

CREDIT OPINION

26 August 2024

Update



RATINGS

Fukuoka Prefecture

Domicile	Japan
Long Term Rating	A1
Туре	LT Issuer Rating - Fgn Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Fukuoka Prefecture (Japan)

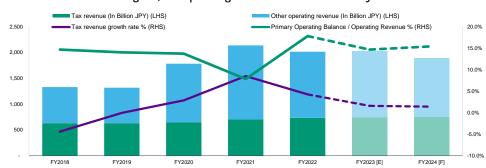
Update to credit analysis

Summary

The credit profile of Fukuoka Prefecture (A1 stable) reflects our view that the rating of the Government of Japan (A1 stable) and those of the regional and local governments (RLGs) in Japan should be at the same level because of their close links. The considerable level of oversight and supervision exercised by the central government, as well as the well-developed equalization system of transfers through the local allocation tax (LAT) system, ensures that any credit issues at the RLG level are identified and addressed early. We also assess that there is a very high likelihood of the Japanese government stepping in to provide immediate assistance in the event of an acute liquidity crisis. Fukuoka Prefecture's credit profile balances its economic diversification, favorable debt structure and our expectation of a recovery in its financial metrics against a high debt burden.

Exhibit 1

Tax revenue continues to grow, but operating revenue declines on subsidy cut



Fiscal year starting in April and ending in March of the following year. Our estimates are based on the budget for fiscal 2023 and 2024.

Source: Moody's Ratings

Credit strengths

- » Strong institutional framework, supported by close relationship with the central government
- » Diversified economy as the center of the Kyushu region
- » Consistent improvement in the debt burden, supported by good spending control

Credit challenges

» High debt burden

Rating outlook

The rating outlook is stable, reflecting the outlook on Japan's sovereign rating.

Factors that could lead to an upgrade

An upgrade of the sovereign rating would lead to an upgrade of Fukuoka Prefecture's rating.

Factors that could lead to a downgrade

A downgrade of Japan's sovereign rating would lead to a downgrade of Fukuoka Prefecture's rating. Furthermore, any policy changes that would significantly weaken the highly centralized system or the level of oversight provided by the central government could exert downward pressure on the prefecture's rating.

Key indicators

Exhibit 2
Fukuoka Prefecture

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023 [E]	FY2024 [F]
Net Direct and Indirect Debt / Operating Revenue (%)	297.8%	304.2%	229.2%	193.2%	200.5%	198.0%	209.2%
Interest Payments / Operating Revenue (%)	2.6%	2.4%	1.7%	1.3%	1.3%	1.3%	1.4%
Primary Operating Balance / Operating Revenue (%)	14.7%	14.0%	13.7%	7.8%	17.8%	14.7%	15.4%
Cash and cash equivalent / Operating Revenue (%)	N/A	N/A	0.4%	1.6%	2.3%	1.9%	2.1%
Capital Spending / Total Expenditures (%)	17.8%	19.8%	14.9%	12.3%	13.9%	13.3%	14.9%
Social Spending / Total Expenditure (%)	4.2%	4.1%	3.2%	2.7%	3.5%	3.3%	4.6%
Population growth rate (%)	0.0%	0.1%	-0.1%	-0.4%	-0.1%	-0.1%	N/A
Nominal GDP growth rate (%)	0.7%	-0.6%	-5.5%	3.2%	3.6%	2.7%	N/A

Fiscal year starts on April 1 and ends on March 31. Fiscal 2023 is Moody's estimate based on the budget, and fiscal 2024 is Moody's projection based on the budget. Sources: Fukuoka Prefecture and Moody's Ratings

Detailed credit considerations

Fukuoka Prefecture's A1 rating combines its Baseline Credit Assessment (BCA) of a2 and a very high likelihood of extraordinary support from the national government in the event of acute liquidity stress.

Baseline Credit Assessment

Strong institutional framework is supported by a close relationship with the central government

RLGs in Japan benefit from a highly developed, predictable and stable institutional framework. This protective arrangement contributes significantly to their credit strength through the central government's oversight of RLGs' performance, as well as the provision of fiscal transfers that reduce fiscal disparities.

