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SUPPLEMENTARY INFORMATION

UPDATE ON QUÉBEC'S ECONOMIC AND
FINANCIAL SITUATION – FALL 2023

SUPPLEMENTARY INFORMATION

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1. MARGINS OF PRUDENCE, SENSITIVITY ANALYSES AND MAIN RISKS TO QUÉBEC'S FINANCIAL SITUATION

❑ Margins of prudence

The provisions included in the financial framework total \$2.5 billion through 2027-2028:

- a Contingency Fund reserve amounting to \$1.0 billion from 2023-2024 to 2027-2028, or \$200 million per year, to respond to an unexpected increase in expenditure;
- a contingency reserve of \$1.5 billion over five years, which could mitigate the effects of a sharper-than-expected economic slowdown in the current year and uncertainty that could affect longer-term forecasts.

TABLE 1

Margins of prudence (millions of dollars)

	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	Total
Contingency Fund reserve	200	200	200	200	200	1 000
Contingency reserve	500	—	—	500	500	1 500
TOTAL	700	200	200	700	700	2 500

❑ Risks and sensitivity analyses in the context of high inflation

Economic activity in Québec, like elsewhere in the world, is evolving in an uncertain environment. Several risks, both upside and downside, could impact the economic outlook in the coming months. In particular, inflation and the monetary authorities' ability to contain it are significantly increasing the uncertainty around the parameters and assumptions on which the forecasts are based for the various components of the financial framework. Consequently, the sensitivity-analysis results presented in this section could be substantially different from those initially anticipated.

❑ Risks and sensitivity analysis for own-source revenue

■ Risks

The own-source revenue forecasts for 2023-2024 and subsequent years include a certain level of risk and uncertainty, and are based on assumptions tied to future events, such as controlled inflation and lower interest rates as of spring 2024. Nevertheless, there are a number of risks that could influence the anticipated developments in the economy in 2023 and 2024, including a greater-than-expected tightening of monetary policy or a different shift in inflation.

For example, the forecast for corporate tax revenue is marked by a considerable level of uncertainty owing to a combination of several economic, decision-making and administrative factors such as:

- the legal framework, which allows businesses to make choices regarding taxation, in particular the utilization of deferred losses;
- the possibility of adjusting instalment payments over the course of the year;
- the deadline for filing and processing tax returns, which affects the recognition of corporate taxes.

■ Sensitivity analysis

In general, the nominal GDP forecast is a good indicator of growth in own-source revenue¹ given the direct link between tax bases and nominal GDP.

- According to the overall sensitivity analysis, a variation of 1 percentage point in nominal GDP has an impact of about \$1.0 billion on the government's own-source revenue.

This sensitivity analysis is based on an adjustment of each tax base in proportion to the adjustment of nominal GDP.

- In reality, a change in the economic and geopolitical outlooks can have a greater impact on certain economic variables, affecting some tax bases more than others.

Sensitivity analyses set an average historical relationship between the change in own-source revenue and growth in nominal GDP. However, although they remain valid, these trends may not be confirmed for a specific period due to exceptional events or particular economic circumstances.

- In fact, economic fluctuations may have different impacts on revenue because of changes in the behaviour of economic agents.
- In these situations, the change in own-source revenue can be higher or lower than the change in nominal GDP.

TABLE 2

Sensitivity of own-source revenue excluding revenue from government enterprises to major economic variables

Variables	Variation forecasts for 2023	Impacts for fiscal 2023-2024
Nominal GDP	4.0%	A variation of 1 percentage point changes own-source revenue ⁽¹⁾ by about \$1.0 billion.
Wages and salaries	5.5%	A variation of 1 percentage point changes personal income tax revenue by about \$435 million.
Employment insurance	-13.1%	A variation of 1 percentage point changes personal income tax revenue by about \$6 million.
Pension income	5.0%	A variation of 1 percentage point changes personal income tax revenue by about \$65 million.
Net operating surplus of corporations	-6.7%	A variation of 1 percentage point changes corporate tax revenue by about \$60 million.
Consumption excluding food expenditures and shelter	6.9%	A variation of 1 percentage point changes QST revenue by about \$220 million.
Residential investment	-16.5%	A variation of 1 percentage point changes QST revenue by about \$35 million.

(1) Own-source revenue excluding revenue from government enterprises.

¹ Own-source revenue excluding revenue from government enterprises.

❑ Risks and sensitivity analysis for revenue from government enterprises

■ Risks

The forecasts for government enterprises depend on the information available when they are produced. As a result, updating information may affect forecasts.

