FCC Ag Economics

Outlook for Farm Assets and Debt 2016-17

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Canada

Introduction

Farming is a business that requires strategic investments and careful planning to be productive and efficient. Farm debt and asset management is a fundamental component of business strategy. It also has a big impact on the financial performance of agricultural operations.

This report provides an overview of the balance sheet of Canadian agriculture, focusing on financial health. It looks at the affordability of assets relative to farm income, with an emphasis on farmland values. Projections of the value of farmland and buildings and farm debt are also provided.

Canadian farms remain on average in a strong position to meet their financial obligations. The value of farm assets continues to climb, with debt at manageable levels because of strong income. Projections also suggest a slower appreciation in farmland values and farm debt over the next couple of years.

Canadian agriculture remained financially strong in 2015

Record net farm income and strong asset appreciation continue to support a strong agriculture sector in Canada. Since 2010, the value of total farm assets increased 56% while the value of total liabilities increased 43%, according to the balance sheet of the agricultural sector (Statistics Canada).

It's worth noting that the financial strength of Canadian farms weakened slightly in 2015, after multiple years of improvements.

Three key indicators that are commonly used to evaluate the overall financial health of the agriculture sector are: liquidity, solvency, and profitability.

> "The balance sheet of the agricultural sector provides the value of farm assets used to produce agricultural products, the liabilities associated with these assets and the farm sector equity, as of December 31." *(Statistics Canada)*

1. Liquidity of Canadian farms is strong and in line with historical trends

Overall, Canadian farmers are in a strong position to service short-term obligations with a current ratio of 2.38 in 2015. While the current ratio has softened from 2.63 in 2014, it remains in line with the historical average (Figure 1).

Saskatchewan farmers are in the most liquid position due to high inventory levels (Saskatchewan holds 30.1% of all Canadian inventory). The province shows a current ratio of 3.13 and the highest 15-year average of 3.50.

The current ratio is nearing one in Newfoundland (1.01), Nova Scotia (1.06), and British Columbia (1.26) – which suggest careful planning must be exercised, especially if production issues arise in 2016.

Liquidity is a measure of the health of day-to-day business operations. It looks at the ability to manage cash flow and meet obligations in the short-term. A simple way to measure liquidity is the **current ratio**, which compares the value of current assets (cash, accounts receivable and inventory) to current liabilities (debt and accounts payable). This financial measure is also referred to as working capital available to a business.

A ratio lower than 1 indicates that a business does not possess enough short-term assets to cover short-term obligations, a less-than-ideal situation. Conversely, a very high ratio could suggest an operation is under-investing.

Figure 1: Current ratio is high across Canada

Source: Statistics Canada (Balance Sheet of Agriculture)

2. Investments in Canadian agriculture raise financial leverage

In 2015, total farm debt increased faster than total assets. As a result, the debt-to-asset ratio increased for the first time in six years. Despite the small increase, the debt-to-asset ratio remains historically low at 15.5% compared to the previous 5-year average of 15.9% and the 15-year average of 16.7% (Figure 2).

The 15-year average debt-to-asset ratio ranges between 12% and 29% for all provinces. The ratio in the Atlantic Provinces and British Columbia is higher than the 15-year average, while in the rest of Canada it is lower.

Provinces that hold a high percentage of total assets in land (British Columbia, Alberta, Saskatchewan, and Ontario) have seen the ratio of debt to asset decline the most in recent years.

Solvency measures the ability to meet long-term financial obligations. The **debt-to-asset ratio** indicates whether or not a farm has sufficient assets to cover all liabilities, and provides a measure of overall solvency. In short, if all assets were to be liquidated, could the money generated pay off existing debt obligations?

A low debt-to-asset ratio provides flexibility to an operation if it faces challenges in meeting financial obligations, or wishes to seize an opportunity like expanding or diversifying.

Figure 2: Debt-to-asset ratio is lowest in western Canada

15-year average | Current

Region	15-year average
Canada	16.7%
NFL	28.4%
PEI	25.7%
NS	22.9%
NB	21.7%
QB	24.0%
ON	15.7%
MB	22.6%
SK	15.3%
AB	14.1%
BC	12.9%

Source: Statistics Canada (Balance Sheet of Agriculture)

3. Profitability remains strong, but falls below the five-year average

Record net income in 2015 resulted in a stronger return-on-assets ratio, from 2.0% in 2014 to 2.3% in 2015. This is well below the recent peak of 3.9% in 2013, however. The 5-year average return-on-assets is 2.7% and the 15-year average is 2.6%.

