What’s Inside?
This spring, FARE Professors Brady Deaton, Alan Ker and Alfons Weersink were invited by the Standing Committee on Agriculture and Agri-Food to share their research on the economics of agriculture in the House of Commons.

This FARE Share Special Issue is a compilation of their Opening Statements. As you’ll read in the pages ahead, their testimonies share both research and personal experiences to inform the Members of Parliament (MP) who shape Canadian agriculture and agri-food policy.

Debt in the Agriculture Sector and its Effects

Three professors from the Department of Food, Agricultural and Resource Economics (FARE) recently stepped out of the lecture hall and onto Parliament Hill to share important research that will help to shape effective public policy for Canadian agriculture.

Brady Deaton, Alan Ker and Alfons Weersink each made testimonies to the Standing Committee on Agriculture and Agri-Food in the House of Commons this spring. The professors were invited by the Committee, which examines issues related to the sector. Currently, the Committee is studying the effects of debt in the agriculture sector. Each invitation is recognition of the professor’s research and acknowledgement of their position as a subject matter expert.

Chaired by Pat Finnigan (Liberal MP), Committee meetings involve witnesses presenting a 10-minute opening statement and then participating in a question and answer period with Committee members comprised of MPs from all parties and regions in Canada. This is an important forum for stakeholders to provide input into issues that affect farms and other agribusinesses throughout the country.

The professors’ testimonies provided the Committee with solid research and information that will be used to shape future Canadian agriculture and agri-food policy. You will find complete transcripts of their statements in the following pages.
Thank you for the opportunity to share my thoughts and research regarding contemporary issues facing young and start-up farmers who seek to begin or expand their farm operations. I will also address the associated issues of debt and the transfer of farm operations from one generation to the next. Before getting into the heart of my comments, I want to recognize that there are many unique aspects of farming. Farming requires a unique partnership with nature, and this dynamic relationship poses an ongoing challenge. Second, many farmers and future farmers grow up on a farm and come to know farming as a way of life. In this regard, farmers are committed to place and farming in a way that many of us view as important.

Let me begin with the very important question: how do young farmers fare in the agricultural sector? This question poses a bit of a challenge, because to answer it one needs to find an occupation to compare with farming. As I mentioned earlier, farming is unique in many respects. Keeping that in mind, one starting place might be to compare the percentage of Canadian farm operators under 40 with the percentage of Canadian owners of small to medium-sized enterprises under 40. Using data from the 2011 census and Industry Canada, we calculate that as of 2011, 9.9% of total farm operators (identified as the oldest operator on the farm) were under the age of 40. Comparatively, in the same year, 12% of majority owners of small and medium sized enterprises were under the age of 40.

Should we be surprised at the present percentage of farm operators under 40? I am not in a position to answer that question for you; but, as you continue to contemplate this issue, keep in mind that farm operations typically involve millions of dollars of assets and hundreds of thousands of dollars in debt. Hence, these kinds of capital-intensive industries require unique operational and managerial skills. We need to assess our age expectations in farming against similar capital-intensive businesses in Canada. As we do this, we should keep in mind that farming and its unique partnership with nature. This means that, as one farmer put it to me: “…80 hour work weeks are a good thing, and [during some seasons] we work when the sun shines and enjoy a day off when it is raining; in these times, weekends are just part of the calendar.” These seasonal demands may discourage some young people from entering the industry. Also, it is important to recognize that modern farming is not as biased against older folks as it used to be; it is less demanding physically than in the past.

Farming requires a broad suite of capital investments including land and buildings, machinery and equipment and, in some cases, livestock. Importantly, it is unlikely that the magnitude of debt for any particular farm can be associated with the soundness of the farm operation. Farmers running the highest debt are likely to be doing so because creditors are comfortable that they are in a position to repay this debt. For this reason, there are other measures used to assess the financial well-being of the farm sector. These are the kind of measures that Farm Credit Canada (FCC) discusses on their website, including measures of liquidity (e.g., current assets to current liabilities) and the debt-to-asset ratio. In reviewing these current measures, FCC suggests that they are generally in line with, or more favourable than, historic averages.

For farmers in general, and young farmers in particular, incurring debt allows them the opportunity to undertake enterprises that could not be financed by personal wealth. The current debt reflects, in part, the capital costs of being a competitive farm operation in today’s agricultural sector. In addition, some of the increase in debt is due to the decisions of farmers to invest some portion of their net-income (which has generally been increasing) into capital investments. One of these investments has been farmland, which as you well know, has appreciated in recent years. For example, in Ontario the Municipal Property Assessment Corporation estimates that between 2012 and 2016 the per-year average increase of overall farmland values was 16%. The increase in the value of land does not, however, mean a farm is sustainable from a cash flow perspective.

