



## Issuer Guide 2024 – Canadian Provinces & Territories

NORD/LB Floor Research

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# NORD/LB ISSUER GUIDE 2024 Canadian Provinces & Territories

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## Constitutional principles The status of the provinces and territories and their connection with the central government

#### Organisation as a federal state

Canada was formed by the British North America Act of 1867 in the form of a federation (also called a federal state), not least due to cultural differences between the areas dominated by French-speakers and those where English was spoken as the main language. Since then, Canada's external borders and the names of its provinces and territories have repeatedly been changed, with the result that there are now ten provinces and three territories in total. The Canadian constitution defines a fundamental division of powers between the central government and the provinces. However, certain powers — for example those in connection with the criminal justice system or immigration — are shared between the two levels of the federal system. No explicit powers are granted to the local authorities within the provinces in the Canadian constitution. Rather, these are established by the provincial legislatures, which delegate part of their powers to the municipal administration.

#### Division of powers as defined in the Canadian constitution (examples)

#### **Central government**

Unemployment insurance

Sovereign debt and property rights

Census and statistics

Regulation of trade and commerce

Insolvency and criminal law

Maritime coastlines and inland fisheries

Defence

Currency and coinage

Patents

Source: Parliament of Canada, NORD/LB Floor Research

#### **Provinces**

Property and civil rights

Exploration of natural resources

Direct taxation within the province

Hospitals

Education

Municipalities

Company incorporations

Administration/sale of public land

**Energy production** 

#### Status of the provinces

The constitution dictates that the central government may decide on changes to the borderlines of provinces, provided that the province in question gives its approval. All in all, Canadian provinces enjoy a relatively high degree of autonomy, which is reflected particularly in fiscal policy. For example, provinces are entitled to generate revenue through additional income tax or corporation tax. To this end, the provinces may change the tax rates without requiring the consent of the central government. Rights to levy taxes on certain products (e.g. tobacco and petrol) extend their flexibility to adapt fiscal policy on the revenue side. On the expenditure side, this is mirrored in their relatively high degree of authority: in addition to healthcare, the provinces control education and the exploration of natural resources, for example. The latter provides additional revenue from mining licences and special taxes. These fiscal freedoms, which extend further than those of comparable subsovereigns (e.g. the German Laender or the states and territories of Australia), are also assessed positively in the rating reports compiled by Fitch, Moody's and S&P.



#### Status of the territories

The status of the territories under constitutional law differs from this set-up. There is a clear distinction from the provinces: while the latter possess their own constitutional powers, the central government only delegates powers to the territories. In the past this resulted in substantial influence from the central government. However, this influence has been diluted in recent years, such that the territories have increasingly enjoyed rights similar to those of provinces. Government transfer payments do, however, continue to account for the largest portion of the territories' revenue.

#### Connection with the central government: the case of Alberta

As we understand it, there is no unequivocal connection between the central Canadian government and its provinces or territories in terms of liability. Instead, there is only an implicit assumption that the central government would intervene under certain circumstances during a crisis situation. Nevertheless, the example of Alberta in the mid-1930s illustrates that this arrangement may not necessarily be enough to avert a payment default. In the specific case of Alberta, the province only had to accept monitoring by a supervisory body in order to avoid a payment default. However, Alberta declined the compromise offered by the central government and opted in favour of a default in order to safeguard its own autonomy. While we would consider a scenario of this nature to be unlikely in view of the importance of the capital markets for the provinces today, we believe it neatly illustrates that central government support can only be assumed, although the likelihood that this would be forthcoming is high.

#### Parliamentary elections 2021

Following the parliamentary election held on 21 October 2019, voters would ordinarily have gone to the polls four years later at the next election. However, in the wake of the COVID-19 crisis, Prime Minister Justin Trudeau felt compelled to call a new federal election in 2021, with the aim of securing a mandate for his government to manage the country's response to the pandemic and organise the recovery from the economic impacts of the crisis. In the end, following the parliamentary election held on 20 September 2021, Trudeau remained in office and continues to govern at the head of a minority government. The Liberal Party led by Trudeau won 160 of 338 seats, meaning he fell ten seats short of securing an overall majority. After the Liberal Party primarily lost votes in the west of Canada in 2019, which can be put down to the climate policies pursued by Trudeau in his first term as Prime Minister, two additional seats in the western province of Alberta were gained in 2021. Moreover, there has traditionally been a strong independence movement in Quebec, which is also reflected in the success of the Bloc Quebecois at the ballot box. This party, whose long-term ambition is to achieve independence for the province of Quebec from Canada, won the third-highest number of seats in the House of Commons of Canada. In addition, there were also votes from central and western provinces - predominantly from Alberta – that demanded independence from Canada. As a minority government, the Trudeau administration continues to face huge challenges, particularly in view of the increased disunity that is evident across the country, which is likely to complicate the task of governing Canada.



#### Constitutional principles The Canadian financial equalization and transfer system

#### Three different equalization systems

The Canadian central government implements the majority of its financial equalization policy among provinces and territories through three different equalization systems:

Canada Health Transfer (CHT)

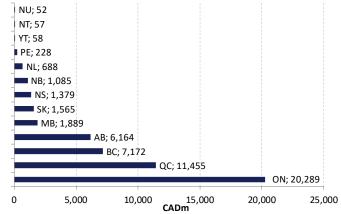
Canada Social Transfer (CST)

Equalization Program (EP) and Territorial Formula Financing (TFF)

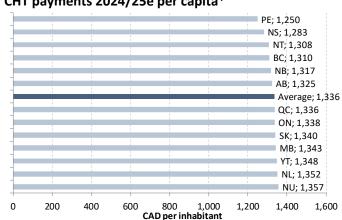
#### Canada Health Transfer (CHT)

The flow of equalization funds in the CHT constitutes the largest channel within the Canadian financial equalization system. The payments are intended as a long-term and predictable source of funding for the healthcare systems in the provinces and territories. Payments are made on a per capita basis, i.e., the allocation of funds is linked solely to the number of inhabitants in the respective province or territory. This is in line with the plans of the Canadian government, which in 2007 began to implement the long-term plan of providing all inhabitants with comparable treatment, regardless of place of residence. Slight variations in the paid-out amounts per capita are attributable to the central government's definition of the number of inhabitants in the provinces. Starting from the 2014/15 budget year, payments are made solely on a cash basis. Payments were increased by 6% up to the 2016/17 budget year, in accordance with legislation which has been passed. Since the beginning of the 2017/18 budget year, growth in this equalization system is calculated on the basis of the moving three-year average of nominal GDP growth in the Canadian economy, whereby guaranteed growth of at least 3% per year is assured.





#### CHT payments 2024/25e per capita\*



Source: Department of Finance Canada, Statistics Canada, NORD/LB Floor Research

#### Ontario and Quebec remain the largest recipients within the CHT

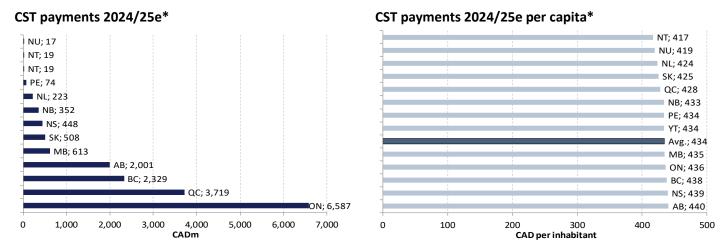
The provinces of Ontario and Quebec continue to receive the highest payments within the CHT, as the system is based on the number of inhabitants. Accordingly, the prospective ranking of recipients within this system for the 2024/25 budget year merely reflects a ranking by population figures.

<sup>\*</sup> Figures for the budget year (1 April to 31 March).



#### Canada Social Transfer (CST)

The Canadian central government uses the CST to allocate funding for post-secondary education, social support and services as well as for early childhood development, early learning and childcare. As is the case with the CHT, the level of the payments made to a province or territory is based solely on the population of the respective province or territory. This is in line with the plan to provide the whole population of Canada with the same level of social support. The relevant legislation provides for annual growth of 3% in this equalization level for the 2024/25 budget year and subsequent years.



<sup>\*</sup> Figures for the budget year (1 April to 31 March). Source: Department of Finance Canada, NORD/LB Floor Research

#### No surprises in the allocation of payments

As in the case of the CHT, close examination of the payment flows does not reveal any surprises. While the payments in relation to the number of inhabitants are at comparable levels in all the provinces and territories, the large differences in the distribution of inhabitants result in absolute payment amounts that diverge substantially from one another.

#### Revised version of the CHT and planned revisions to the CST in 2024

On 7 February 2023, the Canadian government announced its plan to top up healthcare funding in the provinces and territories by CAD 196.1bn over a period of ten years, including CAD 46.2bn in additional funding. As part of this ten-year plan, the government will also make an additional one-off payment of CAD 2.0bn in 2023 to the CHT. Moreover, the CHT is guaranteed to grow by 5% per year in the next five years. In this context, it is expected that the CHT will increase by 33% in the next five years, and by as much as 61% over the forthcoming decade. A revision to the CST equalization program is pending for 2024. Cuts could potentially have a negative impact on the financial situation of the provinces and territories. However, the Canadian provinces and territories are not overly dependent on the payments from the CST system, with the result that negative ramifications should be kept in check, especially as there is currently no indication of the payments made under this program being reduced to any significant extent. In fact, the topped-up CHT and levels of inflation seen in recent years could actually be taken as signs that the CST itself could be increased.

#### **Equalization Program (EP) and Territorial Formula Financing (TFF)**

With the Equalization Program and Territorial Formula Financing, the third payment flow within the financial equalization system is divided into separate mechanisms for provinces (EP) and territories (TFF).



#### EP: allocations to provinces aimed at creating equivalent living conditions

The Canadian financial equalization system, originally established in 1957, provides for a direct financial equalization, in which the central state makes funds available to the provinces with the aim of delivering reasonably comparable levels of public services at correspondingly comparable levels of taxation. The equalization system, which has been anchored in the Canadian constitution since 1982, therefore aims to converge living standards. However, in our view, the wording ("sufficient revenues") acknowledges the (permanent) existence of disparities between the provinces. Although the objective of the financial equalization system is laid down in the constitution, the central state pays the funds to the provinces without the attachment of any conditions. As such, the provinces enjoy unrestricted use of the payment flows transferred. Increases in this payment flow are stipulated by law on the basis of the moving three-year average for Canadian GDP growth.

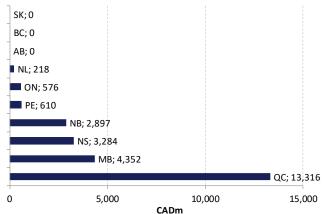
#### How the EP works

The calculation of a province's entitlement to equalization payments is based on an analysis of the respective province's fiscal capacity, which is determined on the basis of its ability to generate income per capita. Before any adjustments are made, the entitlement to equalization per inhabitant is calculated from the difference between a province's own fiscal capacity and the average fiscal capacity of all the provinces. As a result, however, this means that adjustments result in increased complexity for the financial equalization system. For example, when two alternative methods are used to calculate the level of equalization payments that a province is entitled to receive, the higher value is ultimately used. For instance, where the equalization entitlement after fully excluding natural resource revenues is higher than after excluding 50% of natural resource revenues, the province is accordingly allocated the higher amount derived from both methods.

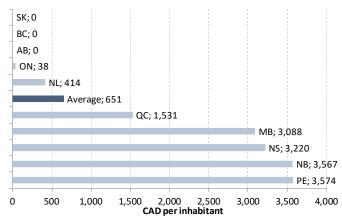
#### Review and renewal of the EP expected before 31 March 2024

The legislation governing the EP is regularly reviewed to ensure that it achieves its objectives and uses the most current and accurate metrics to determine the allocations awarded to the provinces. In this context, the EP must undergo a process of review and renewal prior to 31 March 2024. This could have a particularly significant impact on the provinces of Prince Edward Island, New Brunswick, Nova Scotia and Manitoba, as these have a transfer share of income of at least 25% and the EP represents the largest transfer in these provinces. However, due to levels of inflation seen over the past couple of years and the increase in the CHT in February 2023, from our point of view any reduction in the EP would appear to be rather unlikely.





#### EP payments 2024/25e per capita\*



<sup>\*</sup> Figures for the budget year (1 April to 31 March). Source: Department of Finance Canada, Statistics Canada, NORD/LB Floor Research



#### Quebec by far the biggest recipient in the EP

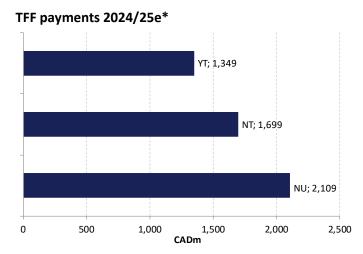
Within the Equalization Program, Quebec is the biggest recipient as measured by the absolute volumes. A total of CAD 13.3bn is estimated as revenue from this level of the financial equalization system for the 2024/25 budget year. This relatively high volume, which accounts for over half the system as a whole, can be understood in the context of the population of Quebec. At CAD 1,513, allocations per capita are indeed well in excess of the average, although significantly below the levels of Prince Edward Island and New Brunswick, as well as being about 50% of the support volume awarded to Manitoba. While overall seven provinces are expecting inflows from the Equalization Program, no allocations are planned for a total of three provinces in the 2024/25 budget year.

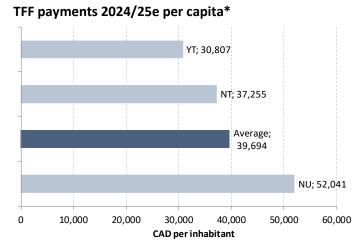
#### **TFF as Equalization Program for territories**

Along the same lines as the Equalization Program for provinces, the TFF constitutes the largest payment flow to the three Canadian territories from the central government. The payments are intended to facilitate levels of public services for the inhabitants of the territories that are comparable with those enjoyed by Canadians living in the provinces, again at comparable levels of taxation. The TFF supports the financing of hospitals, schools and infrastructure, for example. On account of the low population density, this comes at a high cost. Payments within the TFF are nevertheless made without being earmarked for any particular purpose.

#### How the TFF works

The TFF uses a complex method of calculation. Each territory's grant is based on the difference between an approximate figure for its expenditure needs and its capacity to generate revenues. By excluding 30% of their revenue capacity from the calculation, the system aims to incentivise the territories to increase their own revenues and grow their economies. Revenue from raw materials is also excluded from the calculation, with the central government negotiating the approach towards this item separately with each territory.



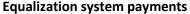


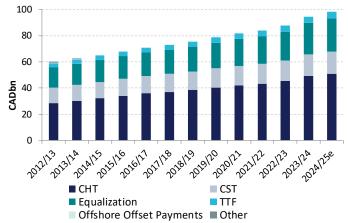
<sup>\*</sup> Figures for the budget year (1 April to 31 March).
Source: Department of Finance Canada, Statistics Canada, NORD/LB Floor Research

#### Significant allocations per inhabitant

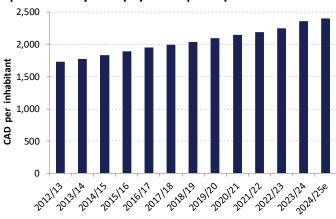
Even though the volume of the TFF is relatively low in comparison with the Equalization Program (2024/25e budget year: CAD 5.2bn vs. CAD 25.3bn), its importance for the territories is extremely high in per capita terms. For example, the regional governments of the territories receive payments totalling CAD 39,694 on a per capita basis.







#### Equalization system payments per capita\*



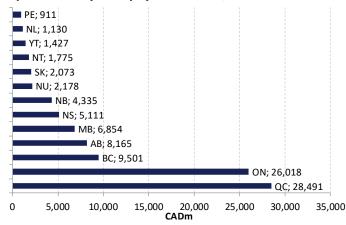
NB: Offshore Offset Payments are equalization payments that only Nova Scotia receives from the central government. They act as compensation for the reduction in payments from the Equalization Program resulting from development of the oil and gas fields off the coast of Nova Scotia.

Source: Department of Finance Canada, Statistics Canada, NORD/LB Floor Research

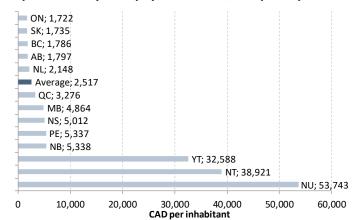
#### Continuous increase in allocations for financial equalization

The volumes allocated within the financial equalization system have increased steadily in recent years. If future payments continue in line with budget plans, the volume in 2024/25e is likely to be around 53% higher than was the case a decade ago. The funds reallocated within the CHT and Equalization Program were, in particular, drivers of growth (+59.1% and +51.5% respectively), while the TFF level and the CST system returned slightly reduced growth rates (+48.7% and +34.4%, respectively). In actual fact, however, the payments within the financial equalization system track the overall revenue development of the provinces and territories: the share of revenue from the provinces' transfer system has hardly changed over recent years and stands in a corridor between 10% and 30%. For the territories, the transfer payments are of far greater importance; their share in relation to revenues has, on average, amounted to around 70-80% over recent years.

#### Equalization system payments 2024/25e\*



#### Equalization system payments 2024/25e per capita\*



<sup>\*</sup> Figures for the budget year (1 April to 31 March). Source: Department of Finance Canada, Statistics Canada, NORD/LB Floor Research

#### Quebec and Ontario dominate the system, although territories are the biggest winners

While Ontario and Quebec clearly dominate the financial equalization system in terms of absolute amounts, the three territories receive by far the highest payments on a per capita basis. As a result, the system is accordingly more important to the regional governments of the territories.

<sup>\*</sup> Figures for the budget year (1 April to 31 March).



#### Conclusion

On balance, we assess the Canadian financial equalization system as a reliable mechanism. The payments have a high degree of constancy and have grown in relatively linear fashion in recent budget years. We view the fact that a large part of the system (CHT and CST) is linked to a specific purpose as sustainable, although it does reduce flexibility in the use of revenues. However, we believe that this circumstance is largely offset by the fact that, for most of the Canadian provinces, the equalization system does not constitute a dominant portion of their revenue streams. Nevertheless, dependencies could arise among the provinces that currently have high transfer shares (New Brunswick, Nova Scotia and Prince Edward Island) in the event that these were to exceed the current levels, which already stand at around 30% presently. An even greater dependency on the financial equalization system, and therefore also on the central state, can be seen in the case of the territories. However, in view of their constitutional status, this should hardly come as a surprise.



### Constitutional principles CETA

#### **CETA (Comprehensive Economic and Trade Agreement)**

Negotiations on a free trade agreement between the European Union (EU) and Canada first began in June 2009. Formally known as the EU-Canada Comprehensive Economic and Trade Agreement (CETA), it aims to promote trade and cooperation in all economic subareas between Canada and the EU. The agreement seeks to open up new growth opportunities for both economies, primarily through the abolition of 98% of all customs duties. It took more than eight years from the start of negotiations before the agreement provisionally came into force on 21 September 2017. Following provisional application, which was explicitly facilitated by the Treaties of the EU offering the option of mixed agreements, the majority of the agreement became effective. The sub-areas that fall exclusively into the sphere of EU competence may in this way be implemented prior to ratification by the EU Member States' respective national parliaments. In the case of CETA, this relates to the agreement may only take full effect once it has been approved and ratified by all 27 Member States of the European Union.

#### Is CETA a mixed agreement under EU law?

The EU treaties make a distinction between agreements made by the European Union based on their respective influence on (sub-)national or EU-side areas of competence. If the provisions in an agreement only affect areas of responsibility that had been transferred to the EU by the national parliaments, the EU can conduct ratification of the agreement as sole signatory. However, if national competences are affected as well, parliamentary approval in the relevant Member States is also required. In such cases, we can talk of a "mixed agreement", because the individual Member States must also ratify the agreement as co-signatories. Nevertheless, the legal distinction as to whether an agreement is to be regarded as mixed is not unambiguous in this respect. For example, the European Commission and Italy classified CETA as purely within EU competence, while Germany additionally considered the scope as extending to national parliaments.

#### The rocky road to concluding the agreement

In the end, the European Commission turned to a political solution. In so doing, it made a concession to Austria, among other Member States, which had demanded the involvement of national parliaments in the process. As a result, Cecilia Malmström, EU Trade Commissioner at this time, proposed to the European Council on 5 July 2016 that subsequent proceedings should be advanced on the basis of a mixed agreement. Based on this classification, all EU Member States had to be included in the agreement as co-signatories by the scheduled signing date and additionally signal their willingness to sign. Due to the country's legal framework obliging the central government to obtain the consent of the regional parliaments, Belgium in particular was unable to make any positive statement with regard to CETA for a long time. As the Wallonia region considered its own interests at risk, it only granted its approval after obtaining internal political concessions on the part of the central government in Brussels.