The return on assets is lower than the 15-year average in all provinces, except New Brunswick (Figure 3). The appreciation of farmland values over the past 5 years has increased the value of farm assets, and put downward pressure on profitability when compared to asset values.

Canadian agriculture requires significant investment in land, buildings and machinery. As a result, the industry remains very sensitive to income fluctuations, creating volatility in the return-on-assets ratio and ultimately profitability.

Profitability measures how much money an operation is able to generate after accounting for expenses. The **return-on-assets** ratio tells how profitable a farm is relative to the total value of its assets. This is calculated by comparing net income to total assets.

A higher return on assets indicates an ability to generate income when deploying these assets.

Figure 3: Return on assets is below the 15-year average for all provinces except New Brunswick

15-year average
Current

Canada 2.6%
NFL 2.5%
PEI 3.4%
NS 2.3%
NB 3.1%
QB 3.7%
ON 1.9%
MB 4.1%
SK 4.4%
AB 1.9%
BC 1.0%

Source: Statistics Canada (Balance Sheet of Agriculture)

Net farm income is not keeping up with asset appreciation

The pace of appreciation in asset values has exceeded that of both farm debt and income over the past several years. From 2001-2015, assets appreciated by 155.1%, debt appreciated by 125.8%, and net farm cash income appreciated by 85.2%.

The first consequence is an improvement in the debt-to-asset ratio, which means that Canadian agriculture faces lower financial risk on average. That's good news.

Another ratio to keep an eye on is the asset-to-income (AI) ratio. All provinces have a current AI higher than the 25-year average except for New Brunswick and Saskatchewan (Figure 4).

Much of the variability in this ratio is driven by the volatility in income across provinces year-over-year.

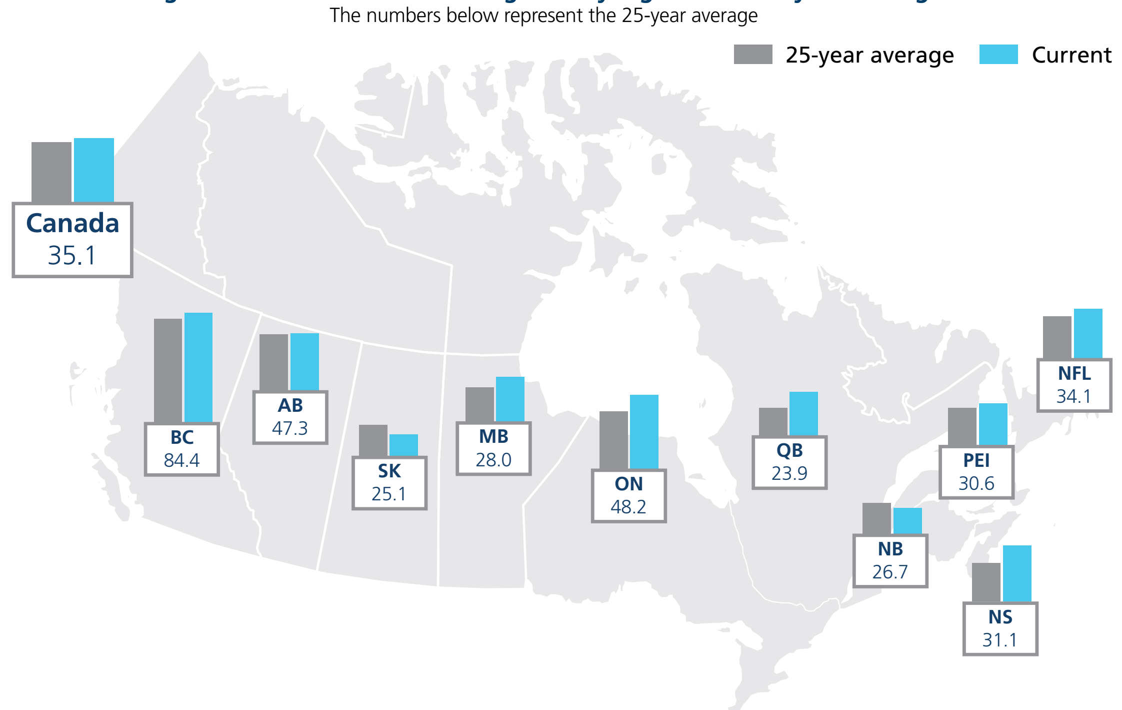
What is the assets-to-income (AI) ratio?