In addition, it must also be borne in mind that certain variables, such as those concerning weather conditions, are difficult to forecast.

■ Sensitivity analysis

For Hydro-Québec, a variation of:

- 1.0 US¢/kWh in the price of energy on foreign markets changes its annual net earnings by about \$85 million;
- 1°C in winter temperatures compared to normal temperatures changes its net earnings by about \$85 million.

For Loto-Québec, a 1% variation in sales changes its net earnings by over \$10 million.

For the Société des alcools du Québec, a 1% variation in sales changes its net earnings by nearly \$20 million.

For Investissement Québec, a variation of 1 percentage point in interest rates changes its net earnings by nearly \$5 million.

For the Société québécoise du cannabis, a 1% variation in sales changes its net earnings by nearly \$2 million.

❑ Risks and sensitivity analysis for federal transfers

■ Risks

The primary risk associated with the equalization forecast concerns the estimation of the per capita fiscal capacity of each province, given that the federal government does not publish forecasts for equalization payments by province.

Moreover, the main risks associated with the forecast for revenue from the Canada Health Transfer (CHT) and the Canada Social Transfer (CST) concern the estimation of the value of the special Québec abatement² as well as the estimation of the population of the provinces and territories.

² Québec's CHT and CST revenues are deducted from a portion of the value of the special Québec abatement (13.5% in the case of basic federal income tax collected in Québec, of which 62% is attributed to the CHT and 38% to the CST).

■ Sensitivity analysis

Equalization, CHT and CST revenue forecasts are primarily based on the following economic and demographic variables:

- growth in Canada's nominal GDP;
- growth in wages and salaries used in the forecast for basic federal income tax;
- growth in the net operating surplus of corporations used in the forecast for taxable corporate income;
- Québec's share of the population among the provinces as a whole.

Sensitivity analyses may not apply for a given year because of special economic conditions or federal government changes in the way equalization, the CHT or the CST operate.

Moreover, the sensitivity analysis of equalization revenue is based on an increase of 1 percentage point in the growth of Québec's economic variables, without any impact on those of the other provinces.

TABLEAU 3

Sensitivity of federal transfer revenue to major economic and demographic variables

Variables	Forecasts for 2023	Impacts for fiscal 2023-2024
Growth in Canada's nominal GDP	1.8%	An increase of 1 percentage point raises equalization revenue ⁽¹⁾ by about \$25 million. An increase of 1 percentage point raises CHT revenue ⁽¹⁾ by about \$35 million.
Growth in wages and salaries in Québec	5.5%	An increase of 1 percentage point reduces equalization revenue ⁽²⁾ by about \$120 million. An increase of 1 percentage point reduces CHT and CST revenue by about \$55 million.
Growth in the net operating surplus of corporations in Québec	-6.7%	An increase of 1 percentage point reduces equalization revenue ⁽²⁾ by about \$30 million.
Québec's share of the Canadian population	22.1%	An increase of 0.1 percentage point raises equalization revenue ⁽²⁾ by about \$105 million. An increase of 0.1 percentage points raises CHT and CST revenue by about \$65 million.

(1) Equalization and CHT envelopes for 2023-2024 were set in December 2022 by the federal government and will not be revised. Increased growth in 2023 would have an impact as of 2024-2025.

(2) Due to the two-year lag in the equalization formula, increased growth in 2023 would have an impact as of 2025-2026. The impact of this increase for the years 2023-2024 and 2024-2025 would be nil.

□ **Risks and sensitivity analysis for portfolio expenditures**

■ **Risks**

Several factors can affect the expenditures of a departmental portfolio. These factors include, in particular:

- a change in clientele, such as recipients of last-resort financial assistance or the student population in educational institutions;
- technological changes, which particularly affect the cost of drugs and medical equipment for performing diagnostics;
- an insufficient workforce, in the context of a shrinking labour pool, which limits the government's ability to implement its programs;
- changes in the general level of prices, which affect each of the government's portfolios differently;
- the emergence of new needs among the Québec population.

The accuracy of forecast remuneration expenditures is improved when the remuneration of government employees is governed by agreements. Since several collective agreements end on March 31, 2023, remuneration expenditures could differ from forecasts starting in 2023-2024.

■ **Sensitivity analysis**

The financial framework's forecasts take into account:

- budgetary choices, which stem from prioritizing certain sectors over others in allocating spending;
- economic and demographic variables, which are tied to price factors (inflation) and demographic factors (changes in population).

The following two tables show the sensitivity of portfolio expenditures according to budgetary choices and socioeconomic factors.