#### Ratification in all 27 parliaments necessary

With the agreement signed by the EU and Canada, CETA is not yet definitively in force in formal terms. The existing consent by the Member States is merely equivalent to a declaration of intent to accept the agreement. All 27 parliaments must now formally declare their approval. It is only when this procedure has been completed that CETA will come into full effect. However, there is no time frame to regulate a deadline for the voting procedure in the parliaments. Up to the parliamentary recess in the summer of 2023, only 17 Member States have ratified the agreements. Therefore, a further delay before the full implementation of CETA can certainly be expected. Potential changes of government in EU Member States that have yet to ratify the agreement and the changes of political direction associated with this also have the potential to extend this delay further.

#### **Overview of CETA objectives**

CETA is divided into 30 chapters, which can be sub-divided into a total of eight key objectives. Specific goals have been explicitly set within an overarching objective of creating additional employment and growth in both economies. Examples include the abolition of almost all customs duties, access to public contracts in the respective other region and liberalisation of the service sector, as well as investment protection. In Europe especially, certain elements of the agreement relating to the latter point have triggered huge protests in some cases. The basic aim behind the investment protection mechanism was to safeguard against arbitrary expropriation. In addition, modern investment protection agreements have long since expired. It is not only property that receives protection, but also "investments" in a kind of boundless protection area. In relation to arbitration tribunals, which are often cited in connection with the investment protection mechanism, Belgium requested the opinion of the European Court of Justice (ECJ) as to whether the dispute resolution system of CETA is compatible with EU law. In April 2019, the ECJ determined that the free trade agreement and the arbitration tribunal system for the resolution of disputes between investors and states it contains does not breach EU law, clearing another hurdle on the path towards full implementation of CETA in the process.

#### Impact of CETA on Canada

The European Union is the third-largest economic region in the world. As such, for many sectors of the economy, it can be found in the upper echelons of the import ranking lists. Since 98% of all customs duties would be abolished, the agreement primarily opens up opportunities for Canada to improve its own status as a trading partner with the EU. The EU particularly relies on imports, especially minerals, metals and fossil fuels. As a result, Canada could use its economic strength in these areas to gain an advantage over countries without free trade access to the EU market, such as the USA. Canada will also enjoy significant advantages in the service sector as a result of CETA. Access to the EU market for public contracts is of key importance in this respect. Although this provision also applies to European firms in Canada, the European market is disproportionately larger. This implies much greater potential for Canadian firms in the EU. In 2022, trade in goods and services with EU Member States (excluding the UK) accounted for approximately 9.8% of Canadian imports and around 5.9% of Canadian exports. Since 2018, the first full year after CETA provisionally came into force in September 2017, these values have risen by around 9.2% and 5.9% respectively, and could increase further still in the future, assuming that this growth is not merely a one-off effect or an outlier. Traditionally, the UK was one of Canada's most important trading partners after the USA. Brexit, as the UK withdrawal from the EU tends to be known, temporarily negated the positive effects arising from CETA Agreement in 2022. The COVID-19 pandemic can be regarded as another disruptive factor in efforts to evaluate the data to this point.



#### Impact of CETA on Canadian provinces and territories

CETA is likely to benefit primarily those Canadian sub-sovereigns that already generate a high proportion of their exports in the EU, such as the Northwest Territories and Nunavut. However, provinces such as Saskatchewan also stand to benefit from CETA. Among other things, the province is planning in its growth program to increase exports by 50% up to 2030, which would be facilitated by free access to a market with around 500m consumers. The hydrogen industry could also be a huge beneficiary from the agreement. For example, new wind farms and hydrogen plants are to be built in the provinces of Newfoundland and Labrador, Nova Scotia and New Brunswick from 2023 onwards. Canada has earmarked investments totalling CAD 9bn for this purpose. For their part, the German energy companies Uniper SE and E.ON Hydrogen have each agreed to purchase 500,000 tonnes of ammonia per year, as the green hydrogen is shipped, with initial deliveries expected to arrive by 2025. From the European side, importing hydrogen is seen as a favoured alternative to purchasing LNG, as sufficient infrastructure for exporting the latter is lacking on the Canadian east coast. Moreover, the Spanish crude oil firm Repsol S.A. decided in March 2023 to reject plans for a planned LNG export terminal in New Brunswick on economic grounds. CETA will also open up additional options for more urban regions in Ontario and Quebec, which stand out due to their high economic output attributable to the service sector. The closer cooperation between the EU and Canada in the mutual recognition of qualifications and the liberalisation of the service sector will simplify temporary employment in particular. It will also facilitate transatlantic cooperation on a business level. Other key beneficiaries include small and medium-sized enterprises (SMEs) in Canada, over 50% of which are located in Ontario and Quebec. In total, SMEs, which are also strongly export-oriented, account for 90% of jobs in the Canadian private sector. In 2022, Canada exported goods worth CAD 717.6bn, of which 43.1% were attributable to SMEs (42.7% in 2021). Moreover, of the 48,036 export firms in Canada, a total of 97.5% (2021: 97.6%) were organized as SMEs. Another industry that expects a significant tailwind from CETA is the fishing industry. As a result of the agreement, up to 96% of all EU tariff lines will be dropped for fish and seafood products from Canada. On average, the tariffs on such products come in at 11% but can reach as high as 25%. The lifting of these significant trade barriers stands to benefit Atlantic provinces such as Nova Scotia and New Brunswick in particular, which account for the majority of Canada's fishing exports to the EU.



### Constitutional principles NAFTA and its successor CUSMA

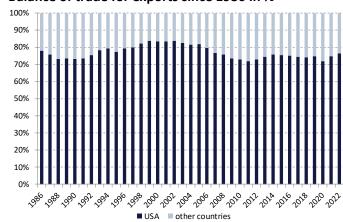
#### The USA as Canada's most important trading partner

The Canadian export industry is dependent on the US economy to an unparalleled extent. In 2022, a total of 76.9% of all Canadian export revenue came from the USA, generating just under 24.5% of Canada's total GDP. By way of comparison, the equivalent share for the United Kingdom was just 1.1%. This makes the USA the most important external economic influence on Canada, which is the second-largest country on Earth in terms of area. Potential tariff increases from the USA, such as those previously introduced by the former Trump administration on steel and aluminium from Canada and Mexico, would in all likelihood make imports from Canada much more expensive for US citizens in the event that the Republicans emerge victorious at the 2024 US election. As a result, this would have the potential to reduce trade volumes. The feared consequence would ultimately be job losses and a weakened economy in Canada.

#### Balance of trade for exports since 1986



#### Balance of trade for exports since 1986 in %



Source: Statistics Canada. NORD/LB Floor Research

#### Free trade without major effect on trade in goods

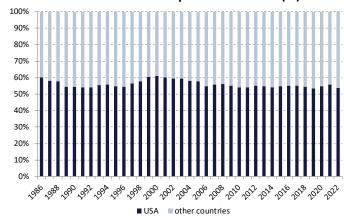
The implementation of NAFTA resulted in tripling of exports in the balance of trade during the subsequent years up to 2008. Yet this trend began as early as 1992, i.e., two years before NAFTA. Up to 2002, the proportion of exports to the USA in relation to total exports increased steadily, from an initial level of 78.4% in 1993 to a final figure of 83.9% in 2002. Thereafter, a countermovement began to set in. In 2022, the equivalent value amounted to 76.4%. Although this represents a marginal increase in comparison with the prior year (2021: 74.9%), it remains well below the values seen at the beginning of the 2000s. As such, Canadian exports to its southern neighbour only became marginally more important – and only temporarily to boot. It is interesting that the proportion of exports to the USA in relation to Canadian GDP also rose significantly in line with the growth recorded between 1993 and 2002, with a peak value of 32.4% recorded in the year 2000 for this. In 2022, at a value of 21.4%, the ratio has returned to a level seen in the early days of the NAFTA era. In retrospect, it can be said that neither exports nor GDP are to any significant degree more dependent on the USA as a result of NAFTA. All the same, this should not lead to the conclusion that abolition of trade privileges would not result in any implications for exports.







Trade balance for service exports since 1986 (%)

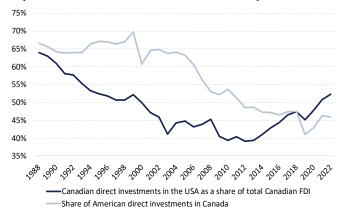


Source: Canada Statistics, NORD/LB Floor Research

#### Service exports and foreign direct investments (FDI)

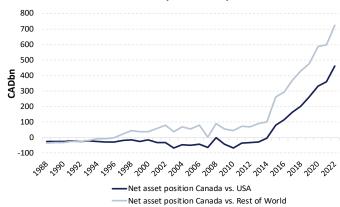
Just as with regard to the export of goods, an increasing volume has been observed in the export of services since 1986. In the 1990s in particular, the importance of service exports to the USA grew, although these amounted to less than 3.5% of GDP over the entire period under review and, after tailing off at the beginning of the millennium, stabilised at a level of around 3%, meaning exports of services to the USA are far less significant than that of goods. The USA has always accounted for a share of between 50% and 60% of Canadian service exports. If we take a look at the level of FDI in Canada and the equivalent Canadian values abroad, it is clear that the USA is declining in importance as both a destination and source of investments. In 1987, the USA accounted for a share of 70% of FDI in Canada, with this value subsequently falling to 46% by 2022 (reflecting a decline from CAD 1,264bn to CAD 581bn across this time frame). In relation to total Canadian FDI, the share of Canadian investments in the USA amounted to 52% in 2022 (CAD 1,041bn of CAD 1,990bn). At 66%, this metric was also significantly higher in 1987. The USA remains Canada's most important partner for cross-border capital flows, although NAFTA has not had a significant impact in this regard. Having previously always recorded a deficit in the period under review, it is noteworthy that Canada has registered a constantly growing positive direct investment position versus the USA since 2015. In this context, a deficit of CAD 5.3bn had been transformed into a surplus of CAD 460.1bn by the end of 2022.

#### Importance of the USA as an investment partner



Source: Canada Statistics, NORD/LB Floor Research

Direct investment volume (in CADbn)





#### USMCA/CUSMA as the successor agreement to NAFTA

At the initiative of the Trump administration, the USA, Canada and Mexico renegotiated their economic relationships, which up to this point had been shaped by NAFTA, and struck a deal to replace the 1994 agreement. The United States-Mexico-Canada Agreement (USMCA), rearranged in Canada to read CUSMA (Bill C-4) for obvious reasons (and referred to as "L'Accord Canada-États-Unis-Mexique" (ACEUM) in the French-speaking province of Quebec), was signed on 30 November 2018 and aims to define the conditions for free trade in North America in the 21st century. This is achieved by taking into account areas such as digital trade, environmental protection, employee rights in addition to copyright laws and special provisions for their implementation. In contrast to NAFTA, CUSMA will run for a limited term of just 16 years. The agreement also stipulates that it should be reviewed every six years and can potentially be extended for a further 16 years. After Canada became the final Member State to ratify the agreement in March 2020, CUSMA came into force on 1 July 2020, with the result that the North American export industry now enjoys greater planning security. In the period directly before the COVID-19 crisis, the US government had been responsible for creating instability in this regard, particularly on account of the tariffs levied against steel and aluminium imports from Canada and Mexico, which were in place from June 2018 to May 2019.

#### Amendments from the CUSMA

The provisions with regard to the automotive industry represent an important part of the agreement. According to the former President of the United States, Donald Trump, the automotive industry in the USA suffered an unfair disadvantage under the previously applicable rules. CUSMA now stipulates that 75% (previously: 62.5%) of the automotive components used in a car must have been manufactured in North America in order for no tariffs to be applied. In addition, 40% of the components must have been manufactured by employees earning at least USD 16 per hour. If a CUSMA Member State enters into another free trade agreement with a country that one of the other parties to the agreement deems not to be a free market economy, the other Member States have the option to exclude the Member State in question from CUSMA with a notice period of six months. This would subsequently transform CUSMA into a bilateral agreement between the two remaining states. It is thought that China would be the most significant country that would not be regarded as a free market economy by all members of CUSMA. Canada has therefore sacrificed any opportunity to conclude a free trade agreement with China, the world's second largest economy, in order to sign up to the CUSMA and conduct free trade within North America. This serves to underline the importance of the USA as a trading partner for Canada and could have an impact on the likelihood of China acceding to the CPTPP (further details included in the following section). With CUSMA, Mexico and Canada have taken a deliberate and decisive step closer to the USA. The requirement with regard to wages within the automotive industry and conditions on employee protection are placing pressure on Mexican manufacturers, while Canada has opened up its import market further for dairy products, poultry and eggs. This could primarily impact the provinces of Saskatchewan, Prince Edward Island and Manitoba, where the importance of the agri sector is higher than in other provinces. As the agri sector only constitutes around 2% of total Canadian GDP, the effects in this context are not expected to be excessive.



## Constitutional principles The Comprehensive and Progressive Agreement for TransPacific Partnership (TPP)

#### The long road to the TPP

The long-planned TPP (Trans-Pacific Partnership) trade agreement between an original total of twelve countries was signed in 2015, although initially it was not ratified. At this time, Australia, Chile, Brunei, Japan, Canada, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam and the USA were all involved in the agreement. TPP was considered an extension of TPSEP (Trans-Pacific Strategic Economic Partnership), the free trade agreement between Chile, Brunei, New Zealand and Singapore, which was concluded back in 2005. The main aim of TPSEP was the removal of customs duties. The interest in acceding to the agreement on the part of the USA was advanced in particular by the former US administration under Barack Obama's presidency. The original intention was primarily to promote the exchange of international financial services.

#### Trump orders exit from the TPP

Donald Trump once again took centre stage in relation to a trade agreement by sharply criticizing the proposal for the Trans-Pacific Partnership, even during his presidential election campaign. Trump repeatedly asserted his main argument that the employment situation on the US labour market would be weakened by any agreement. In January 2017, on his first day in office, the former POTUS formally withdrew the United States from the TPP by decree, with the aim of strengthening domestic industry and the labour market. This therefore signified that the USA had adopted the dreaded path of protectionism for its trade policy.

#### Agreement will continue without the USA

Exactly one year to the day after President Trump stated his intention to withdraw the USA from the TPP, the remaining eleven countries announced a revised version of the TPP excluding the USA. The proposed agreement was presented by Justin Trudeau, Prime Minister of Canada, who announced the revised version of the agreement, renamed the "Comprehensive and Progressive Agreement for Trans-Pacific Partnership" (CPTPP), at the World Economic Forum (WEF) in Davos, Switzerland, in 2018. The eleven partner countries signed the agreement on 08 March 2018 in Chile. The agreement entered into force with effect from the end of 2018. In May 2023, Brunei became the final partner country to ratify the agreement. As described above, it includes the elimination of tariffs on agricultural and industrial products. Clear signals in support of multilateral cooperation and against the protectionist attitude of the USA were sent out, not only for the members of the partnership, but also for global trade in general, especially through the timing of the announcement. Embodied by Prime Minister Trudeau, Canada took on a leading role in setting the tone in this respect. The eleven participating countries have around 500m inhabitants overall, representing about 13% of global GDP.



#### Conclusion

After the CPTPP was signed on 08 March 2018 and ratified by all members, the objective of the agreement, i.e. to create a solid, rules-based trading system for the 21st century, came a major step closer to being realised. Looking ahead, we believe the next priority should be to maximise the number of participants. However, the Biden Administration in the USA has also ruled out re-joining the agreement. Rather, at the initiative of the POTUS, the Indo-Pacific Economic Framework for Prosperity (IPEF) was launched in May 2022. With this, the USA continues to underline the economic importance of the region. China remains a potential membership candidate, despite the fact that Australia and Japan intimated that they would not support a formal Chinese application back in 2021. However, in the case of the UK, which, despite its geographical location, signalled its interest in joining the CPTPP post-Brexit, the situation has now been clarified. On 31 March 2023, the UK government announced that negotiations with the member states of the agreement had been concluded, before signing the Protocol of Accession on 16 July 2023. It is now up to all Member States to ratify the accession of the United Kingdom to the CPTPP. Kazuyoshi Umemoto, who led the negotiations on behalf of the new heavyweight member, Japan, said that no major changes had been made to the original TPP variant in terms of content, with only a handful of individual paragraphs having been deleted. These marginal adjustments could nevertheless be interpreted as a sign of negotiating leeway in favour of the USA. As the largest economy among the members, Japan is using the agreement to open up further to international markets.



#### Regulatory framework of the Canadian provinces and territories

#### Key factor for relative attractiveness

In the SSA segment, we regard the regulatory treatment of exposure as one of the main determinants of the relative attractiveness of an issuer or bond. For this reason, we analyse the implications of risk weighting, LCR and NSFR classification and treatment under Solvency II in the section below. In this context, however, we will not present a general overview of each individual regulation. Instead, we refer you to our <a href="Issuer Guide - German Laender 2023">Issuer Guide - German Laender 2023</a>, in which we cover the individual legislation in detail.

#### The risk weighting

#### 0% risk weighting under CRR possible

We hold the view that a risk weighting of 0% could be applied to Canadian provinces in line with the standard approach of CRR.

#### Relevant regulatory frameworks: CRR; Commission's decision; CAR

The basis for the risk weighting of outstanding claims against Canadian provinces and territories is essentially derived from four legislative acts: the European Capital Requirements Regulation (CRR; Regulation (EU) No. 575/2013 and Regulation (EU) 2019/876), the implementation decision (EU) 2021/1753 from the European Commission, and the Canadian Capital Adequacy Requirements (CAR).

#### CRR: Art. 115(4) allows the possibility of 0% risk weighting for sub-sovereigns outside the EEA

The risk weighting of exposure is subject to the requirements of the CRR within the EU. In the case of regional governments and local authorities (RGLAs), the risk weighting is determined using the standard approach in accordance with Art. 115 CRR. Section 4 describes the possibility that exposure to sub-sovereigns may be treated as exposure to the respective central state, provided that the state in question is not part of the EEA and is therefore regarded as a third country. Essentially, there are two requirements for equal treatment of exposure, i.e. the possibility of a 0% risk weighting:

- 1. The third country's regulatory and legal provisions are at least equivalent to those of the European Union.
- 2. The regulatory body in the third country treats exposure to the respective sub-sovereigns like exposure to the central government. This is because there is no difference in relation to the risks of these positions due to the special powers to levy taxes held by these sub-sovereigns and institutional precautions that are in place to reduce the risk of default.

#### **Necessary to examine two requirements**

It is accordingly necessary to examine two requirements: the equivalence of Canada's regulatory and legal provisions with those of the EU and the risk weighting of Canadian provinces and territories under the standard approach in Canada.



#### **BCBS** approves reforms

In 2018, the Basel Committee on Banking Supervision (BCBS) adopted amendments to the regulations governing capital requirements under the credit risk approach, among other measures. A buffer was also added to the leverage ratio and the calculation of the necessary regulatory capital by the banks was also tightened up. The purpose of these adjustments is the unjustified variability of risk weightings between the individual banks.

#### Commission decision: equivalence of regulatory and legal provisions

Examination of the first requirement was made far easier in October 2021. The European Commission published implementation decision (EU) 2021/1753, which defined those countries in which the regulatory and legal provisions are at least equivalent to those of the EU. In conjunction with Annex IV of the decision, Article 4 indicates explicitly those countries for which this first requirement of Art. 115(4) CRR is met. This list includes the following jurisdictions:

#### List of third countries that are equivalent from a supervisory and legal viewpoint

Argentina	Hong Kong	Saudi Arabia
Australia	India	Serbia
Bosnia and Herzegovina	Isle of Man	Singapore
Brazil	Japan	South Africa
Canada	Jersey	South Korea
China	Mexico	Switzerland
Faroe Islands	Monaco	Turkey
Greenland	New Zealand	USA
Guernsey	North Macedonia	

Source: European Commission, NORD/LB Floor Research

#### **Equivalence confirmed**

Equivalence is thereby confirmed by the Commission's decision. As a result, the first requirement of Art. 115(4) can be regarded as satisfied.

