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Corporate Taxation in the U.S. and Canada – A Comparative Analysis

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Abstract

As the degree of global trade integration increased, corporate taxation became a border-crossing matter that obliged governments to reassess the tax attractiveness of their jurisdictions. The U.S. and Canada are two major players of today's trade landscape and the corporate tax environment of these two countries impact MNEs investment decisions. Historically, Canada offered a more favourable tax environment compared to its neighbour. However, the U.S. tax reform, TCJA, challenged Canada's tax attractiveness. This paper aims to assess the similarities and differences of both countries' tax systems after the tax reform based on the tax attractiveness criteria. Following, the paper examines lessons that can be derived for Canada to regain its strong position in the global tax attractiveness scenery. The U.S. and Canada have the potential to set an example for lawmakers and show that it is possible to create a corporate taxation environment that preserves governments' interest whilst creating attractive taxation policies in the eye of MNEs.

Keywords: Corporate taxation; United States; Canada; tax attractiveness; Tax Cuts and Jobs Act.

1. Introduction

"Taxes are what we pay for a civilised society".[1] Taxes are the main source of revenue for governments to create a state of social welfare for their citizens. Despite this, taxes still do not have positive connotations in both individual and corporate taxpayers' minds.

In our increasingly globalised world, trade hardly remains within one country's borders. To minimise their tax liabilities and to exploit the deficiencies in tax systems, multinational enterprises (MNE) are dispersing their business operations around the globe. Since tax payments and related expenditures on corporate income account for a great percentage of a company's expenses, taxation is a central aspect of investment decisions. Thus, countries need to adjust their fiscal policies to increase their tax attractiveness.

The main motivation of this thesis is to understand which country offers a more favourable fiscal environment for MNEs by looking at the dynamics behind international tax competition between countries. Alongside being two dominant players of the global trade landscape, the U.S. and Canada are ideal candidates for a cross-national comparison due to their geographical proximity and close economic links. Since they are both federal states, these countries are also very similar on a fundamental level with regard to their political systems. This similarity continues throughout taxation policies. However, over the years differences in aspects like headline tax rates allowed Canada to gain significant corporate tax attractiveness advantage over the U.S., and to create a more favourable investment environment. This advantage partly faded in 2018 when the Tax Cuts and Jobs Act (TCJA) came into force in the U.S., which was a major tax reform that drew tremendous public attention. TCJA has not only changed the decades-old taxation policies of the U.S. but also had significant implications on an international level. Considering that Canada is one of the countries that is on the frontline when dealing with TCJA, it is almost forced to respond to the reform of its neighbour.

Academia, businesses and civil society have been discussing the U.S. tax reform and its implications for a long time. Various research papers and articles were written in academic journals in recent years. The prevailing argument is that the corporate tax advantage that Canada has enjoyed for decades is in jeopardy and significant implications are on the horizon. Thus, Canada should respond to the U.S. tax

[1] This statement was delivered by Oliver Wendell Holmes Jr. in a United States Supreme Court opinion in 1927 (Compania General de Tabacos de Filipinas v. Collector of Internal Revenue).

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reform in a grounded and consistent manner. In this regard, the similarities between two tax systems give Canadian policymakers an opportunity to learn from the pivotal elements of the U.S. tax reform.[2]

The principal contribution of this bachelor thesis is the comparison of the tax systems of the U.S. and Canada with regard to corporate taxation from the perspective of their tax attractiveness. Since, as yet, the corporate taxation of both countries has not been analysed by focusing on the similar and diverging aspects, this thesis aims to close the existing gap in the literature. Thus, the question that is being asked is: What are the similarities and differences of MNEs' income taxation in the U.S. and Canada after the U.S. tax reform? Considering how similar corporate taxation in the U.S. and Canada is, it is also crucial to ask: When moving forward, what can Canada learn from the U.S.?

The comparison criteria to assess the similarities and differences are defined on the basis of three indexes: Tax Attractiveness, Tax Complexity and Tax Competitiveness Index. More details with regard to the indexes are going to be discussed in the following section when describing the prior literature written on the topic. These three indexes have a very large number of parameters, whereby many of them are common. For the purposes of this thesis, 12 criteria are chosen in total. Firstly, the parameters are filtered based on the fact of whether they are related to corporate taxation or not. Following, among those filtered parameters, the ones that came across in all three indexes are chosen.[3] In order to create a clearer overview, the parameters are grouped into four categories, whereby each category has been further divided into two to five subcategories. Firstly, "basic elements" are separated into corporate income tax rate and group taxation regime. The second category is "cost recovery" which has been subcategorised as capital cost recovery, loss carryforward and loss carryback. The category "tax incentives" is separated into research and development and patent box regime. Lastly, "international tax regulations" covers general anti-avoidance rules (GAAR), controlled foreign corporation (CFC) rules, thin capitalisation rules, transfer pricing rules and treaty network.

The structure proceeds as follows: Following this introduction, this thesis starts by giving an overview of the taxation system of both countries and by briefly describing the prior literature. Parts of a tax system can only be accurately assessed in the context of the whole system. Therefore, it is important to understand how both countries' legal systems are structured before examining any discrete aspects. In the third part of the thesis, the criteria of corporate taxation are going to be compared.[4] The last part answers the second part of the research question and derives lessons for Canada on the basis of comparison criteria from the previous section. The thesis concludes by summarising the findings of the previous two sections.

2. Overview and Current Developments

2.1. Prior Literature

The "Canada – U.S. Tax Comparisons" by Shoven and Whalley[5] is the only existing comprehensive comparison study so far. It discusses the similarities and differences of taxation systems of both countries beyond the taxation of corporate income. The book consists of several essays, whereby it does not define any criteria to compare corporate taxation and to assess the tax attractiveness of both countries. Even though the book is a good start to understand the fundamental concepts, it has lost its relevance in some respects due to ever-changing tax systems of the U.S. and Canada.

In addition, well-known journals such as the Canadian Tax Journal have published articles that compare certain corporate taxation aspects of both countries. In general, however, the number of comparison studies as such is scarce, and they do not provide a comprehensive comparison of corporate taxation systems.[6] Instead of comparing corporate taxation to assess the tax attractiveness, it has been a more popular research topic to look at the international spillover effects of TCJA, specifically its effects on Canada.[7]

As described in the introduction, the criteria derived from the three indexes lay the groundwork of this thesis. Tax Attractiveness Index aims to make an overall assessment of a country's tax environment to evaluate how attractive it is for corporate investment decisions.[8] Tax Complexity Index covers the criteria that signal the complexity of the tax code and tax framework which are important investment decision factors for MNEs.[9] Lastly, Tax Competitiveness Index measures the competitiveness and neutrality of countries' tax codes among the Organisation for Economic Co-operation and Development (OECD) countries.[10] The parameter of these in-

[2] See McKenzie and Smart (2019b, pp. 3–4).

[3] See the Appendix 1 for a detailed explanation of the methodology followed for the comparison.

[4] See the Appendix 2 for a comprehensive overview of the results of the comparison.

[5] Shoven and Whalley (1992).

[6] Clark and Klemm (2015) highlights how important corporate income tax rate for cross-national investments is, and looks at the rates of major economies, including the U.S. and Canada. Farrar "Canada's Thin Capitalization Rules: The Need for a Subjective Approach" (2006) compares the thin capitalisation rules of Canada with the G-7 countries, including the U.S.McKenzie/Smart "Policy Forum: Business Tax Reform in the United States and Canada" (2019) focuses on the most significant aspect of corporate taxation, the tax rate, and compares it before and after TCJA. Zodrow "Policy Forum: Corporate Income Taxation in Canada" (2008) examines again the corporate income taxation policy of Canada and compares it to the U.S. with regard to its competitiveness.

[7] Bazel, Mintz, and Thompson (2018) emphasises that the new tax reform of the U.S. introduced many ground-breaking changes that will make the country a much more attractive jurisdiction to invest in. Thus, the authors suggest a review of the Canadian tax system. Harris, Keen, and Li (2019) discusses provisions of TCJA that will affect Canada. Alongside fundamental and conventional components of the tax reform, the effects of newly introduced provisions such as the foreign-derived intangible income and the global intangible low-taxed income are considered. Lastly, the article also gives suggestions for possible responses.

[8] See Schanz, Keller, Dinkel, Fritz, and Grosselfinger (2017, pp. 3–4).

[9] See Hoppe, Schanz, Sturm, and Sureth-Sloane (n.d.).

[10] See Bunn and Asen (2019, pp. 1–2).

dexes would allow an objective and comprehensive comparison of countries' tax systems from the standpoint of their tax attractiveness. Nevertheless, a study as such has not yet been conducted, hence this thesis will be the first in this area. Considering the importance of an attractive tax environment as a decisive factor for investments, this thesis will show the stance of the U.S. and Canada and it would also help MNEs that are planning on expanding their business operations in North America to make wiser investment decisions. Additionally, the research would be a good starting point for policymakers who are trying to improve the tax attractiveness of their countries.

