetary conditions tighten and consumers grapple with higher inflation. However, India's projected growth rate remains among the strongest outcomes that we expect, in the emerging markets universe. This will help prevent a worsening of the government's already weak debt metrics.

India faces a higher current account deficit this year, and external flows are weighing on the rupee's exchange rate versus the dollar. Nevertheless, the country's external balance sheet remains sound, in our opinion. It has ample foreign exchange reserves and limited external sovereign debt.

If India's economy slows down much more dramatically than we expect, or if balance of payments flows are considerably weaker for longer, downside risks may coalesce.

Let's consider a stress scenario that assumes consumer price index inflation and benchmark interest rates are higher than our current forecast by 300 bps and 250 bps, respectively. In this scenario, sovereign ratings would come under additional pressure through economic growth and government debt burden channels. In particular, a substantially higher interest rate environment would raise the government's interest service bill on its large debt stock, which is already elevated, at more than 30% of its annual revenues. The duration of the higher rates environment would be critical. A short-term rates shock is less likely to do lasting damage because the government may opt to issue shorter-term instruments until rates begin to fall again. However, a durable rates shock would have a far greater hit on the sovereign's debt dynamics and would be more material from a ratings perspective.

Corporate Sector: Good Liquidity Supports Credit Profiles

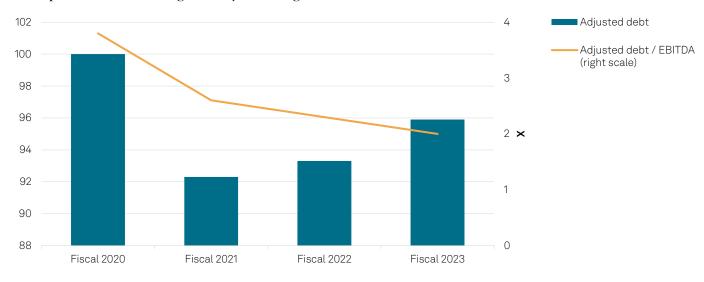
Sector	Interest rate	Inflation	Foreign exchange risk	Overall impact	
Metals and mining	Low	Low to moderate	Low	Low	
IT services	Low	Low	Low	Low	
Pharma and chemicals	Low	Low to moderate	Low	Low to moderate	
Auto	Low	Moderate	Low	Low to moderate	

Source: S&P Global Ratings.

Large rated corporate credits in general have adequate cushion to withstand rising rates, widening credit spreads and increasing input costs. This is mainly due to the significant deleveraging and improvement in operating fundamentals over the past two years. Most companies also do not need meaningful funding for capex or financing, shielding them from the increase in funding cost. Further, only about 30% of debt of the rated issuers is floating rate in nature, limiting the effect of the increase in interest rates.

The liquidity position is generally sanguine. Less than 10% of our rated portfolio is exposed to refinancing risk over the next 12 months. Even in these cases, companies have so far refinanced obligations using well-developed banking relationships without a material increase in funding costs. One example is commodities producer Vedanta Resources Ltd.

Chart 2
Rated Corporate Issuers Have Significantly Deleveraged



Fiscal year ending March 31. Average adjusted debt of rated issuers rebased to 100 using March 2020 debt as a base. Recent 5G telecom auctions a significant factor in increase in debt expectations in fiscal 2023; Source: S&P Global Ratings.

We expect the most pronounced earnings decline to occur in the commodity sector--a fall of about 10%-20% year on year. Earnings will remain above average, however, as the decline is from record levels of profitability in fiscal 2022. For example, following recent price declines, we expect Vedanta's EBITDA to be about US\$5.5 billion in fiscal 2023, compared with US\$6.4 billion in fiscal 2022. This is still at the higher end of its historical profitability. The India operations of Tata Steel Ltd. face a similar decline in earnings. But the upside in earnings from its European operations will likely result in more stable performance.