#### CAR: 0% risk weighting of Canadian regions in Canada

The risk weighting is therefore exclusively based on the regulatory treatment of the Canadian provinces and territories by the Canadian regulatory and supervisory institution. The relevant legal provision is the CAR, which specifies the definitions for the risk weighting under the standardized approach in Chapter 4.1.2. This provision enables the equivalence of Canadian provinces and territories and the central government, resulting in a risk weighting of 0%.

#### 0% risk weighting for Canadian provinces possible under CRR

The method of deriving the risk weighting through the CRR, the decision of the European Commission and CAR therefore confirm the possibility of assigning a risk weighting of 0% based on the standard approach. Accordingly, in our opinion, Canadian provinces and territories represent interesting alternatives to other issuer groups that benefit from similar regulatory preference (e.g. German Laender).



#### The LCR classification

#### LCR classification dependent on two conditions

The LCR classification of bonds issued by Canadian provinces and territories is defined by the <u>LCR Regulation</u>, which is based on the CRR. We believe that Level 1 classification is possible since the requirements of Art. 10(1)(c)(iv) LCR are met.

#### Art. 10(1)(c)(iv) LCR requires two conditions to be met

Art. 10(1)(c)(iv) LCR enables the possibility of Level 1 classification for bonds issued by regional governments and local authorities (RGLAs) that are not based in the EEA. For this, two requirements are defined:

- 1. LCR classification of the respective central state is possible under Art. 10(1)(c)(ii)
- 2. Exposure to sub-sovereigns may be treated as exposure to the respective central state under Art. 115(4) CRR

#### First requirement: Validity of Art. 10(1)(c)(ii) LCR for Canada

The first requirement is that exposure to Canada can be classified as Level 1 assets under Art. 10(1)(c)(ii) LCR. Classification requires a Credit Quality Step (CQS) of 1 in accordance with Art. 114(2) CRR. Canadian government bonds must have a minimum rating of AA-/Aa3 in order to be classified as Level 1 assets. Since Canada is currently rated AA+/Aaa/AAA by Fitch, Moody's and S&P respectively, this requirement is met. Given that Canadian government bonds can consequently be used as Level 1 assets, the first condition of Art. 10 (1)(c)(iv) LCR is hereby satisfied.

#### Second requirement: 0% risk weighting for Canadian provinces

For the second requirement, the LCR refers to the risk weighting of the respective sub-sovereign according to Art. 115(4) CRR. Since we conclude that a risk weighting of 0% can be applied to exposure against Canadian provinces and territories in accordance with the standard approach of CRR (see previous pages), this requirement is therefore also met.

#### Bonds issued by Canadian provinces as Level 1 assets

As a result, we arrive at the conclusion that Canadian provinces and territories benefit from Level 1 classification in the context of the LCR, similar to German Laender, for example. For a more in-depth analysis of the LCR, we would refer at this point to our <u>Issuer Guide – German Laender 2023</u>.



#### The NSFR classification

#### Introduction of the NSFR within the framework of the CRR

After the CRR came into effect, requirements with regard to the Net Stable Funding Ratio (NSFR) were also implemented into European law, although the European Commission adopted the BCBS draft with a handful of amendments. Similar to the LCR, the purpose of the NSFR is to avoid funding risks. In contrast to the LCR, however, the focus of the NSFR is on a time frame of 12 months, rather than stress periods of one month. For more detailed information in this regard, we again refer to our <u>Issuer Guide – German Laender 2023</u>.

#### RSFF of 0% in accordance with Art. 428r - 428ah CRR

The classification of assets in RSF categories is regulated by Articles 428r–428ah of the CRR. As unencumbered LCR Level 1 assets (see previous pages), a Required Stable Funding Factor (RSFF) of 0% can be applied to bonds issued by Canadian provinces and territories, which is the best possible classification. In comparison with the draft version drawn up by the BCBS, which stipulated an RSFF of 5%, this classification is even more favourable. Canadian subsovereigns are therefore equated with the German Laender, for example.

#### The Solvency II classification

#### Solvency II classification according to BaFin

In the standard formula under Solvency II, bonds are generally considered in relation to the interest rate risk, the spread risk, the market concentration risk and, if denominated in foreign currency, the currency risk. In the spread risk and market concentration risk, certain bonds are assigned a risk factor of 0%. In this respect, see in particular Art. 180(2) Delegated Regulation (DR) for specific risk exposures in relation to the spread risk and Art. 187(3) DR for the market concentration risk.

#### **Basic principles of Solvency II classification**

The capital requirement for the spread risk of bonds is basically determined as a stressed market value, whereby the related stress factor to be used is essentially derived from the two parameters: duration and CQS. For further details, please refer to Art. 176 ff. DR. The credit quality step is mainly derived from the (external) rating. To this end, a specific mapping is defined in a document entitled: <a href="Implementing Technical Standards on the mapping of ECAIs credit assessment">Implementing Technical Standards on the mapping of ECAIs credit assessment</a>. Exposure to local governments is only to be treated as exposure to the relevant central government if they are explicitly included on the published <a href="Lists of the European Banking Authority">Lists of the European Banking Authority (EBA)</a>.



#### Specific aspects of Solvency II classification

Given that none of the provinces of Canada constitute a regional government of a member state, Art. 180(2)(b) DR in particular is not applicable initially. Due to the fact that a large majority of the issued bonds is additionally not denominated in the currency of the relevant central government (Canada), but rather denominated in EUR, Art. 180(3) DR is likewise in particular not applicable. As a result, in this instance, the capital deposit is determined in line with the requirement specified in Art. 176 DR. In terms of fixed-interest bonds, Art. 176(3) DR is relevant for stress factor use in particular, provided that these bonds are rated. In the case of variable-interest bonds, Art. 176(2) DR and Art. 176(4) ff. DR in particular must be observed.

#### Result - CQS

The decisive factor is that bonds of this type denominated in foreign currency that are issued by provinces or regional governments of non-member countries are not assigned preferred status and, as a rule, must accordingly be covered by equity capital, irrespective of rating and consequently CQS too. This also applies to bonds denominated in CAD, since the exposure to the province is not regarded as exposure to the Canadian state. For this reason, it is not Art. 180(3) DR that is crucial to stress factor use, but rather Art. 176 DR still. Consequently, no bonds are assigned preferred status, regardless of the rating.

#### Result - SCR

The SCR (Solvency Capital Requirement) is currently calculated on the basis of "individual addresses". Accordingly, it is the regional governments that constitute the individual addresses in question. In the case of EUR bonds, there would also be no risk factor of 0% in this instance (cf. Art. 186(1) in particular). This would also apply to bonds if they were denominated in CAD. Consequently, no bonds are assigned a risk factor of 0% in the market concentration risk either.

#### International regions missing from EIOPA list – approximation along the same lines as RGLA guarantees expected

Interestingly, the EBA only includes RGLAs from the EEA in its list, although there is no restriction to Member States under Art. 85. In contrast, the <u>Final Report based on the consultation paper</u> states that the scope shall initially be restricted to EEA-based RGLAs. However, future extension of the scope to include RGLAs in relevant third countries is not ruled out. If Solvency II also follows the risk weighting according to Basel III for international subsovereigns when applying preferred status, we believe that Canadian regions would also benefit from a stress factor of 0%. In the event that exposure to Canadian regions were treated as exposure to the central government, our interpretation would be that this also produces a stress factor of 0% on the basis of Canada's sovereign rating and in accordance with Art. 180 (3).

#### Conclusion

In our view, bonds issued by regional authorities in Canada are not preferred under Solvency II and should therefore be assessed on a case-by-case basis according to risk class and duration.

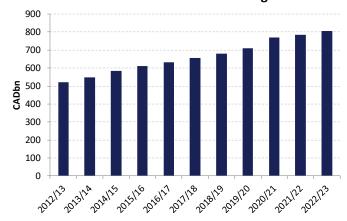


#### Fundamental development of the Canadian provinces Budget and debt development – an overview

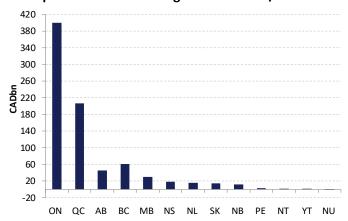
#### High degree of heterogeneity

In relation to the budgets, Canadian provinces and territories again feature a high degree of heterogeneity. There are major differences evident in the budgets of each individual subsovereigns, not least due to the fact that the population of Canada is concentrated in just a handful of provinces.

#### Trend in net debt of Canadian sub-sovereigns



#### A comparison of outstanding net debt 2022/23



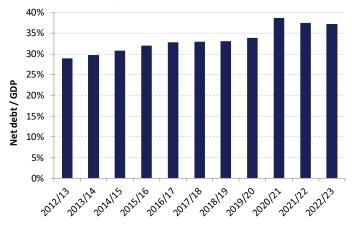
Source: Budgets of the individual provinces and territories (Department of Finance Canada), NORD/LB Floor Research

#### Sustained growth in net debt

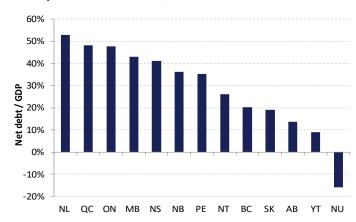
As was the case in previous years, the net debt of Canadian sub-sovereigns rose again in the 2022/23 budget year to a total of CAD 806.9bn. This equates to an increase of CAD +22.2bn in comparison with the previous year. Unsurprisingly, the largest portion of the debt is attributable, at CAD 400.5bn and CAD 206.8bn respectively, to the two most populous provinces of Ontario and Quebec. Looking at total debt, there has been a rise of just under +14% over the past three years. In the 2022/23 budget year, by far the highest debt growth in percentage terms was recorded by Yukon (one of the three Canadian territories), where net liabilities increased by +193.1%. However, this development should be contextualised by highlighting the territory's low debt level as a starting point. Among the provinces, Prince Edward Island recorded the largest relative increase in debt with a percentage of new debt of +8.9%, which is attributable to its higher budget deficit. In absolute figures, this growth totals CAD +207m. However, Ontario and Quebec again stand out in terms of absolute debt growth, having registered figures of CAD +17.6bn and CAD +14.6bn respectively versus the 2021/22 budget year. The largest debt reduction in the previous financial year was recorded by the province of Alberta, where net liabilities fell by a huge -22.7%. In total terms this equates to fall in debt of CAD -13.4bn.







#### A comparison of net debt / GDP in 2022/23

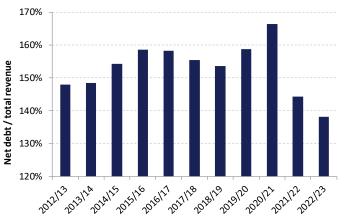


<sup>\*</sup> Debt figures as at budget year-end (31 March); real GDP data as at calendar year-end. Source: Public accounts of each of the provinces and territories, NORD/LB Floor Research

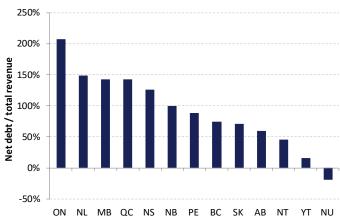
#### **Debt measured against GDP**

Since the 2008/09 budget year, debt growth has always exceeded economic growth. However, this trend was broken in each of the past two budget years. For example, the ratio of net debt to GDP fell to 37.2% in the 2022/23 budget year, with regional differences also coming to the fore in this respect. Overall, the increase in debt relative to economic strength has been slow in the recent past — with the exception of 2020/21, when debt growth of 4.8 percentage points was recorded. However, this reflects new borrowing and the contraction of GDP in the wake of the COVID-19 pandemic.

#### Trend in net debt / revenue



#### A comparison of net debt / revenue in 2022/23



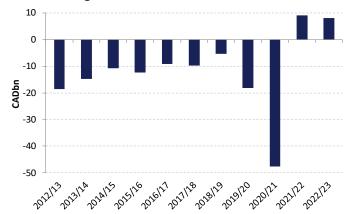
Source: Budgets of the individual provinces and territories (Department of Finance Canada), NORD/LB Floor Research

#### Turning point reached in debt sustainability

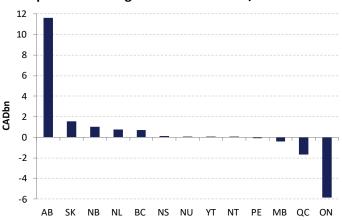
After the ratio of net debt to revenue reached a peak value in the 2020/21 budget year, this metric has started to fall sharply again as early as the 2021/22 budget year. The reason for this significant decline was revenue growth in the provinces and territories of just under +18% across 2021/22. At present, the ratio of net debt to revenue stands at 138%. The differences between the various parts of the country are again substantial in this regard; it is striking that the territories perform best here. Moreover, the provinces and territories also differ on account of their respective development in debt sustainability. While the average value for debt sustainability in the provinces amounts to 155% over the past decade, the equivalent value for the territories across the same time frame comes in at 8%.



#### Trend in budget balances



#### A comparison of budget balances in 2022/23

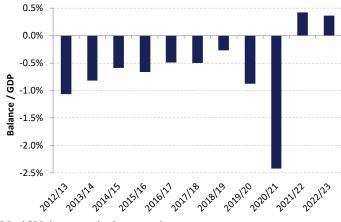


 $Source: Budgets \ of the \ individual \ provinces \ and \ territories \ (Department \ of \ Finance \ Canada), \ NORD/LB \ Floor \ Research$ 

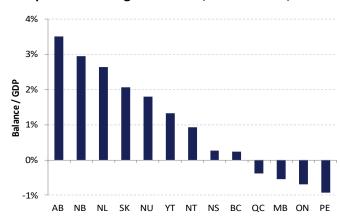
#### Improvement in the aggregated budget balance

Having been seriously impacted by the COVID-19 pandemic, the total balance of the Canadian provinces and territories has improved in the following years. In the 2022/23 financial year, the collective of Canadian sub-sovereigns recorded a balance surplus again. Overall, this amounts to CAD 8.0bn, reflecting a decline of CAD -1.0bn in comparison with the prior year. The majority of Canadian sub-sovereigns posted more or less balanced budgets, with Alberta in particular recording a significant surplus of CAD 11.6bn. Alberta posted remarkable revenue growth amounting to +58.4% as early as the 2021/22 budget year, which enabled the province to generate a budget surplus for the first time since 2014/15. In the 2022/23 budget year, there was renewed revenue growth of +11.4%. Ontario and Quebec recorded the highest budget deficits in the same period. While both provinces still posted positive balance sheets in 2021/22, the deficits recorded in the previous financial year totalled CAD -5.9bn and CAD -1.7bn respectively. In addition, two further Canadian subsovereigns, namely Manitoba (CAD -0.4bn) and Prince Edward Island (CAD -0.1bn), posted marginal budget deficits.

#### Trend in budget balances / GDP\*



#### A comparison of budget balances / GDP in 2022/23



Source: Budgets of the individual provinces and territories (Department of Finance Canada), NORD/LB Floor Research

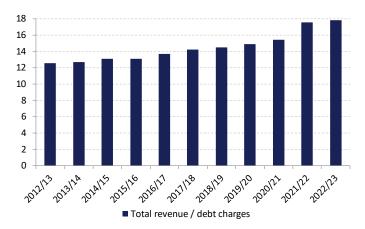
<sup>\*</sup> Real GDP data as at calendar year-end.



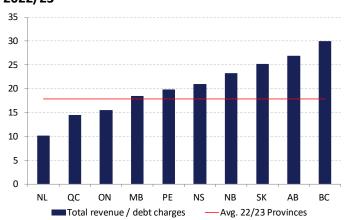
#### Improvement in interest coverage

The interest coverage of the Canadian provinces also improved in the 2022/23 budget year, as has been the case in each of the previous nine budget years. The reason for this development was that interest payments rose only marginally due to the low interest environment in combination with increasing revenues. Similarly to other metrics, there are also clear differences between the individual provinces in terms of the respective levels of interest coverage. For example, British Columbia is ranked first in a comparison of all provinces with a score of 29.9x due to its below-average per capita interest burden, whereas the province of Newfoundland and Labrador records the lowest value, at just 10.1x, despite the fact that it posted the highest revenue per capita in the 2022/23 budget year. In 2022/23, the average interest coverage across all provinces came to a value of 17.8x.

#### Trend in revenues / interest expenditure\*



#### A comparison of revenues / interest expenditure in 2022/23



\* Excluding territories, as they have hardly any interest expenditure or none at all.

Source: Budgets of the individual provinces (Department of Finance Canada), NORD/LB Floor Research

#### Conclusion

As has been the case in preceding years, the total debt level of the Canadian sub-sovereigns rose further in the 2022/23 budget year. This now stands at CAD 806.9bn, or 37.2% of GDP. In addition, the financial situation of individual provinces and territories is characterised by a high degree of heterogeneity. This can also be explained by the fact that the different parts of the country vary significantly in terms of population, economic structure and other factors. Nevertheless, some key metrics did develop positively: for example, debt sustainability, total balance and interest coverage of the provinces have all improved in the recent past.



#### Fundamental development of the Canadian provinces A comparison of Canadian sub-sovereigns and German Laender

#### **Basic information to start**

In our opinion there are significant differences between Canadian sub-sovereigns and German Laender. Although the financial equalization mechanisms are now more alike since the abolition of the Laender financial equalization system in its original form in 2020, there are still clear differences regarding fiscal autonomy and budget development.

#### Connection with the central government – higher degree of autonomy for Canadian provinces

One of the most significant differences between Canadian sub-sovereigns and German Laender is, in our view, the degree of autonomy with regard to fiscal policy. While the Laender only have limited flexibility, especially on the revenue side due to a low level of autonomy, Canadian provinces have far more wide-ranging options in this respect. Indeed, the Regional Authority Index (RAI) developed by Hooghe, Marks and Schakel (2010) reveals that Canadian provinces enjoy greater fiscal autonomy than the German Laender, which is likely to increase further as a result of the debt brake for German Laender reactivated at the start of 2023. Nevertheless, German Laender have a higher total value and therefore a greater degree of autonomy overall. The authors are currently working on an update to the RAI, which should include data up to and including 2020. By transferring competencies to the Bund in return for a higher share in VAT receipts for the Laender, they have further limited their sovereignty, which is likely to reduce their RAI score. The RAI is not the only index that attempts to classify the autonomy of sub-sovereigns: the OECD has a wide range of indices in these areas, such as the Composite Spending Autonomy Indicator (CSAI). This stands at 0.995 for Canada and 0.715 for Germany. In the CSAI, a zero stands for centralised spending, while a one stands for decentralised spending. This result also indicates that Canadian sub-sovereigns have higher fiscal autonomy than the German Laender: the same conclusion that was reached by the RAI.

#### Implicit chain of liability - assumptions vs. implicit constitutional entitlement

We see another difference between Canada and Germany in the implicit chain of liability that connects sub-sovereigns with the central government. As we understand it, the liability link between province and central government in Canada is based solely on the assumption that, in a critical situation, the central government would act accordingly by providing support, thus acting as implicit guarantor. This is essentially similar in Germany, although here, the principle of federal loyalty gives rise to implicit constitutional entitlement, which is consequently far more established, even if the Basic Law only implies liability (for a discussion of the principle of federal loyalty, we refer to our <u>Issuer Guide – German Laender 2023</u>).



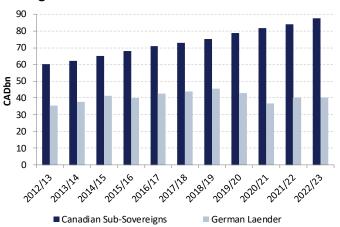
#### How the financial equalization mechanism works

In the past, the financial equalization system in Canada was very different to its German counterpart. However, following the reform of the German financial equalization system, there are now more similarities. Following the reformation/abolition of the Laender financial equalization system and the associated horizontal redistribution of funds between the Laender, the system in place in both countries since 2020 has been one in which funds are distributed only vertically from the central government to the provinces/Laender. A look at the development of allocations from the equalization systems reveals that the proportion of provincial income from the Canadian transfer system over the previous years oscillated within a corridor between 16% and 18%. As a result of the strong increase in income in budget years 2021/22 and 2022/23, the share of transfer payments has decreased recently, standing at 15.0% in 2022/23 (2021/22: 15.4%). Meanwhile, the trend in Germany shows a downward trajectory for some time now: while in 2012/13, around 9.0% of the total income of the Laender was attributable to the financial equalization system, the most recent figure for this metric stands at 5.8%.