2.2. Taxation in the U.S.

The Constitution-based federal republic of the U.S. gives all levels of government, federal, state and municipality, the authority to legislate and regulate. The taxation of income occurs in the U.S. separately on federal and state level, whereas taxing power of states is not absolute and depends on the restrictions of the Congress.[11] The taxes paid on the state and local level are fully deductible when computing federal income tax to avoid duplications.[12]

Tax is by definition the transfer of a portion of the income to the government and it does not give the taxpayer the right to a *quid pro quo* in return.[13] Among the several elements of the U.S. federal tax system, income taxes are the primary component. The tax liability is calculated on the taxable income. However, the U.S. legal system does not provide a single unified definition of income and is intended to "capture all income without committing itself to a specific definition of what it means".[14] This is partly the result of individually added new provisions to the Internal Revenue Code (IRC) to achieve a specific policy role without taking their interaction with the existing provisions into consideration. Due to the fact that overlapping and duplicated provisions continue throughout the overall federal tax system, the taxation system of the U.S. is viewed as complex and multidimensional.[15]

Public Law No. 115-97, publicly known as the Tax Cuts and Jobs Act, was signed by President Donald Trump in 2017. TCJA is the most comprehensive tax reform of the U.S. in over three decades. The new or changed regulations affected every taxpayer in the country, whereby TCJA's most prominent and fundamental changes relate to corporate income taxation rules and the tax treatment of pass-through corporate income. In the near future, it is expected that the law will stimulate the economy positively, however it remains questionable whether the long-term impact will be as positive as lawmakers hoped.[16]

Despite the existence of merely two fundamental tax regimes, worldwide and territorial taxation, corporate taxation differs to a great degree between countries and offers little uniformity. Until the enactment of TCJA in 2018, the U.S. was one of the few remaining developed countries who still implemented worldwide taxation. The pure worldwide taxation regime taxes all income earned by corporations domiciled in the home country. However, the U.S. regime included alterations from the pure form and allowed MNEs to defer the taxation of the foreign-earned income until this income has been repatriated and made available to the parent company. Despite the benefits granted by the deferred taxation rules, the far higher corporate income tax rate of 35 per cent compared to most of the other OECD countries put the U.S. in a disadvantageous position. This also created an unfavourable investment environment for MNEs in the U.S. and incentivised them to engage in aggressive tax planning strategies.[17]

The cession of the worldwide taxation system was one of the most significant changes that was embarked with TCJA. Notwithstanding, lawmakers opted for a modified territorial regime instead of the pure territorial form since the latter would have created strong incentives to shift the taxable income and real investment activity to low-tax jurisdictions and to shift deductions to the U.S. Currently, the foreign-source income is free from taxation in the U.S. and is only taxed in the jurisdiction where the revenue is derived from. Since the repatriation of the foreign earnings does not create a tax liability in the U.S. any longer, under the new territorial regime corporations are more inclined to repatriate their earnings.[18] The changes in MNEs' tax structuring have been seen immediately after TCJA, for instance, Apple announced in the first quarter of 2018 that it would repatriate 94 per cent of its foreign income.[19]

Prior to TCJA, Internal Revenue Service tried to limit profit shifting by regulating transfer pricing rules. Nevertheless, their efforts were not successful, since among 40 per cent of globally profit shifting, U.S. based MNEs shift comparatively more than MNEs from other countries.[20] Thus, the Base Erosion and Anti-Abuse Tax was introduced, which is a provision that applies only to large MNEs and imposes minimum tax on otherwise tax-deductible payments between a U.S. corporation and its subsidiary. In addition, TCJA also establishes other provisions that aim to limit destructive profit shifting such as the foreign-derived intangible income (FDII) and global intangible low-taxed income (GILTI).

Another significant change that was introduced with TCJA is for pass-through businesses. Since the income of the latter is taxed as the owner's personal income at the individual rate[21], their income is not subject to the corporate

[11] See Brackman (2016, pp. 1–3.).
[12] See Pomerleau (2018).
[13] See Burman and Slemrod (2013, p. 6); Sherlock and Marples (2019, p. 5).
[14] McCaffery (2012, p. 36).
[15] See Brackman (2016, pp. 165–166).
[16] See Gale, Gelfond, Krupkin, Mazur, and Toder (2018, p. 590).
[17] See Fischer (2015, pp. 1028–57).
[18] See Yang, Lord, and Saito (2019, pp. 69–83).
[19] See Wakabayashi and Chen (2018) as cited in Yang et al. (2019, pp. 74–75).
[20] See Tørsløv, Wier, and Zucman (2018, pp. 3–4); Tax Policy Center (n.d.).
[21] See Merriam-Webster (n.d.).

income tax rate. Though TCJA changes apply to all corporations including pass-through entities, specific modifications in form of deductions are introduced which will expire after 2025.

2.3. Taxation in Canada

Income tax was first introduced as a temporary measure in Canada to raise revenue for the World War I. However, it continued after the war and income tax has become the single most important revenue-raising method in the country. In the meantime, the income taxation proved to be useful since it became a mechanism for centralising power in the federal government which has been previously reserved to the provinces. Over the years, Canadian lawmakers continued to refine their Income Tax Act (ITA) to cope with the challenges brought by globalisation for its corporate taxpayers.[22]

Canadian income tax system is composed of a multitude of federal, provincial and municipal taxes. Taxing power is divided between the federal government and its political subdivisions based partially on the differentiation between direct and indirect taxation, whereby the federal government is responsible for direct taxation and there is no constitutional limit to the federal taxing power. Despite this, there is no attempt to make a distinction between direct and indirect taxation in the statute. As a result, if the legislation is firmly decided on describing a tax as “direct", there is the possibility of declaring any tax as direct.[23] Provinces have then the power to levy the direct taxation on the income earned in their jurisdiction, whereby all of the 10 provinces and the three territories levy income tax. The federal government of Canada collects the tax on behalf of the provincial governments according to the tax collection agreement between them. Even though provincial governments must adopt the federal income tax base in consideration, they apply their own tax base and provide tax credits.[24]

3. Comparison of Corporate Taxation in the U.S. and Canada

3.1. Basic Elements

3.1.1. Corporate Income Tax Rate

Corporate income tax is the direct tax on the profits of a corporation. It describes the rate at which each dollar of profit is taxed. The enforcement of high corporate income taxes by the governments reduces the after-tax rate of return of corporate investments and increases the cost of capital. As a result, companies become reluctant to invest and the overall economic output decreases. In a broader sense, a greater tax burden also leads to higher prices for end-consumers and reduces the salaries of employees. Therefore, the rate at which the corporate income is taxed has a remarkably significant impact on a country’s economy, and governments that offer lower corporate income tax rates are seen as more attractive.[25]

The taxation of corporate income occurs in the U.S. both on the federal and state level. Prior to the enactment of TCJA, the federal corporate income tax rate was 35 per cent and was notably high compared to other OECD countries. In order to increase the competitiveness of U.S. based MNEs and re-establish the tax attractiveness of the country, the federal corporate income tax rate was reduced to 21 per cent. Also, progressive taxation on the federal level was eliminated, thus the federal corporate income tax rate is a flat rate for all companies regardless of their income.[26]

In accordance with the similarity of their governmental organisation, both the U.S. and Canada impose taxes on both the federal levels and on the level of their political subdivisions. In Canada, these subdivisions are provinces and territories. Canadian federal corporate income tax rate is 15 per cent after the general tax deduction, which is considerably lower than the headline rate in the U.S. General tax deduction is applicable for corporations that are not subject to preferential treatment. For instance, Canadian-controlled private corporations are not allowed to utilise this deduction.

