## **Oh Cannabis! Little Growth High**

Aaron Goertzen, Robert Kavcic, Alex Koustas, Benjamin Reitzes

Canada became the first OECD country to legalize cannabis this week. We're not in the business of evaluating the social implications, so we'll focus strictly on the economic impact. Until this week, StatsCan was planning to treat the legalization as a bump to Q4 GDP and revise the historical data to account for illicit activity at a later date. However, the Q4 GDP release (due in late February) will now include current estimates and revisions as well. Therefore, the impact on growth is expected to be relatively muted, but the level of GDP will be boosted. And, even then, the slow roll out of legal retail dispensaries will spread out the impact over a few quarters.

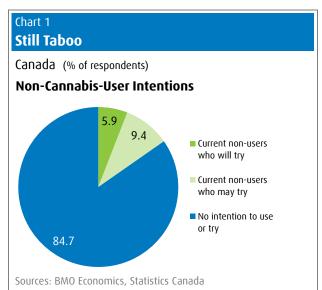
## The Numbers Behind the Green

The economic impact of cannabis legalization will depend on two crucial factors: how much of the dominant non-licensed black market (85% of users) migrates to the legal space; and, how many non-users (over 25 million Canadians of legal age) choose to indulge in the substance. StatsCan has devoted material resources to scoping out intentions through its National Cannabis Survey. It estimates that over 75% of illegal users either plan to switch (50%) or may switch (25%) to legal channels. However, those hoping for a deluge of demand from non-users may be disappointed to find that only 5.9% "will try" and 9.4% "may try" cannabis after legalization (*Chart 1*). StatsCan assumes that 50% of the marginal respondents in both categories ("may switch", "may try") actually do so, which adds up to roughly 5.5 million users after legalization—with 1.7 million remaining in the black market for the time being. The estimated legal market is likely subject to some bias as survey respondents are typically hesitant to confirm illegal activities, but there was probably some apprehension by non-users to answer that they would consider trying. So, we'll call it a wash for now.

An estimated market of 7.1 million Canadians would overshadow the pre-legalized market of 4.8 million (of which 4.4 million are of legal age), thanks to the addition of roughly 2.7 million new users. Key to any growth projections will be how many of these new users become regular consumers. The cannabis market is bifurcated, with

42% of current users consuming once or less per month and 41% consuming at least once per week or daily. Given these uncertainties, StatsCan offers a number of alternative scenarios, with personal quarterly expenditures on cannabis ranging from \$177 to \$221. Adjusting the quarterly data for the legalization date of October 17th, annualized spending through legal and illegal channels would range from \$5.0 billion to \$6.3 billion. However, StatsCan's planned inclusion of past illegal activity to the national accounts means that only the 2.7 million new users being added to the existing market will produce a marginal effect, adding 0.1 ppts-to-0.4 ppts to annualized Q4 GDP growth. This could be scaled down over time as users either choose not to repeat, or find savings elsewhere if they do.

Cannabis-related capital expenditures have already been included in the GDP data as producers invested through traditional channels (greenhouses, agricultural equipment, etc.), so there should be



# Feature

Focus — October 19, 2018

### Page 11 of 18

almost no growth impact on the investment front in Q4. However, given the run-up in cannabis stocks and deal-making that has played out recently, it's possible that industry investment could move the needle on national business investment in the years ahead.

The impact on government finances should be moderate at first, as both the federal and provincial governments have agreed to a pricing and tax regime that will keep prices low enough to compete with the black market. Ottawa will generate revenues through an excise tax regime, payable at the producer level. The tax will be the greater of \$1 per gram or 10% of the product price. For the first two years, Ottawa will keep 25% of the revenue and distribute 75% to the provinces. Additionally, the federal government will cap its revenue take at \$100 million for the first two years, with the excess flowing to the provinces. Based on the estimated legal market size, revenues could indeed run close to that level, which would also mean roughly \$300 million flowing to provincial coffers (though this is a very crude estimate). At the provincial level, the impact will likely be modest as well, at least in the near term. Many provinces have agreed to transfer a share of revenues (typically about a third) to the municipal level and to cover education and anti-black market programs. Additionally, the early cost of setting up distribution (e.g., the Ontario Cannabis Store) will likely bite into revenue gains. At the consumer level, increased consumption would drive a bump in GST/HST revenues at both levels of government, but that could be partly offset by lower spending elsewhere (i.e., alcohol).