#### Revenue from financial equalization in relation to total revenue

# 18% 16% 14% 14% 10% 10% 8% 4% 2% 0% Canadian Sub-Sovereigns German Laender

#### Total transfer payments to the Canadian subsovereigns and the German Laender



NB: Figures for the Laender as at calendar year-end. Estimates for most recent budget year in Canada; German transfer payments in CAD were calculated at average yearly exchange rates

Source: Budgets of the individual provinces and territories (Department of Finance Canada), Federal Ministry of Finance, NORD/LB Floor Research

#### A comparison of the trend in transfers

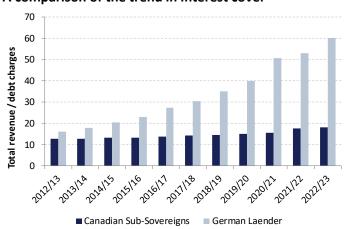
Regarding the total transfer payments to the German Laender and the Canadian subsovereigns, an interesting picture emerges: growth in Canadian transfers is greater than that of the German Laender. In Canada, payments over ten years increased by 45.9%, while in Germany, they rose by just 14.1%. Over the same period, the income of the Canadian sub-sovereigns and the German Laender grew by 67.2% and 70.5% respectively, which also explains the declining relative transfer share of total income of the German Laender. German Laender are therefore becoming increasingly less dependent on transfer payments, whereby the situation in the Canadian sub-sovereigns has only gradually improved.



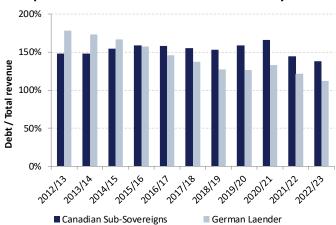
#### Budget trend – stabilisation vs. positive trend

A look at the budget development of all Canadian sub-sovereigns and German Laender reveals clear differences. Particularly with regard to interest coverage, the German Laender are miles ahead of the Canadian provinces and territories: while in German Laender, the total income-interest payment ratio has nearly doubled in five years to 60.1x, Canada has registered only a moderate rise from 14.4x to 18.1x. A similar trend can be identified in debt sustainability, which the German Laender have been able to continuously improve in the past – apart from in 2020/21. Since 2015/16, the Laender have exceeded the Canadian sub-sovereigns in this metric; having deteriorated in the wake of the financial crisis, it has now stabilised. The improvement in the budget metrics may be attributable to the stricter regulations to which German Laender are subject. Since the start of 2020, German Laender have not been permitted to acquire any new debt (an exception was made during the COVID-19 pandemic, when the debt brake was discontinued between 2020 and the end of 2022) – they are also subject to review by the stability council on a semi-annual basis. The debt brake is currently in force (again) in 13 of the 16 German Laender. We believe that it is plausible that the interest coverage of German Laender will decrease in the future for large amounts of refinancing, as the interest burden is increasing as a result of the restrictive ECB monetary policy. As a contrast to this, we expect that Canadian sub-sovereigns will register a less pronounced increase in the interest burden owing to the already high interest base.

#### A comparison of the trend in interest cover



#### A comparison of the trend in debt sustainability



NB: Figures for the Laender as at calendar year-end. Estimates for most recent budget year in Canada.

Source: Budgets of each of the provinces and territories (Department of Finance Canada), German Federal Ministry of Finance, NORD/LB Floor Research

#### Conclusion

All in all, we see marked differences between Canadian provinces and German Laender. While the implicit liability chain in Germany means that the Laender are strongly tied to the federal government, the relatively high fiscal autonomy of the Canadian sub-sovereigns from a fundamental perspective presents a significant advantage. We assess the overall budget trend in the German Laender as more positive, with Canada also improving further in 2022/23. The principle of federal loyalty has also led to a stronger correlation between the German Laender in terms of creditworthiness. This principle aims to minimise the differences, which are sometimes significant, in the creditworthiness of the individual Laender. However, in the case of Canadian provinces, we view this aspect (connection with the central government) as less of a compensatory factor. Accordingly, we see a far higher degree of heterogeneity in the creditworthiness of Canadian provinces, which is also reflected in this form in the ratings.



#### Refinancing of Canadian sub-sovereigns Funding strategies – an overview

#### Significant differences between the provinces

There are notable differences between Canadian sub-sovereigns in terms of their capital market activities. While none of the territories had issued any kind of bond prior to 2020, the Northwest Territories (Ticker: GNWT) approached the market with its inaugural bond issuance in September 2020 raising CAD 180m. Moreover, there are notable differences between provinces in terms of the extent and structure of their primary market activities.

#### Ontario and Quebec remain the largest bond issuers by some distance

Ontario (Ticker: ONT) and Quebec (Ticker: Q) remain the two largest issuers, with ONT alone having accounted for more than half of all bond issues by Canadian provinces in the past. Across the year 2023, the state of play proved to be somewhat more balanced, although at 43.8% versus 27.7%, ONT continued to be busier on the capital market than Q. Jointly, the two provinces therefore still accounted for around 72% of the issuance volume. Prior to the COVID-19 pandemic, Alberta and Manitoba were responsible for substantial levels of issuance activity, although have since fallen back to shares of "only" 2.1% and 4.0% respectively. At the same time, ONT and Q are also no longer the only two sub-sovereigns to have placed EUR benchmarks, with British Columbia (Ticker: BRCOL) joining the ranks of EUR provinces as well. In April 2018, Alberta entered the scene with a bang, placing an inaugural EUR bond in the amount of EUR 1.5bn. In 2019, Alberta followed this up with a further EUR 1.25bn. Manitoba surpassed this threshold in 2022 after tapping its existing bonds. Its 15 EUR-denominated bond issues outstanding amount to a total volume of EUR 1.8bn. In 2023, only Q placed a benchmark bond, issuing a total volume of EUR 2.25bn in the process. BRCOL and ONT returned to the EUR market in early 2024, both raising EUR 1.25bn for bonds with a 10.5y and 10y term respectively.

#### Diversified refinancing

There is typically a moderate level of diversification in terms of funding. Apart from Newfoundland and Labrador, Nova Scotia and Prince Edward Island, all other provinces use foreign currencies as part of their funding strategies. The foreign currency shares in relation to the relevant volume of bonds outstanding range from 5.1% (Saskatchewan) to 25.8% (British Columbia), with an average of 18.2%. The USD is still the most important foreign currency among Canadian sub-sovereigns, accounting for the (melting) equivalent of EUR 66.7bn of total debt outstanding. EUR-denominated bonds represent the second most important foreign currency (EUR 40.8bn) and are examined separately in the following paragraph. Other relevant foreign currencies used to ensure diversification of funding are the AUD, GBP and CHF.

#### Four issuers of EUR benchmarks: ONT, Q, BRCOL and ALTA

Up to October 2015, ONT and Q were the only issuers of EUR benchmarks. Since this time, BRCOL has also sought to access new investor groups. In April 2018, ALTA followed suit. At a total of EUR 40.8bn overall, there is still some room for improvement in the contribution to the funding mix of the now four issuers plus Manitoba (no primary market EUR benchmark to date). The volume had declined temporarily following maturities in ONT, but has increased again by more than EUR 10bn since 2020. We expect EUR-denominated funding to grow further in time, with the potential for new provinces to open up to the euro as a result of the new EMTN program in Newfoundland and Labrador.



#### **Overview of funding instruments**

Province/territory	Outstanding volume of bonds (EURbn)	Proportion of foreign currencies	Bond volume (EURbn)	EUR benchmarks	Issuance volume 2023 (EURbn equivalent)
Alberta (ALTA)	62.4	25.2%	4.8	3	1.0
British Columbia (BRCOL)	59.0	25.8%	4.1	3	6.2
Manitoba (MP)	38.2	20.1%	1.8	1	1.9
New Brunswick (NBRNS)	15.0	9.5%	-	-	1.0
Newfoundland and Labrador (NF)	13.3	0.0%	-	-	0.6
Nova Scotia (NS)	11.1	0.0%	-	-	1.2
Northwest Territories (GNWT)	0.1	0.0%	-	-	0.0
Nunavut ( - )	-	-	-	-	-
Ontario (ONT)	279.2	13.7%	12.1	8	21.1
Prince Edward Island (PRINCE)	1.8	0.0%	-	-	0.1
Quebec (Q)	164.9	25.1%	18.0	10	13.3
Saskatchewan (SCDA)	20.0	5.1%	-	-	1.6
Yukon ( - )	-	-	-	-	-
Total/average	664.9	18.2%	40.8	25	48.1

Foreign currencies are converted into EUR at rates as at 13 March 2024.

Source: Issuers, NORD/LB Floor Research

#### Issuance volumes: a game of two halves - part stabilisation, part expansion

The trend in issuance volumes of Canadian sub-sovereigns has been characterised by a rising trajectory over recent budget years, before reaching a (provisional) peak in the 2014/15 budget year. While the issuance volume in the 2007/08 budget year was CAD 34bn, for example, it more than doubled to nearly CAD 80bn before dropping to just under CAD 75bn prior to the COVID-19 pandemic. At the same time, the balanced budgets continued to decrease. Due to the pandemic, funding was on the rise again. Generally speaking, issuance activities would primarily rise in CAD in the first instance, although there were considerable fluctuations in the domestic currency as well. It was a similar story for foreign currencies, with the result that the EUR in particular lost relevance in the short term, but in other budget years has actually outperformed the Greenback. Of course, this is always opportunistically driven due to the cross-currency basis swap spreads (XCCY) in the respective market situation. The trend in issuance volumes also not only reflects the economic or interest rate environment. Instead, with regard to the refinancing operations of the provinces, it also reflects commodity prices on global markets (particularly crude oil) and consequently any loss of (budgeted) tax receipts that needed to be compensated for, and – depending on market prices – those that will need to be offset in future.

#### Funding volumes for Ontario and Quebec remain relatively stable

Recently, however, this trend in volumes has applied to the two largest issuers – Ontario and Quebec – only to a limited extent. Due to the sheer size of their budgets alone, Ontario and Quebec always have high funding requirements (together they consistently account for 50%-80% of the total volume). With 42.0% of the total issuance volume, Ontario is and will remain a heavyweight on the capital market, followed by Quebec (24.8%). In the meantime, however, British Columbia, Alberta and Manitoba have also tapped the capital market with increasing frequency, at times also in EUR. Moreover, Saskatchewan, New Brunswick and Newfoundland and Labrador have been increasingly active as issuers too, although not (yet) in the European single currency. As was the case across the world, the COVID-19 pandemic led to increased funding requirements in Canada. This led both to a deterioration in budgetary situations and, in some cases, adversely impacted the rating (or at least the rating outlook) as well.



#### EUR – the second most important foreign currency

In absolute terms, the EUR is the second most important foreign currency for the Canadian provinces' refinancing activities. Only the USD is of greater importance, while the GBP, CHF and AUD all rank behind the EUR. In relative terms, the EUR is of minor importance compared with the CAD: only in the 2009/10 and 2014/15 budget years did the EUR account for around 10% of the total issuance volumes. Aside from Ontario and Quebec, up until 2011, only British Columbia had issued a bond denominated in EUR. It is still in circulation with a volume of EUR 40m up to 2038. In 2015 and 2024, BRCOL successfully placed benchmark bonds (EUR 500m; EUR 1.25bn). Moreover, Canada's westernmost province has been active with smaller bonds. Since 2011, BRCOL has issued a total of 17 EUR bonds with a total volume of EUR 4.1bn. Up to the onset of the COVID-19 pandemic, the province had always been awarded the top rating AAA/Aaa. A handful of issuance windows also opened up for Alberta in 2015 and 2016. The EUR played an important role here, with the province able to tap into new investor groups by way of private placements. Manitoba has also been active in similar formats with a series of private placements. In April 2018, Alberta issued an inaugural EUR bond with a volume of EUR 1.5bn and 7y term - precisely matching that of Ontario in the same month. The deal was priced at ms +5bp (ONT: ms +2bp). By way of comparison: the 10y benchmark placed by Quebec in January 2023 (EUR 2.25bn) was priced at ms +41bp. It is also interesting to note that the only other EUR bond ever to have been issued by a Canadian sub-sovereign other than Ontario and Quebec expired in 2007, with Nova Scotia having placed this bond back in 2001. As such, a sixth Canadian province has actually gained experience in the area of EUR issuances. As of this year, Newfoundland and Labrador has likewise been in a position to place bonds in the European single currency.

#### **General information**

Outstanding bonds In EUR equivalent\* EUR 664.9bn Of which in EUR\* EUR 40.8bn

#### Outstanding bonds issued by Canadian provinces – an overview



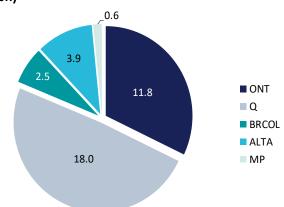
<sup>\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table presented in EURm. Source: Bloomberg, NORD/LB Floor Research



#### A comparison of outstanding bond volumes (EURbn)

#### $11.1 \ ^{20.0} \ /^{13.3} 1.8$ ■ ONT 15.0 Q BRCOL 38.2 ALTA 62.4 MP 279.2 NBRNS ■ NS 59.0 ■ SCDA 164.9 ■ NF **■ PRINCE**

#### A comparison of outstanding EUR benchmark volumes (EURbn)

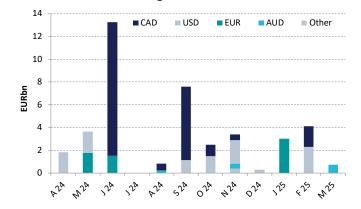


As at: 13 March 2024 Source: Issuers, Bloomberg, NORD/LB Floor Research

#### The Canadian capital market for bonds from the provinces and territories

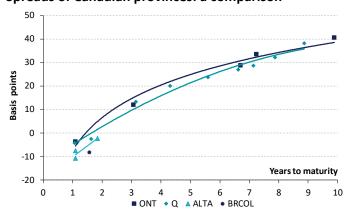
The total volume of outstanding bonds issued by Canadian provinces amounts to the equivalent of EUR 664.9bn. Of this, 6.1% is denominated in EUR, meaning that the European single currency is of minor importance from the perspective of these issuers. With an outstanding volume totalling EUR 40.8bn, the EUR nevertheless represents the second most important foreign currency after the USD (equivalent to EUR 66.7bn in total). However, if anything, this highlights the supreme importance of the CAD. The focus on ultra-long maturities is rather fascinating: the volume-weighted average produces a mean time to maturity of 12.5 years (as at: 13 March 2024), while more than one third of the bonds outstanding will not mature until after 2033 (41.0%, with an upward trend). Conversely, foreign currency maturities are concentrated at the short end (e.g., a total of EUR 5.2bn of the overall volume of EUR 40.8bn is set to mature after 2034). This equally applies to the USD and GBP. Given that, in addition to Ontario and Quebec, only Alberta, British Columbia and Manitoba have issued large-volume EUR bonds, we cover these provinces in greater detail in the following Issuer Guide, before shining a light on potential future EUR benchmark candidates such as Newfoundland and Labrador and Saskatchewan. This is followed by short profiles of the remaining sub-sovereigns. At the time of our last publication, none of the three territories had any bonds outstanding. However, the Northwest Territories now has one bond issue outstanding (ticker: GNWT).

#### Bond amounts maturing in the next 12 months



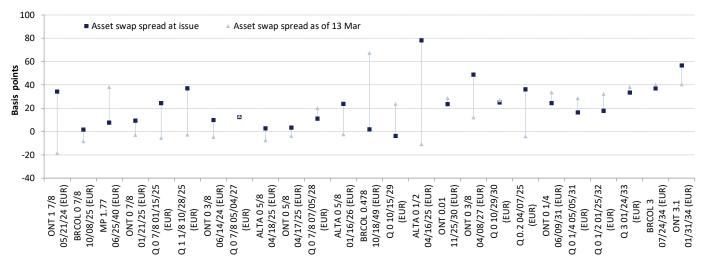
As at: 13 March 2024 Source: Issuers, Bloomberg, NORD/LB Floor Research

#### Spreads of Canadian provinces: a comparison

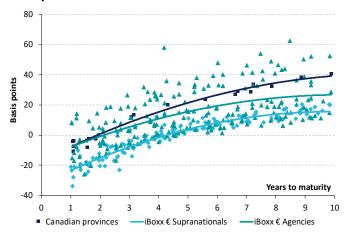




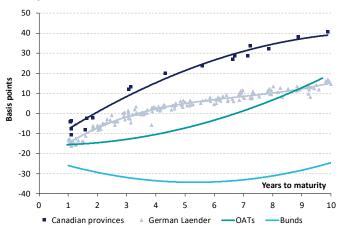
#### Performance of benchmark issues



#### ASW spreads vs. iBoxx € Indices



#### ASW spreads vs. Bunds, OATs & Laender



NB: Residual term to maturity >1 year and <10 years, outstanding volume at least EUR 0.5bn. As at: 13 March 2024 Source: Bloomberg, Markit, NORD/LB Floor Research

#### **Conclusion and outlook**

When and to what extent Quebec and especially Ontario will increase their EUR emissions again in the future remains unclear. We last saw Quebec with a benchmark in January 2023 (EUR 2.25bn), while Ontario, after a break since November 2021, was back in January 2024 (EUR 1.25bn). Ontario has significant maturities in EUR within the coming months. Quebec and Alberta not again until 2025. In the 2014/15 financial year, EUR benchmark bonds worth EUR 4.75bn were issued, which represented the highest level since 2009/10. The above-mentioned BRCOL, MP and ALTA transactions at least made up in part for the former EUR-denominated issuance activities of the "Big Two". This segment remains highly attractive to European investors. Of course, the relevant interest rate environment at the time of a transaction as well as the cross-currency basis swap spread always play a major role in the refinancing of provinces as well. Ultimately, new issues are opportunistically driven by the conditions in play at the time of the relevant issuance window. In Canada, the second half of the tax year began on 1 October 2023. As is well known, the fiscal and therefore budget year ends on March 31, 2024.



## Particular features in the refinancing of Canadian provinces Green bonds as part of the funding mix

## ONT and Q already active as green bond issuers

The first green bond deal from a Canadian province was recorded back in 2014: Ontario placed a green bond (4y) in its domestic currency with a volume of CAD 500m. At the end of January 2016, the same issuer carried out a second transaction in the amount of CAD 750m (7y). This bond was then tapped at the start of 2017, which serves as a sort of quasi third green transaction. This amounted to an additional CAD 800m to bring the overall volume to CAD 1.55bn. In February 2017, Quebec also placed an inaugural deal of CAD 500m, for which the order books were more than twice oversubscribed (see below). In the meantime, Ontario alone has now issued 13 green bonds, of which seven are re-openings, with a total volume of CAD 15.0bn, whereof CAD 13.0bn is still outstanding. This means that the largest province of Canada is also the undisputed leader of these rankings. As a result, it can be said that Canadian provinces are already making use of the green route to the capital market both on a regular basis and to a significant extent as well. We now propose to briefly introduce this future-oriented topic before delving deeper into the details.

#### Growing awareness of sustainability on the global capital markets

After issues such as sustainability and environmental protection have increasingly become the focus of societal attention in recent years, awareness of these topics has also arisen on the international capital markets. According to data from the Climate Bond Initiative (CBI), green bonds accounted for 56% of the GSS+ volume in 2022, reflecting the popularity of green bonds. In 2022, green bonds totalling USD 487bn were placed around the world (-16% Y/Y). As was the case in 2021, themed bonds accounted for 5% of the total bond issuance volume in 2022, according to CBI data. Ontario and Quebec have been using green bonds as funding instruments for a good while now. The term Socially Responsible Investments (SRI) has come into usage in a similar context. These investments are characterised by the fact that a positive net effect on society is targeted and that certain minimum ethical requirements are fulfilled. For instance, neither the arms industry nor coal-fired power stations are eligible for financing. While ecological aspects are certainly considered with SRI on occasion, the focus is more on societal considerations. ESG-compliant investments cover a somewhat broader spectrum of criteria, taking into account aspects related to the areas of Environment, Social and Governance as part of investment decisions. The fact that these issues are being taken seriously by the largest market players is also reflected in the ECB announcement dated 4 July 2022, which stated the central bank's ambition of decarbonising its portfolio of corporate bonds. Furthermore, several institutional investors together developed the "Principles for Responsible Investments" at the initiative of the United Nations. In essence, these six principles represent a commitment on the part of the signatories to take greater account of ESG factors in investment decisions and to promote their adoption within the financial sector. To simplify the classification of investments that qualify as sustainable or social, the EU devised a taxonomy to standardise the descriptions used. The aim here is to support investments in the green remodelling of energy production and the economy by removing any uncertainties. Recently, there have been loud calls for the taxonomy to be extended to include social aims. The European Economic and Social Committee has advocated for the establishment of a practical and conceptually sound social taxonomy in order to promote both ecologically and socially sustainable projects.