Different from the U.S., Canada imposes progressive taxation on corporate income, whereas the first 500.000,00 CAD (600.000,00 CAD in Saskatchewan) of active business income is subject to a net federal rate of 9 per cent.[27] Progressive taxation is seen as a mechanism for governments to support their small businesses and is an attractive feature of a country’s tax landscape. Thus, Canada has an advantage on this matter compared to the U.S. The corporate income taxes imposed by political subdivisions of both countries vary greatly, whereby the combined corporate income tax rate is on average 26,47 per cent in Canada and 25,77 per cent in the U.S.[28]

3.1.2. Group Taxation Regime

Generally, under income tax law, a company is treated as a single separate taxable unit. This policy is derived from the traditional separate entity doctrine, under which a company is examined as a distinct legal entity and separate from its shareholders. However, with globalisation, the landscape of the trade has changed, and corporate groups have become more influential.[29] In 2017, although 100 largest MNEs worldwide accounted for about 0,1 per cent of the total number of MNEs, their sales made up around 10 per cent of the world’s gross domestic product.[30]

The rise of corporate groups started to challenge the existing separate entity doctrine and a new policy was created:

[22]See Christians (2018, pp. 2–4).
[23]See Petrie (1952, pp. 7–9).
[24]See Ault, Arnold, and Cooper (2019), chapter “Canada".
[25]See Bunn and Asen (2019, p. 6).
[26]See Internal Revenue Service (2019b).
[27]See Canada Revenue Agency (2005).
[28]See OECD (2020).
[29]See Ting (2013, pp. 3–4).
[30]See United Nations Conference on Trade and Development (UNCTAD) (2018, p. 26).

the enterprise doctrine. This new provision implies that separate entities under one corporate group are treated as a single taxable unit. Following this change, countries worldwide reacted by adjusting their tax law. Currently, the responses vary in a large spectrum, whereby some jurisdictions apply relatively restrictive group taxation regimes and others employ more comprehensive consolidation schemes.

Group taxation regimes have two key functions: Intra-group loss offset and tax-free intra-group asset transfer. If desired, lawmakers can replace these two functions with full consolidation.[31] Since group taxation regime allows to reduce the tax burden by filing one single consolidated tax return, the existence and scope of group taxation regimes are attractive features of a country's tax environment.[32]

The group taxation regime of the U.S. was first introduced in 1917 as the primary form of group tax relief. The regime has experienced many changes over its long history and the policy has targeted companies that sought to decrease their taxes on their profits.[33] Section 1501 of IRC gives a group of corporations the right to opt in to file a single consolidated tax return to offset intra-group losses. An election to file a consolidated return needs pre-approval of the Internal Revenue Service commissioner.[34] In order to be qualified for the consolidation, the parent company must possess ownership of at least 80 per cent of both value and voting power of the subsidiary.[35] The primary advantage of this provision is to combine the income of the subsidiaries into a single taxable income figure. In addition, intra-group dividends can be ignored, and the recognition of the gains or losses of intra-group transactions can be deferred. Nevertheless, this provision only applies to domestic entities, whereby foreign incorporated subsidiaries must file a separate return. Exceptions exist for certain Mexican and Canadian subsidiaries. Following, problems arise for incorporated groups when faced with states' diverse and uncoordinated filing requirements. Since, while some states require separate filing for each corporation, others allow consolidation. In states where separate reporting is enforced, a corporation is obligated to determine separate income even though the entity is part of a consolidated group for federal tax purposes.[36] In addition, since partnerships are not corporations their return cannot be consolidated.[37]

On the other hand, there is no existing group taxation regime in Canada. Thus, differing from the U.S. taxation provisions, under Canadian ITA, each corporation is required to file a separate return.[38] The absence of group taxation provisions under Canadian law is a feature that reduces the attractiveness of the country.

3.2. Cost Recovery

3.2.1. Capital Cost Recovery

Investments promote growth in an economy; thus, tax systems have to be designed in a way that they are able to attract capital. Depreciation allowances play a major role when MNEs decide whether to invest in a jurisdiction.[39] Since in tax systems based on income an immediate write-off of the costs of capital investments is not allowed, businesses are required to spread the write-off of these costs over several years. The idea behind is that the legally allowed deductible amount reflects the depletion in value of an asset.[40]

However, write-offs in the future years prove as less valuable compared to earlier write-offs as a consequence of the decreasing time value of money. Consequently, firms cannot deduct fully the present value of the costs of their capital investments. Due to this decrease in the present value of depreciation allowances, true business costs are understated whereas the taxable income is being overstated. Overall, countries that offer faster write-off provisions become more attractive for MNEs, since their depreciation schedules serve to lower down the tax base easily.[41]

Capital cost recovery system of the U.S. is based on an asset classification system and it spreads out the depreciation costs over the estimated useful life of an asset.[42] Depreciation deductions may be taken for tangible properties that are used for business purposes or properties that produce income, such as rental property. The modified accelerated cost recovery system is available for properties placed after 1986, under which each class has a prescribed recovery period and depreciation method. General cost recovery periods depend on the type of tangible property and are three, five, seven, ten, 15, 20, 27,5 and 39 years (31,5 years for properties before 13 May 1993). Allowed depreciation methods are declining-balance method and straight-line method, switching from the point when the latter maximises the depreciation deduction. Taxpayers may switch to an alternative depreciation system and use only the straight-line over prescribed useful lives. Prior to the enactment of TCJA, a special 50 per cent first-year depreciation allowance applied, which has been replaced by the new regulation with a 100 per cent first-year bonus depreciation deduction for certain qualified properties that are acquired and placed in service after 27 September 2017 and before 1 January 2023. Tangible properties with a recovery period of 20 years or less are defined as qualified property under the modified accelerated cost recovery system, and special depreciation allowance reduces the basis before regular depreciation deductions.[43]

In Canada, similar to the U.S., capital cost allowances are calculated on the basis of pooled asset classes, whereby annual depreciation allowances are given as a prescribed rate

[31] See Ting (2013, pp. 13-18, 32).
[32] See Schanz et al. (2017, p. 6).
[33] See Ting (2013, p. 70).
[34] See Brauner (2011, p. 70); Ting (2013, p. 301).
[35] See Trump (2020, p. 4).
[36] See Brauner (2011, p. 305).
[37] See PricewaterhouseCoopers International Ltd. (PwC) (2020b).
[38] See Dumalski and DeGrace (2019, p. 4).
[39] See Nam and Radulescu (2005, p. 5).
[40] See Brazell and Mackie (2000, pp. 532–533).
[41] See Bunn and Asen (2019, pp. 8–9).
[42] See Brazell and Mackie (2000, p. 531).
[43] See Ernst & Young LLP (2019b, p. 1818); PricewaterhouseCoopers International Ltd. (PwC) (2020a).

and applied on a declined-balance basis. Businesses cannot deduct the full amount in the year of acquisition of depreciable property and have to disperse the capital costs over several years. In response to TCJA, in the Fall Economic Update of 2018, the federal government of Canada introduced three important changes with regard to capital cost allowances to "enhance business confidence".[44] According to the new provisions, the cost of machinery and equipment used for manufacturing or processing of goods may be immediately written-off. Since the manufacturing industry is capital intensive and highly mobile, this new incentive will help the industry to cope with the changes brought by TCJA. Secondly, businesses are given the chance to immediately write-off the full costs of clean energy equipment. Furthermore, the federal government introduced the Accelerated Investment Incentive, under which businesses can deduct their capital investment costs at an accelerated rate. This accelerated rate is approximately equal to three times the usual first-year deduction and it will gradually phase out by 2028.[45] The temporary accelerated deduction provisions of both countries increased the allowed amount of the first-year deductions. In a way, the Fall Economic Update of Canada has replicated capital cost recovery provisions of TCJA to establish a similar attractiveness for capital investments as the U.S. in its jurisdiction.

3.2.2. Loss Carryforward

Companies occasionally have unused tax credits in a given tax year which is mostly the case in times of economic downturn. Since tax carryforwards imply future tax savings, they are valuable assets to the firm. In most countries, companies are allowed to offset their current losses against future profits. In other words, if the company has a positive tax base in the future, it can deduct its tax loss carryforwards to reduce its tax burden.[46] Hence, the amount of a tax loss carryforward is a considerable contribution to the company's value[47] and it helps to "shelter a part of the firm's future income from taxation".[48] Loss carryforward provisions of a country dictate the number of years a company is permitted to carry forward its losses. Countries with more generous provisions are more attractive to MNEs.[49]

According to the U.S. IRC, net operating losses (NOL) arise when deductions exceed gross income in a given tax year. NOLs generated before 1 January 2018 may be carried forward for up to 20 years. TCJA updated this provision, and currently, NOLs generated after that date can be carried forward indefinitely. Nevertheless, for NOLs without carryforward limitations, the deduction is capped to 80 per cent of the taxable income which has been calculated without regard to the deduction.[50] Other limitations for the carryforward of NOLs are defined in Section 382, whereas special rules apply for deductions subsequent to a reorganisation and after changes in corporate ownership. On 27 March 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was enacted which provided relief from relatively strict provisions of TCJA. One of those provisions was the elimination of the income limitation of NOLs for carryforwards for post-TCJA years through 2020.[51]

Different from the U.S. provisions, ITA of Canada differentiates among capital losses, allowable business investment losses, non-capital losses and farm losses. Non-capital losses are realised from regular business activities and they can be deducted against any source of income. The unused portion of the non-capital losses can be carried forward for up to 20 years.[52] Similar to the U.S., after the prescribed time period the rights to offset losses against income becomes permanently unavailable. Much like the provisions of IRC, Canadian lawmakers have limited the carryforward option in case of an ownership change. After a majority acquisition loss carryforward can only be deducted if the acquired business will continue to operate with reasonable profit expectations. Also, deduction is allowed in cases where the losses are used to offset the same or similar business income. The idea behind this loss streaming rule is to avoid acquisitions that solely aim to utilise loss carryforwards of acquired companies.[53]

3.2.3. Loss Carryback

Loss carryback allows companies to deduct current year losses against past year profits. Analogously to loss carryforwards, loss carrybacks reduce a company's overall tax burden. Thus, countries that allow companies to carry back their losses far into the past are more attractive from the tax perspective.