In well-functioning markets, the value of an asset should be based on its income earning potential. The AI is a measure of the affordability of total farm assets based on net farm cash income.

There is no ideal level for the AI ratio; it will vary by province as enterprise types change. For example, the presence of horticulture in Ontario, Quebec and British Columbia will make the AI ratio different than in other provinces that rely more on livestock and grain and oilseed production.

Hence, an AI ratio must be compared over time, and not across provinces. A ratio above its long-term average indicates assets are more expensive than the historical norm, while a lower ratio suggests the opposite.

Figure 4: Asset-to-income ratio generally higher than 25-year average
The numbers below represent the 25-year average



Sources: Statistics Canada (Balance Sheet of Agriculture, Cansim 002-0009)

Land continues to play an increasing role in farm assets

Farmland accounts for the greatest proportion of farm assets. In 1981, land made up 54% of the value of total assets. That number increased to 67% in 2015. The only other asset whose percentage share of total assets increased over the same time period is production quota in supply-managed sectors.

Because of the importance of land in agriculture, it's imperative that we take a closer look.

Land is becoming more expensive relative to farm crop receipts

The land-to-revenue (LR) ratio is similar to the AI ratio, but looks specifically at land. It is constructed by dividing the value of land by the revenue generating capability of the land (in this case, crop receipts).

Similarly to the AI ratio, there is no ideal standard for the LR ratio. Large regional differences in crop mix and overall productivity make it difficult to compare region to region, so a historical comparison is more appropriate.

In all provinces, land was less affordable in 2015 than it has been in the past – not just because value went up across the country, but also because appreciation in land values has outpaced increases in total farm revenue (Figure 5). The affordability of land can be identified as being meaningfully different than its historical average in Quebec, Ontario, Manitoba, Alberta and British Columbia.

Many factors can explain these differences. Some provinces face pressure from population expansion and competing agriculture sectors that push the LR ratio away from its mean. Increases in the ratio are also expected in the context of low interest rates. Low interest rates make land an attractive asset, especially in the current environment of rising global food demand.

Figure 5: Land has become more expensive compared to crop receipts

The numbers below represent the 25-year average

25-year average
Current

Canada 8.4
BC 12.9
AB 13.6
SK 4.9
MB 5.4
ON 10.3
QB 7.6
NB 3.8
PEI 3.8
NS 5.1
NFL 7.0

Sources: Statistics Canada (Balance Sheet of Agriculture, Cansim 002-0009)

Value of farmland and buildings highly correlated with farm debt

From 2001 to 2015, total farm debt increased by 125.8%. Over the same time period, the value of farmland and buildings increased by 211.1%. The two measures trended upward together and are strongly linked:

> From 2001-2011, the value of farmland and buildings appreciated on average 7.2% per year, exactly doubling over the time period. From 2012-2015, annual appreciation was 11.7%, and total appreciation was 39.4%.
>
> Meanwhile, from 2001-2011, farm debt increased by 5.3% per year for a total appreciation of 68.3%. From 2012-2015, appreciation increased to 8.1% per year, or 26.3% total.

The increase in the rate of appreciation of the value of farmland and buildings in recent years was caused by two factors. First, low interest rates incentivized producers to buy more land because a larger portion of mortgage payments went towards principal repayment rather than interest charges. Second, high crop receipts boosted farm incomes and increased demand for farmland. The 2008-2015 period witnessed seven years of record crop receipts.

Soft landing in the value of farmland and buildings is expected

Our projections continue to suggest a soft landing for the value of farmland and buildings following years of rapid appreciation. In Canada, we project the value of farmland and buildings to increase by 5% in 2016 and by 1% in 2017 (Figure 6).

The soft landing will mainly be a result of softer crop receipts. Expectations of lower prices for grains and oilseeds should put downward pressure on farm crop receipts and farm income in 2016 and 2017.

The strong connections between farmland values and farm debt lead us to project that farm debt will increase by 7% in 2016 and 3% in 2017.

Figure 6: Soft landing in the value of farmland and buildings and farm debt outstanding expected

Source: FCC Ag Economics Calculations

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. Increases in farmland values are projected to slow down, along with farm debt outstanding.

3. Total farm asset values are in line with recent trends in farm cash income. Farmland values have appreciated faster than crop receipts in the last five years. Yet, financial risks remain manageable as the outlook for interest rates and net cash income are supportive of the balance sheet. It remains prudent for agricultural operations to be flexible enough to amend business plans if the outlook for borrowing costs and/or profitability moves in a different direction.

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