#### Green Bond Principles and allocation of issuance volume

We regularly publish a study on the topic of green bonds and ESG/SRI, in which we seek to delve deeper into this relatively young market segment. The most recent study was published in May 2023, which we plan to update this year as well. The International Capital Market Association defined the Green Bond Principles (GBP). These regulate bond issuances that qualify as green bonds and were most recently updated in June 2022. However, the Green Bond Principles do not represent a legally binding definition. The Green Bond Principles focus on four criteria: Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds and Reporting. Projects that are given consideration are those that pursue the overall objectives of adapting to and mitigating climate change, preserving natural resources and biodiversity in addition to preventing and reducing pollution. Moreover, the GBP recommend that external auditors verify compliance. In the past, green bonds have been differentiated from conventional bonds solely in the use of proceeds. In the interim, green bonds are now starting to be differentiated on the basis on their yields too. According to a study published by the International Monetary Fund (IMF) in April 2023, green sovereign bonds feature an average spread of -4bp against conventional sovereign bonds, although in certain cases the spread differences between individual countries are more pronounced. The IMF further explains that the negative premium (greenium) can be explained by the high demand for green bonds. In the future, this greenium could rise further in the event that green bonds are awarded regulatory privileges. However, this would all depend on uniform standards being implemented for green bonds. With the agreement on the EU Green Bond Standard on 28 February 2023, there could well now be a standardised definition to serve as the basis for this. According to the CBI, the largest issuers of green bonds in 2022 were financial service providers and companies outside the financial sector. At just over 77%, the three areas of energy, buildings and transport accounted for the majority of the issuance volume in 2022. Looking at new issues in 2022 by country of origin, China accounts for the largest share at more than USD 85bn, followed by the USA (around USD 64bn) and Germany (approximately USD 61bn).

#### Influence of ESG factors on credit ratings

In 2019, the rating agency Fitch introduced a scoring model (ESG Relevance Score) that allows the influence of ESG factors (Environmental, Social, Governance) on an issuer's rating to be assessed. However, this only takes into account the influence of these factors on the rating and not the behaviour of the respective issuer with regard to this aspect. The background to this was a desire on the part of investors to create greater transparency in respect of the influences underlying a rating. For this analysis, each of the three ESG factors are divided into five sub-groups, for which a rating on a scale of 1 to 5 is awarded, with Fitch able to refer to 106 sector-specific templates in order to assess the relevant aspects for each sector. In this context, values of 1 and 2 represent no existing influence on the rating (1: not relevant to either issuer or sector; 2: not relevant to issuer, but relevant to sector). A score of 3 is awarded where a potential influence exists, while scores of 4 and 5 are awarded for relevant factors and particularly influential factors respectively. The five sub-groups then produce a score from 1 to 5 for each of the three ESG factors, with three sub-levels for each value. At the end of the process, there are ultimately 15 different levels for each ESG factor. The values of the three ESG factors are then added up to produce an overall score that follows the same system to provide insights as to the extent to which the ESG factors influence the ratings of the respective issuers. For more detailed information, please refer to Fitch Ratings publications.



#### Applying the scoring model to Canadian provinces

For each of the 15 sub-categories and the overall score, the model determines a score of 3 for British Columbia, Ontario, Saskatchewan and Quebec, which represents a relatively low level of importance of ESG factors in the rating. In contrast, for the province of Alberta, where the oil production industry plays a prominent role in the economy, a value of 4 is awarded for "Biodiversity and Natural Resource Management" (sub-group linked to the Environmental factor), which identifies this sub-group as being a relevant factor in the ratings of this province. This also leads to an overall score in the lower 4 range. The rating for this province is therefore influenced by ESG factors to a marginally greater extent than is the case for the other provinces. In addition, it is also suprising that the province of Quebec, which covers 98% of its energy requirement from renewable energies (primarily hydroelectric power) is awarded a score of 3, exactly the same as the other provinces mentioned above, for the "Water Resources and Management" sub-group.

#### Future prospects for green bonds

The Province of Quebec has – as described above – issued eight additional green bonds on the capital market since making its debut in this segment back in 2017. Following the inaugural issuance of CAD 500m in February 2017, further green bonds of the same volume were placed exactly 12 months later and in June 2018. In May 2022, the largest-volume deal to date (CAD 1bn) was placed. The most recent deal was issued in November 2022, which carried a volume of CAD 800m. This issuance was increased in June 2023 by way of a reopening in the amount of CAD 600m to CAD 1.2bn. As such, the total volume of green bonds placed by Quebec stands at CAD 5.7bn, reflecting a share of 2.8% in the province's net debt of CAD 206.8bn. While the last three issuances have each had a term to maturity of ten years, the first five deals included two maturities of seven years and three with initial terms of five years. It is notable that the order books for each of the new issuances have all been several times oversubscribed, although a declining trend in this regard has recently been in evidence. For example, the fifth green bond issue placed by Quebec (February 2020) generated an order book of CAD 2.8bn, which equates to an oversubscription ratio of more than 5.0x, while demand for the November 2022 deal was just 1.75x more than the bond volume. The investors for all of these bond issuances came predominantly from Canada, with just over three quarters of the volumes being allocated to asset managers and pension funds.

#### **Conclusion and outlook**

When and whether Ontario or Quebec will issue another green bond cannot yet be predicted with any great degree of certainty. However, we believe that it would be realistic to expect the two provinces to each issue at least one green bond per year. In our view, this would, in turn, lead to a continuation of the buoyant issuance activity in this sector in future. Up to now, however, green bonds from Canada have been restricted to the domestic currency (CAD). We have now also seen the first green bonds issued at local level, for example from the cities of Toronto, Ottawa and Vancouver. Moreover, Manitoba was active with an inaugural green deal in the form of a Green Impact Bond (CAD 1m) in February 2021.



# Particular features in the refinancing of Canadian provinces Will Social Response Bonds become a key theme?

## Sustainable Development Goals cover more than "just" green aspects

In order to target new investor groups even more specifically, Canadian provinces may be well advised to consider issuing other bonds with a specific thematic focus in addition to green bonds. Social bonds are already tried and tested on the market and can be used in a variety of ways and in targeted fashion. Among other aspects, bonds of this kind enable issuers to comply with the UN Sustainable Development Goals (SDGs, formerly Millennium Development Goals) through the promotion of affordable housing and social inclusion, for example.

#### **SDG Housing Bonds**

In 2017, Nederlandse Waterschapsbank N.V. (NWB Bank) from the Netherlands created a framework for "SDG Housing Bonds" (previously known as "Affordable Housing Bonds"). The proceeds from such bonds are used by NWB to grant loans for social housing projects in the Netherlands. In this context, the focus is on the social mission of these organisations. Community management is an important part of their work, and as such the organisations strive to create a safe and healthy environment for inhabitants, in addition to increasing the standard of living across the neighbourhood.

#### **Social Bond Principles**

The International Capital Market Association defines the Social Bond Principles (SBP). These regulate bond issuances that qualify as social bonds and were most recently updated in June 2023. However, the Social Bond Principles do not represent a legally binding definition. As with the Green Bond Principles, the Social Bond Principles likewise focus on four criteria: Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds and Reporting. Social projects are deemed to be those that are assessed and quantified by the issuer as providing a tangible social benefit. Social projects also aim to solve or alleviate a specific social problem and/or achieve positive social outcomes. Categories of social projects include, but are not limited to, providing and/or promoting affordable basic infrastructure, access to basic services, affordable housing, the creation of jobs and food security, in addition to socio-economic progress and empowerment. Social bonds are not limited to a single category and can be targeted at specific demographic groups (e.g. ethnic minorities, migrants, people with disabilities) or to serve more general purposes. The Social Bond Principles recommend that compliance should be verified via external auditors. Social bonds differ from other bonds solely in terms of the Use of Proceeds category, with no differences to be seen in the structure and other characteristics such as yield and risk.

#### Comment

Social bonds are increasingly gaining in importance and could also be used by Canadian provinces in future in order to address social challenges in a targeted manner. However, we are unable to say with any degree of certainty when and even if the Canadian provinces will in fact issue a social bond. At a local level, we have already seen the first smaller bonds, for example on the part of the city of <u>Toronto</u>. Moreover, <u>Vancouver</u> issued an inaugural sustainability bond in 2021, with the aim of promoting sustainable projects in both a social and ecological sense.



## Particular features in the refinancing of Canadian provinces Provincial Bond Purchase Program – PBPP

#### **BoC launches PBPP**

The Bank of Canada (BoC) felt compelled on 15 April 2020 to also launch a purchase program for provincial bonds (Provincial Bond Purchase Program – PBPP) in order to further support the liquidity and efficiency of the financing markets of the provincial governments. For European investors, it then became important to be aware of the differences between the PSPP, PEPP and PBPP. The Canadian program supplemented the BoC's existing Provincial Money Market Purchase Program (PMMP). Given the significant need for financing as governments sought to implement emergency response measures, and with both households and businesses doing their best to plot a way through this challenging time, the aim of both the PBPP and PMMP was to maintain well-functioning provincial financing markets. Canada suffered not only as a result of the COVID-19 pandemic, but also from an oil price shock, which in turn caused the country's inflation outlook to plummet.

#### How the PBPP works

Eligible securities were purchased on the secondary market within the framework of the PBPP. The eligible securities consisted of CAD-denominated bonds issued by all provinces (and fully guaranteed provincial authorities) with a residual term to maturity of up to ten years (i.e. those falling due prior to 15 April 2031). The program, which ran for a period of 12 months, was limited to CAD 50bn in volume. No minimum rating requirements were imposed and the BoC planned not to acquire more than 20% of an issuer's outstanding eligible assets. The eligible portion of an issuer's assets in circulation is recalculated on a monthly basis. In addition, there was an option to expand the program parameters, provided that the conditions justified this. One interesting aspect is the approach regarding the relative breakdown of provincial bonds: the volume of debt purchased by an eligible issuer took into account the share of the issuer's outstanding debt as well as the share of Canadian GDP attributable to the issuer.

#### Comment

Following the initial announcement featuring the criteria outlined above, the PBPP was fine-tuned up to the beginning of May 2020 before finally launching on 7 May 2020. The program was eventually terminated on 6 May 2021 (limited to exactly one year). In total, a volume of CAD 35.1bn (par value) in provincial bonds was purchased under the PBPP. As predicted, purchases were mainly concentrated on the provinces of Ontario (42.7%) and Quebec (21.5%), followed by Alberta (12.8%) and British Columbia (10.4%). The BoC reports on the value of provincial bonds purchased under the PBPP on a weekly basis. Moreover, there are other differences in comparison with the European purchase programs. For example, no floating rate notes (FRNs; commonly called floaters) were eligible for purchase, while bonds denominated in EUR (the main focus of this study) were likewise excluded. However, this is consistent with the parameters of the Eurosystem's Expanded Asset Purchase Program (EAPP), for which foreign currencies are ineligible. The BoC continues to closely monitor global and domestic market developments and, in its own words, remains committed to providing all the liquidity that the financial system requires in order to continue serving the needs of the Canadian population.



# Canadian Provinces and Territories Issuer profiles



## **Key facts**Link to the Ministry of Finance

Number of inhabitants (2022)

15,109,416 Capital city

**Homepage** 

Toronto

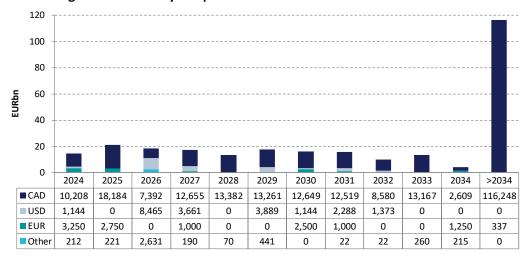
#### Ratings

	Long-	Outlook
	term	
Fitch	AA-	stab
Moody's	Aa3	pos
S&P	A+	pos

#### **Ontario**

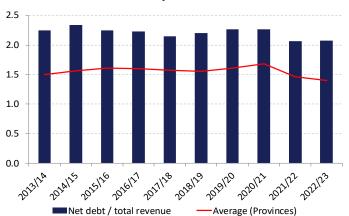
In 1867, the process of Canadian Confederation saw the former United Province of Canada split into two separate regions: Ontario and Quebec. Together with New Brunswick and Nova Scotia, these four regions became the first Canadian provinces by way of the British North America Act and were granted wide-ranging rights as well as their own constitutions. Following the Second World War, the Greater Toronto area in particular grew at a disproportionate pace, replacing Montreal as the largest city. With 15.1m inhabitants (38.8% share of the Canadian population), Ontario is the largest province of Canada as measured by this metric. In total, 2.9m Ontarians live in the metropolitan region of Toronto. In addition, the capital city of Canada, Ottawa, is located in the south-east of Ontario. The economy of Ontario is broadly based, although at 5.7%, unemployment is marginally above the national average (5.4%). Despite the huge area covered by the province (892,412 km²), agriculture plays only a minor role in Ontario. With a GDP of CAD 829.5bn, which equates to 38.7% of economic output in Canada, Ontario makes the highest contribution to the Canadian economy. Investments on the part of global automotive manufacturers and suppliers of batteries and battery materials for electric vehicles totalling more than CAD 16bn over the past two years are also worth highlighting, as these could potentially increase the share of raw materials in economic output in the future.

#### Outstanding bonds issued by the province of Ontario

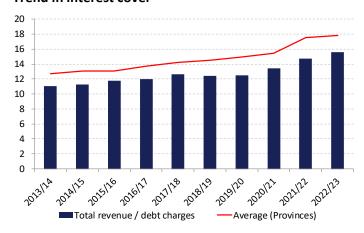


Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



#### Trend in interest cover



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



Net debt\* (ranking\*\*)

CAD 400.5bn (13th)

Outstanding bonds\*\*\*

EUR 279.2bn

Of which EUR bonds

EUR 12.1bn

**Bloomberg ticker** 

**Economy 2022/23** Real GDP (ranking)

CAD 839.5bn (1st)

Real GDP per capita (ranking)

CAD 55,561 (8th)

Real GDP growth (ranking)

3.7% (5th)

**Unemployment (ranking)** 

5.7% (5th)

Key figures 2022/23

Tax-interest coverage (ranking)

13.0x (9th)

Total revenue/interest paid (ranking)

15.6x (11th)

Net debt/GDP (ranking)

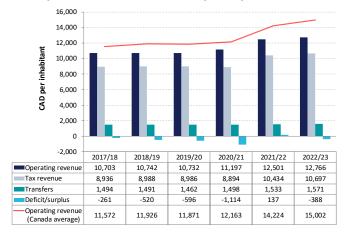
47.7% (11th)

Net debt/revenue (ranking)

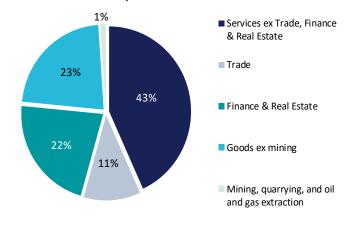
2.1x (13th)

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

## Development of revenue in CAD per capita



#### Gross value added by economic sector

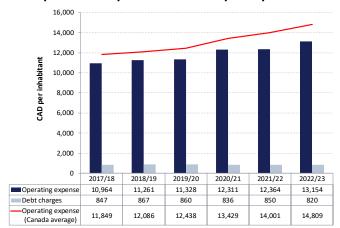


Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

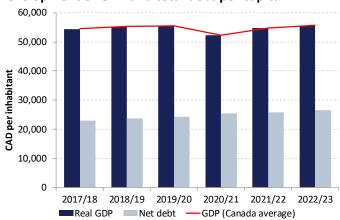
#### Strengths/Chances

- + Well-diversified economy
- + Relatively low dependence on raw materials
- + Dependency on transfers on the low side

#### Development of expenditure in CAD per capita



#### Development of GDP and total debt per capita



- Per capita debt and debt-to-GDP ratio remain high
- Debt sustainability and interest coverage

<sup>\*</sup> Budget year 2022/23

<sup>\*\*</sup> Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

8,695,659

**Capital city** 

Quebec

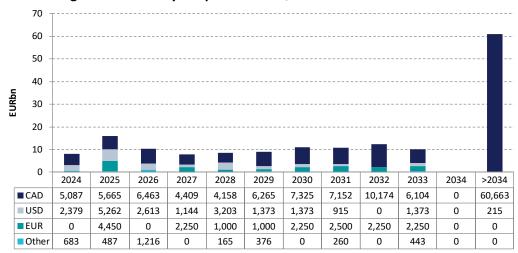
#### **Ratings**

	Long-	Outlook
	term	
Fitch	AA-	stab
Moody's	Aa2	stab
S&P	AA-	stab

#### Quebec

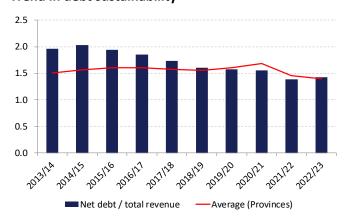
The second largest province in Canada, Quebec is also the only province in which French is the sole official language. After the first French colonial settlers established the first permanent settlements in the region around the year 1600, Quebec became one of the four founding provinces of Canada in 1867. Identification with its French heritage and the strong sense of provincial self-assurance are also reflected in the province's political outlook. Bloc Québécois is a political party that campaigns exclusively in Quebec during federal elections. It is committed to representing the province's interests and targets independence from Canada as a long-term ambition. In the election in September 2021, Bloc Québécois won the third highest number of seats, claiming 32 of the 338 seats in the House of Commons of Canada. The economy of Quebec is the second largest in Canada behind Ontario, with growth of +2.8% to CAD 428.3bn recorded in 2022. At 4.5%, unemployment in 2023 was at the lowest level of all provinces and came in below the Canadian average of 5.4%. Despite the stable labour market, a budget deficit of CAD -1.7bn was generated in the 2022/23 budget year. A challenge that Quebec is currently confronted by is demographic development: at 4.7% growth over the past five years, the population of Quebec is growing at a far slower pace than the Canadian average. In addition to a low birth rate, this development can be explained by the province's below-average number of immigrants. Furthermore, as at 31 December 2022, Quebec has issued a guarantee for CAD 49.1bn of the debts incurred by Hydro-Quebec. The utility company paid out a dividend of more than CAD 3.4bn to the Quebec government in 2022.