Finally, while Canada is well-positioned to become a global leader in cannabis exports, markets remain limited to a small-subset of jurisdictions permitting medical use. Exports were only a nugget of total production in Q2 at 745 kg, or less than 10% of the limited medical-use market, hardly enough to influence the export account in any way. The illegal market is much larger, however, with StatsCan estimating that Canada exported roughly \$1.2 billion

worldwide in 2017. These figures are also expected to be incorporated into the national accounts data; though, like consumption, they will simply represent a level shift rather a contribution to the quarterly growth.

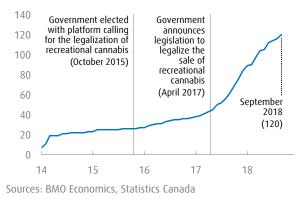
## Supply and Investment

On the supply front, the number of facilities licensed to produce medical cannabis has increased steadily since Health Canada began to allow private companies to sell directly to authorized Canadians in 2014 (Chart 2). In late 2015, the federal election of the current Liberal government on a platform including the legalization of recreational cannabis increased the stream of entrants into the market. When the government announced its plan to table legislation legalizing recreational use in April 2017, that stream turned into a torrent. In the intervening 18 months, the number of licensed production facilities has nearly tripled to 120 as of September 2018 as entrants positioned themselves for legalization this week. Industry employment is not especially high, with 2,400 Canadians working in the space at the end of 2017, and perhaps 3,500 at present. On a regional basis (Table 1), production is

## Chart 2 Growing Like a Weed

## Canada (number of facilities)

### Medical Cannabis — Licensed Production Facilities



## Table 1 **Concentrated Growth**

### Regional Distribution of Medical Cannabis **Production Facilities**

	Licensed Facilities — Sept. 2018		Share of National GDP
	Number	Share	— 2017 —
		(%)	(%)
British Columbia	25	21	13
Alberta	8	7	16
Saskatchewan	4	3	4
Manitoba	2	2	3
Ontario	65	54	39
Quebec	9	8	19
Atlantic Canada	7	6	6
Total	120	100	100
Sources: BMO Ecor	nomics, Statistics (	Canada	

# Feature

## Page 12 of 18

concentrated in Ontario (cultivated by an expanding industry of start-up accelerators and venture capital funds) and British Columbia (previously a hub of illicit production). The clear laggard in the race for the cannabis market is Quebec perhaps surprisingly, given the province's abundance of cheap hydroelectricity. The apparent dearth of cannabis production in Quebec has little to do with regulation, however, which is determined on a national basis for growers.

With the cannabis industry still in its formative stages and shortages reported across various parts of the country this week, there appears to be room for further investment in both production and retailing. At the producer level, an increasingly crowded market (at least, in terms of the number of entrants) is leading larger players to bolster their competitive positions by investing in automation, giving them a leg up on smaller, more labour-intensive operations. The largest producers also have wider global ambitions and are hoping to capitalize on their early-mover advantage by expanding into foreign markets.

A few foreign markets are already open in the medical space, and the possibility that medical and recreational cannabis could be legalized in new jurisdictions represents an important longer-term opportunity. Indeed, there must be some confidence that global markets are set to open given Canadian producers' intentions to expand capacity to over 1.5 million kilos per year, compared to projected domestic annual demand of just over 1.0 million kilos in the near term.

Domestically, there may also eventually be room for companies to expand into more capital-intensive cannabis derivatives, including edible and drinkable products, depending on the evolution of the regulatory environment. Retail-level capital spending represents a minor tailwind for the Canadian economy, though in some provinces that activity will play out mainly in the public sector.

**Key Takeaway**: Despite the buzz around legalization, the economic impact looks minimal. We'll have to wait for longer-term implications given the lack of precedent, and anticipate an over-supply of bad puns as cannabis is fully integrated into the economic data.

