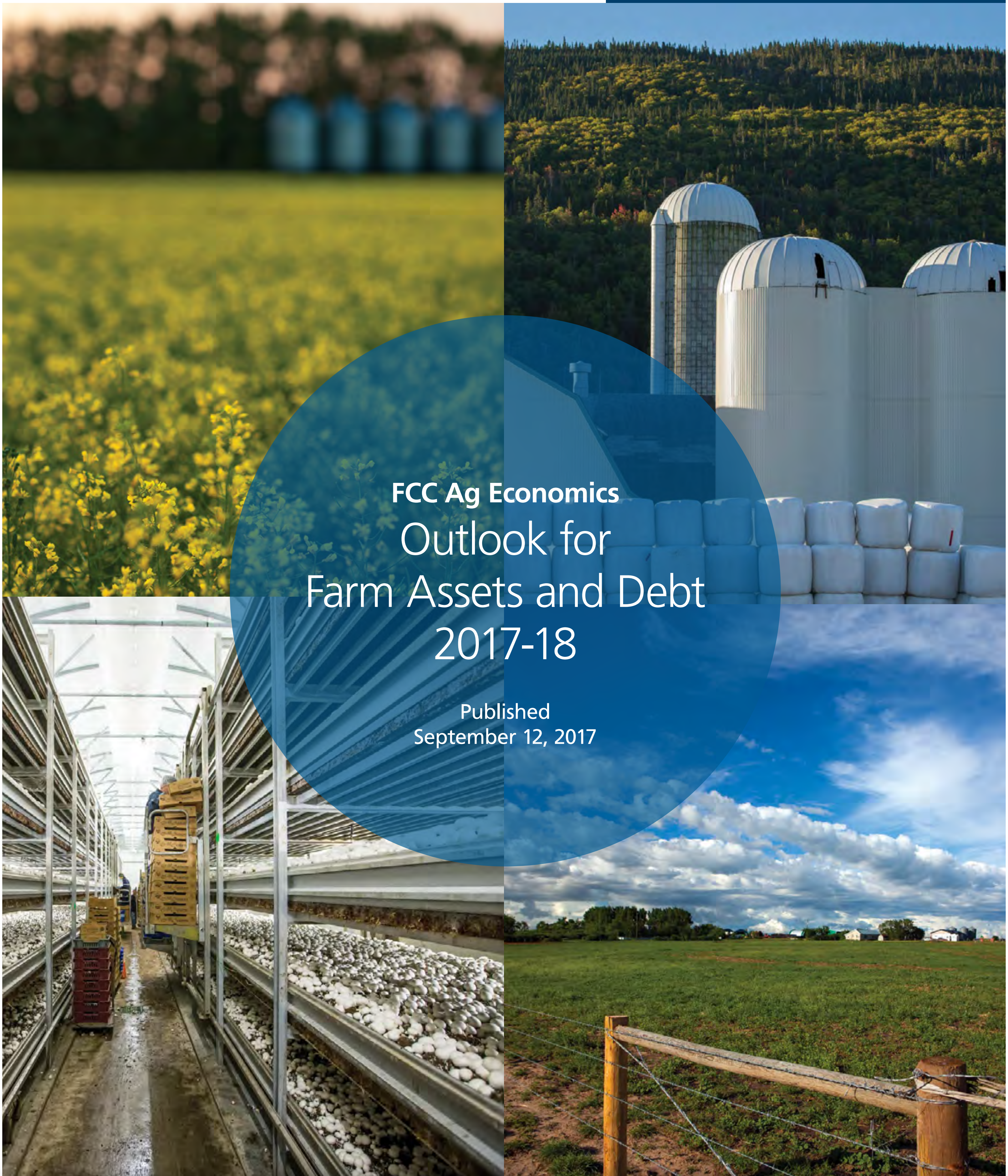

FCC Ag Economics

Outlook for Farm Assets and Debt 2017-18

Published
September 12, 2017

Farm Credit Canada
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Canada

Introduction

Canadian agriculture is always evolving. The expansion of trade opportunities, consumers' changing food preferences and technological progress have made farm management more complex. One trend continues – agriculture remains capital-intensive. Given the growth of farm asset values and debt in recent years, financial management has never been more important.