The other sector that we expect to face earnings pressure is the automobile sector (original equipment manufacturers and ancillaries). This stems from the increase in commodity prices, and the limited ability of companies to pass on cost increases. The earnings of Tata Motors Ltd. also continue to suffer from the chip shortage at subsidiary Jaguar Land Rover Automotive PLC. This is offsetting improving performance at Tata Motors' Indian operations.

Rising input costs are also affecting working capital management in some sectors. For example, deteriorating working capital management led us to downgrade agrochemicals company UPL Corp Ltd. to 'BB+' from 'BBB-'. Wage pressure has so far had a very limited effect on Indian corporates, unlike in many developed markets. The IT sector is likely to see the biggest impact of wage inflation. However, this has no influence on credit quality because of the sector's very low leverage and strong free cash flow generation.

In terms of adverse foreign exchange movements, we estimate only about 10% of the rated portfolio will see earnings decline. This will occur through the import of raw materials or unhedged debt exposure. About 40% of the rated portfolio will benefit from a depreciation of the rupee. The entities are typically commodity companies (metals, chemicals, oil) and IT services providers, which have sizable foreign exchange revenues and usually a cost structure denominated in Indian rupees. Most domestically driven companies with external debt have hedged their exposures.

Infrastructure Sector: Renewables Will Be More Exposed; Regulated Utilities Most Resilient To Macro Tests

Sector	Interest rate	Inflation	Foreign exchange risk	Overall impact
Renewable	Moderate	Low	Moderate	Moderate
Airports	Low to moderate	Moderate	Low to moderate	Low to moderate
Ports	Low	Moderate	Low to moderate	Low to moderate
Regulated utilities	Low	Low	Low	Low

Source: S&P Global Ratings.

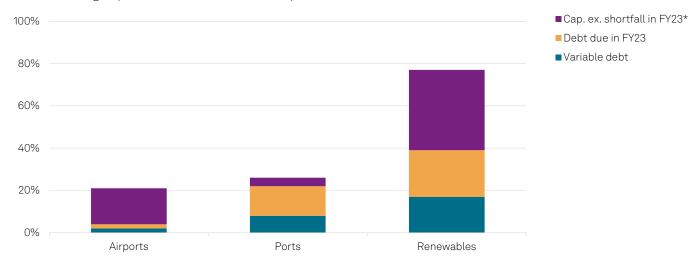
In our stress scenario, the sector most exposed to rising interest rates is renewable energy. Massive capex plans (in most cases multiple times of full-year earnings) and some upcoming refinancing needs will result in a higher-than-anticipated interest burden. This is despite a high proportion of existing fixed rate debt being largely insulated from rising interest rates. We also believe some of the renewable projects undertaken in the past few years were premised on rates remaining low. Returns for these projects will be anemic, if not loss-making. Nevertheless, generally high operating margins will limit damage from inflationary pressures. The high proportion of U.S. dollar-denominated debt with aggressive hedging through call options with knock-in-knock-out options exposes the issuers to higher hedging costs to roll the hedge for higher strike price (hedge falls off on reaching the strike price). We expect all players to remain covered by incremental hedges. But rising hedge costs could further strain weak financials, with the existing ratio of debt to EBITDA at about 7x.

Airports such as Delhi International Airport Ltd. are benefiting from the recovery in domestic and international travel. However, amid the higher rate environment, refinancing and capex needs could put pressure on already weak financial metrics (with interest coverage ratio of about 1x-1.5x). The effect of inflation on high operating leverage could further squeeze margins. Almost all the debt for rated airports is in U.S. dollars. U.S. dollar-linked revenues from duty free sales provide some offset; however, hedging through call options is the primary mechanism for mitigating currency risk. Rising hedging costs as the rupee depreciates closer to knock-out level could increase all-in costs.

Chart 3

Capex Spending Is Exposing Renewables To Rising Interest Rates

Additional funding requirements for rated Indian companies in FY23 (% over FY22 debt)



*Not funded by operating cash flows. Cap. Ex.--Capital expenditure. FY--Fiscal year. Source: S&P Global Ratings.