RLGs' fiscal performance is overseen by the central government under the New Revival Law, which relies on various fiscal indicators. If an entity's indicators exceed defined thresholds, it is identified as either an "early correcting entity" or a "revival entity", and must then carry out plans to improve its fiscal situation. This law, which covers a wide range of RLG activities, reflects the central government's strong resolve to reduce the risk of a financial crisis at the local level and bolster the local sector's credit risk profile.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Exhibit 3
Fukuoka Prefecture clears all ratios of the New Revival Law

Fiscal 2022	Actual deficit ratio	Consolidated actual deficit ratio	Adjusted debt service ratio	Future adjusted debt burden ratio
Fukuoka Prefecture	-	-	11.20%	250.70%
Require an approval of MIC to issue bond	2.50%	-	18.00%	
Early Correcting Entity	3.75%	8.75%	25.00%	400.00%
Revival Entity	5.00%	15.00%	35.00%	N/A
Average of all prefectures	-	-	10.10%	154.20%

Ratio Explanation¹

In the above table, "-" indicates no such deficit reported. No capital shortage is reported in prefecture's corporate accounts. Sources: Fukuoka Prefecture, Ministry of Internal Affairs and Communications (MIC), and Moody's Rating

Japanese RLGs have limited flexibility with respect to own-source revenue. The country's local tax law determines the tax base available to RLGs and limits the range of permitted tax rates. For each major local tax, RLGs may apply the standard rate or a higher rate, up to a prescribed maximum.

Depending on the tax, the maximum rate is typically 10%-50% higher than the standard rate. However, in some cases, such as the inhabitants tax on individuals and property tax, there is no legal maximum. While an RLG may impose a tax not specified in the local tax law, it must be first approved by the Ministry of Internal Affairs and Communications (MIC).

Because of insufficiency in the central government's tax revenue, which is used to fund LAT, the central government has allocated a specific amount of rinzai-sai debt (an operating debt approved by the MIC), which is to be issued by the RLGs in place of LAT cash transfers from the central government. The larger RLGs, in particular, have been apportioned larger rinzai-sai amounts because the market access of small RLGs is more limited.

The amounts required to service rinzai-sai debt will be included in each RLG's future LAT subsidy. However, as the central government has recorded shortfalls in sources that fund LAT, we are monitoring the sustainability of the LAT transfer model, including the debt-servicing costs for rinzai-sai. Notwithstanding a temporary disruption during the pandemic, rinzai-sai debt issuance has slowed over the past few years along with an improvement in the local tax revenue, allowing for a reduction in the fiscal transfers to cover shortfalls.

During the pandemic, the central government provided various forms of support to the RLGs, such as subsidies to cover pandemic-related expenditure or to support local businesses, which limited the negative pressure on RLGs' finances.

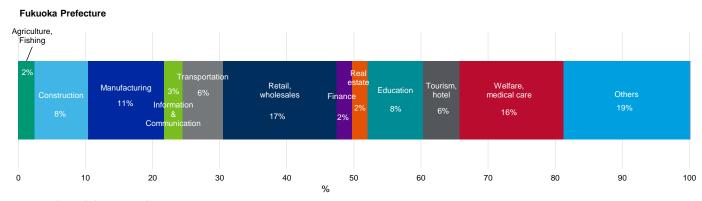
In addition, inflationary pressures from a weak yen and higher energy prices have had a limited effect on the RLGs because of government subsidies that supported affected local businesses and households.

Fukuoka Prefecture benefits from a diversified regional economy as the center of the Kyushu region

Fukuoka Prefecture's economy is the largest of the seven prefectures located in the Kyushu region. The prefecture's GDP (around ¥20.1 trillion for the fiscal year that ended March 2023 [fiscal 2022]) accounts for about 40% of the region's GDP and more than one-third of the region's total population, which was 5.1 million as of March 2024. The prefecture's population started to decrease marginally from fiscal 2020, as the population of all districts and cites except Fukuoka City (A1 stable) declined. Fukuoka Prefecture's unemployment rate is higher than the national average of 2.6%, which contributed to its lower GDP per capita than that of peers.

Fukuoka Prefecture's GDP per capita is about 10% lower than the national average, as well as that of other export-oriented manufacturing centers, such as Shizuoka (A1 stable) and Hiroshima (A1 stable) prefectures. However, Fukuoka Prefecture's economic diversity (see Exhibit 4) is a credit strength despite its lackluster GDP per capita.