This report looks at the balance sheet of Canadian agriculture and provides an overview of the financial strength of the industry. And it's timely, following the first interest rate increase by the Bank of Canada in seven years.

But the recent hikes aren't cause for alarm. Historically, interest rates are still extremely low. The hikes are rather a signal to look at financial planning and risk management more closely. Relative to overall outstanding debt, the value of farm assets in Canadian agriculture is strong. Farm cash receipts position the industry well to face potentially higher borrowing costs. We project farmland values will continue to climb, but at a slower pace, due to a softer rate of increase in farm cash receipts.

Canadian agriculture remained financially healthy in 2016

Two important financial measures are used to assess the financial strength of an industry – liquidity and solvency:

1. Liquidity

Liquidity reveals information about the health of the day-to-day operations. It measures how much capital is available to a business within the short term (usually one fiscal year). One indicator of liquidity is the **current ratio**.

This ratio compares current assets (cash, accounts receivable, inventory) to current liabilities (the amount for inventory, supplies or equipment purchased on credit and to be paid in the upcoming operating cycle). In other words, is the operation able to meet financial obligations without disrupting normal operations?

Current Ratio = Current Assets / Current Liabilities

Interpreting ratio numbers

1 to 1.5: This ratio indicates a farm is technically liquid, but it could be exposed to financial challenges if market conditions worsen.

1.5 to 3: This is generally considered a high current ratio. It shows there is enough room to cover the current liabilities while providing flexibility to face unexpected events.

3 or higher: This ratio means the business may not be using cash efficiently.

Current ratio of Canadian agriculture

The overall current ratio of Canadian agriculture in 2016 was 2.30, which is on par with the 15-year average at 2.39. Saskatchewan, Alberta and Manitoba are the provinces with the highest current ratio (Figure 1).

The relative importance of the grains and oilseeds sector in these provinces partly explains this as opposed to other provinces where livestock receipts account for a greater share of overall farm cash receipts. For example, Saskatchewan alone holds 31.0% of the value of all Canadian agricultural inventory. Overall softening in commodity prices brought down the liquidity ratio in Atlantic provinces.

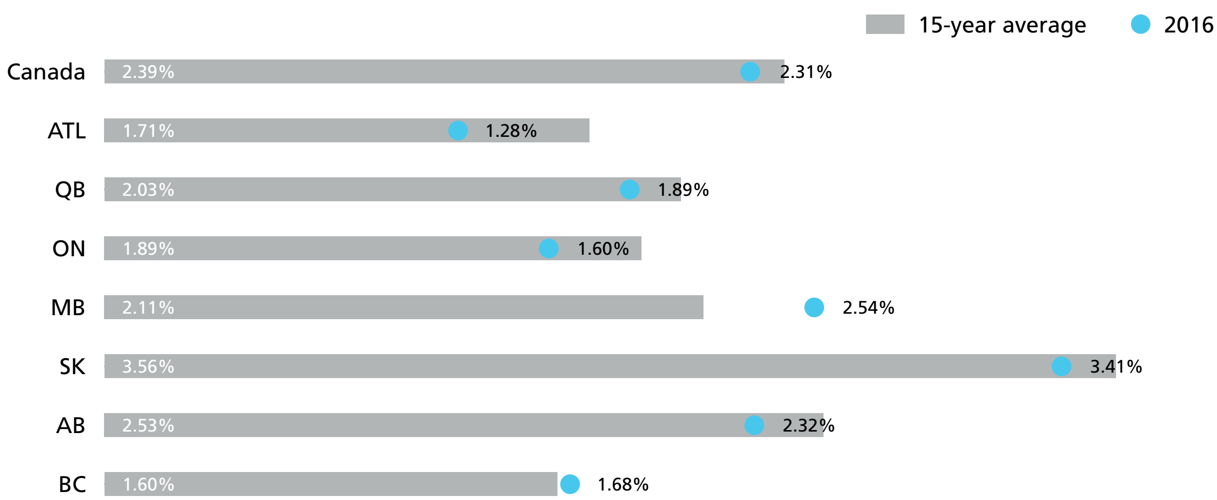
What does an industry ratio truly mean?

The numbers we report come from publicly available data reported by Statistics Canada. StatsCan calculates financial ratios as either national or provincial averages. The ratios we use in this report don't reflect those of individual subsectors (e.g., dairy).