- It should be noted that such data are indications, and that impacts may vary depending on the nature and interaction of risk factors.

■ **Budgetary choices**

Spending may vary according to the choices made by the government in allocating its available budgetary resources.

For fiscal 2023-2024, therefore, a 1% variation in expenditures in the:

- Santé et Services sociaux portfolio would lead to a variation of about \$590 million;
- Éducation portfolio would lead to a variation of about \$200 million;
- Enseignement supérieur portfolio would lead to a variation of about \$100 million.

TABLE 4

Sensitivity of expenditures to a 1% variation for the key portfolios
(millions of dollars)

	Impacts for fiscal 2023-2024
Santé et Services sociaux	590
Éducation	200
Enseignement supérieur	100
Famille	80
Transports et Mobilité durable	70
Emploi et Solidarité sociale	50
Affaires municipales et Habitation	50
Économie, Innovation et Énergie	40
Environnement, Lutte contre les changements climatiques, Faune et Parcs	20
Other portfolios	190
TOTAL	1 400

Note: Totals may not add due to rounding.

■ **Socioeconomic factors**

The analysis carried out also makes it possible to estimate the sensitivity of portfolio expenditures to certain socioeconomic factors.

■ **Population**

Spending is affected by changes in total population and by changes in the size of the clientele for certain services.

For example, a 1% variation in the total population would change total spending by about \$1 110 million, that is, 0.8 percentage points.

A 1% variation in the number of people aged 5-16, that is, the population that affects, in particular, the demand for school services, would have a \$260-million impact on total expenditure.

■ **Prices**

Public spending is influenced by the price of services offered by the government, the evolution of which is closely tied to the change in the general level of prices in the economy, that is, inflation.

Accordingly, a uniform variation in prices could lead to variations in portfolio expenditures.

The results show that a 1% variation in prices would lead to a \$640-million variation in spending, that is, 0.5 percentage points in total spending.

TABLE 5

Sensitivity of portfolio expenditures to a 1% variation in each economic and demographic variable

Socioeconomic variables		Impacts for fiscal 2023-2024	
		(\$million)	(percentage points)
Population			
Total population	Total expenditure	1 110	0.8
	Per portfolio:		
	– Santé et Services sociaux		0.9
	– Éducation		0.9
	– Enseignement supérieur		0.9
	– Famille		0.9
	– Other		0.5
0-4 years	Total expenditure	80	0.1
	Per portfolio:		
	– Famille		0.5
5-16 years	Total expenditure	260	0.9
	Per portfolio:		
	– Éducation		0.9
17-24 years	Total expenditure	140	0.1
	Per portfolio:		
	– Enseignement supérieur		0.9
65 years and over	Total expenditure	320	0.2
	Per portfolio:		
	– Santé et Services sociaux		0.5
Prices			
Inflation	Total expenditure	640	0.5
	Per portfolio:		
	– Santé et Services sociaux		0.3
	– Éducation		0.2
	– Enseignement supérieur		0.6
	– Famille		1.0
	– Other		0.7

□ **Risks and sensitivity analysis for debt service**

■ **Risks**

The main risks associated with the debt service forecast are a higher-than-anticipated increase in interest rates and a lower-than-anticipated return on the Retirement Plans Sinking Fund (RPSF).³

The RPSF is an asset that was created for payment of the retirement benefits of public and parapublic sector employees. It is managed by the Caisse de dépôt et placement du Québec.

The income of the RPSF is deducted from debt service. Therefore, a lower-than-expected return would result in an increase in debt service.

■ **Sensitivity analysis**

A higher-than-anticipated rise in interest rates of 1 percentage point over a full year would increase interest expenditure by \$484 million.

A return of 1 percentage point less than the anticipated return on the RPSF would result in an increase of about \$30 million in debt service the following year.

A change in the value of the Canadian dollar compared with other currencies would have no impact on debt service because the government's debt has no foreign currency exposure.

³ With its investment policy, which is based on a long-term horizon, the RPSF should generate an annual return of 6.35%.