Ports such as Adani Ports are exposed to inflationary pressures but benefit from long-dated maturities and U.S. dollar-related earnings. This should help mitigate credit risk from margin pressure. We also note that the ports sector is relatively less leveraged (in line with global peers) at about 4x debt to EBITDA--this is less than a debt-to-EBITDA of over 5x for other infrastructure sectors.

We believe regulated utilities (such as NTPC Ltd.) will remain largely protected from macroeconomic factors. This is because the sector's well-established regulatory framework allows for full passthrough of higher interest costs, fuel costs (coal) and foreign exchange risk/hedging costs.

Credit quality could weaken for infrastructure companies that fail to address weakening financial metrics. Massive growth plans will test financial discipline for companies already operating at high leverage and low interest coverage. We expect infrastructure players to focus more on domestic funding to reduce foreign exchange risks and manage funding costs. However, we don't anticipate defaults in the rated portfolio. This is because of the strong sponsors in the renewables sector, the recovering fundamentals for airports, and the robust regulatory framework for regulated utilities.

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The US\$37 Trillion Global Stress Test

Up to 20% of debt by borrowers may face downward transition in notional credit risk tiers (this is based on our evaluation of country, industry, and financial risk of the sample; as partially borrowed from our Corporate Ratings methodology). These are the findings from our stress test of more than 800 Indian nonfinancial companies (97% unrated by count). The scenario comprises 20,000 global corporates (93% unrated) with debt totaling US\$37 trillion. The sample includes 816 Indian corporates with total debt totaling US\$570 billion (see "If Stagflation Strikes, Loss-Making Corporates Will Double Globally," July 12, 2022).

Under this scenario:

- We have assumed additional producer price inflation of 300 bps and stressed interest spreads by 300 bps (on average globally depending on their notional credit risk profile) in addition to a 250 bps rise in the policy rate over our base-case estimates for fiscal 2023.
- We have assumed a nonparallel rise and sharp widening of interest spreads for borrowers with weaker credit profiles. However, we believe interest rate spreads may not widen sharply in India as Indian borrowers are predominantly relying more on bank funding than on capital market funding.
- For inflation, we have assumed that the companies will be able to pass through about 80% of the increase in input costs across geographies, which is further adjusted on a sector-by-sector basis according to our subjective view on each industry.
- We do not shock the total debt book, only the following three components: (1) floating rate debt; (2) new debt coming in; and (3) maturing debt for that year.

In the case of India, we expect 20% of the total sample debt analyzed to transition into weaker notional risk categories, compared with 25% of total debt for the Asia-Pacific sample debt. Nevertheless, borrowers--representing two-thirds of the corporate debt where credit profiles deteriorate--have Government of India ownership and could get government support, if required. In our view, smaller companies to be more affected.

Table 1

India -- Notional Credit Risk Score Transition Rates

Sample info:	2021a	
	Entity count	Debt (US\$ mil.)
1	7	776.9
2	80	11,195.4
3	161	53,725.9
4	235	336,859.3
5	328	162,690.7
6	5	3,935.1
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Scenario:	Severe shock				By sa	mple debt
From/to	1	2	3	4	5	6
1	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	0.0%	90.7%	7.0%	0.0%	2.3%	0.0%
3	0.0%	0.0%	72.3%	13.0%	14.7%	0.0%
4	0.0%	0.0%	1.4%	69.9%	28.7%	0.0%
5	0.0%	0.0%	0.0%	1.2%	95.8%	3.0%
6	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Note: 2021 base data used for study conducted. Across scores 1 to 6, 6 means highest credit risk. Source: S&P Global Market Intelligence, S&P Global Ratings.