Because producers within different subsectors carry different levels of debt, the provincial and/or national level ratios will not reflect any one operation.

These financial ratios should not be used for benchmarking purposes. They provide relevant information about financial health when assessing their trend over time.

Figure 1: Liquidity remains strong but slightly declined in 2016



Source: Statistics Canada (Balance Sheet of Agriculture)

2. Solvency

Solvency is related to the ability to meet long-term debt obligations. One way to measure this is using the **debt-to-asset** ratio. This ratio indicates the proportion of assets financed with debt, rather than equity. It answers the question: "If all assets were turned into cash, would there be enough to cover all the existing debt?"

Debt-to-Asset Ratio = Total Debt / Total Assets

Interpreting ratio numbers

The more an operation funds assets with debt rather than equity, the greater its risk of being unable to pay back the amount it owes. This is important, especially in agriculture, as cash flows are subject to seasonal pressures and prices are prone to cyclical behaviour.

A low debt-to-asset ratio indicates flexibility. You're able to extend the terms of existing debt, as well as borrow more if the opportunity arises.

Debt-to-asset ratio of Canadian agriculture

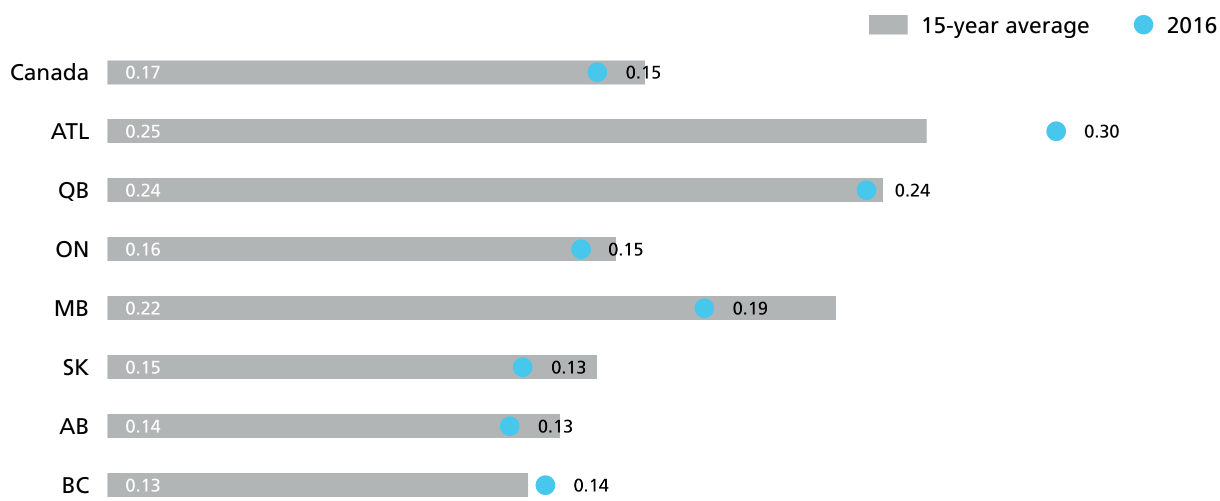
Total liabilities in Canadian agriculture reached $90.8 billion in 2016, a 7.5% increase over 2015. In comparison, total farm asset values reached $591.1 billion, a 5.0% increase over 2015.

The 2016 debt-to-asset ratio in Canadian agriculture increased, something we had not seen since 2009. The solvency position of the industry is still good as the 2016 debt-to-asset ratio of 0.15 is still lower than the 15-year average of 0.17.

The ratio ranges from 0.13 to 0.39 across provinces (Figure 2), with the highest ratios in the Atlantic provinces and Quebec. Provinces that have high concentrations of crop farming possess the lowest debt-to-asset values, and those with higher concentration of supply managed industries show a higher level of assets financed by debt.

Atlantic provinces and British Columbia show higher debt-to-asset ratios for 2016 than their 15-year average. The provinces that hold a high percentage of land as total assets (British Columbia, Alberta, Saskatchewan, and Ontario) have seen the ratio decline in recent years.