In the U.S., prior to TCJA, NOLs were permitted to be carried back for two years to obtain a refund. TCJA changed this rule and eliminated the loss carryback provision completely.[54] Nevertheless, this provision was recently modified with the CARES Act, whereby corporate taxpayers are now permitted to carryback their NOLs for the years 2018, 2019 and 2020 for up to five years. Taxpayers have the option to choose one particular tax year for carryback. However, in general, once a carryback is claimed, then it must be executed for all five years. As a result, it is expected that loss carrybacks introduced with the CARES Act will provide economic relief for companies that are affected by the Coronavirus pandemic.[55]

On the other hand, differing from the U.S. provisions, non-capital losses may be carried back for three years in Canada to offset gross income arising in those tax years. In the event that the carryback losses have not been utilised

[44] Department of Finance Canada (2018, p. 55).
[45] See Ernst & Young LLP (2019a, p. 266); PricewaterhouseCoopers International Ltd. (PwC) (2019).
[46] See Streitferdt (2013, pp. 163–164).
[47] See Betker (1995, pp. 3–18) as cited in Streitferdt (2013, p. 12).
[48] Sarkar (2014, pp. 803–804).
[49] See Bunn and Asen (2019, p. 8).
[50] See PricewaterhouseCoopers International Ltd. (PwC) (2020a).
[51] See Singer, Bray, Kershaw, Shulman, and Crouch (n.d.).
[52] See Canada Revenue Agency (2017).
[53] See Thomson Reuters Canada Ltd. (n.d.).
[54] See Internal Revenue Service (2019a).
[55] See Luscombe (2020, p. 3).

in the prescribed time frame, they become permanently unavailable to the taxpayer.[56] Compared to the U.S., Canada has not yet introduced any relief provisions for business taxes with regard to losses encountered due to the pandemic. Despite the fact that the CARES Act introduces provisions limited to a short time period, it is still important when considering the tax attractiveness since it shows the U.S. government's determination on supporting its businesses.

3.3. Tax Incentives

3.3.1. Research and Development

Tax incentives used to promote research and development (R&D) business activities are adapted widely among many countries and they are a tool for national growth and job creation.[57] It has the characteristic of reducing the costs of carrying out R&D activities by alleviating MNEs' tax liability. Since R&D investments are large expenses, tax incentives that reduce the after-tax R&D costs are important when determining the tax attractiveness of a jurisdiction.[58] The economic rationale is derived from the statement that social returns of inventions are higher than the private returns. In other words, the end-product of an R&D activity can be appropriated in a private enterprise to a limited extent compared to public purposes. Thus, companies would be reluctant to invest in R&D activities without any incentives.[59]

The policy design of tax incentives of R&D activities can be volume-based or incremental, whereby the simpler design is, the higher the welfare is going to be due to the alleviated administrative burden. The U.S. and Canada both employ a volume-based policy, whereby the total amount of qualified R&D activities is taken into account. Furthermore, tax incentives covered by R&D are tax credit, enhanced deductions and depreciation allowances for R&D activities. The tax credit allows firms to directly deduct the amount determined by their tax rate from their tax liability born by their R&D expenditures. The U.S. and Canada both implement the method of granting tax credit as a way to incentivise R&D activities.[60]

In the U.S., in addition to the federal tax credit, many states offer separate R&D tax credits that are generally at a lower level than the federal credit rate. The traditional research tax credit is 20 per cent of the qualified research expenses that exceed the pre-defined base amount whose calculation relies on data between 1984–1988. Due to the complexity of defining the base amount, only a few companies choose to report the traditional research credit. Alternative simplified credit is another option that is more widely used, under which the credit rate is 14 per cent of the excess expenses, whereby the threshold is 50 per cent of the averaged past three consecutive years' qualified research expenses. Lastly, the U.S. government offers targeted research credits that, as the name suggests, focus on specific types of R&D activities. MNEs that qualify for targeted research credit cannot use the regular research credits for the same qualified expenses. The R&D tax credit system of the U.S. does not exclude any industries, thus all companies that undertake qualified research expenses are eligible for a tax credit.[61]

Canada has a relatively lucrative tax credit system compared to other countries around the world and it is organised under the Scientific Research and Experimental Development (SR&ED) Tax Incentive Program. SR&ED federal investment tax credit is 15 per cent for all qualifying R&D expenditures carried out in Canada, and it is used to reduce federal tax payable. On the other hand, different from the U.S., Canada does not offer many diverse credit options besides an additional enhanced refundable tax credit of 35 per cent for Canadian controlled private corporations on eligible expenditures of three million Canadian dollars. For R&D expenditures that exceed this amount, there is also the option to earn a non-refundable 15 per cent tax credit.[62]

Qualified expenses under the U.S. R&D tax credit system include wages and salaries of employees and all types of supplies other than depreciable assets. On the other hand, Canada only takes into account materials that are used for the purposes of the research. As a result, the U.S. IRC qualifies more items as eligible for R&D tax credit purposes since "supplies" cover a wider range of items than "materials", therefore it gives companies more discretion in determining the activities that constitute as R&D expenditure.[63]

Additionally, similar to the U.S. state tax credit, Canada has separate provincial/territorial credits that range from 3,5 per cent to 20 per cent. MNEs both in the U.S. and Canada are allowed to carry forward their tax credits for 20 years and claim them back in future periods. SR&ED of Canada also offers an immediate deduction for all qualified expenditures, under which there is the option to carry forward and deduct in future years.[64]

3.3.2. Patent Box Regime

Historically, R&D tax incentives have been seen as the only effective way of promoting innovative business activities. However, in the early 2000s, the current form of the patent box regime has emerged, and it has been found that incentives subsidising the income stream from innovation activities result with more favourable outcomes in the long run than incentives that subsidise investments in innovation, i.e. R&D tax incentives. Patent box regime has the objectives of stimulating domestic innovation and combatting erosion of the domestic tax base. It reaches these objectives by featuring a reduced tax rate on income derived from the commercialisation of royalties or giving a tax exemption on a certain percentage of the latter.[65] The existence and scope of a patent

[56] See Canada Revenue Agency (2017).
[57] See Goulding and Goulding (2013, p. 18).
[58] See Schanz et al. (2017, p. 8).
[59] See Arrow (1962, pp. 616–619).
[60] See Correa and Guceri (2013, pp. 5–6, 10–11).
[61] See Aronshtam and Kane (2018, pp. 271–273).
[62] See Canada Revenue Agency (2020).
[63] See Laplante, Skaife, Swenson, and Wangerin (2019, pp. 89–91); SRED (2017).
[64] See Aronshtam and Kane (2018, pp. 35–37); OECD (2019, p. 1).
[65] See Bradley, Dauchy, and Robinson (2015, pp. 1047–1048, 1069).

box regime increase the tax attractiveness of a jurisdiction substantially.

Prior to the introduction of BEPS project Action 5[66], the policymakers in the U.S. have not been showing serious interest in the development of patent/innovation box regimes. However, with the introduction of the modified nexus standard, the U.S. government felt obliged to respond to hinder redirection of R&D activities by U.S. MNEs. In July 2015, the Innovation Promotion Act[67], publicly known as the Boustany-Neal discussion draft was released. This Act amended IRC by adding new provisions related to the innovation box and it was stating that the enactment of U.S. innovation box would allow to increase the competitiveness of U.S. companies, but this Act has never passed the Senate.[68]

Until the enactment of TCJA, no further discussions related to the discussion draft took place. Although TCJA does not include any direct patent/innovation box regimes, it introduced two special provisions: FDII and GILTI. According to FDII provision, 37,5 per cent of the income derived from the commercialisation of the licences of intellectual property is subject to deduction. Nevertheless, on the opposite side, GILTI provision imposes a minimum tax on the global income, including income derived from licencing of intellectual property. Thus, some commentators argue that FDII and GILTI act as "carrot and stick", and only create an indirect patent/innovation box regime.[69]