Banking Sector: Standing Its Ground

In our base case, we expect the Indian banking sector to solidify its position. We project the sector's weak loans (NPLs and performing restructured loans) will continue to decline to 4.5%-5% of gross loans by March 31, 2024 (see chart 4). This projection takes into account continued resolution and recovery of legacy problem loans. Likewise, we forecast credit costs to normalize to 1.2% for fiscal 2023 and stabilize at about 1.1%-1.2% for the next couple of years. This makes credit costs comparable to those of other emerging markets and to India's 15-year average.

Chart 4
Indian Banks' Asset Quality To Continue Improving To Cyclical Low



Annualized data for Dec. 2021 for credit losses. Data for fiscal years, all ended March 31. FY--Fiscal year. f--Forecast. e--Estimate. Source: RBI, S&P Global Ratings calculation and estimates.

Chart 5

ROAA To Touch An Eight-Year High Of 1%

Systemwide return on average assets



 ${\tt Data\ as\ of\ March\ 31,\ 2022.\ ROAA--Return\ on\ average\ assets.\ f--Forecast.\ Source:\ RBI,\ S\&P\ Global\ Ratings\ estimates.}$

The small and midsize enterprise (SME) sector and low-income households are vulnerable to rising interest rates and high inflation. But, in our base case of moderate interest rate hikes, we view these risks as limited. Likewise, we expect the return on average assets to normalize to 1% in fiscal 2023--an eight-year high (see chart 5). Supporting our base case are India's strong economic growth prospects over the next two to three years, with GDP expanding 6.5%-7% annually in fiscal years 2024-2026.

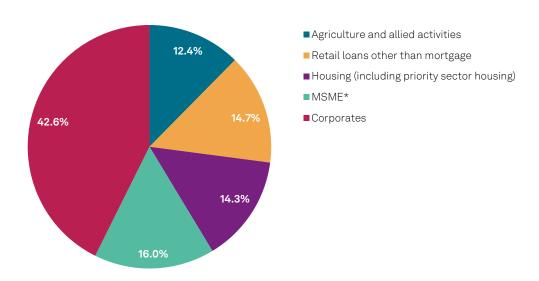
If the macroeconomic circumstances worsen beyond our base case and the stress case as outlined above actually plays out, they could affect:

- Some SMEs. We believe smaller companies are more vulnerable than their larger peers' because the smaller companies may be unable to fully pass on a rise in production and borrowing costs.
- Small and marginal farmers. They will be more affected if rural inflation is high, and we
 expect banks may restructure their loans in cases of extreme weather. However, we believe
 agriculture-related loans, in general, will be less affected, given the forecast of a normal
 monsoon for 2022.
- Within retail, the mortgage holders remain exposed to higher interest rates, though we expect limited impact (see sidebar 2). Those segments that will be more vulnerable include: low-income households, especially those with micro-finance loans; highly leveraged borrowers, or self-employed borrowers with home equity loans for business-end use. Micro-finance loans formed 1% of total advances as of March 2022. Retail loans barring mortgage loans (15% of total loans) are either fixed rate loans or short tenor, and therefore insulated from interest rate hikes.

Chart 6

Limited Exposure To Sectors Facing Elevated Interest Rates And Inflation Risk

Loan composition



 ${\sf Data}\ as\ of\ {\sf May}\ 20,\ 2022.\ {\sf *Estimated}.\ {\sf MSME--Micro},\ small\ and\ midsize\ enterprise}.\ {\sf Source}:\ {\sf Reserve}\ {\sf Bank}\ of\ {\sf India}.$

Mortgages: Cushioning The Blow From Higher Rates

We expect higher rates or elevated inflation to have limited impact on mortgages because of the following mitigating factors.

• Loan tenors in India are relatively short and therefore tenor extensions limit the burden on customers. Indian lenders tend to adjust the impact of interest rate movement via tenor change, rather than changing equated monthly instalments (EMI). The exception is where extended tenor may go beyond retirement age for a person. In this case, the banks may increase the EMI. Consider a typical 12-year tenor home loan--the average at the time of origination for Housing Development Finance Corporation Limited (HDFC), the largest mortgage company in India. A 400 bps rise may lead to an increase in tenor by 2.6 years or to a 22% increase in EMI or a combination of increase in tenor and increase in EMI. We have assumed the interest rate will remain elevated by 400 bps throughout the tenor of the loan, which is unlikely to be the case, and therefore will limit the pain.