Figure 2: Financial leverage remains low in Central Canada and the Prairies



Source: Statistics Canada (Balance Sheet of Agriculture)

Farm cash receipts not keeping up with farmland value appreciation

Financial principles suggest that the value of an asset should be based on its income earning potential. The ratio of farmland values to farm cash receipts (land-to-revenue ratio) is a useful measure to evaluate how much an asset value drifts away from the revenue it generates.

Land-to-Revenue = Value of Farmland / Farm Cash Receipts

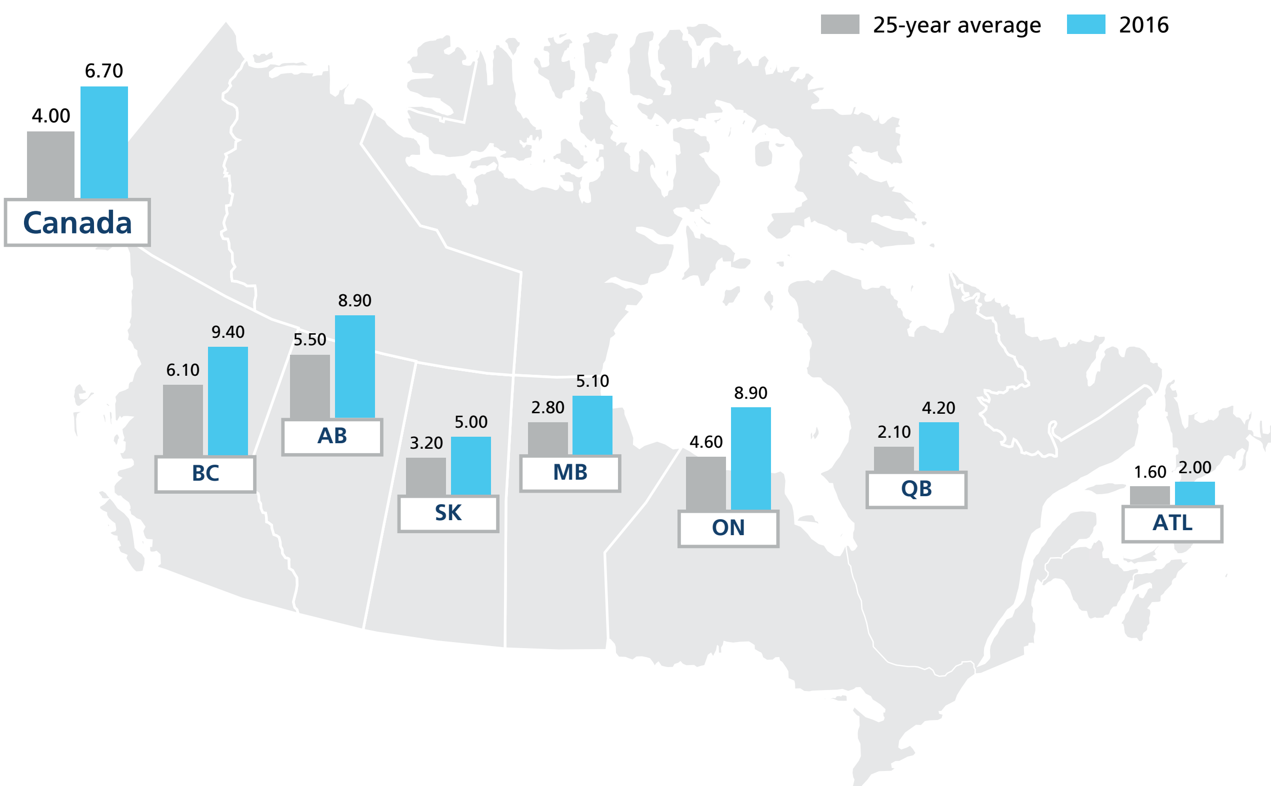
Interpreting ratio numbers

There's no ideal level for the land-to-revenue ratio. Large regional differences in crop mix and productivity can yield significant differences in the ratio across provinces. It's more appropriate to compare the ratio of a province over time, and not make comparisons across provinces.

Land-to-revenue ratio of Canadian agriculture

The 2016 land-to-revenue ratio is higher in each province than its 25-year average value. This suggests that land is expensive from a historical standpoint, but other factors must be considered. The downward trend in interest rates over the last many years is an important reason why the ratios everywhere are higher than their averages.