As was the case with the U.S., Canadian policymakers have been discussing a possible patent box regime for years, but it has not yet been implemented on the federal level. However, regimes on a provincial level have been adopted. British Columbia was the first province in Canada who granted a reduced tax rate of 2,75 per cent for international patent income. The province does not enforce the product to be developed locally, whereby companies with a permanent establishment in the province are entitled of the tax rate reduction. The second provincial patent box regime was then introduced in Quebec in 2016 to bridge the gap between innovation and its commercialisation, where the tax on qualifying patent income was reduced to a rate of 4 per cent. However, Quebec's patent box regime only applied to the manufacturing industry and it reduced the tax rate for qualified innovative manufacturing corporations, whereby intellectual property has to be at least partly developed in Quebec.[70]

3.4. International Tax Regulations

3.4.1. General Anti-Avoidance Rules

Taxpayers may engage in tax planning strategies to reduce their tax payable. Notwithstanding, in cases, where tax avoidance strategies have reached a drastic level, governmental interference becomes necessary. Therefore, GAAR are implemented by many jurisdictions to restrict impermissible tax avoidance.[71] The definition of the latter can become problematic because of its ever-changing and unpredictable nature; however, it is broadly characterised as being inconsistent with the spirit of tax law since these transactions are often abnormal, artificial and they lack a commercial substance. Furthermore, there is an additional complexity born with GAAR, since there is a clash between taxpayers' entitlement to lawful tax planning, and the governments' need to protect its tax revenue from impermissible tax avoidance.[72] On the other hand, for MNEs the existence of GAAR provisions are a drawback since they prefer having freedom in their tax planning strategies. A country that imposes clearly defined, strict GAAR rules is not considered as attractive compared to other jurisdictions without any anti-avoidance provisions.

In the U.S., in accordance with the common law tradition at the federal level, the judiciary decides ultimately, whether there is a tax avoidance transaction and whether resulting tax benefit from this transaction should be denied. The anti-avoidance doctrine was first developed with the case Gregory v. Helvering[73] and stated that economic substance of a transaction is the deciding factor in its classification. Lack of economic substance signals that a business has been solely transacted with the purpose of tax minimisation.

In 2010, the economic substance doctrine was codified with the enactment of Healthcare and Reconciliation Act in IRC Section 7701(o).[74] Nevertheless, the codified version has drawn criticism with the argument that it "provided a roadmap to successful avoidance"[75] compared to the prior judicial version. Thus, despite the codification of the doctrine, federal courts still hold the power to determine whether a transaction is part of a tax avoidance strategy or has an economic substance within it.[76] In addition to the economic substance doctrine, U.S. courts rely on other doctrines such as substance over form, step transaction and sham transaction doctrines.[77]

In Canada, taxpayers' general right to arrange its affairs in a way that its tax burden is reduced, originated from the "Duke of Westminster principle"[78], under which legitimate right to engage in tax planning has been recognised by the Canadian courts. However, the Stubart[79] case has shown the need for a general provision aimed to limit abusive tax avoidance and following, a robust GAAR provision has been enacted in 1988. The Canadian anti-avoidance provision has been defined in Subsection 245 of ITA.

Different from the U.S. GAAR, Canadian GAAR works un-

[66] OECD (2015).
[67] Goodlatte (2015).
[68] See Atkinson (2015, pp. 5–8); Traub and Kummer (2015, pp. 3–4).
[69] See Shaviro (2018).
[70] See De Luca et al. (2016, p. 3).
[71] See Waerzeggers and Hillier (2016, p. 1).
[72] See Kujinga (2012, pp. 42–43).
[73] Gregory v. Helvering (1935, para. 2).
[74] See Prebble and Prebble (2010, p. 27).
[75] See Avi-Yonah and Pichhadze (2017, p. 10).
[76] See Brown (2012, pp. 609–610).
[77] See Larsen, Cordero, Bowen, Denault, and D'Alessandro Jr. (2018, p. 21).
[78] Duke of Westminster v. Commissioners of Inland Revenue (1935).
[79] Stubart Investments Ltd. v. The Queen (1984).

der a cascade mechanism which gives little leeway to taxpayers. Firstly, Subsection 245(2) determines whether there is a tax benefit resulting from the transaction. If there is one, it is then to decide whether the transaction is motivated for tax purposes or *bona fide* non-tax reasons according to Subsection 245(3). Lastly, Subsection 245(4) examines to see if tax benefit resulted from a misuse of specific taxing provisions of ITA. As is the case with the U.S., subjective nature of GAAR is reflected in the Canadian provisions, thus statutory interpretation by the courts is an essential element.[80] In addition to GAAR provisions, the U.S. and Canada have also specific anti-avoidance rules that go beyond the general provisions and apply to narrowly prescribed set of transactions[81], whereby these rules will be examined separately in the coming parts.

3.4.2. Controlled Foreign Corporation Rules

Global trade landscape is dominated by a high level of global integration which complicates the taxation of corporate income and makes it a border-crossing issue. In cases where profits are generated both in the home country of the parent company and in the host country of a subsidiary, it becomes problematic in which jurisdiction this income should be taxed. Each entity of the corporate structure is regarded as a separate taxpayer; thus, each subsidiary becomes subject to income tax in the host country.

Following, most countries impose domestic income tax when the income has been repatriated and allow methods to eliminate double taxation that arises from taxing the same base multiple times. Nevertheless, the parent company owns essentially the profits and hence has the right to determine when, if at all, the income should be repatriated to the home country. Considering that base protection and enforceability of tax system are integral parts of a country's optimal policy design, when profits escape the reach of the home country, it possesses a threat to the enforceability of tax collection.[82]

In order to control aggressive tax planning and constant migration of profits, many high-tax countries introduced CFC rules. These rules impose a direct tax on foreign subsidiaries by including non-repatriated income into the domestic tax base. Whether to enforce CFC rules or not depends generally on three criteria: Control criterion, tax level criterion and source of income. Control criterion requires the shareholder to be in control of financial decisions of the entity in a foreign country and the ability to make decisions related to tax avoidance. On the other hand, the tax level criterion obliges a fixed minimum tax level, below which incentives for profit shifting emerge. Lastly, the source of income should be passive income, whereby any highly mobile income that makes income-shifting possible, qualifies, e.g. foreign personal holding company income. Since the CFC rules greatly increase the total tax burden of MNEs, countries that impose these rules are seen as less attractive for investment purposes.[83]

The U.S. was the first country worldwide who introduced CFC rules in 1962. It took over a decade for other capital-exporting OECD countries, including Canada, to adopt similar rules.[84] Under U.S. law, CFC is a foreign corporation that is owned by over 50 per cent by U.S. shareholders, whereby certain types of income are included in the taxable income of the U.S. shareholders. Types of income that must be included in the tax base are defined in subpart F of IRC which includes foreign-based company sales income and foreign-based company service income, among others. U.S. shareholders are by definition, U.S. persons who own more than 10 per cent of a foreign corporation's voting stock or own more than 10 per cent of the total value of all classes of a foreign corporation's stock.[85] Thus, different from Canada, the U.S. implements a two-step ownership test, whereas first, the ownership of the corporation is examined, and afterwards the shareholders' ownership is assessed. Following, the dividends of the CFC received by U.S. shareholders are eligible for a full "dividend-received deduction", which means that dividends obtained are tax-free since CFC did not make any tax payments to the government.[86]

Nevertheless, after the enactment of TCJA, IRC Section 951 Subtitle A is introduced, and it required U.S. shareholders to include the amount of GILTI, independent of whether the amount is distributed or not. As a result, TCJA's GILTI rules expanded the scope of CFC rules beyond passive income, thus it is now applicable to all income generated by a CFC if the income is considered to be low-taxed. In other words, TCJA does not define any tax havens, it rather taxes all income that is subject to a foreign tax rate lower than 13,125 per cent. GILTI is despite its name, is not limited to low-taxed income from intangible assets, and encompasses U.S. shareholders' pro-rata share of CFC's total net income less 10 per cent return on depreciable tangible property.[87] GILTI is included in the U.S. shareholder's income and a deduction equal to 50 per cent of the full amount is allowed. In addition, the shareholder has the right to claim a foreign tax credit for 80 per cent of the foreign taxes paid or accrued by a CFC.[88]

Another provision that was enacted with TCJA was the Base Erosion and Anti-Abuse Tax which imposes a minimum tax to the tax base of large corporations with gross receipts of 500 million dollars or more, and in addition to corporations that have deductions that exceed 3 per cent of their total deductions paid to foreign related companies. Base Erosion and Anti-Abuse Tax, as the name suggests, levy a direct tax on base-eroding payments and acts as a "backup to GILTI".[89]

[80] See Hashimzade and Epifantseva (2017, p. 108).
[81] See Marley and Tremblay (2005, p. 105).
[82] See Clifford (2019, pp. 44–46).
[83] See Schanz et al. (2017, p. 5).
[84] See Arnold (2012, p. 478).
[85] See Traub and Kummer (2015, p. 8).
[86] See Yang, Poon, and Chang (2018, p. 20).
[87] See McGill, Karch, Feeley, O'Banion E., and Crouse (2018, pp. 11–13).
[88] See PricewaterhouseCoopers International Ltd. (PwC) (2020b).
[89] See Dueñas (2019, p. 18).