Exhibit 4
Fukuoka Prefecture has a diversified industrial structure
Employment by industry, 2020



2020 census basic tabulation on employment status. Sources: Statistic Bureau of Japan and Moody's Ratings

Fukuoka Prefecture has two international airports. One of them is Fukuoka Airport that is well connected to the center of Fukuoka City by subway, while Kitakyushu Airport has direct flights to and from China and South Korea. The prefecture also hosts Ha Port, which recorded the highest volume of international passenger traffic in Japan before the pandemic began.

Lower wages than the national average, together with a good access network and supportive RLG policies, have attracted large manufacturers to the Kyushu region, where they have built production facilities, which in turn has attracted migrants to Fukuoka prefecture. The largest share of migrants came from abroad, accounting for 20% of total migrants. Fukuoka Prefecture is the 10th most populated prefecture in terms of foreign residents, and has the highest growth rate.

Fukuoka Prefecture and the northern part of the Kyushu region have also become an established center for automotive manufacturing. The prefecture is also promoting the expansion of its industrial base to new sectors such as aerospace, renewable energy and hydrogen, which will help support its tax base and the shift to decarbonization.

Financial metrics will recover with higher revenue

Japanese prefectures in general have a higher proportion of corporate tax, which is more vulnerable to cyclicality, in their tax composition than that of municipalities. Fukuoka Prefecture's corporate tax revenue accounts for around 25% and personal income tax around 19% of its tax revenue based on its fiscal 2024 initial budget, while these rates for municipalities are less than 10% and 40%, respectively.

For fiscal 2022, tax revenue was ¥734 billion, the highest ever recorded and 4.3% higher than in fiscal 2021. On the other hand, total operating revenue declined by 5.7% in fiscal 2022, reflecting the reduction in the central government subsidies that were provided for pandemic-related expenditure.

The central government's subsidy cut meant a reduction in the prefecture's spending to support lower-tier municipalities in mitigating the effect of the pandemic. Together with increased local tax revenue, the prefecture's primary operating margin, as measured by its primary operating balance as a percentage of operating revenue, improved to 17.8% from 7.8% in fiscal 2021.

The liquidity generated from operations was sufficient to cover capital spending and reduce net debt balance. In fiscal 2022, the prefecture also increased the balance of its fiscal adjustment fund by ¥11 billion to improve the liquidity ratio to 2.3% from 1.6% in fiscal 2021.

We estimate tax revenue growth of 1.6% in fiscal 2023 and 1.4% in fiscal 2024, reflecting continuous economic recovery and moderate inflation. Total operating revenue will stay flat in fiscal 2023, but will decline in fiscal 2024 because of a further reduction in subsidies.

For fiscal 2023 and 2024, the operating margin will decrease from that in fiscal 2022 but remain higher than the pre-pandemic level, sustained by growing tax revenue. The prefecture will continue to reduce debt through liquidity. It has historically recorded stable

capital spending for maintenance and disaster control, and plans to finance part of the capital spending through its fiscal adjustment fund. We estimate the liquidity ratio to be around 2.0% for fiscal 2023 and fiscal 2024, which is around the average for the rated prefectures in Japan, indicating Fukuoka Prefecture's sustainable liquidity management.

Debt burden is set to decrease gradually but will remain high

At close to 300% historically, Fukuoka Prefecture's debt burden, measured by net direct and indirect debt as a share of operating revenue, is comparable with that of other rated Japanese prefectures, but is higher than that of designated cities in Japan and international peers we rate. Its rinzai-sai debt accounted for around 35% of its total net debt for the fiscal 2022.

We include rinzai-sai debt when calculating the prefecture's debt burden metric, although we recognize that this debt resulted from the central government's inability to fund LAT with cash transfers and not because the prefecture was fiscally irresponsible. The effect of this debt on the prefecture's BCA is mitigated by the fact that the MIC treats rinzai-sai as debt to be subsidized through future LAT transfers, and the amount of rinzai-sai debt issued by each RLG is determined by a mechanical formula that tends to generate heavier debt levels for larger RLGs whose market access is deemed as excellent. These larger RLGs include Fukuoka Prefecture. As such, the level of rinzai-sai debt does not strictly reflect the actual fiscal position of Fukuoka Prefecture.

For the past 10 fiscal years to the fiscal 2021, the prefecture's net debt balance has been growing marginally by 2% year over year to support capital spending to address disaster recoveries following heavy rains and subsequent preventive investments as the region is prone to natural disasters, such as typhoons and heavy rains, which are becoming more frequent and severe. Other than these fortification projects, the prefecture has a plan for New Fukuoka Art Museum, with a total budget of ¥18.3 billion from fiscal 2021 to fiscal 2028.