Figure 3: Land has become more expensive compared to farm cash receipts

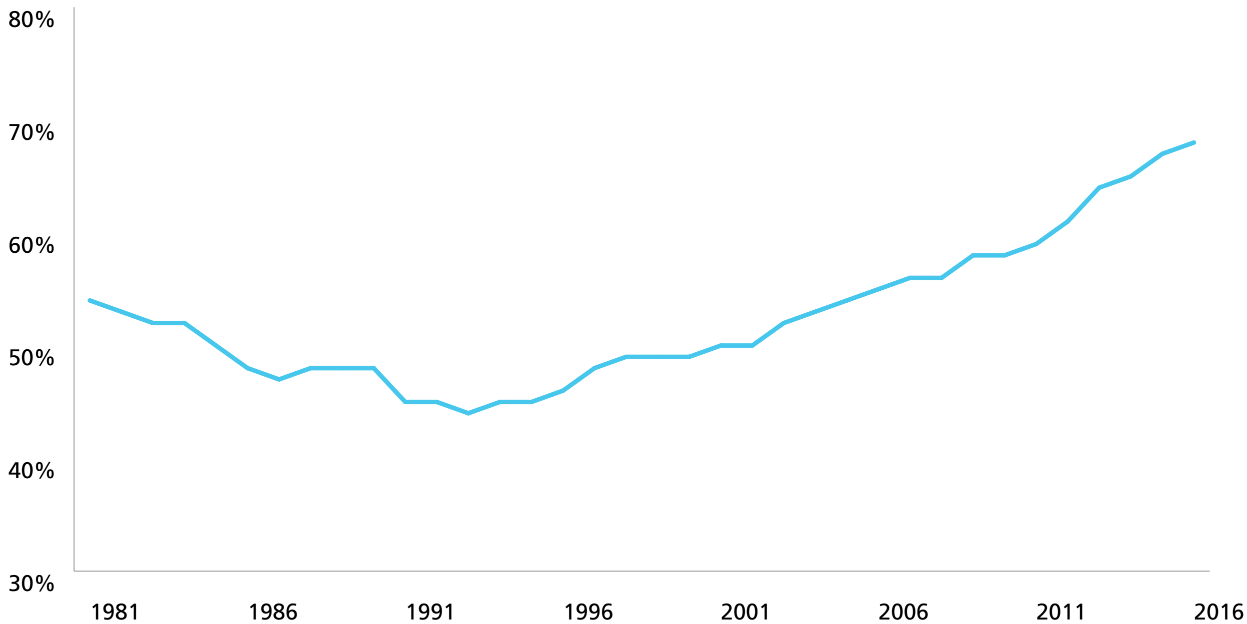


Source: Statistics Canada (Balance Sheet of Agriculture)

Farmland values continue to grow relative to overall farm assets

Over the past 23 years, farmland has gained value relative to the value of all farm assets (Figure 4). The proportion of farmland as total assets declined from 1980-1994 and since has been increasing.

Figure 4: Farmland makes up almost 70% of total farm assets



Source: Statistics Canada (Balance Sheet of Agriculture)

Footnote: Statistics Canada includes the value of all leased equipment and land in the valuation of assets.

Farmland values highly correlated with farm debt

Between 2011 and 2016, the value of farmland and buildings appreciated at an annual average pace of 10.9%, with a total appreciation of 50.1%. Farm debt outstanding appreciated on average by 7.0% per year with a total appreciation of 32.0% over the same period. These two variables are strongly connected and trend together.

The rate of increase in farmland values over the past few years was a result of two main drivers:

1. Strong farm cash receipts boosted farm income, signaling a strong demand for Canadian agricultural commodities and increased the demand for farmland.

2. Low interest rates led farm operations to expand to reduce per-unit production costs.

How interest rates affect mortgage payments

Low interest rates allow producers to expand their operations and purchase more farmland.

Example: A $100,000 mortgage amortized over 10 years with an interest rate of 5.8% (the 20-year average of the 5-year mortgage rate) has roughly the same monthly payments as a $110,000 mortgage with the same terms and a rate of 3.7% (the 2016 average of 5-year mortgage rate). But remember – income is the main driver of repayment capacity. An operation must be able to meet debt obligations if interest rates increase.