Canadian CFC rules are organised extensively under the Subsection 91(1) of ITA and named as foreign accrual property income rules.[90] Similar to the U.S. provisions, foreign accrual property income regime obliges a Canadian resident shareholder to include its share of passive income of its controlled foreign affiliate, whereby it is irrelevant whether or not this income has been distributed. In order to be qualified as a controlled foreign affiliate, the majority of the voting shares must be owned directly or indirectly by a Canadian corporation. Foreign accrual property income covers income from investment business and income that is derived from the trading or dealing in indebtedness. In case of income is derived from specific activities, it encompasses the income if it accrues to the benefit of the Canadian taxpayer under a tracking arrangement.[91]

3.4.3. Thin Capitalisation Rules

The trade-off theory of corporate finance states that firms pick their capital structure by trading off the benefits of tax shield from debt against its costs, i.e. financial distress and agency costs. A tax shield is a reduction in tax expenditures due to tax-deductibility of interest expenses.[92] In addition to the advantages raised by this asymmetry of tax treatment, differences in tax rates across countries result with profit shifting and reduction of the overall tax burden.

MNEs allocate their debt to high-tax countries or provide loans internally to related entities in those jurisdictions in order to deduct higher interest expenses from their tax base.[93] Consequently, entities in low-tax countries are equipped with equity, whereas entities in high-tax countries have large amounts of debt on their balance sheets. In order to limit excessive debt financing and intra-group financial transactions, lawmakers in high-tax countries have adopted thin capitalisation rules. These rules aim to prevent profit shifting to a large extent by limiting the deductibility of interest payments from taxable income. Thin capitalisation rules differ greatly across countries and usually have a high degree of complexity. They can also be arranged in a way that they are only binding for certain selected industries.[94] Since interest tax shield is an important financial instrument to reduce tax payable of corporations, provisions that limit interest deductions are not favoured by MNEs. Hence, they reduce the tax attractiveness of a country.

The U.S. government imposes clearly defined thin capitalisation rules which have been tightened with the enactment of TCJA. The current allowed debt-to-equity ratio is 1,5:1. Section 385 of IRC contains provisions that evaluate whether an instrument claimed to be debt is considered as debt or equity for the U.S. tax purposes. If the transaction is legally prohibited, capital loaned to an entity by a related party may be characterised as equity by Internal Revenue Service. Correspondingly, its interest expense deductions may be disallowed, and its principal repayments and its interest expenditures are considered as distributions and they are subject to withholding tax.

If the instrument is considered as debt, the business interest expense deductions apply.[95] These deductions have been modified with the enactment of TCJA and they have been limited to 30 per cent of the adjusted taxable income. Deductions apply broadly to the business interest of any taxpayer; hence it is irrelevant whether they are foreign or U.S. persons or whether they are related or unrelated entities. For tax years before 2022, the adjusted taxable income equals approximately to earnings before interest, taxes, depreciation, and amortisation, whereby after that date it will be decreased by depreciation and amortisation. Carry forward of disallowed interest expenses into future years is allowed. In case of lending from a foreign lender, interest expenses must be paid prior to performing their deduction.[96]

As stated in Subsection 18(4) of ITA, Canada's thin capitalisation rules, rely on mandatory debt-to-equity ratios to prevent illegitimate diversion of profits to low-tax jurisdictions.[97] These provisions have been subject to amendments over the years. According to Section 385 provisions, Canadian lawmakers give a specified debt-to-equity ratio. Currently, Canadian thin capitalisation rules restrict the ability to deduct interest expenses paid by a resident corporation to a specified non-resident shareholder or related persons on debts exceeding the defined debt-to-equity ratio of 1,5:1. A specified shareholder is someone, who owns 25 per cent or more of a corporation resident in Canada, either by fair market value or by voting rights, with other related persons that do not deal at arm's length.[98] These rules apply to corporations resident in Canada, trusts, non-residents' Canadian branches and partnerships of which a corporation resident in Canada is a member. In addition, thin capitalisation rules apply to certain back-to-back loan arrangements.[99]

3.4.4. Transfer Pricing Rules

MNEs manipulate transfer prices when they conduct transactions with related companies in a way that their tax liabilities are minimised. They do so by setting high prices for the sale of goods or services to related entities in high-tax countries. As a result, they reduce the overall tax burden of the organisation and repatriate higher profits to low-tax countries. Hence, from the standpoint of MNEs non-existing or relatively vaguely organised transfer pricing rules increase the attractiveness of a jurisdiction.

Notwithstanding, for governments in cases when there are no existing restrictions with regard to the prices set for

[90] See Nosikova (2015, p. 4).
[91] See Dumalski and DeGrace (2019, p. 3); PricewaterhouseCoopers International Ltd. (PwC) (2020b).
[92] See Berk and DeMarzo (2017, pp. 552–556).
[93] See Merlo and Wamser (2014, pp. 27–28).
[94] See Schanz et al. (2017, p. 10).
[95] See Ernst & Young LLP (2019b, pp. 1821–1822).
[96] See PricewaterhouseCoopers International Ltd. (PwC) (2020a).
[97] See Nitikman (2000, pp. 20–21).
[98] See Shafer (2013, p. 1).
[99] See Ernst & Young LLP (2019a, pp. 267-268).

intra-group transactions, transfer pricing becomes a sole device of tax evasion. Furthermore, tax authorities try to recover this revenue loss by restricting the setting of transfer prices by MNEs. Nevertheless, this intrusion of tax authorities may cause inefficiencies that damage consumer prices and MNEs' organisational choices.[100] An intrusion as such also distorts the main point of MNEs' cross-national activity which is to cut costs by locating their organisation more efficiently around the globe.[101] In order to solve these conflicting problems, OECD has suggested a set of guidelines[102] to help safeguard tax authorities interests while alleviating market distortions raised by abusive transfer pricing strategies. Transfer pricing rules worldwide are organised based on the arm's length principle, under which the price that would prevail between two unrelated entities in a competitive market is predicated.[103]

The primary legislation of the U.S. transfer pricing rules is defined in Section 482 of IRC (Regulations 1.482-1 to. 1.482-9), also known as Treasury Regulations. It ensures that controlled transactions' profits are correctly reflected, and a controlled taxpayer is on par with an uncontrolled taxpayer. Along establishing a general standard applicable to transactions between related entities, Section 482 also introduces an additional standard for transfers of intangible properties. Although the arm's length principle has not been explicitly stated, it has been embodied by the statutory language by establishing a tax parity between controlled and uncontrolled transactions. According to Section 1.482-1 of Treasury Regulations the "best method rule" should be used to ensure the arm's length pricing, insomuch as the best transfer pricing method is the one with the most reliable arm's length result.[104] This method should be based on the criteria of comparability of uncontrolled transactions and quality of data and assumptions. Acceptable transfer pricing methods in transfers of tangible properties are comparable profits method, comparable uncontrolled price method, cost plus method, among others. Unspecified methods may also be used by taxpayers if they end in with an arm's length result. Furthermore, the U.S. rules for transfer pricing do not predicate on the guidelines issued by OECD and there are no references to the latter in Treasury Regulations. Advance pricing agreements can be reached between taxpayers and the Internal Revenue Service, under which an arm's length pricing method is agreed upon for the upcoming intercompany transaction.[105]

Canada's status as being a high-tax jurisdiction has become stronger after the corporate tax rate reduction in the U.S., which also caused transfer pricing rules gaining importance in the Canadian taxation system. Transfer pricing rules are contained in Section 247 of ITA, whereby, as is the case with the U.S., OECD's guidelines play a limited role for Canada's transfer pricing provisions. As stated in GlaxoSmithKline Inc. case[106], OECD's provisions may only be used as interpretative aid and only Section 247 of ITA is legally binding. Following, although, Section 247 does not prescribe any particular method, it applies the arm's length principle by comparing controlled transactions to comparable arm's length transactions. However, ITA does not specify any particular method, thus "the selection of the most appropriate pricing method depends [...] on the assessment of the comparability of transactions".[107] Acknowledged methods are similar to the ones recommended in the OECD's guidelines and include comparable uncontrolled price method, resale price, profit split method, among others. Although all methods are accepted, in the past courts have shown a preferential position to traditional transaction methods, specifically comparable uncontrolled price method. As in the U.S., advance pricing agreements with the Canada Revenue Agency are possible to provide more tax certainty for taxpayers.[108]

