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

❑ Margins of prudence

The stabilization reserve as at March 31, 2020 and the provisions included in the financial framework, which together total $14.9 billion, make it possible to cover risks that could influence the financial framework and to thus respond to an unexpected decline in revenue or increase in expenditure.

Margins of prudence
(millions of dollars)

	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Total
Contingency Fund reserve	200	200	200	200	200	1 000
Stabilization reserve as at March 31, 2020						13 877
TOTAL	**200**	**200**	**200**	**200**	**200**	**14 877**

❑ Risks and sensitivity analysis for own-source revenue

■ Risks

The revenue forecasts for 2020-2021 and subsequent years include a certain level of risk and uncertainty given that they are based on assumptions concerning future events, such as changes in the economic situation.

— For example, the forecast for corporate tax revenue is marked by a significant level of uncertainty owing to a combination of several economic, decision-making and administrative factors, such as the legal framework that enables businesses to make choices regarding taxation, particularly the utilization of deferred losses, the possibility of adjusting quarterly instalment payments and the deadline for filing and processing tax returns, which affects the recognition of corporate taxes.

Moreover, for 2019-2020, the recognition of revenue by the time the Public Accounts are released could lead to results that differ from those forecast and have an impact on the level of revenue in subsequent years, which also represents a risk.

■ Sensitivity analysis

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

— According to the overall sensitivity analysis, a change of 1 percentage point in nominal GDP has an impact of about $800 million on the government's own-source revenue.

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

— In reality, a change in 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 various 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	Growth forecasts for 2020	Impacts for fiscal 2020-2021
Nominal GDP	4.1%	A variation of 1 percentage point changes own-source revenue by about $800 million.
Wages and salaries	4.8%	A variation of 1 percentage point changes personal income tax revenue by about $350 million.
Employment insurance	2.8%	A variation of 1 percentage point changes personal income tax revenue by about $5 million.
Pension income	6.0%	A variation of 1 percentage point changes personal income tax revenue by about $55 million.
Net operating surplus of corporations	3.6%	A variation of 1 percentage point changes corporate tax revenue by about $50 million.
Consumption excluding food expenditures and shelter	3.3%	A variation of 1 percentage point changes QST revenue by about $175 million.
Residential investments	4.1%	A variation of 1 percentage point changes QST revenue by about $30 million.

❑ Risks and sensitivity analysis for revenue from government enterprises

■ Risks

The forecasts for government enterprises depend on the information available when they are made. Updating of information may thus have an impact on forecasts.

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 net earnings by about $150 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 about $10 million.

For the Société des alcools du Québec, a variation of 1% in sales changes its net earnings by over $15 million.

For Investissement Québec, a variation of 1 percentage point in interest rates changes its net earnings by about $10 million.

For the Société québécoise du cannabis, a variation of 1% in sales changes its net earnings by over $1 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[1] 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 that of the other provinces.

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[1] 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 revenues to major economic and demographic variables

Variables	Forecasts for 2020	Impacts for fiscal 2020-2021
Growth of Canada's nominal GDP	3.4%	An increase of 1 percentage point raises equalization revenue(1) by about $50 million.
		An increase of 1 percentage point raises CHT revenue(1) by about $50 million.
Growth in wages and salaries in Québec	4.8%	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 $40 million.
Québec's share of the population in Canada	22.5%	An increase of 0.1 percentage point raises equalization revenue(2) by about $165 million.
		An increase of 0.1 percentage point raises CHT and CST revenues by about $55 million.
Growth of the net operating surplus of corporations in Québec	3.6%	An increase of 1 percentage point reduces equalization revenue(2) by about $15 million.

(1) Equalization and CHT envelopes for 2020-2021 were determined in December 2019 by the federal government and will not be revised. Increased growth in 2020 would have an impact as of 2021-2022.
(2) Due to the two-year lag in the equalization formula, increased growth in 2020 will have an impact as of 2022-2023. The impact for fiscal years 2020-2021 and 2021-2022 is 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 affect particularly 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 Quebecers.

■ 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 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 constitute 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 consolidated expenditure of the Santé et Services sociaux portfolio would lead to a variation of about $480 million in the portfolio's spending.

Sensitivity of spending to a variation of 1% by major departmental portfolio
(millions of dollars)

	Impacts for fiscal 2020-2021
Éducation et Enseignement supérieur	260
Santé et Services sociaux	480
Other portfolios	370
TOTAL	**1 110**

- **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 variation of 1% in prices would lead to a variation of about $870 million in spending, or 0.8 percentage point in total spending.

— When the next collective agreements for government employees are signed, the government will be able to reduce the risks on its price-related expenditure because the compensation component of its expenditure will be determined for the term of the agreement.

- ***Population***

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

For example, a change of 1% in the total population would change total spending by about $820 million, or 0.7 percentage point.

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

		Impact for fiscal 2020-2021	
Socioeconomic variables		($million)	(Percentage point)
Prices			
Inflation	**Total spending**	**870**	**0.8**
Population			
Total population	**Total spending**	**820**	**0.7**
	By portfolio:		
	– Santé et Services sociaux		0.7
	– Éducation et Enseignement supérieur		0.8
	– Other		0.7
0-4 years	Total spending	90	0.1
5-16 years	Total spending	150	0.1
17-24 years	Total spending	150	0.1
65 years and over	Total spending	230	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).[2]

The RPSF is an asset created for the purpose of paying the retirement benefits of public and parapublic sector employees, and 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 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 about $300 million.

A return of 1 percentage point less than the anticipated return on the RPSF would lead to an increase of about $20 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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[2] With its investment policy, which is based on a long-term horizon, the RPSF should generate an annual return of 6.35%.

❑ Main risks to the financial situation

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

Margins of prudence	Risks	Estimated impact
Financial framework	**Economic variables**	
– Stabilization reserve: ▪ $13.9 billion as at March 31, 2020	– Impact of external variables on the Québec economy	
	▪ Variation of 1 percentage point in US 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 $800 million on own-source revenue
	▪ Typical recession (average)	– Impact of $8.1 billion on own-source revenue
	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 Québec's population in Canada	– Impact of $220 million on federal transfer revenues
Portfolio expenditures	**Portfolio expenditures**	
– Contingency Fund reserve: ▪ $200 million per year from 2020-2021 to 2024-2025	– Unforeseen expenditures in government programs	– Undetermined impact
	– Variation of 1 percentage point in the total population	– Impact of $820 million on spending
	– Additional variation of 1 percentage point in technology-related costs for healthcare	– Impact of $295 million on spending
	– Variation of 1 percentage point in the general level of prices	– Impact of $870 million on spending
	– Natural disaster	– Undetermined impact
Debt service	**Debt service**	
	– Variation of 1 percentage point in interest rates	– Impact of $300 million on debt service
	– Variation of 1 percentage point in the return on the RPSF	– Impact of $20 million on debt service