The value of farmland and buildings is projected to continue appreciating, but at a slower pace: annual average increases of 4.0% in 2017 and 1.0% in 2018 (Figure 5). This declining rate of increase will mainly be the result of projected softer growth in farm cash receipts and higher borrowing costs.

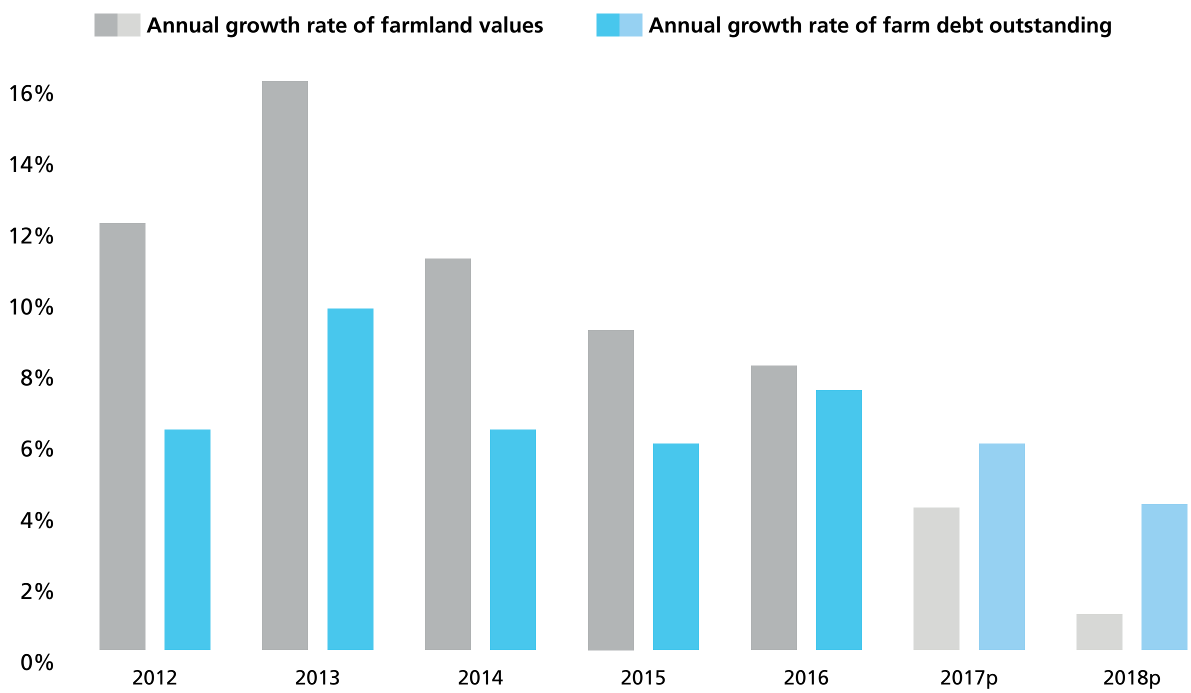
Farm cash receipts are expected to grow 1.5% in 2017, followed by a 5.1% increase in 2018. Financial markets suggest that the five-year mortgage interest rate may increase from an average of 3.7% in 2016 to 4.3% in 2017 and 4.6% in 2018. As farmland and farm debt are strongly tied, total farm debt outstanding is also expected to have a lower rate of growth in 2017 and 2018.

Higher interest rates mean slowing appreciation in farmland values

Farmland values are sensitive to interest rates. The baseline projections in Figure 5 assume the average five-year mortgage rate in 2017 will increase 0.6% (60 basis points), followed by an increase of 0.3% (30 basis points) in 2018.

What if upward pressures on interest rates are stronger than expected? It's estimated that an additional increase of 1.0% (100 basis points) above the baseline assumptions would slow down the appreciation in farmland values by 1.5%.

Figure 5: Farm debt outstanding is projected to grow faster than farmland values in 2017, 2018



Source: Statistics Canada (Balance Sheet of Agriculture) and FCC calculations

Modest increase in interest rates gives opportunity to review financial strategies

Canadian agriculture has thrived recently as evidenced by the $19 billion increase in farm cash receipts over the last ten years. Is the likelihood of higher interest rates likely to change this situation? Definitely not. But producers should use the recent rate hikes by the Bank of Canada as a signal to evaluate various interest rate scenarios on their financial health.