Table 2

Impact Of Interest Rate Rise On A Typical Home Loan In India

	150 bps rise	400 bps rise
Increase in tenor	1 year increase	2.6 year increase
Increase in EMI	8%	22%

Source: S&P Global Ratings estimates and calculation.

- Aversion to debt leads to high prepayments. Indian households are generally averse to leverage. This is reflected in the low household leverage to GDP ratio (21%), high equity in the house (median loan-to-value of 70%), low EMI-to-income ratio (median EMI for 2012-2019 of 35%-40%), and high prepayment rates (for example, HDFC's effective tenor on 12-year loans is 5.5 years)
- Rising income and lower unemployment support repayment. After the initial COVID shock, unemployment levels have been declining and wages rising. In the event of severe stress, however, we may see a reversal, which could affect the affordable housing segment.
- The weighted average lending rate on outstanding individual housing loans declined 147 bps from 8.99 per cent in the first quarter of full year 2020 to 7.52 per cent in the first quarter of full year 2022. And we expect the 165 bps rise in our base case to have minimal strain on most borrowers.

In such a stress scenario, there could be only a 50 bps-75 bps increase in the proportion of weak assets and if such a scenario plays out it may delay the normalization in bank asset quality by reversing the improving trend. We believe India's favorable growth prospects are cushioning the impact. In our view, the impact will be higher if this scenario is accompanied by large scale job losses and salary cuts.

Under this scenario, we expect the sharp rise in interest rate will lead to a widening of margins for banks. This is because banks generally have an asset-sensitive book whereby assets are repriced before liabilities. But this gain will be offset by mark-to-market losses and a rise in credit cost. Since a large portion of the trading book is held in the "available for sale" category rather than "held for trading", we expect a major portion of the mark-to-market losses to affect the net worth directly, rather than flowing through to profits. As per the RBI's recent study, a parallel rise of 250 bps in the yield curve would reduce the system core capital levels only modestly--by about 83 bps to 12.6%.

As for the impact of exchange rate volatility, Indian banks are predominantly funded in the domestic market; and their external market borrowings are primarily for further on-lending to Indian corporates for their overseas requirements. So, their asset liability positions are well matched. The impact on banks will be second-order compared with that on corporates. A recent study by the RBI on the outstanding external commercial borrowings (ECBs) of Indian corporates shows 56% are fully hedged. And 22% of the borrowings are by public sector entities, which have a natural hedge or ability to pass through to the government. The remaining 22% of the total ECBs outstanding is in the private sector and a large proportion of these borrowers have a natural hedge—that is, earnings in foreign currencies. This would leave a very small portion of the total outstanding ECBs that are truly unhedged.

We therefore expect that in our stress case scenario Indian companies and banks have significant downside protections.

Related Research

- Global Banks Outlook--Midyear 2022: Tougher Test Ahead, July 21, 2022
- Global Banking Outlook--Midyear 2022: Here Comes The Rain Again, July 21, 2022
- Global Debt Leverage: If Stagflation Strikes, Loss-Making Corporates Will Double Globally, July 12, 2022
- Global Debt Leverage: If Stagflation Strikes, China Corporates Are Most Vulnerable, July 12, 2022
- If Stagflation Strikes, Still-Recovering Corporate Sectors Hit Hardest, July 12, 2022
- Asia-Pacific: Varying Core Inflation Paths Drive Monetary Policy Divergence, July 26, 2022
- Economic Outlook Asia-Pacific Q3 2022: Overcoming Obstacles, June 27, 2022
- Banking Industry Country Risk Assessment: India, May 09, 2022

Editor

Lex Hall

Digital Designer

Halie Mustow

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