3.4.5. Treaty Network

Double taxation treaties play a crucial role as a policy tool to promote cross-national investment activity.[109] These treaties have two primary objectives: avoiding double taxation in international transactions and preventing tax evasion by MNEs. There is a consensus that double taxation treaties are mean to reduce withholding taxes on passive income. Since they eliminate to a large extent the investment uncertainty that a company may encounter when investing overseas, they also help to promote foreign direct investments.[110] As a result, an increase in foreign direct investments spurs economic growth and hence raises the tax revenues of governments. Thus, the number of effective tax treaties that are in force boosts the attractiveness of a country for MNEs. Double taxation treaties are largely influenced from the standards defined by the OECD Model Tax Convention on Income and on Capital[111] and United Nations Model Double Taxation Convention[112], and they shift the taxing rights from the source state to the resident state.[113]

The U.S. receives the biggest share of worldwide foreign direct investments due to the relative openness of its economy. A vast majority of the U.S. foreign direct investments comes from the countries with which the U.S. has signed a tax treaty in the past. Currently, the U.S. has 64 bilateral tax treaties in force.[114] In the past, the U.S. had viewed its treaties as negotiated agreements with strong bilateralism. Nevertheless, the U.S. government has decided in 1976 to

[100] See Behrens, Peralt, and Picard (2014, pp. 651–652).
[101] See The Economist (1993, para. 8).
[102] OECD (2017b).
[103] See Taklalsingh (2019, pp. 3–4).
[104] See Ernst & Young LLP "Worldwide Corporate Tax Guide" (2019), p. 1822.
[105] See Larsen et al. (2018, p. 11).
[106] Canada v. GlaxoSmithKline Inc. (2012, para. 20).
[107] Alberta Printed Circuits Ltd. v. The Queen (2011, para. 167).
[108] See Suarez (2019, pp. 797–799).
[109] See Kunka, Stasio, and Zagler (2020, pp. 575–576).
[110] See Daniels, O'Brien, and von der Ruhr (2015, p. 1000).
[111] OECD (2017a).
[112] United Nations Model Double Taxation Convention between Developed and Developing Countries (2017).
[113] See Braun and Fuentes (2016, pp. 384–385).
[114] Deloitte (2020).

Criteria	Differences
Corporate Income Tax Rate	Federal tax rate in the U.S.: 21 per cent Combined average tax rate in the U.S.: 25,77 per cent Federal tax rate in Canada: 15 per cent Combined average tax rate in Canada: 26,47 per cent
Group Taxation Regime	There is no group taxation regime in Canada.
Capital Cost Recovery	Different rates for temporary accelerated deduction provisions.
Loss Carryforward	Carryforward in Canada is allowed for 20 years. In the U.S carryforward allowance is indefinite but is capped to 80 per cent of the taxable income.
Loss Carryback	Canada allows carryback for three years. No carryback allowance in the U.S.
Research and Development	Eligible R&D expenditures are more broadly defined in the U.S. than Canada.
Patent Box Regime	Two provinces in Canada have employed patent box regimes. In the U.S. there is an indirect patent box regime with FDII and GILTI.
General Anti-Avoidance Rules	GAAR provisions of Canada work under a cascade mechanism. The U.S. GAAR relies on many doctrines.
Controlled-Foreign Corporation Rules	GILTI provision expands the scope of eligible income beyond passive income. Base Erosion and Anti-Abuse Tax of the U.S. acts as back-up to the CFC rules.
Thin Capitalisation Rules	The U.S. limits interest deductions to 30 per cent of adjusted taxable income, whereby there are no limitations in Canada. Tighter thin capitalisation rules in the U.S.
Transfer Pricing Rules	N/A
Treaty Network	Canada has a larger number of bilateral tax treaties than the U.S.

Figure 1: Brief overview of the differences

publish a draft “U.S. Model" which is essentially based on the OECD’s Model, and hence it is very similar in nature. However, there are few substantial deviations such as corporate residence. In the U.S. tax treaties, the latter is determined solely based on its place of organisation, whereas this is not the case in OECD’s Model and in the United Nations’ Model. These deviations are a reflection of the uniqueness of the U.S. tax treaty provisions.[115]

The treaty network of Canada has grown tremendously since 1976 when the link between treaties and Canada’s exemption system for the taxation of active foreign-sourced income has been established. According to this provision, in case of profits are generated in a designated treaty nation, Canadian MNEs may repatriate their foreign-sourced active income to Canada tax-free. Different from the U.S. treaty network, all the Canadian tax treaties are based on the OECD’s Model and on the United Nations’ Model. However, specific economic relations with a particular country are reflected individually in each treaty.

Compared to the U.S., Canada has a larger treaty network. Currently, the country has 93 bilateral treaties in force and four additional treaties that are signed but not yet in force.[116] Among existing tax treaties of Canada, the most important one is the treaty with the U.S.[117] The rationale behind this statement derives from the strong economic links between two countries; whereas the U.S. receives the biggest share of foreign direct investments of Canada.[118]

4. Lessons for Canada from the U.S.

Historically, Canada provided a more attractive tax environment for MNEs compared to the U.S., thus the country enjoyed an inward shift of foreign corporations’ profits. Nevertheless, this tax advantage faded with the enactment of TCJA. While it is not yet certain how large the consequences of the reform are going to be, it is a certain fact that Canada’s tax attractiveness started diminishing. The measures that were introduced with the Fall Economic Update in response to TCJA were temporary in nature. Hence, a robust and internationally competitive reform is necessary for Canada to regain its position in global trade scenery.[119]

When preparing a reform as such, Canadian lawmakers could look at the elements of the U.S. tax system. This part of the thesis derives lessons for Canadian government from the results of the comparison in the previous section. The results of the comparison indicated that among these 12 criteria, all of them except “transfer pricing rules" can be identified as different, nonetheless, the degree of divergences varies. Two criteria, group taxation and loss carryback, differ the greatest since while one country has the respective provision whereas

[115] See Brauner (2017, pp. 21.23).
[116] See Department of Finance Canada (2019).
[117] United States - Canada Income Tax Convention (1985).
[118] See Cockfield (2017, pp. 118–119).
[119] See McKenzie and Smart (2019a, pp. 2–4, 22).

the other has not. Broadly speaking for five[120] out of 12 criteria the differences are of disadvantage for Canada. In this part, in addition to the results of the comparison, the views of commentators from governmental agencies and academia are included. Since the commentators also formulated their suggestions while taking the U.S. system into account, the lessons that were derived from the previous part of this thesis and their views are harmonised to a large extent.

As indicated earlier, lower corporate income tax rate makes a country more attractive and draws capital investment. In this regard, Canada has lost its competitive edge over the U.S. with the reduction of the U.S. corporate income tax rate. Moreover, it has been found that companies in non-tax haven jurisdictions are more sensitive to movements in corporate tax rate which makes a Canadian response even more necessary.[121] However, critics' views vary with regard to the amount of reduction in corporate income tax rate whereas some do not recommend turning this to "a race to the bottom"[122], and others suggest a reduction of about 10 per cent.[123] Canadian policymakers should weigh the pros and cons of both approaches, nevertheless, the need to respond to the drastic reduction of the U.S. tax reform stays further on necessary.

Canada currently has no group taxation regime. Implementing a group taxation regime would move some MNE activity to Canada since it allows corporations to reduce their overall tax burden by transferring losses and filing a single consolidated tax return.[124] However, the case of the U.S. shows that when adding group taxation provisions into its law, Canadian lawmakers should also consider their negative aspects: The possibility of consolidation cleared the way for aggressive tax planning strategies in the U.S. which gave rise to the need of specific anti-abuse provisions.[125] Consequently, group taxation regime is a double-edged sword, hence when implementing similar provisions to the ones in the U.S., policymakers must work thoroughly to balance its positive and negative aspects.

As stated above in section 3.2.1, the Canadian government announced temporary accelerated capital cost recovery provisions to raise capital investments as a response to the measures implemented with TCJA. It has been argued however that these temporary measures are inadequate, and they make already bafflingly organised ITA of Canada even more complicated.[126] Thus, when moving forward, instead of implementing further interim measures, the Canadian government should prefer more grounded changes. A proposal is to implement a "cash-flow tax" that taxes the economic rents of an entity. This model would allow immediate deduction of all capital expenses and eliminate the interest deductions. As a result, all sectors will be influenced equally and distortions between different asset classes will be eliminated.[127]

In case of loss offset rules, the time value of money enhances the importance of the number of time periods for which the carryover is allowed. Since loss carrybacks are retrospective, the losses can be fully utilised. Notwithstanding, loss carryforwards can only be partially utilised because of the declining time value of money. As a result, the longer a company carries forward its losses, the more the value of the latter decreases.[128] Thus, an increase in Canada's carryforward allowance in years similar to the increase in the U.S. is not expected to have a major impact. Canada already has a relatively long carryforward time period which can be considered as attractive.[129]

As discussed above in section 3.3, tax incentives are important means to promote innovation in a country. SR&ED program of the Canadian government provides good incentives for R&D activities; however, innovation activities of Canadian corporations are still considered as inadequate. Research suggests that many corporations leave the country before they grow and thus do not commercialise their intellectual properties in Canada.[130] In order to change this phenomenon, federal measures are necessary. For instance, a patent box regime on the federal level would encourage companies to engage in R&D activities and also increase the attractiveness of Canada.[131] Another direct solution would be to increase the funding of SR&ED program. Furthermore, the Canadian government could ensure corporations that are looking to expand to new jurisdictions that their intellectual property rights are going to be protected in these countries. This can be provided by assuring increased protections in trade agreements.[132]

With regard to GAAR provisions, there are not many significant differences between the U.S. and Canadian provisions. Nonetheless, one can say that since Canadian provisions are organised in a more detailed way, they are stricter than the U.S. counterpart. In overall, based on the previous comparison, there are not any lessons to be derived for Canada.