One tool you can use is the **interest coverage ratio**. It's computed as earnings before interest, taxes and depreciation (EBITDA) divided by the interest expense:

Interest Coverage Ratio = EBITDA / Interest Expense

Interpreting ratio numbers

If the ratio is less than 1.5, it may be difficult to service existing debt using net operating income. The higher the ratio, the stronger the operation's health.

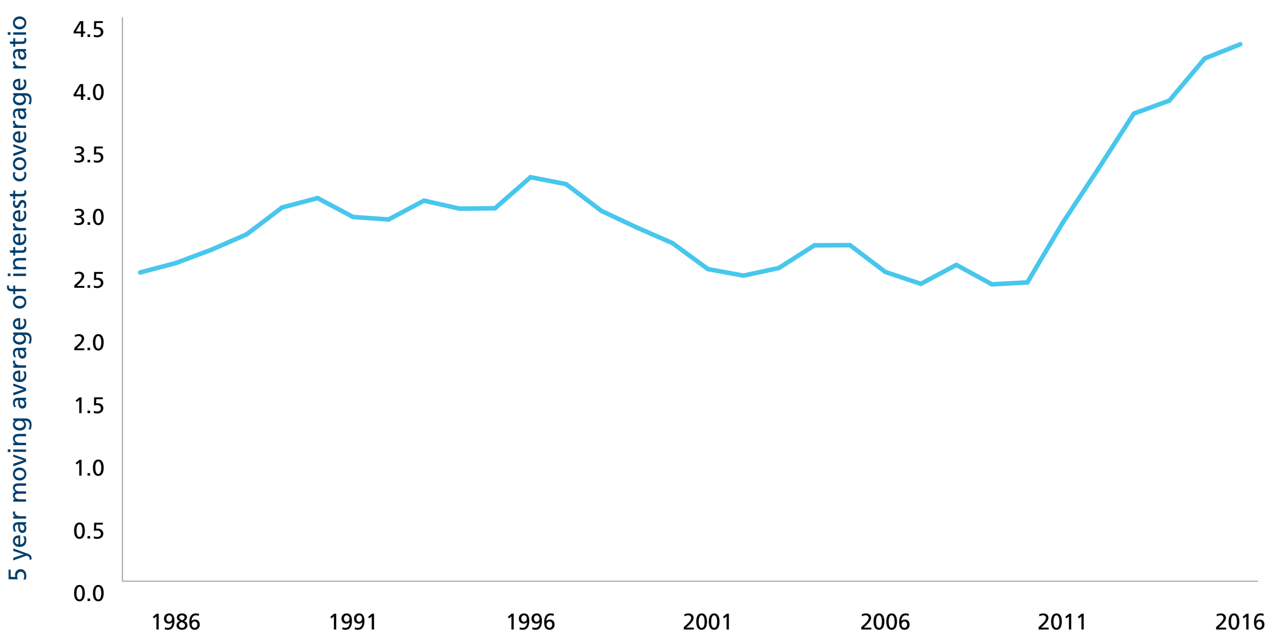
Interest coverage ratio of Canadian agriculture

Figure 6 illustrates the power of rising incomes relative to the pattern of interest rates and debt. Total farm debt has grown 144.0% over the last 15 years, while interest rates generally trended downward. Higher liabilities will push interest expenses up, but lower interest rates will bring interest expenses down.

Combining interest payments on existing debt and income yields an interesting picture: the average interest coverage ratio has climbed since 2008.

Even though borrowing costs may soon be climbing, Canadian agriculture is in a financially strong position to handle an increase in interest rates.

Figure 6: Strong net cash income increased the coverage of interest expenses despite higher farm debt



Source: Statistics Canada (Balance Sheet of Agriculture)

Three important takeaways from our analysis

1. Canadian agriculture remains in a strong financial position. The balance sheet of agriculture is healthy, but could face some challenges as farm income flattens and land appreciation slows.

2. FCC Ag Economics projects slowing rates of increases in farmland values and farm debt outstanding.

3. Higher borrowing costs are not likely to pressure a farm operation's capacity to repay debt if future increases are gradual, unless farm cash receipts weaken. Businesses should be flexible to amend business plans if the outlook for borrowing costs and/or profitability moves in a different direction.

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