Fukuoka Prefecture had planned to reduce the debt in the previous Fiscal Reform Plan covering fiscal 2017-21. However, total net debt increased by 7.2% during this period, mainly because of the above-mentioned spending related to disaster recoveries.

For fiscal 2022, the prefecture's net debt balance was ¥3.8 trillion, down 2.0% from fiscal 2021, supported by higher tax revenue and good liquidity management. This is the first time the prefecture managed to reduce its debt in the past decades, with a slightly better fiscal year-end debt balance than that projected under the Fiscal Reform Plan announced in 2022 (fiscal 2022-2026).

We estimate tax revenue will keep growing in fiscal 2023 and fiscal 2024, generating stable liquidity to cover the ongoing capital spending plan. A part of the capital spending will be funded through the subsidies from the cental government as well as fund reserve, hence we estimate the prefecture will continue to reduce its debt balance as planned in its budget, at a faster pace than that incorporated in the Fiscal Reform Plan.

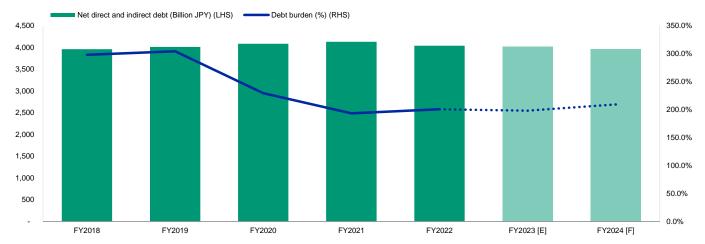
Meanwhile, the debt burden will stay unchanged at 200% in fiscal 2023 and will be higher in fiscal 2024 as operating revenue changes by subsidies.

The long tenors of Fukuoka Prefecture's debt and its good market access mitigate the effects of its high debt burden. The prefecture's debt comprises mostly long-term, fixed-rate bonds or bank borrowings. Fukuoka Prefecture also benefits from favorable capital market conditions, relatively lower interest rates and investors' appetite for debt with longer maturities. Fukuoka Prefecture also funds itself through public resources, such as the central government and <u>Japan Finance Organization for Municipalities</u> (A1 stable), as well as regional banks, with which it has long-standing relationships.

The prefecture continues to work to improve efficiencies and generate efficiencies through the Fiscal Reform Plan 2022 (fiscal 2022-26). It aims to generate ¥125 billion of savings during the five years by streamlining operations, reducing cost and securing new revenue.

Exhibit 5

Debt balance will decline, but debt burden will be stable



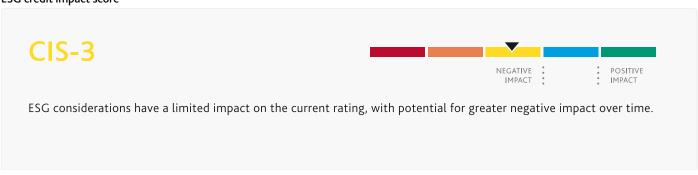
Fiscal year starting in April and ending in March of the following year. Our estimates are based on the budget for fiscal 2023 and 2024. Source: Moody's Ratings

Fukuoka Prefecture, in collaboration with Kitakyushu City and Fukuoka City, was designated a "Green Asia International Strategy Special Zone" by the central government in December 2011. It is working toward strengthening the international competitiveness of its industries based on environmental considerations and developing a production base for environmentally friendly products.

ESG considerations

Fukuoka Prefecture's ESG credit impact score is CIS-3

Exhibit 6
ESG credit impact score



Source: Moody's Ratings

Fukuoka Prefecture's ESG Credit Impact Score is (**CIS-3**). Fukuoka Prefecture's CIS is constrained by Japan's social risk – mainly ageing, declining demographics – which presents potential weakness over time in the central government's capacity to provide support through its institutional framework, which includes the equalization system. Nevertheless, this strong and predictable institutional framework for Japanese RLGs and the central government's support mechanisms for disaster recovery currently mitigate Fukuoka Prefecture's ESG risks.