As noted previously, CFC rules of the U.S. have been revisited with TCJA. As a consequence of the new GILTI rules, it is possible for Canadian-source income of MNEs to be subject to GILTI tax. This takes place in cases when the tax rate of Canada is below 13,125 per cent due to reductions in the tax rate, e.g., R&D tax credits, which in the outcome

[120]These are corporate income tax rate, group taxation regime, research and development, patent box regime and thin capitalisation rules.
[121]See McKenzie/Smart (2019), pp. 16-17.
[122]See Stratton (2019, p. 19).
[123]See McKenzie/Smart (2019), pp. 16-17.
[124]See Donnelly and Young (2002, pp. 431–432).
[125]See Brauner (2011, pp. 301–301, 311).
[126]See Stratton (2019, p. 11).
[127]See McKenzie and Smart (2019b, pp. 17–19).
[128]See Donnelly and Young (2002, p. 441).
[129]Tax Attractiveness Index (Schanz et al. (2019)) recognises countries that allow loss carryforward for more than 20 years as fully attractive (with the index value "1"). Since Canada allows carryforward up to 20 years, it has the score 0,5 in the index. For the purposes of this thesis, due to the extreme proximity of Canada's allowance to the given threshold, the country can be categorised as attractive.
[130]See The Standing Senate Committee on Banking, Trade and Commerce (2018, pp. 17–18).
[131]See De Luca and Hausch (2017, pp. 59–60).
[132]See The Standing Senate Committee on Banking, Trade and Commerce (2018, pp. 17–18).

lowers the average tax rate on an MNE's worldwide income and makes it subject to GILTI tax. This phenomenon is defined as "treasury transfer effect" since the rate reductions in Canada would be in favour of the U.S. through the GILTI tax.[133] Canadian lawmakers should take this indirect effect into consideration when responding to the U.S. tax reform to avoid any counterproductive consequences.

With the introduction of TCJA, the thin capitalisation rules in the U.S. have been tightened. This can result with U.S. based MNEs shifting their debt to affiliates in other jurisdictions such as Canada, to reduce their debt ratio in the U.S. If the Canadian government does not respond with a policy change, the country would then encounter losses of its tax revenue. Furthermore, it has been also found that tighter thin capitalisation rules result with MNEs substituting regulated forms of debt with unregulated ones. In this alternative strategy, they choose to issue loans in the name of affiliates in jurisdictions with looser rules.[134] Thus, in order to limit aggressive debt shifting towards its territory, Canada should tighten its thin capitalisation rules as well.

As indicated earlier, Canada and the U.S. have, at least on the surface level, very similar transfer pricing rules, whereby both countries' accepted transfer pricing methods are in accordance with the arm's length principle. TCJA's newly introduced provisions such as FDII and GILTI rules had effects on transfer pricing, nevertheless, these effects were indirect. Thus, regarding the transfer pricing rules, there are not any lessons for Canada that can be derived from the provisions of the U.S.

As stated above, with regard to the criteria 3.4.5 "treaty network", Canada has a better standpoint than the U.S., since the country has currently more bilateral tax treaties in force. However, some observers argue that the strong dependence of Canada to its biggest trade partner, the U.S., can be problematic. An example from the recent past is the steel and aluminium tariffs imposed on goods of Canadian exporters by the U.S. government. To eliminate the potential risk that rises due to political turmoil, Canada should try to develop its relationships with other emerging market economies such as China and Mexico.[135]

Apart from the lessons that are derived from the comparison criteria chosen for this thesis, there are other key areas that Canadian lawmakers should consider. Over the years many provisions were added to ITA which ended up with complicating the income tax system. Critics suggest that simplifying ITA would increase the tax attractiveness of Canada in the eyes of the MNEs.[136] When employing these necessary and long overdue changes, the current situation should also be taken into consideration. Since the Coronavirus pandemic is expected to have fundamental changes in societies, the need for an internationally competitive tax system that encourages innovation and investment is more crucial than ever.[137]

5. Conclusion

This thesis aimed to assess the similarities and differences of MNEs' income taxation in the U.S. and Canada after the U.S. tax reform. Based on the 12 corporate taxation criteria that determine the tax attractiveness of jurisdiction, the corporate taxation systems have been compared. It concludes that, as expected, despite many similarities of the fundamental fiscal aspects of both countries, their tax systems differ. It is not possible to uniformly declare the countries as similar or different, since some parameters are very much alike between the two countries, whereas others are completely diverse. These differences have been heightened with the enactment of TCJA. Furthermore, this thesis had the intention to derive lessons for Canada from the U.S. corporate taxation system. By inferring to its own comparison, this objective is fulfilled in a unique and first-of-its-kind manner.

Basic elements differ considerably between both countries, whereby the most significant advantage of Canada, lower corporate income tax rate, disappeared with TCJA. On the other hand, group taxation provision of the U.S. is an important edge over Canada from the perspective of tax attractiveness. With regard to cost recovery, both countries' tax systems were influenced heavily from TCJA, whereby the immediate temporary steps that Canada took with the Fall Economic Update to keep up with the changes of TCJA require further development. The category of tax incentives harboured most of the similarities between the two tax systems. In the future, in order to promote innovation even further in their jurisdictions, the U.S. and Canada should continue to develop their tax incentives. The broad category of international tax regulations demonstrates on the surface level that both countries are strict with their efforts to prevent illegitimate tax planning strategies, but they are also trying to preserve their tax attractiveness for MNEs' investment purposes. With reference to the latter, the new provisions that the U.S. has implemented with the tax reform could be a threat to Canada's tax attractiveness. The last part shows that there are many steps that Canada can take to rebuild its competitive position against the U.S., hence an action of Canadian policymakers in retaliation to TCJA has become necessary.

It is an undeniable fact that the more detailed the conducted analysis is, the larger the divergencies of both countries' corporate taxation systems are going to be; since it is essentially impossible to have two entirely matching taxation systems. But a comparison that considers the fundamental aspects of each criterion allows to see the broader picture. Hence, the methodology chosen for this thesis adequately

[133] See McKenzie and Smart (2019b, pp. 13–15, 20–21).
[134] See Buettner, Overesch, Schreiber, and Wamser (2012, pp. 930–38), as cited in McKenzie and Smart (2019a, p. 8).
[135] See The Standing Senate Committee on Banking, Trade and Commerce (2018, pp. 20–22).
[136] See The Standing Senate Committee on Banking, Trade and Commerce (2018, pp. 9–11).
[137] See Canadian Chamber of Commerce (2020, pp. 1, 8); Canadian Chamber of Commerce (2018, pp. 5–6).

shows similar and different aspects without excessively scrutinising and makes the comparison available for further research.

As stated repeatedly throughout this thesis, based on the conclusions, policymakers of Canada should consider promptly reforming their tax system. Moreover, policymakers worldwide should bear these comparison criteria in mind when trying to assess how attractive their tax systems are from the standpoint of corporate taxation. MNEs can also refer to this comparison when making their own investment decisions. Hence, this comparison between the U.S. and Canada could act as a role model for both governments and businesses. Further research is however needed to actually form the structure of a possible Canadian tax reform. In this regard, before implementing any changes it is also required to assess how the implications of a reform as such are expected to be.

The corporate landscape today is prominent with its great degree of global integration. This makes the previously domestically organised corporate taxation a border-crossing matter. It also obliges countries to arrange their tax systems in a way that it pleases multinational corporations. In this race between governments to make their countries attractive investment hubs, the relativity factor plays a major role, since during decision process companies are often undecided between two jurisdictions. In the future, it is desirable to have tax systems that simultaneously preserve the governments' interests while providing attractive tax environments for companies to invest in. In this regard, the U.S. and Canada have the potential to set the example that lawmakers around the world are hoping to see because as it is impossible to have economic growth without investments, it is also certainly not possible to draw investments without a correct tax policy.

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