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SUPPLEMENTARY INFORMATION

BUDGET 2022-2023

Votre gouvernement

Québec

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 $4.6 billion by 2023-2024. They cover risks that could affect the financial framework and thus make it possible to respond to an unexpected decline in revenue or an unexpected change in expenditure.

TABLE 1

Margins of prudence
(millions of dollars)

	2021-2022	2022-2023	2023-2024	Total
Contingency Fund reserve	200	200	200	600
Provision for economic risks and other support and recovery measures	—	2 500	1 500	4 000
TOTAL	**200**	**2 700**	**1 700**	**4 600**

❑ Risks and sensitivity analyses in the context of the pandemic

The COVID-19 pandemic significantly increases uncertainty regarding parameters and assumptions underlying the establishment of forecasts for the various components of the financial framework. Consequently, the effects of risks and sensitivity analyses could be different than those normally expected, thereby increasing the volatility of the financial impacts presented in this section.

❑ Risks and sensitivity analysis for own-source revenue

■ Risks

The revenue forecasts for 2022-2023 and subsequent years include a certain level of risk and uncertainty given that they are based on assumptions concerning future events, such as the trajectory of the pandemic and the repercussions of the public health crisis on economic activity.

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 revenue,[1] 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 $950 million on the government's own-source revenue.

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

— In reality, a change in the economic outlook can have a greater impact on some economic variables, as well as greater repercussions on certain tax bases than on others.

Sensitivity analyses set an average historical relationship between the change in own-source revenue and growth in nominal GDP. Accordingly, they may prove inaccurate for a given year depending on the economic situation and yet not lose their validity.

— Indeed, for a given year, 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 greater or lower than the change in nominal GDP.

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

Variables	Variation forecasts for 2022	Impacts for fiscal 2022-2023
Nominal GDP	6.4%	A variation of 1 percentage point changes own-source revenue(1) by about $950 million.
Wages and salaries	8.1%	A variation of 1 percentage point changes personal income tax revenue by about $400 million.
Employment insurance	–33.0%	A variation of 1 percentage point changes personal income tax revenue by about $10 million.
Pension income	4.5%	A variation of 1 percentage point changes personal income tax revenue by about $60 million.
Net operating surplus of corporations	–6.4%	A variation of 1 percentage point changes corporate tax revenue by about $55 million.
Consumption excluding food expenditures and shelter	12.0%	A variation of 1 percentage point changes QST revenue by about $200 million.
Residential investment	0.6%	A variation of 1 percentage point changes QST revenue by about $45 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. Updating of information may thus have an impact on forecasts, in particular, the trajectory of the COVID-19 pandemic.

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 $250 million;
- 1° C in winter temperatures compared to normal temperatures changes its net earnings by about $100 million.

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

For the Société des alcools du Québec, a variation of 1% 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 $10 million.

For the Société québécoise du cannabis, a variation of 1% 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.

In addition, 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 abatement[2] and the estimation of the population of the provinces and territories.

■ Sensitivity analysis

The forecast for revenue from equalization, the CHT and the CST is based primarily on the following economic and demographic variables:

— the growth of Canada's nominal GDP;

— the growth in wages and salaries used in the forecast for basic federal income tax;

— the growth of 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 changes made by the federal government to the operation of equalization, the CHT or the CST.

In addition, 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.

[2] Québec's revenues from the CHT and the CST are deducted from part 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 of federal transfer revenue to major economic and demographic variables

Variables	Forecasts for 2022	Impacts for fiscal 2022-2023
Growth of Canada's nominal GDP	8.3%	An increase of 1 percentage point raises equalization revenue(1) by about $55 million.
		An increase of 1 percentage point raises CHT revenue(1) by about $35 million.
Growth in wages and salaries in Québec	8.1%	An increase of 1 percentage point reduces equalization revenue(2) by about $85 million.
		An increase of 1 percentage point reduces CHT and CST revenues by about $50 million.
Québec's share of the population in Canada	22.4%	An increase of 0.1 percentage point raises equalization revenue(2) by about $145 million.
		An increase of 0.1 percentage point raises CHT and CST revenues by about $60 million.
Growth of the net operating surplus of corporations in Québec	–6.4%	An increase of 1 percentage point reduces equalization revenue(2) by about $15 million.

(1) Equalization and CHT envelopes for 2022-2023 were set in December 2021 by the federal government and will not be revised. Increased growth in 2022 would have an impact as of 2023-2024.
(2) Due to the two-year lag in the equalization formula, increased growth in 2022 would have an impact as of 2024-2025. The impact for the years 2022-2023 and 2023-2024 would be nil.

❑ Risks and sensitivity analysis for portfolio expenditures

■ Risks

Several factors can have an impact on government spending. These factors include, in particular:

- changes in target clienteles, such as the student population in educational institutions;
- technological changes, which particularly affect spending in the health sector;
- changes in the general level of prices, which have different impacts on each of the government's portfolios;
- the emergence of new needs among the Québec population.

■ Sensitivity analysis

The financial framework's forecasts take into account:

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

The two following tables show the sensitivity of portfolio expenditures at the budgetary level as well as in regard to economic and demographic 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 example, a variation of 1% in the expenditure of the Santé et Services sociaux portfolio would lead to a variation of about $560 million.