## Outstanding bonds issued by the province of Quebec

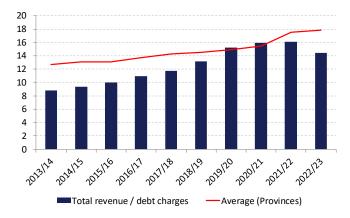


Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



#### Trend in interest cover



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



Net debt\* (ranking\*\*)

CAD 206.8bn (12th)

Outstanding bonds\*\*\*

EUR 164.9bn

Of which EUR bonds

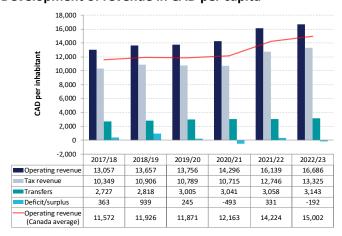
EUR 18.0bn

**Bloomberg ticker** 

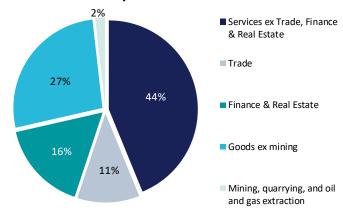
Q

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

## Development of revenue in CAD per capita



#### Gross value added by economic sector



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

#### Strengths/Chances

- + Low unemployment rate
- + Strong, diversified economy
- + Relatively low dependence on raw materials

## **Economy 2022/23**

Real GDP (ranking)

CAD 428.3bn (2nd)

Real GDP per capita (ranking)

CAD 49,249 (9th)

Real GDP growth (ranking)

2.8% (10th)

**Unemployment (ranking)** 

4.5% (1st)

#### Key figures 2022/23

Tax-interest coverage (ranking)

11.5x (12th)

Total revenue/interest paid (ranking)

14.4x (12th)

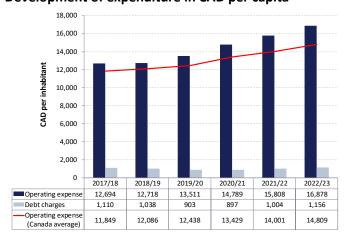
Net debt/GDP (ranking)

48.3% (12th)

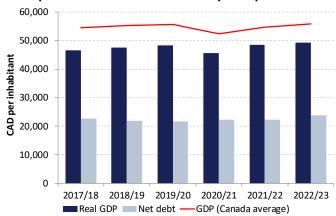
Net debt/revenue (ranking)

1.4x (10th)

## Development of expenditure in CAD per capita



#### Development of GDP and total debt per capita



- Below-average economic output per capita
- Per capita debt and debt vs. GDP remain high
- Ageing population

<sup>\*</sup> Budget year 2022/23

<sup>\*\*</sup> Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

5.319.324

**Capital city** 

Victoria

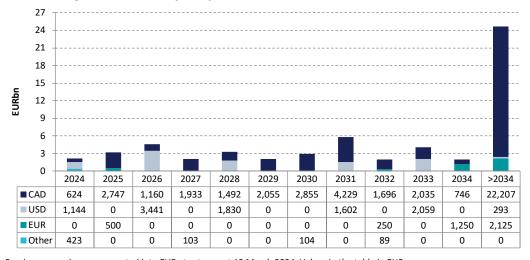
#### **Ratings**

Long-	Outlook
term	
AA+u	stab
Aaa	stab
AA	neg
	term AA+u Aaa

#### **British Columbia**

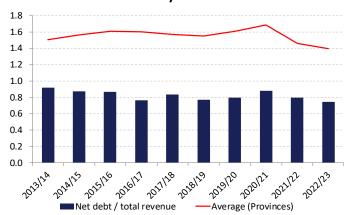
British Columbia is the third-largest province in Canada by population. Around 5.3m people live in the province, which covers 9.5% of the total area of Canada. The majority of the population is concentrated in the south of the province, especially in Vancouver and Victoria. Like in the neighbouring province of Alberta, the number of inhabitants has risen disproportionately strongly in British Columbia in recent years. As the only province of Canada with a pacific coastline, main trading partners naturally include some Asian countries, such as China, Japan and South Korea. Despite its slightly below-average economic output per capita, British Columbia is one of the strongest Canadian provinces in financial terms. With 0.7x, the score for debt sustainability is the third best among all provinces. In 2022, a GDP of CAD 299.3bn was generated, which equates to growth of +3.9% Y/Y. At just 5.9% of economic output, the commodities sector can hardly be described as a dominant pillar of the British Columbia economy, although its share has risen by more than two percentage points in the past three years. One of the largest energy projects in the history of Canada is also being realised in British Columbia: LNG Canada. An export terminal located in Kitimat on a section of coastline in the north of the province will direct shipments of natural gas to Asia, delivered to the terminal by way of a 670km-long pipeline. The total costs for this project amount to over CAD 48bn, with operations expected to start in 2025. The budget plan 2023 is also worth mentioning, as it projects rising expenses and deficits from the 2023/24 budget year through to 2025/26. As a result, the rating agency S&P was moved to downgrade the rating of British Columbia and issue a negative outlook.

## Outstanding bonds issued by the province of British Columbia



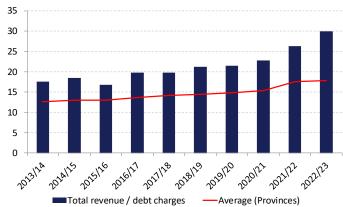
Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

## Trend in interest cover





Net debt\* (ranking\*\*)

CAD 60.7bn (10th)

Outstanding bonds\*\*\*

EUR 59.0bn

Of which EUR bonds

EUR 4.1bn

**Bloomberg ticker** 

**Economy 2022/23** 

Real GDP (ranking)

CAD 299.3bn (4th)

Real GDP per capita (ranking)

CAD 56,257 (7th)

Real GDP growth (ranking)

3.9% (4th)

**Unemployment (ranking)** 

5.2% (4th)

Key figures 2022/23

Tax-interest coverage (ranking)

25.4x (3rd)

Total revenue/interest paid (ranking)

30.0x (4th)

Net debt/GDP (ranking)

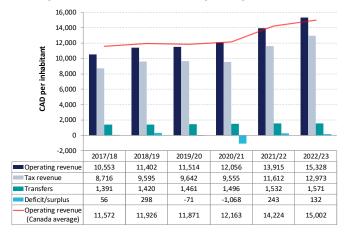
20.3% (5th)

Net debt/revenue (ranking)

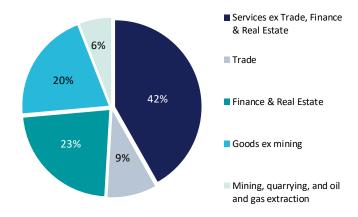
0.7x (6th)

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

## Development of revenue in CAD per capita



#### Gross value added by economic sector

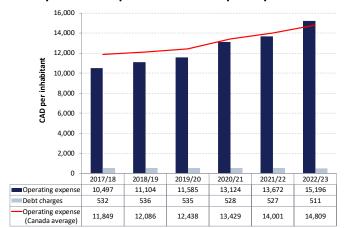


Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

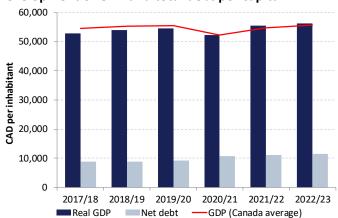
#### Strengths/Chances

- + Low unemployment
- + Comparatively good debt metrics
- + Constant, high growth rates

#### Development of expenditure in CAD per capita



#### Development of GDP and total debt per capita



- Dependency on the real estate sector
- High level of planned expenditure and deficits in the 2023 budget plan

<sup>\*</sup> Budget year 2022/23

<sup>\*\*</sup> Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

4.543.111

**Capital city** 

Edmonton

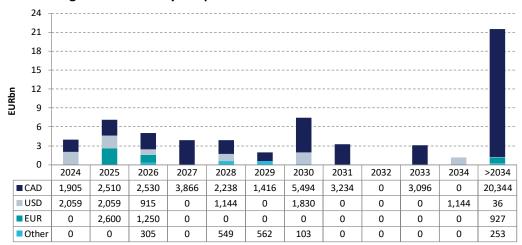
#### Ratings

	Long-	Outlook
	term	
Fitch	AA-	pos
Moody's	Aa2	stab
S&P	AA-	stab

#### **Alberta**

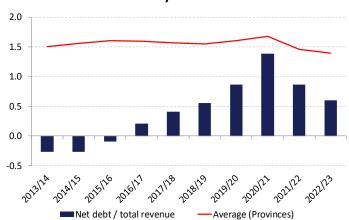
With GDP of CAD 331.5bn and just under 4.5m inhabitants (11.7% of the overall population of Canada), Alberta is both the most populous and economically strongest of the three prairie provinces (Alberta, Saskatchewan and Manitoba). Comparable to Saskatchewan, the extraction of raw materials is of huge importance in Alberta, with crude oil playing a prominent role in this regard. In 2021, Alberta was responsible for 82% of Canadian oil production. A large proportion of this activity is attributable to extraction from oil sands. The dependency on oil prices, which certainly still exists, has in fact risen again in recent years. This is reflected in higher oil prices and the increased share of the raw materials sector in GDP. Whereas the value here stood at 13.0% in 2016, it had increased to 22.0% in 2022. Following the sharp fall in oil prices seen between 2015 and 2016, Alberta slipped into a recession, which again serves to underline the province's dependency on oil. For example, in 2020 the GDP of Alberta also fell by -7.8% year on year due to low oil prices, among other factors. The province is characterised by disproportionately rapid population growth over both the short and long term. The population of Alberta has increased by +7.1% over the past five years. Alberta's reputation as Canada's most affluent province is certainly justified from the perspective of GDP per capita, although it has also had to contend with several budget deficits in recent years. However, in the 2022/23 financial year, a substantial budget surplus of CAD 11.6bn was recorded, with GDP rising by +5.1% and revenues up by +11.4% in comparison with the previous year. Moreover, net debt was reduced by -22.7%.

#### Outstanding bonds issued by the province of Alberta



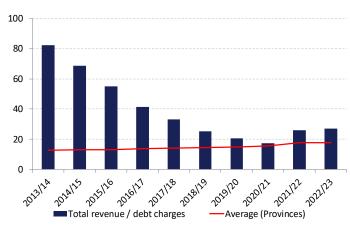
Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



## Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

#### Trend in interest cover





Net debt\* (ranking\*\*)

CAD 45.6bn (10th)

Outstanding bonds\*\*\*

EUR 62.4bn

Of which EUR bonds

EUR 4.8bn

**Bloomberg ticker** 

**ALTA** 

\* Budget year 2022/23

**Economy 2022/23** Real GDP (ranking) CAD 331.5bn (3rd)

Real GDP per capita (ranking)

CAD 72,965 (4th)

Real GDP growth (ranking)

5.3% (3rd)

**Unemployment (ranking)** 

5.9% (6th)

Key figures 2022/23

Tax-interest coverage (ranking)

22.9x (4th)

Total revenue/interest paid (ranking)

26.9x (5th)

Net debt/GDP (ranking)

13.8% (3rd)

Net debt/revenue (ranking)

0.6x (4th)

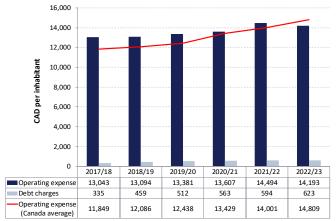
\*\* Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

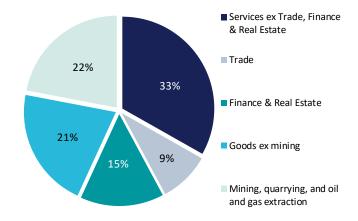
## Development of revenue in CAD per capita



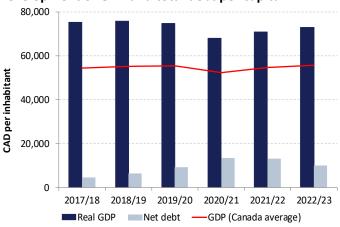
Development of expenditure in CAD per capita



#### Gross value added by economic sector



#### Development of GDP and total debt per capita



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

#### Strengths/Chances

- + Debt metrics still at good levels
- + Highest GDP per capita among the provinces
- + Low levels of taxation compared with other provinces

- High dependency on commodities
- High unemployment
- Carbon transition risk

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

1.409.223

**Capital city** 

Winnipeg

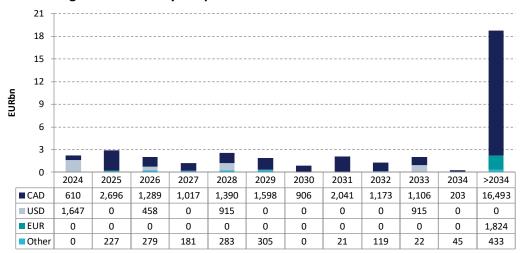
#### **Ratings**

Long-	Outlook
term	
-	-
Aa2	stab
A+	stab
	term - Aa2

#### Manitoba

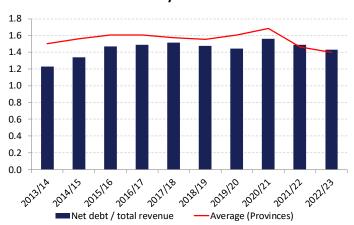
In 1870, Manitoba became the first of the three prairie provinces to be carved out of the Northwest Territories. In 2022, the province, which covers an area of 540,310 km<sup>2</sup>, was home to more than 1.4m inhabitants. With a median age of 37.7 years, Manitoba boasts the youngest population of all Canadian provinces ahead of second-placed Alberta. The economy grew by +3.3% in 2022 slightly below the Canadian average in this respect. With growth of +15.5% since 2012, Manitoba ranks in seven place among the Canadian sub-sovereigns. In 2024, the income tax brackets are to be raised and the basic tax allowance is set to be increased. This is intended to stimulate increased interprovincial immigration to Manitoba, which in turn should provide a boost to the economy. This could also reduce Manitoba's provincial emigration rate, as approximately 7,500 more people leave Manitoba than enter the province each year. The proportion of young and educated citizens that decide to leave the province is particularly critical. For example, more than 32.9% of those emigrating from the province are educated to degree level, despite the fact that the Canadian average stands at 20.1%. Moreover, 52.0% of the emigrants from the province of Manitoba are aged 25-54. Traditionally, Manitoba has a broadly diversified economy and low unemployment. In 2023, the unemployment rate of 4.8% was the second lowest in Canada, behind Quebec and shared with Saskatchewan. In contrast to this, however, with a share of 25.0% of revenues in the 2022/23 budget year, Manitoba is dependent on governmental transfer payments to a comparatively greater extent than other provinces.

#### Outstanding bonds issued by the province of Manitoba

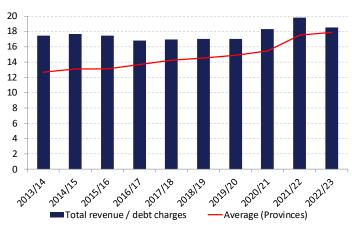


Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



#### Trend in interest cover



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



Net debt\* (ranking\*\*)

CAD 29.4bn (9th)

Outstanding bonds\*\*\*

EUR 38.2bn

Of which EUR bonds

EUR 1.8bn

**Bloomberg ticker** 

**Economy 2022/23** Real GDP (ranking)

CAD 68.5bn (6th)

Real GDP per capita (ranking)

CAD 48,596 (10th)

Real GDP growth (ranking)

3.3% (6th)

**Unemployment (ranking)** 

4.8% (2nd)

Key figures 2022/23

Tax-interest coverage (ranking)

12.9x (10th)

Total revenue/interest paid (ranking)

18.5x (10th)

Net debt/GDP (ranking)

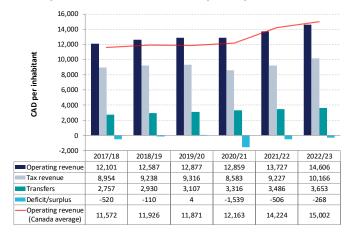
43.0% (10th)

Net debt/revenue (ranking)

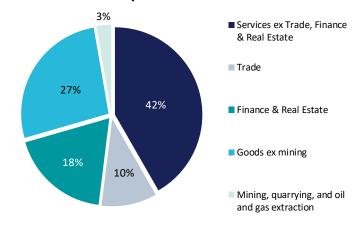
1.4x (11th)

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

## Development of revenue in CAD per capita



#### Gross value added by economic sector



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

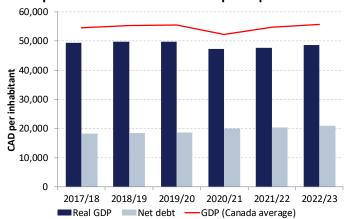
#### Strengths/Chances

- + Stable labour market
- + Diversified economy

## Development of expenditure in CAD per capita



#### Development of GDP and total debt per capita



- Dependency on transfers
- Ratio of net debt to GDP in a comparison of the provinces

<sup>\*</sup> Budget year 2022/23

<sup>\*\*</sup> Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

1,194,803

Capital city

Regina

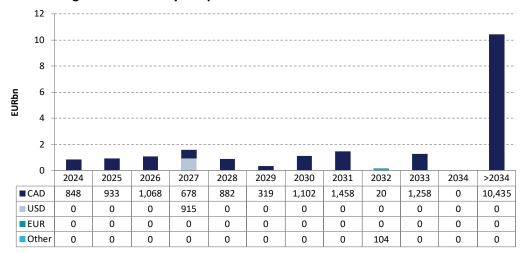
#### **Ratings**

	Long-	Outlook
	term	
Fitch	AAu	stab
Moody's	Aa1	stab
S&P	AA	stab

#### Saskatchewan

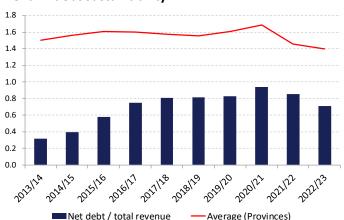
The province of Saskatchewan was formed in 1905 after being carved out from the Northwest Territories. In 2022, a total of just under 1.2m people lived in Saskatchewan. This equates to roughly 3.1% of the overall Canadian population. At 26.6% and 11.1% of GDP respectively, the raw materials and agriculture sector are both key pillars of the economy of Saskatchewan. Moreover, Saskatchewan has huge deposits of uranium and potassium. In fact, with a share of 13% in global uranium production, Saskatchewan is the world's second largest producer of this element. After Alberta, Saskatchewan is the largest oil-producing region in Canada, accounting for around 10% of Canadian oil production in 2021. Rapeseed and wheat are common features within the agri-sector. The service sector in Saskatchewan is the smallest in Canada, at 47.3% of GDP. Over the past decade, Saskatchewan's GDP growth has been sluggish (2014: CAD 74.4bn; 2022: CAD 76.7bn), although at +6.0% in 2022 the province managed to record the strongest economic growth across Canada. While GDP per capita, at CAD 64,171, may have declined versus 2014 in Saskatchewan (CAD 66,869), it remains well in excess of the Canadian average of CAD 55,722. In 2022/23, the budget situation of Saskatchewan improved in comparison with the previous year. For the first time since 2014/15, the province posted a budget surplus of CAD 1.6bn. Moreover, net debt was down by -5.7%. Furthermore, it is also worth noting that, with a share of just 9.1% in total revenues, Saskatchewan's dependency on governmental transfer payments in on the low side.

#### Outstanding bonds issued by the province of Saskatchewan

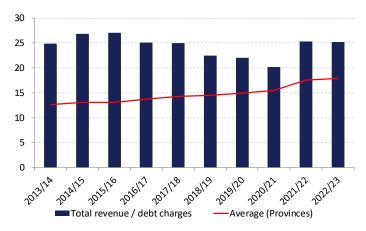


Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



#### Trend in interest cover



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



Net debt\* (ranking\*\*)

CAD 14.6bn (6th)

Outstanding bonds\*\*\*

EUR 20.0bn

Of which EUR bonds

EUR 0.0bn

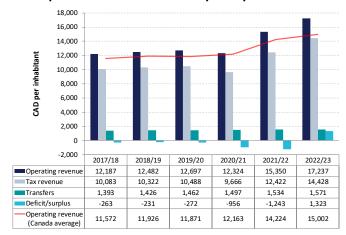
**Bloomberg ticker** 

**SCDA** 

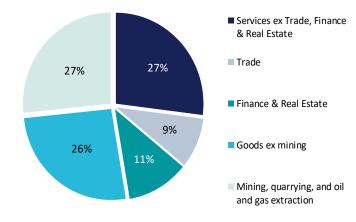
- \* Budget year 2022/23
- \*\* Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.
- \*\*\* Foreign currencies are converted into EUR at rates as at 13 March 2024.