# Feature

Focus – October 19, 2018

#### **General Disclosure**

"BMO Capital Markets" is a trade name used by the BMO Financial Group for the wholesale banking businesses of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc., BMO Capital Markets Limited in the U.K. and BMO Capital Markets Corp. in the U.S. BMO Nesbitt Burns Inc., BMO Capital Markets Limited and BMO Capital Markets Corp are affiliates. This document is issued and distributed in Hong Kong by Bank of Montreal ("BMO"). BMO is an authorized institution under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong) and a registered institution with the Securities and Futures Commission (CE No. AAK809) under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong). BMO does not represent that this document may be lawfully distributed, or that any financial products may be lawfully offered or dealt with, in compliance with any regulatory requirements in other jurisdictions, or pursuant to an exemption available thereunder. This document is directed only at entities or persons in jurisdictions or countries where access to and use of the information is not contrary to local laws or regulations. Their contents have not been reviewed by any regulatory authority. Bank of Montreal or its subsidiaries ("BMO Financial Group") has lending arrangements with, or provide other remunerated services to, many issuers covered by BMO Capital Markets. The opinions, estimates and projections contained in this report are those of BMO Capital Markets as of the date of this report and are subject to change without notice. BMO Capital Markets endeavours to ensure that the contents have been compiled or derived from sources that we believe are reliable and contain information and opinions that are accurate and complete. However, BMO Capital Markets makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to BMO Capital Markets or its affiliates that is not reflected in this report. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. This document is not to be construed as an offer to sell, a solicitation for or an offer to buy, any products or services referenced herein (including, without limitation, any commodities, securities or other financial instruments), nor shall such Information be considered as investment advice or as a recommendation to enter into any transaction. Each investor should consider obtaining independent advice before making any financial decisions. This document is provided for general information only and does not take into account any investor's particular needs, financial status or investment objectives. BMO Capital Markets or its affiliates will buy from or sell to customers the securities of issuers mentioned in this report on a principal basis. BMO Capital Markets or its affiliates, officers, directors or employees have a long or short position in many of the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. The reader should assume that BMO Capital Markets or its affiliates may have a conflict of interest and should not rely solely on this report in evaluating whether or not to buy or sell securities of issuers discussed herein.

#### **Dissemination of Research**

Our publications are disseminated via email and may also be available via our web site <u>http://economics.bmocapitalmarkets.com</u>. Please contact your BMO Financial Group Representative for more information.

#### **Conflict Statement**

A general description of how BMO Financial Group identifies and manages conflicts of interest is contained in our public facing policy for managing conflicts of interest in connection with investment research which is available at <a href="http://researchglobal.bmocapitalmarkets.com/Public/Conflict\_Statement\_Public.aspx">http://researchglobal.bmocapitalmarkets.com/Public/Conflict\_Statement\_Public.aspx</a>.

#### ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

BMO Financial Group (NYSE, TSX: BMO) is an integrated financial services provider offering a range of retail banking, wealth management, and investment and corporate banking products. BMO serves Canadian retail clients through BMO Bank of Montreal and BMO Nesbitt Burns. In the United States, personal and commercial banking clients are served by BMO Harris Bank N.A., Member FDIC. Investment and corporate banking services are provided in Canada and the US through BMO Capital Markets. BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Ireland PIC, and Bank of Montreal (China) Co. Ltd. and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member SIPC), BMO Nesbitt Burns Securities Limited (Member SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Canadian Investor Protection Fund) in Canada, Europe and Asia, BMO Capital Markets Limited in Europe, Asia and Australia and BMO Advisors Private Limited in India.

"Nesbitt Burns" is a registered trademark of BM0 Nesbitt Burns Inc., used under license. "BM0 Capital Markets" is a trademark of Bank of Montreal, used under license. "BM0 (M-Bar roundel symbol)" is a registered trademark of Bank of Montreal, used under license.

® Registered trademark of Bank of Montreal in the United States, Canada and elsewhere.

™ Trademark Bank of Montreal in the United States and Canada.

© COPYRIGHT 2018 BMO CAPITAL MARKETS CORP.

A member of BMO Financial Group