Sensitivity of spending to a variation of 1% in each portfolio
(millions of dollars)

Major portfolios	Impact for fiscal 2022-2023
Santé et Services sociaux	560
Éducation	190
Enseignement supérieur	100
Other portfolios	450
TOTAL	**1 300**

- **Economic and demographic variables**

The analysis carried out makes it possible to estimate the sensitivity of portfolio expenditures to basic socioeconomic variables.

- ***Prices***

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

The results show that a 1% variation in prices would lead to a variation of about $630 million in spending, or 0.5 percentage point in total spending.

- ***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% change in the total population would change total spending by about $1 100 million, or 0.8 percentage point.

Sensitivity of portfolio expenditures to a variation of 1% in each economic and demographic variable
(millions of dollars and percentage points)

		Impact for fiscal 2022-2023	
Socioeconomic variables		($million)	(percentage points)
Prices			
Inflation	**Total spending**	**630**	**0.5**
Population			
Total population	**Total spending**	**1 100**	**0.8**
	By portfolio:		
	– Santé et Services sociaux		0.8
	– Éducation		0.8
	– Enseignement supérieur		0.9
	– Other		0.8
0-4 years	Total spending	90	0.1
5-16 years	Total spending	220	0.2
17-24 years	Total spending	130	0.1
65 years and over	Total spending	240	0.2

❑ Risks and sensitivity analysis for debt service

■ Risks

The main risk associated with the debt service forecast is a higher-than-anticipated increase in interest rates or 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 applied against debt service. Therefore, a lower-than-expected return on the RPSF would lead to an increase in debt service.

■ Sensitivity analysis

A greater-than-anticipated rise in interest rates of 1 percentage point over a full year would increase the interest expenditure by $553 million.

A return of 1 percentage point less than the anticipated return on the RPSF would lead to an increase of about $27 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.

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[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

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

Margins of prudence	Risks	Estimated impact
Financial framework	**Economic variables**	
Provision for economic risks and other support and recovery measures:	Impact of external variables on the Québec economy	
– $2.5 billion in 2022-2023 and $1.5 billion in 2023-2024	– Variation of 1 percentage point in U.S. real GDP	Impact of 0.45 percentage point on Québec's real GDP
	– Variation of 1 percentage point in Ontario's real GDP	Impact of 0.42 percentage point on Québec's real GDP
	Own-source revenue	
	Global slowdown	
	– Variation of 1 percentage point in Québec's nominal GDP	Impact of $950 million on own-source revenue(1)
	– Typical recession (average)	Impact of $8.1 billion on own-source revenue(1)
	Government enterprises	
	Variation of 1 °C in winter temperatures compared to normal temperatures	Impact of $100 million on Hydro-Québec's net earnings
	Federal transfers	
	Variation of 0.1 percentage point in the share of Québec's population in Canada	Impact of $205 million on federal transfer revenues
Portfolio expenditures	**Portfolio expenditures**	
Contingency Fund reserve: – $200 million annually from 2021-2022 to 2023-2024	Unforeseen expenditures in government programs	Undetermined impact
	Variation of 1 percentage point in the total population	Impact of $1 100 million on spending
	Additional variation of 1 percentage point in technology-related costs for health care	Impact of $80 million on spending
	Variation of 1 percentage point in the general level of prices	Impact of $630 million on spending
	Natural disaster	Undetermined impact
	Public capital investment completion rate for a given year (5% difference)	Impact of $68 million on spending (depreciation and interest)
Debt service	**Debt service**	
	Variation of 1 percentage point in interest rates	Impact of $553 million on debt service(2)
	Variation of 1 percentage point in the return on the RPSF	Impact of $27 million on debt service

(1) Own-source revenue excluding revenue from government enterprises.
(2) Upon maturity, in the fifth year, the impact of a greater-than-anticipated rise in interest rates of 1 percentage point would increase debt service by more than $1.8 billion.

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 paying accounts payable and collecting accounts receivable.

TABLE 2

Net financial surpluses or requirements
(millions of dollars)

	2021-2022	2022-2023	2023-2024
SURPLUS (DEFICIT)[1]	**–3 897**	**–3 005**	**35**
Non-budgetary transactions			
Investments, loans and advances[2]	491	–3 721	–2 538
Capital investments[3]	–4 842	–4 679	–4 878
Pension plans and other employee future benefits[4]	–2 977	–3 260	–3 844
Other accounts[5]	3 645	–986	1 024
Deposits of dedicated revenues in the Generations Fund	–3 457	–3 445	–3 935
Total non-budgetary transactions	**–7 140**	**–16 091**	**–14 171**
NET FINANCIAL SURPLUSES (REQUIREMENTS)	**–11 037**	**–19 096**	**–14 136**

Note: A negative entry represents a financial requirement and a positive entry, a source of financing.
(1) Balance within the meaning of the Public Accounts.
(2) Investments, loans and advances include mainly investments made by the government in its enterprises and 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 3

Net capital investments
(millions of dollars)

	2021-2022	2022-2023	2023-2024
Investments	–9 470	–9 511	–9 921
Depreciation	4 624	4 832	5 043
Net investments	**–4 846**	**–4 679**	**–4 878**
Less: PPP investments[1]	4	—	—
NET CAPITAL INVESTMENTS	**–4 842**	**–4 679**	**–4 878**

Note: A negative entry represents a financial requirement and a positive entry, a source of financing.
(1) Investments made under public-private partnership (PPP) agreements correspond to new commitments that are taken into account in the government's gross debt. In accordance with the government's accounting policies, PPP investments are recognized in the government's assets as well as in its debt.