□ Main risks for the financial situation

TABLE 6

Margins of prudence and main risks for Québec's financial situation

Margins of prudence	Risks	Estimated impact
Financial framework	Economic variables	
Contingency reserve:	Impact of external variables on the Québec economy:	
– \$500 million in 2023-2024	– Variation of 1 percentage point in U.S. real GDP	Impact of 0.45 percentage points on Québec real GDP
– \$500 million in 2026-2027	– Variation of 1 percentage point in Ontario real GDP	Impact of 0.42 percentage points on Québec real GDP
– \$500 million in 2027-2028		
	Own-source revenue	
	Global economic slowdown:	
	– Variation of 1 percentage point in Québec nominal GDP (equivalent to a 1.0-percentage point variation in growth in the consumer price index)	Impact of \$1.0 billion on own-source revenue ⁽¹⁾
	– Typical recession (average) ⁽²⁾	Impact of \$8.3 billion on own-source revenue ⁽¹⁾
	Government enterprises	
	Variation of 1°C in winter temperatures compared to normal temperatures	Impact of \$85 million on Hydro-Québec's net earnings
	Federal transfers	
	Variation of 0.1 percentage points in Québec's share of Canada's population	Impact of \$170 million on federal transfer revenues
Portfolio expenditures	Portfolio expenditures	
Contingency Fund reserve:	Unforeseen expenditures under government programs	Undetermined impact
– \$200 million annually from 2023-2024 to 2027-2028	Variation of 1 percentage point in the total population	Impact of \$1 110 million on spending
	Additional variation of 1 percentage point in technology-related health care costs	Impact of \$370 million on spending
	Variation of 1 percentage point in the general level of prices	Impact of \$640 million on spending
	Natural disaster	Undetermined impact
	Public capital investment completion rate for a given year (5% difference)	Impact of \$289 million per year on spending (depreciation, non-government owned infrastructure grants and interest)
Debt service	Debt service	
	Variation of 1 percentage point in interest rates	Impact of \$484 million on debt service ⁽³⁾
	Variation of 1 percentage point in the return on the RPSF	Impact of \$30 million on debt service ⁽⁴⁾

(1) Own-source revenue excluding revenue from government enterprises.

(2) In Québec, analysis of historical data indicates that a medium-sized recession could result in a revision to nominal GDP of -2.8 percentage points in the first year of the shock and -0.7 percentage point the year after in comparison to a baseline scenario.

(3) Upon maturity, in the fifth year, the impact of a higher-than-anticipated rise in interest rates of 1 percentage point would increase debt service by nearly \$1.8 billion.

(4) Ultimately, in the fifth year, the impact of a lower-than-anticipated return on the RPSF of 1 percentage point would increase debt service by nearly \$180 million.

2. NET FINANCIAL SURPLUSES OR REQUIREMENTS

Net financial surpluses or requirements represent the difference between the government's cash inflow and disbursements. These net financial surpluses or requirements take into account:

- changes in the budgetary balance on an accrual basis;
- resources or requirements arising from, in particular, the acquisition or disposal of fixed assets, investments, loans and advances and from other activities such as collecting accounts receivable and paying accounts payable.

TABLE 7

Net financial surpluses or requirements (millions of dollars)

	2023-2024	2024-2025	2025-2026
SURPLUS (DEFICIT) FROM OPERATIONS⁽¹⁾	-1 754	-678	468
Non-budgetary transactions			
Investments, loans and advances ⁽²⁾	-2 355	-3 937	-1 829
Capital investments ⁽³⁾	-6 690	-6 636	-6 369
Pension plans and other employee future benefits ⁽⁴⁾	-3 384	-3 733	-4 246
Other accounts ⁽⁵⁾	1 924	1 445	82
Deposits of dedicated revenues in the Generations Fund	-2 241	-2 304	-2 443
Total non-budgetary transactions	-12 746	-15 165	-14 805
NET FINANCIAL SURPLUSES (REQUIREMENTS)	-14 500	-15 843	-14 337

Note: A negative entry represents a financial requirement and a positive entry, a source of funding.

(1) Balance within the meaning of the public accounts.

(2) Investments, loans and advances include mainly investments made by the government in its enterprises as well as loans and advances granted to entities not included in the government reporting entity.

(3) Forecast net financial requirements associated with net capital investments result mainly from needs arising from the Québec Infrastructure Plan.

(4) Net financial requirements associated with retirement plans and other employee future benefits arise from gross employer contributions, employee contributions, benefits and administration costs, employee future benefits as well as uncollected income from the Retirement Plans Sinking Fund and other employee future benefits funds.

(5) Net financial surpluses or requirements for other accounts consist of a series of changes in assets and liabilities, such as accounts receivable and accounts payable.

TABLE 8

Net capital investments (millions of dollars)

	2023-2024	2024-2025	2025-2026
Investments	-11 669	-12 034	-12 057
Depreciation	4 979	5 398	5 688
TOTAL	-6 690	-6 636	-6 369

Note: A negative entry represents a financial requirement and a positive entry, a source of funding.