Exhibit 7
ESG issuer profile scores



Source: Moody's Ratings

Environmental

We assess Fukuoka Prefecture's exposure to environmental risks as (**E-3** issuer profile score), with neutral to low exposures in all environmental categories except on physical climate risk at moderately negative. Our score on physical climate risk reflects Japan's exposure to natural disasters, such as typhoons or heavy rains, that could become more frequent and severe from climate change. However, preventative measures, such as infrastructure fortification, diminish the economic and fiscal impact.

Social

Our overall assessment of social risk exposure is (**S-4** issuer profile score), mainly reflecting declining demographics along a nationwide trend, although Fukuoka Prefecture does have some in-migration as the economic center of the region, which is also supported by the access to high quality education. It also benefits from high quality basic services from a well-developed infrastructure as well as health and safety.

Governance

Fukuoka Prefecture's governance (**G-1** issuer profile score) reflects a strong institutional structure with regards to the central government, featuring a stable and predictable cash transfer equalization system. Governance is also supported by strong policy credibility and effectiveness, transparency and disclosure and budget management.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Extraordinary support considerations

The very high likelihood of extraordinary support from the central government reflects our assessment of Japan's highly centralized system of RLGs, and Japan's unique history of risk socialization.

Rating methodology and scorecard factors

The assigned BCA of a2 is in line with the scorecard-indicated outcome.

Exhibit 8
Fukuoka Prefecture
Regional and local governments

Baseline Credit Assessment – Scorecard	Score	Value	Sub-factor Weighting	Sub-factor Score	Factor Weighting	Total
Factor 1: Economy					25%	1.03
Regional Income [1]	5.75	42577.88	15%	0.86		
Economic Growth	9.00	baa	5%	0.45		
Economic Diversfication	3.00	aa	5%	0.15	,	•
Factor 2: Institutional Framework and Governance		·			30%	0.90
Institutional Framework	3.00	aa	15%	0.45		
Governance	3.00	aa	15%	0.45		
Factor 3: Financial Performance					20%	1.35
Operating Margin [2]	4.58	17.80%	10%	0.46		
Liquidity Ratio [3]	16.85	2.27%	5%	0.84		
Ease of Access to Funding	1.00	aaa	5%	0.05		
Factor 4: Leverage					25%	2.17
Debt Burden [4]	11.81	200.50%	15%	1.77		
Interest Burden [5]	3.94	1.31%	10%	0.39		
Preliminary BCA Scorecard-Indicated Outcome (SIO)						(5.88) a2
Idiosyncratic Notching						0.0
Preliminary BCA SIO After Idiosyncratic Notching						(5.88) a2
Sovereign Rating Threshold		_				A1
Operating Environment Notching		-				0.0
BCA Scorecard-Indicated Outcome			•			(5.88) a2
Assigned BCA		_				a2

^[1] Regional GDP per capita in terms of purchasing power parity (PPP) terms, in international dollars

- [2] Primary Operating Balance / Operating Revenue
- [3] Cash and Cash Equivalents / Operating Revenue
- [4] Net Direct and Indirect Debt / Operating Revenue
- [5] Interest Payments/ Operating Revenue

Source: Moody's Ratings: Fiscal 2022

Ratings

Exhibit 9

Category	Moody's Rating		
FUKUOKA PREFECTURE			
Outlook	Stable		
Baseline Credit Assessment	a2		
Issuer Rating	A1		
Senior Unsecured	A1		
Source: Moody's Ratings			

Endnotes

1 The 'Actual deficit ratio' represents the magnitude of the deficit occurring in an RLG's general account, the principal account of RLGs, as a percentage of their standard fiscal revenue. The 'Consolidated actual deficit ratio' refers to the magnitude of the deficit occurring across all accounts of an RLG, including public companies such as public hospitals and sewage services, expressed as a percentage of the standard fiscal revenue. The 'Adjusted debt service ratio' indicates the magnitude of the repayment amount (public bond cost including interest) of borrowings (local bonds) by RLGs as a percentage of their standard fiscal revenue. The 'Future adjusted debt burden ratio' shows the size of the current debt, including borrowings (local bonds) and other liabilities, that RLGs are carrying as a percentage of their standard fiscal revenue. Standard fiscal revenue or "Hyoujyun zaisei kibo" refers to the total of the regular general financial resources of RLGs, including tax revenue and the Local Allocation Tax, to which the issuance limit for Rinzai-sai debt is also added. The detailed calculation method is available on the MIC website. The ratios are audited by the RLG before announcement.

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