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

## Development of revenue in CAD per capita



#### Gross value added by economic sector



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

#### Strengths/Chances

- + Above average economic output per capita
- + Net debt remains low
- + Low dependency on transfers (9% of revenues)

### **Economy 2022/23**

Real GDP (ranking)

CAD 76.7bn (5th)

Real GDP per capita (ranking)

CAD 64,171 (5th)

Real GDP growth (ranking)

6.0% (1st)

**Unemployment (ranking)** 

4.8% (2nd)

#### Key figures 2022/23

Tax-interest coverage (ranking)

21.1x (5th)

Total revenue/interest paid (ranking)

25.2x (6th)

Net debt/GDP (ranking)

19.0% (4th)

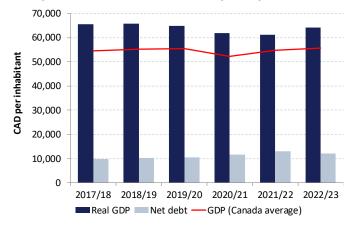
Net debt/revenue (ranking)

0.7x (5th)

## Development of expenditure in CAD per capita



#### Development of GDP and total debt per capita



- Hardly any economic growth in the period prior to 2022
- Dependency on the raw materials sector





Link to the Ministry of Finance

**Homepage** 

Number of inhabitants (2022) 812.061

Capital city

Fredericton

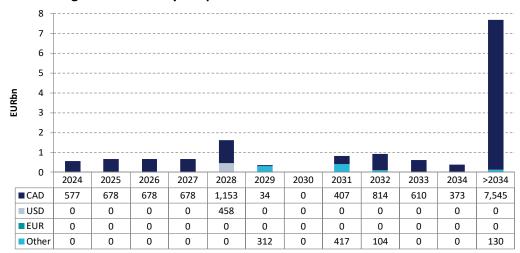
#### **Ratings**

Long-	Outlook
term	
-	-
Aa2	pos
A+	pos
	term - Aa2

#### **New Brunswick**

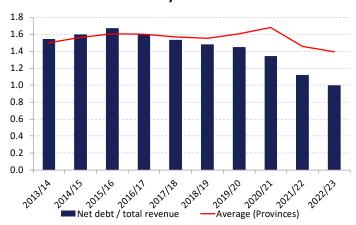
New Brunswick was one of the first four Canadian provinces and to this day is the only province with two official languages. In 2022, New Brunswick had a population of just over 812,000 people (2.1% of the Canadian population). The government is seeking to proactively counteract the sluggish population growth seen over recent years by way of the Atlantic Immigration Pilot program. Among other things, this has led to population growth of +2.7% in 2022, meaning that New Brunswick is again ranked among the top-3 Canadian sub-sovereigns for this metric. With a median age of 45.7 years, exceeded only by Newfoundland and Labrador, New Brunswick is particularly in need of young migrants. New Brunswick is traditionally characterised by one of the highest unemployment rates in Canada. With unemployment of 6.6% in 2023, the province was again above the Canadian average of 5.4%. However, unemployment has fallen continually in recent years. At CAD 34.3bn, a total of 1.6% of Canadian GDP was generated in New Brunswick as at the reporting date, although growth was exceptionally low at just +1.3%. Nevertheless, the province posted another improvement in its financial situation last year. For example, New Brunswick's debt to GDP ratio has been reduced from 44.2% to 36.2% over the past five years, while budget surpluses have been recorded in every year since 2017/18. Moreover, the province successfully maintained the trend towards a reduction in net debt, which has been in evidence since the 2018/19 budget year. The dependency on governmental transfer payments, which accounted for 29.2% of total revenues in 2022/23, is, however, somewhat striking.

#### Outstanding bonds issued by the province of New Brunswick

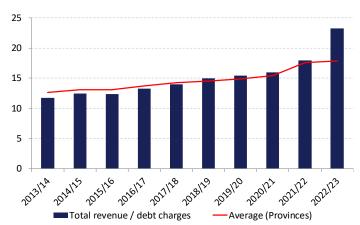


Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



#### Trend in interest cover



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



Net debt\* (ranking\*\*)

CAD 12.4bn (5th)

Outstanding bonds\*\*\*

EUR 15.0bn

Of which EUR bonds

EUR 0.0bn

**Bloomberg ticker** 

**NBRNS** 

**Economy 2022/23** 

Real GDP (ranking) CAD 34.3bn (8th)

Real GDP per capita (ranking)

CAD 42,274 (12th)

Real GDP growth (ranking)

1.3% (11th)

**Unemployment (ranking)** 

6.6% (8th)

Key figures 2022/23

Tax-interest coverage (ranking)

15.2x (7th)

Total revenue/interest paid (ranking)

23.3x (7th)

Net debt/GDP (ranking)

36.2% (8th)

Net debt/revenue (ranking)

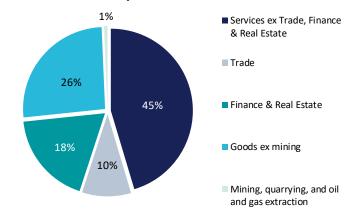
1.0x (8th)

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

#### Development of revenue in CAD per capita



## Gross value added by economic sector

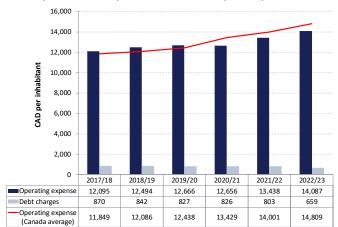


Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research

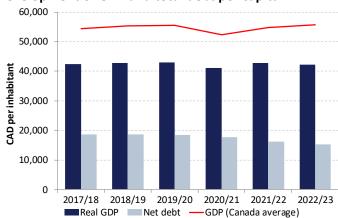
#### Strengths/Chances

- + Improvement in budget situation
- + Proactive government approach to combat stagnation
- + Surpluses generated in recent years

## Development of expenditure in CAD per capita



#### Development of GDP and total debt per capita



- Slow economic growth
- High unemployment

<sup>\*</sup> Budget year 2022/23

<sup>\*\*</sup> Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

525,972

**Capital city** 

St. John's

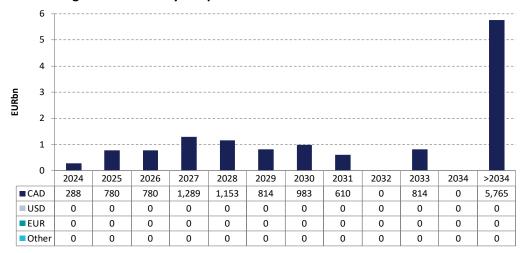
#### **Ratings**

	Long-	Outlook
	term	
Fitch	-	-
Moody's	A1	stab
S&P	Α	stab

#### **Newfoundland and Labrador**

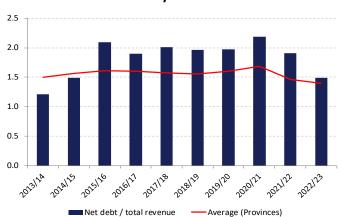
With a population of approximately 0.5m people and covering an area of 358,170 km<sup>2</sup>, Newfoundland and Labrador is among the smallest provinces in Canada. Around one fifth of the population lives in the capital St. John's, which is also the oldest city in Canada. The province's economy is based to a significant extent on raw materials (48% of Canadian iron ore is mined in Newfoundland and Labrador) and the energy sector. In 2021, the oil and gas reserves in Newfoundland and Labrador totalled 2.3bn barrels of crude oil and 356.8bn cubic metres of natural gas - enough to last for decades in line with current production volumes. At CAD 29.7bn, approximately 1.6% of Canadian economic output is generated in Newfoundland and Labrador, although it was the only province in Canada to post a decline in real GDP (-1.5%) in 2022 despite high oil prices. This decline even resulted in GDP falling slightly below the level recorded in 2010. Nevertheless, GDP in relation to number of inhabitants remains above the Canadian average. However, despite declining by 1.3 percentage points, unemployment stood at 10.0% in 2023 (Canadian average: 5.4%) - once again the highest level across Canada. Moreover, with a median age of 47.8 years, Newfoundland and Labrador is the oldest sub-sovereign in Canada from a demographic perspective. Net debt per capita has risen by +88.2% since 2012/13, standing at an unsurpassed value of CAD 29,848 in the 2022/23 budget year. With government transfers accounting for a share of 7.9% in total revenues in 2022/23, Newfoundland and Labrador is the Canadian province least dependent on transfers of this kind.

#### Outstanding bonds issued by the province of Newfoundland and Labrador

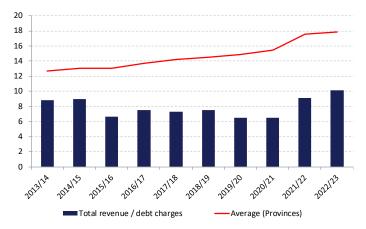


Foreign currencies are converted into EUR at rates as at 13 March 2024. Values in the table in EURm. Source: Bloomberg, NORD/LB Floor Research

#### Trend in debt sustainability



#### Trend in interest cover



Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



Net debt\* (ranking\*\*)

CAD 15.7bn (7th)

Outstanding bonds\*\*\*

EUR 13.3bn

Of which EUR bonds

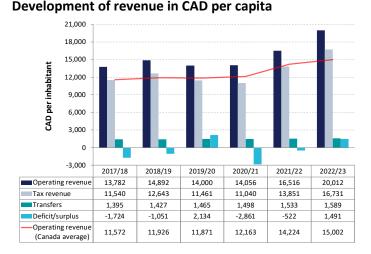
EUR 0.0bn

**Bloomberg ticker** 

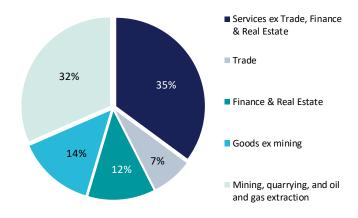
NF

\*\* Current ranking of the province for the respective key figure, whereby a ranking of 1st is the best result in the sub-sovereign comparison.

Source: Statistics Canada, Department of Finance Canada, NORD/LB Floor Research



#### Gross value added by economic sector



 $Source: Statistics\ Canada,\ Department\ of\ Finance\ Canada,\ NORD/LB\ Floor\ Research$ 

#### Strengths/Chances

- + Above-average economic output per capita
- Low dependency on transfers

#### **Economy 2022/23**

Real GDP\*\*\* (ranking)

CAD 29.7bn (9th)

Real GDP per capita (ranking)

CAD 56,488 (6th)

Real GDP growth (ranking)

-1.5% (13th)

**Unemployment (ranking)** 

10.0% (10th)

## Key figures 2022/23

Tax-interest coverage (ranking)

8.5x (13th)

Total revenue/interest paid (ranking)

10.1x (13th)

Net debt/GDP (ranking)

52.9% (13th)

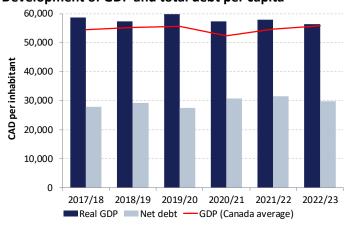
Net debt/revenue (ranking)

1.5x (12th)

## Development of expenditure in CAD per capita



## Development of GDP and total debt per capita



- High unemployment
- Dependency on the raw materials sector

<sup>\*</sup> Budget year 2022/23

<sup>\*\*\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024.





#### Link to the Ministry of Finance Homepage

Number of inhabitants (2022)

1.019.725

Capital city

Halifax

Bloomberg ticker

NS

## **Nova Scotia**

With a population of just over 1.02m inhabitants and covering an area of 55,285 km<sup>2</sup>, Nova Scotia ranks as one of the smallest provinces in Canada. The economy of Nova Scotia heads the list of Canadian provinces that are dominated by the service sector, while public administration and real estate are also key pillars of the economy. In addition, the areas of healthcare and social affairs, as well as manufacturing industries and construction, are of vital importance. In contrast, the raw materials sector is less relevant to the economy of Nova Scotia. Although significant deposits of natural gas are suspected to be located off the coast of Nova Scotia, the share of energy in GDP has been on the slide each year and most recently stood at 1.8%. In 2022, Nova Scotia generated real GDP of CAD 43.2bn (2.0% of total Canadian economic output), although the growth rate of +3.0% year on year and +15.3% since 2013 is below average compared with other provinces. One positive factor to highlight is that just a single deficit (in 2020/21) has been recorded over the past seven budget years, which is due, among other factors, to constantly low per capita expenditure. However, it should also be mentioned that revenue per capita is only lower in Ontario as well. Moreover, Nova Scotia is highly dependent on central government transfers, which account for 29.2% of the province's total revenues. In 2023, unemployment had fallen by 0.2 percentage points but, at 6.3% overall, remains in excess of the Canadian average (5.4%).

#### **General information**

Outstanding bond volume (EURbn)*
EUR 11.1bn
Of which EUR bonds
FUR 0.0bn

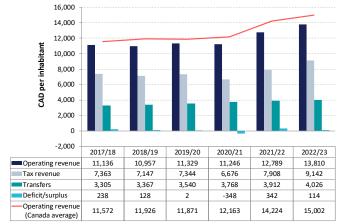
Ratings

Fitch	
Long-term	Outlook
-	-

Moody's	
Long-term	Outlook
Aa2	stab

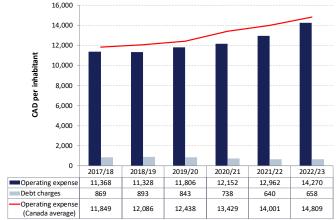
S&P Long-term Outlook AAstab

#### Development of revenue in CAD per capita

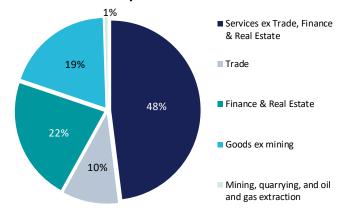


#### 14,000

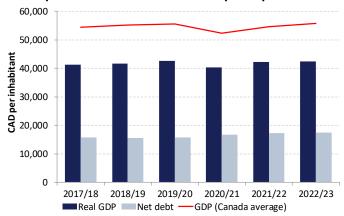
Development of expenditure in CAD per capita



#### Gross value added by economic sector



#### Development of GDP and total debt per capita



Source: Department of Finance Canada, Statistics Canada, NORD/LB Floor Research

<sup>\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024. Source: Bloomberg, NORD/LB Floor Research





Link to the Ministry of Finance

**Homepage** 

Number of inhabitants (2022) 170.688

Capital city

Charlottetown

**Bloomberg ticker** 

**PRINCE** 

## **Prince Edward Island**

Prince Edward Island (PEI) is the smallest Canadian province in terms of area, covering just 5,681 km<sup>2</sup>. Having become part of Canada in 1873, PEI is one of the three maritime provinces in the country. French settlers began to develop agriculture as early as 1720, while the agri sector today accounts for 5.7% of the province's economic output. Aside from this, the economy is shaped by a high degree of diversification. Mining raw materials is less important for the economy in PEI than in any other Canadian sub-sovereign. However, the existence of gas deposits beneath the province has been verified, although it remains to be seen how extensive these are. The development of public infrastructure, educational institutes and healthcare facilities, in addition to renewable energies, is being promoted in particular, with the aim of safeguarding the future viability of the economy of PEI. In 2022, just 0.3% of Canadian economic output originated from the province, where real a GDP of CAD 7.1bn was generated. PEI has always had the lowest economic output in per capita terms. In addition, the unemployment rate is traditionally one of the highest in Canada, although this did recently decline to 7.3% (Canadian average: 5.4%). After recording a surplus in the previous year, the 2022/23 budget year saw the return of a deficit (CAD -66m). Moreover, PEI is highly dependent on payments from the financial equalization system (27.1% of revenues). The population growth of 13.5% in the last five years is also worth mentioning.

#### General information

Outstanding bond volume (EURbn)
EUR 1.8bn
Of which EUR bonds
EUR 0.0bn

Fitch	
Long-term	Outlook

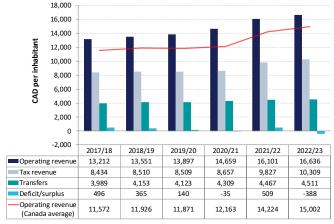
Mood		
Long-term	Outlook	Long-ter
Aa2	stab	Α

S&P	
Long-term	Outlook
Α	pos

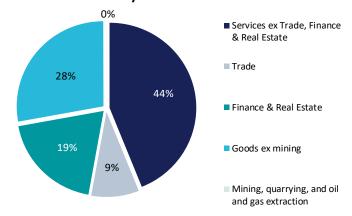
<sup>\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024. Source: Bloomberg, NORD/LB Floor Research

**Ratings** 

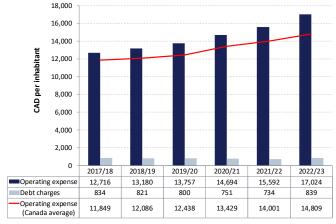
## Development of revenue in CAD per capita

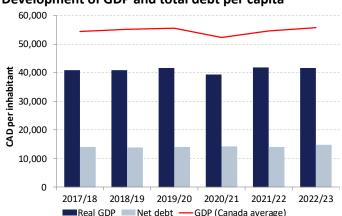


#### Gross value added by economic sector



## Development of expenditure in CAD per capita









Link to the Ministry of Finance

Number of inhabitants (2022)

45,605

**Capital city** 

Yellowknife

Bloomberg ticker GNWT

#### **General information**

# Outstanding bond volume (EURbn)\* EUR 0.1bn Of which EUR bonds EUR 0.0bn

#### **Northwest Territories**

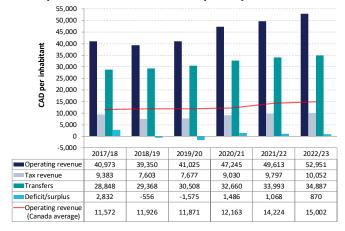
Covering an area of 1,127,712 km<sup>2</sup>, the Northwest Territories (NWT) constitute the third-largest sub-sovereign in Canada. The history of the NWT is dominated by a number of carve-outs (e.g. Yukon in 1898 and Nunavut in 1999). In 2022, the population stood at 45,605 inhabitants (0.1% of Canada's total population). The economic output of the NWT is characterised by the region's dependency on local mineral deposits and raw materials and their respective market prices. More than 21% of economic output was generated in this sector as per the most recent data. Canada's status as the world's third-largest producer of diamonds is primarily down to the deposits found in the NWT. In the recent past, the energy sector has started to become more important again: while in 2017 it constituted less than 2% of GDP, by 2022 this had grown to more than 4%. Nevertheless, NWT does harbour further potential with regard to the oil and gas sector. In 2022, the economy generated real GDP of CAD 4.3bn. Although this was the largest economic output of the three territories, it represents just 0.2% of total Canadian GDP. However, for the NWT, economic output measured in per capita terms has always been higher than in any other Canadian sub-sovereign. Real GDP per capita amounted to CAD 93,257 in 2022. The budget of the NWT is heavily dependent on transfer payments from the central government. In the 2022/23 budget year, the Canadian state accounted for around 66% of the territories revenues.

## **Ratings**

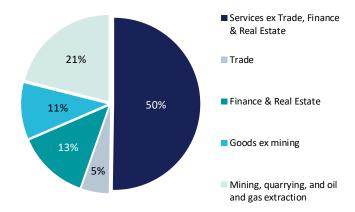
Fito	h	Moo	dy's	S&P			
Long-term	Outlook	Long-term	Outlook	Long-term	Outlook		
AA-	stab	Aa2	stab	-	-		

<sup>\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024. Source: Bloomberg, NORD/LB Floor Research

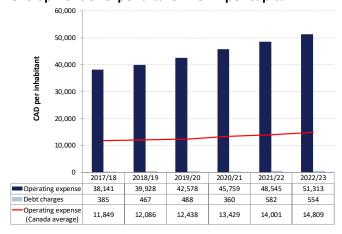
#### Development of revenue in CAD per capita

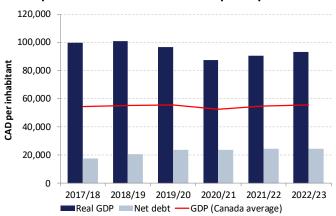


## Gross value added by economic sector



#### Development of expenditure in CAD per capita









Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

40,526

Capital city

Iqaluit

## Nunavut

In order to provide the Inuit population with relative autonomy, the territory of Nunavut was carved out of the Northwest Territories in 1999. At 1,836,994 km<sup>2</sup> (roughly 21% of the total area of Canada) it is the largest sub-sovereign in Canada as measured by area. In 2022, only 40,526 inhabitants were registered as living in Nunavut. The economy is dominated by the territory's access to primary raw materials (e.g. iron, silver and gold). At 43.9% of economic output, the territory is the Canadian subsovereign with the most dependency on the extraction of raw materials. As is the case in the other territories, public administration is also a vital pillar of the economy in Nunavut (17.1%). Over the past five years, the importance of the construction sector has declined by five percentage points and in 2022 accounted for just 5.6% of economic output in Nunavut. Although Inuit art is a rather insignificant sector of the economy relative to GDP, it represents an important source of income for many local people. Overall, just 0.2% of Canadian economic output is generated in Nunavut. However, no other region of Canada is growing more rapidly: between the years of 2012 and 2022, the economic output increased by more than 62%, which can be attributed to the high growth levels recorded during 2013-2017 in particular, leading to Nunavut taking second place in the GDP per capita rankings. Since 2009/10, Nunavut has recorded constant budget surpluses, which is predominantly the result of the high volume of transfer payments received by the territory (2022/23 budget year: 63.3% of revenues).

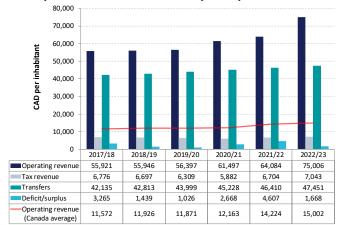
#### General information

Outstanding hand unlaws (FURLs)*	F:A	. L.	Maa	ماريا	S&P		
Outstanding bond volume (EURbn)*	Fito	zn –	Moo	uy s			
EUR 0.0bn	Long-term	Outlook	Long-term	Outlook	Long-term	Outlook	
Of which EUR bonds							
FUR 0.0bn	-	-	-	-	-	-	

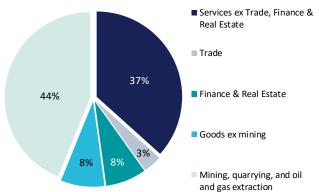
<sup>\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024. Source: Bloomberg, NORD/LB Floor Research

Ratings

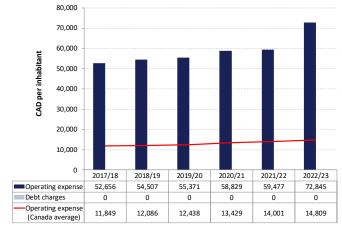
#### Development of revenue in CAD per capita

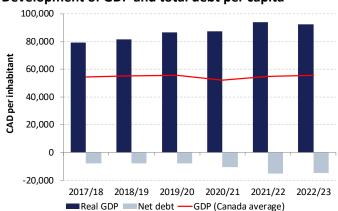


#### Gross value added by economic sector



#### Development of expenditure in CAD per capita









Link to the Ministry of Finance

Homepage

Number of inhabitants (2022)

43,789

**Capital city** 

Whitehorse

#### **General information**

Outstanding bond volume (EURbn)*
EUR 0.0bn
Of which EUR bonds
FLIR O Ohn

#### Yukon

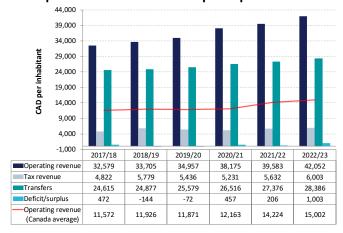
With an area of 472,345 km², Yukon is the smallest of the three Canadian territories. With a population of around 43,789 people, just 0.1% of Canada's total population live in Yukon. Due to the population growth during the Klondike gold rush (from 1886 onwards), Yukon was separated from the NWT in 1898. The territory's economy is dominated by the service sector. In this context, the tourism industry is of great importance. However, mining (especially lead, zinc, silver, gold and copper) has made a bit of a comeback in recent years and now accounts for a significant chunk of 14% of GDP (as opposed to just 6% in 2019). Public administration makes a great contribution to economic output. With a share of around 23% in GDP, it represents the largest across all other Canadian sub-sovereigns. Moreover, real estate and the construction sector are key pillars of the economy, with shares of GDP amounting to 13.6% and 12.1% respectively. In 2022 a real GDP of CAD 3.3bn was generated, which represents just 0.2% of Canadian economic output. In per capita terms, Yukon is ranked in fourth place for this metric. It should also be mentioned that a net deficit was recorded in the 2019/20 budget year for the first time since 1992/93. Nevertheless, as at the 2022/23 budget year, Yukon boasts the second lowest debt level (both in absolute and per capita terms) after Nunavut of all Canadian sub-sovereigns, which is largely due to significant equalization payments from the central government totalling 67.5% of revenues.

#### **Ratings**

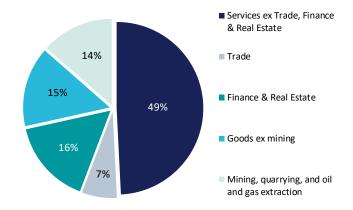
Fito	:h	Moo	dy's	S&P			
Long-term	Long-term Outlook		Outlook	Long-term Outlo			
-	-	-	-	AA	stab		

<sup>\*</sup> Foreign currencies are converted into EUR at rates as at 13 March 2024. Source: Bloomberg, NORD/LB Floor Research

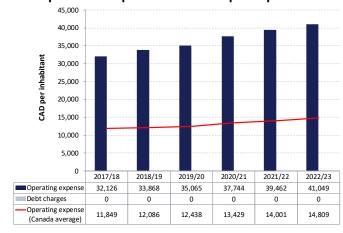
## Development of revenue in CAD per capita

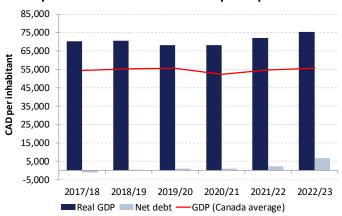


## Gross value added by economic sector



#### Development of expenditure in CAD per capita







## Appendix Ratings overview

Issuer	Fit	ch	Mod	ody's	S&P		
(Bloomberg ticker)	Rating	Outlook	Rating	Outlook	Rating	Outlook	
Ontario (ONT)	AA-	stab	Aa3	pos	A+	pos	
Quebec (Q)	AA-	stab	Aa2	stab	AA-	stab	
British Columbia (BRCOL)	AA+u	stab	Aaa	stab	AA	neg	
Alberta (ALTA)	AA-	pos	Aa2	stab	AA-	stab	
Manitoba (MP)	-	-	Aa2	stab	A+	stab	
New Brunswick (NBRNS)	-	-	Aa2	pos	A+	pos	
Nova Scotia (NS)	-	-	Aa2	stab	AA-	stab	
Saskatchewan (SCDA)	AAu	stab	Aa1	stab	AA	stab	
Newfoundland & Labrador (NF)	-	-	A1	stab	Α	stab	
Prince Edward Island (PRINCE)	-	-	Aa2	stab	Α	pos	
Northwest Territories (GNWT)	AA-	stab	Aa2	stab	-	-	
Nunavut	-	-	-	-	-	-	
Yukon	-	-	-	-	AA	stab	
Canada (CANADA)	AA+u	stab	Aaa	stab	AAA	stab	

Source: Bloomberg, NORD/LB Floor Research

## Appendix Overview of budget and economic metrics

## Trend in real GDP (CADbn)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ontario	682.0	691.7	708.8	727.6	744.0	764.5	789.5	807.3	770.0	809.7	839.5
Quebec	355.8	360.3	366.1	369.7	375.7	386.4	398.9	410.7	391.0	416.7	428.3
Alberta	294.0	311.0	329.2	317.7	306.2	319.2	325.8	326.2	300.8	314.9	331.5
British Columbia	224.7	230.1	238.3	243.8	251.0	260.2	270.1	277.8	269.2	288.2	299.3
New Brunswick	31.2	31.1	31.2	31.4	31.7	32.5	32.9	33.3	32.1	33.9	34.3
Newfoundland and Labrador	29.3	30.8	30.5	30.1	30.6	31.0	30.1	31.3	29.8	30.1	29.7
Nova Scotia	37.4	37.3	37.7	38.0	38.5	39.3	40.0	41.4	39.5	41.9	43.2
Manitoba	59.3	60.9	62.1	62.9	63.9	66.0	67.4	68.1	65.3	66.3	68.5
Prince Edward Island	5.6	5.7	5.7	5.8	5.9	6.2	6.3	6.6	6.4	6.9	7.1
Saskatchewan	68.6	73.1	74.4	73.9	73.6	75.3	76.6	76.0	72.8	72.3	76.7
Northwest Territories	4.3	4.0	4.1	4.3	4.3	4.5	4.5	4.3	4.0	4.1	4.3
Nunavut	2.3	2.5	2.5	2.5	2.6	3.0	3.1	3.3	3.4	3.7	3.7
Yukon	2.7	2.7	2.8	2.5	2.7	2.8	2.9	2.8	2.9	3.1	3.3

## Trend in real GDP in CAD per capita

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ontario	50,933	51,195	52,050	53,083	53,618	54,332	55,178	55,503	52,284	54,672	55,561
Quebec	44,144	44,432	44,918	45,226	45,672	46,543	47,473	48,303	45,594	48,435	49,249
Alberta	75,890	78,118	80,615	76,664	72,967	75,266	75,806	74,775	68,106	70,852	72,965
British Columbia	49,212	49,705	50,627	51,052	51,661	52,790	53,908	54,536	52,214	55,388	56,257
New Brunswick	41,204	41,052	41,062	41,403	41,538	42,336	42,711	42,911	41,040	42,858	42,274
Newfoundland and Labrador	55,745	58,467	57,716	57,095	57,834	58,688	57,326	59,810	57,250	57,888	56,448
Nova Scotia	39,680	39,706	40,207	40,602	40,881	41,394	41,758	42,674	40,262	42,290	42,353
Manitoba	47,447	48,155	48,535	48,704	48,608	49,451	49,801	49,699	47,329	47,612	48,596
Prince Edward Island	38,476	39,328	39,409	39,904	40,090	40,930	40,855	41,666	39,466	41,874	41,649
Saskatchewan	63,342	66,436	66,869	65,895	64,813	65,461	65,856	64,793	61,768	61,223	64,171
Northwest Territories	97,368	91,679	94,043	97,724	96,732	99,708	100,954	96,450	87,505	90,686	93,257
Nunavut	66,307	71,625	69,500	68,242	70,940	79,076	81,404	86,702	87,264	94,029	92,311
Yukon	74,350	74,861	74,104	67,471	70,745	70,210	70,510	68,299	68,188	72,092	75,316

NB: Lowest values in orange, highest values in blue. Source: Statistics Canada, NORD/LB Floor Research



Trend in budget balances (C	(ADbn
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Trend in budget balances (CADbn)											
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Ontario	-10.66	-11.53	-11.27	-5.35	-2.44	-3.67	-7.44	-8.67	-16.40	2.03	-5.86
Quebec	-2.52	-1.70	0.14	3.64	4.15	3.01	7.89	2.08	-4.23	2.85	-1.67
Alberta	-3.10	-0.30	1.12	-6.44	-10.78	-8.02	-6.71	-12.15	-16.96	3.92	11.64
British Columbia	-1.15	0.31	1.66	0.81	2.77	0.31	1.54	-0.36	-5.51	1.27	0.70
New Brunswick	-0.53	-0.60	-0.36	-0.26	-0.12	0.07	0.07	0.05	0.41	0.77	1.01
Newfoundland and Labrador	-0.20	-0.39	-1.01	-2.21	-1.15	-0.91	-0.55	1.12	-1.49	-0.27	0.78
Nova Scotia	-0.30	-0.68	-0.14	-0.01	0.15	0.23	0.12	0.00	-0.34	0.34	0.12
Manitoba	-0.56	-0.60	-0.54	-0.93	-0.79	-0.69	-0.15	0.01	-2.12	-0.70	-0.38
Prince Edward Island	-0.08	-0.05	-0.02	-0.01	0.00	0.07	0.06	0.02	-0.01	0.08	-0.07
Saskatchewan	0.04	0.59	0.06	-1.52	-1.22	-0.30	-0.27	-0.32	-1.13	-1.47	1.58
Northwest Territories	0.16	0.09	0.10	0.11	0.16	0.13	0.03	-0.07	0.07	0.05	0.04
Nunavut	0.12	0.15	0.11	0.10	0.06	0.12	0.05	0.04	0.10	0.18	0.07
Yukon	0.10	0.06	0.07	0.01	-0.01	0.02	-0.01	0.00	0.02	0.01	0.04
Trend in budget balance	es in CAD	per cap	ita								
J	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Ontario	-796	-853	-828	-390	-176	-261	-520	-596	-1,114	137	-388
Quebec	-312	-210	17	446	504	363	939	245	-493	331	-192
Alberta	-800	-76	273	-1,554	-2,570	-1,892	-1,561	-2,786	-3,840	881	2,562
British Columbia	-251	68	353	170	569	64	298	-71	-1,068	243	132
New Brunswick	-702	-791	-476	-343	-153	87	94	63	522	973	1,247
Newfoundland and Labrador	-371	-737	-1,905	-4,177	-2,168	-1,724	-1,051	2,134	-2,861	-522	1,491
Nova Scotia	-322	-720	-153	-14	160	238	128	2	-348	342	114
Manitoba	-448	-474	-421	-721	-600	-520	-110	4	-1,539	-506	-268
Prince Edward Island	-552	-318	-141	-91	-9	496	365	140	-35	509	-388
Saskatchewan	35	536	56	-1,356	-1,072	-263	-231	-272	-956	-1,243	1,323
Northwest Territories	3,734	2,146	2,175	2,479	3,483	2,832	-556	-1,575	1,486	1,068	870
Nunavut	3,521	4,208	3,027	2,677	1,563	3,265	1,439	1,026	2,668	4,607	1,668
Yukon	2,874	1,585	1,844	364	-141	472	-144	-72	457	206	1,003
Trend in net debt (CAD	bn)										
•	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Ontario	259.9	276.2	294.6	306.4	314.1	323.8	338.5	353.3	373.6	382.8	400.5
Quebec	180.0	183.4	185.7	185.0	191.4	188.1	184.5	183.8	190.2	192.2	206.8
Alberta	-14.5	-13.0	-13.1	-3.9	8.9	19.3	27.5	40.1	59.8	59.0	45.6
British Columbia	37.9	38.7	38.6	39.6	37.9	42.0	42.3	46.9	54.8	57.5	60.7
New Brunswick	11.0	11.7	13.1	13.7	13.8	13.9	14.0	14.3	13.9	12.8	12.4
Newfoundland and Labrador	8.3	9.1	10.3	12.5	13.6	14.7	15.4	14.4	16.0	16.4	15.7
Nova Scotia	13.9	14.8	15.0	15.1	15.0	15.0	15.0	15.2	16.4	17.2	17.8
Manitoba	15.8	17.6	19.9	21.9	23.3	24.5	25.1	25.4	27.7	28.5	29.4
Prince Edward Island	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.3	2.3	2.5
Saskatchewan	5.1	4.6	5.6	7.9	10.2	11.3	11.8	12.3	13.7	15.5	14.6
Northwest Territories	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.1	1.1	1.1
Nunavut	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.6	-0.6
Yukon	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.3

Comments: Lowest values in orange, highest values in blue. Source: Statistics Canada, NORD/LB Floor Research



Trend in net debt in CAD per capita											
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Ontario	19,413	20,441	21,631	22,350	22,636	23,016	23,657	24,293	25,368	25,852	26,506
Quebec	22,334	22,614	22,783	22,632	23,273	22,661	21,964	21,617	22,182	22,344	23,787
Alberta	-3,731	-3,274	-3,197	-946	2,121	4,561	6,393	9,202	13,548	13,275	10,040
British Columbia	8,306	8,358	8,200	8,286	7,806	8,519	8,750	9,205	10,631	11,046	11,407
New Brunswick	14,548	15,368	17,272	17,990	18,105	18,166	18,664	18,454	17,717	16,174	15,300
Newfoundland and Labrador	15,860	17,235	19,558	23,677	25,684	27,778	29,260	27,578	30,720	31,457	29,848
Nova Scotia	14,775	15,697	15,990	16,093	15,876	15,752	15,644	15,710	16,707	17,330	17,427
Manitoba	12,657	13,916	15,561	16,975	17,712	18,333	18,550	18,571	20,039	20,442	20,873
Prince Edward Island	14,112	14,567	14,791	15,009	14,798	14,150	13,843	14,007	14,254	14,013	14,737
Saskatchewan	4,715	4,197	4,988	7,047	8,972	9,813	10,182	10,481	11,611	13,109	12,218
Northwest Territories	11,258	11,688	13,053	15,066	16,633	17,343	20,475	23,696	23,822	24,284	24,280
Nunavut	-6,211	-7,804	-8,213	-8,318	-8,043	-7,835	-8,069	-7,983	-10,715	-15,182	-14,739
Yukon	-4,207	-5,330	-6,007	-4,069	-2,288	-940	10	1,145	1,129	2,355	6,817
Trend in net debt/rever	nue (excl	uding tra	nsfer pa	vments)							
•	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Ontario	2.64	2.75	2.83	2.71	2.70	2.58	2.63	2.70	2.85	2.48	2.48
Quebec	2.55	2.45	2.40	2.28	2.19	2.05	1.88	2.00	2.07	1.75	1.79
Alberta	-0.39	-0.31	-0.30	-0.11	0.25	0.56	0.69	0.97	1.61	1.81	0.80
British Columbia	1.08	1.07	0.99	0.99	0.87	0.97	0.88	0.95	1.11	0.95	0.88
New Brunswick	2.30	2.38	2.41	2.51	2.39	2.28	2.23	2.29	2.24	1.78	1.53
Newfoundland and Labrador	1.28	1.40	1.75	2.54	2.25	2.41	2.31	2.41	2.78	2.27	1.78
Nova Scotia	2.43	2.66	2.45	2.41	2.31	2.14	2.19	2.14	2.50	2.19	1.91
Manitoba	1.60	1.67	1.80	1.97	2.02	2.04	2.01	1.99	2.33	2.22	2.05
Prince Edward Island	2.04	2.02	2.02	1.95	1.90	1.68	1.63	1.65	1.65	1.43	1.43
Saskatchewan	0.43	0.37	0.47	0.69	0.96	0.97	0.99	1.00	1.20	1.06	0.85
Northwest Territories	1.14	1.35	1.41	1.64	1.65	1.85	2.45	2.64	3.62	2.48	2.42
Nunavut	-1.37	-1.53	-1.65	-1.49	-1.35	-1.16	-1.23	-1.82	-1.82	-2.26	-2.09
Yukon	-0.46	-0.60	-0.71	-0.53	-0.44	-0.20	0.00	0.22	0.22	0.42	1.14
Trend in revenue (exclu	ding trar	nsfer pay	ments)/i	interest	expendit	ture					
	•	2013/14	•		•		2018/19	2019/20	2020/21	2021/22	2022/23
Ontario	9.04	9.00	9.29	9.75	9.91	10.55	10.37	10.44	10.64	12.28	13.05
Quebec	7.17	7.05	7.54	8.12	8.80	9.32	10.51	11.95	11.95	12.69	11.53
Alberta	70.76	70.51	60.25	45.72	33.71	27.95	21.09	16.62	13.12	21.48	22.89
British Columbia	14.65	14.59	15.54	14.34	16.73	16.38	17.91	18.01	18.10	22.03	25.38
New Brunswick	7.26	7.41	8.03	8.03	8.57	9.15	9.67	9.73	9.58	11.30	15.23
Newfoundland and Labrador	8.35	7.60	7.69	5.45	6.33	6.11	6.39	5.30	5.09	7.66	8.45
Nova Scotia	6.39	6.47	7.00	7.31	7.84	8.48	8.01	8.71	9.04	12.36	13.89
Manitoba	11.75	12.81	13.13	13.03	12.36	12.55	12.50	12.31	12.22	13.28	12.87
Prince Edward Island	8.62	8.94	8.11	8.58	9.10	10.11	10.36	10.64	11.52	13.38	12.29
Saskatchewan	18.68	21.37	22.59	22.79	19.63	20.70	18.54	18.22	15.80	20.44	21.12
Northwest Territories	95.91	50.48	46.49	43.07	28.28	24.36	16.29	15.73	25.05	16.82	18.15
Nunavut	_*	-*	_*	_*	_*	_*	_*	_*	_*	_*	_*
Yukon	_*	_*	_*	_*	_*	_*	_*	_*	_*	_*	_*

 $Comments: Lowest\ values\ in\ orange,\ highest\ values\ in\ blue.\ *\ No\ reported\ interest\ charges.$ 

 $Source: Statistics\ Canada,\ NORD/LB\ Floor\ Research$ 

#### With thanks to Tristan Hinrichs

We would like to take the opportunity to thank Tristan Hinrichs for his valuable contributions to this study. His commitment to this project and the ideas that he brought to the table have enabled us to present a highly differentiated picture of the Canadian market for EUR-denominated issuances.



# Appendix Contacts at NORD/LB

#### Floor Research



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Sales		
Institutional Sales	+49 511 9818-9440	(
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	ı

Institutional Sales MM/FX +49 511 9818-9460
Fixed Income Relationship
Management Europe +352 452211-515

#### Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Länder/Regionen	+49 511 9818-9660
Frequent Issuers	+49 511 9818-9640

## Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

## **Sales Wholesale Customers**

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

#### Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Managament	+49 511 9818-9620
Liquidity Management	+49 511 9818-9650

#### **Relationship Management**

Institutionelle Kunden	rm-vs@nordlb.de
Öffentliche Kunden	rm-oek@nordlb.de



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