It goes without saying that the ability to manage any business and its debt is easier when net-income flows are favourable and interest rates are low (a setting that describes the agricultural industry these last several years). The situation becomes more challenging when these flows become attenuated and/or interest rates rise. This issue emphasizes the importance of making

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productivity enhancing investments in good times, and making sure that the next generation of farmers is prepared to manage the farm not only from an operational perspective, but from a financial perspective. We therefore rely on our credit markets to appropriately weigh the risks of lending to young farmers. This helps to avoid the deleterious effects of incentivizing less productive investments, or supporting farmers who can be profitable in good times but not in less favourable times. One challenge here is that young farmers will be more highly leveraged, because of their need to make high levels of capital investments, and their lower level of accumulated assets. This implies greater risk.

Given the high capital costs of becoming a competitive farmer, you might ask: how do these young farmers get in the game, get up to scale, and stay in the game? There is not one answer, but borrowing money from a financial institution will most likely play a role in all of these stages. There are many ways young farmers may start out developing the wealth that allows them access to the loans they will need to scale up. I will discuss three: (1) off-farm income; (2) renting in farmland; and (3) support from parents. Note that all of these pathways help to support young farmers, but they do not preclude the important role that financing and debt will play in helping farmers to stay competitive.

Off-farm Income

Many young farmers – and indeed, farm families in general – supplement their income with off-farm work. The average farm operator in Canada had a 41% predicted probability of engaging in off-farm work, and the probability for the youngest farm operators was approximately 2% higher. Spouses of farmers also often work off of the farm.

Renting in Farmland

As noted earlier, farmland is expensive. And in many places the price of farmland may be such that a moderate return on investment requires continued farmland appreciation. One option for young farmers is to get up to scale by renting farmland or through contract farming. The farmland rental market is well established in Canada: close to 40% of Canadian farmland is in the rental market. A long established exchange between landlords and tenants suggests benefits to farmers and non-farmers alike. Though somewhat different from renting, there is also the opportunity to be a “custom operator,” providing the necessary equipment and labour to farms owned by individuals who pay the custom operator for their services.
Managing Risk and Efficacy of Government Programs

By: Alan Ker, Professor, FARE, and Director of the Institute for the Advanced Study of Food and Agricultural Policy, University of Guelph

Let me thank the committee for the invitation to testify on “Debt in the Agricultural Sector and Its Effects.” I am the current President of the Canadian Agricultural Economics Society and Professor and Director of the Institute for the Advanced Study of Food and Agricultural Policy at the University of Guelph. The society’s mandate is to further our understanding of the economics that govern the food, agricultural, and resource sectors. While the Institute has multiple mandates, its primary one is to attract competent students into the food and agricultural sectors. As for myself, I have a joint PhD in economics and statistics. Prior to joining Guelph in 2009, I was a Professor in the Department of Agricultural and Resource Economics at the University of Arizona. While I have not published specifically on farm debt, I have in the past two years published peer-reviewed articles on closely related topics including crop insurance, price volatilities, the economic impact of disease outbreak, and yield resilience and climate.

The ability to obtain and manage debt is critical to a sector’s economic success. This is very true in the farm sector. In fact, because of growing concern about increases in both farm debt and land values, in May 2015 the Institute held a conference titled “Are We Headed for Another Farm Financial Crisis.” The consensus, which included speakers Dr. Gervais and Professors Weersink and Deaton, all of whom you have or will have heard from, was that we are not headed for another farm financial crisis. Currently, the debt to asset ratio is relatively low, and, farm cash receipts are strong. Hence, many have testified that debt is not a significant issue for the sector at this time. I would agree. That said, the complexity of managing debt rises as risk increases and I expect risk to increase in the future. I will focus my comments today on risk and the efficacy of the government programs that are meant to assist producers in managing risk. I will break risk into three categories: (1) those related to production; (2) those related to the market; and (3) those related to policy.

Production risk can arise from such things as mortality, disease, genetics, weather, etc. Part of my research program deals with modelling crop yields. This research has revealed a number of interesting points related to yield risk. I will focus on field corn in Ontario. First, year-to-year yield volatility has doubled over the past 50 years. Second, the increased volatility has not been symmetric. That is, low yields are becoming relatively more volatile. Third, this increased volatility can be mostly attributed to innovation rather than changing climate. Consider the following example. Over the past 50 years seed innovations have allowed the planting density per acre to double, thereby increasing average yield per acre. However, the distribution of precipitation has remained constant during this period. While precipitation rarely limited crop yields in the 1960s, given increased planting densities, it does today. Our research shows insufficient precipitation is now an order of magnitude more likely to cause lower yields. As new technologies are adopted, the climate-yield relationship changes and at least historically, that change has increased yield risk, making the management of debt more complicated.

Market risk can arise from input and output prices, interest rates, and exchanges rates. Interest rates appear to be relatively stable and low for the foreseeable future but that can quickly change with changes in monetary policy. Increases in non-food uses, coupled with growth in global population and income, will increase long-run demand for agricultural goods. Long-run supply will be a function of expected returns and productivity growth, the latter driven by research and development expenditures. Overall, I expect long-run output prices to be constant or marginally increase as growth in demand is likely to outpace supply. Short-run prices will fluctuate with current supply, current income, and stocks. Exchange rate risk will continue as in the past effecting both output and input prices. Our exchange rate is, and will continue to be for the foreseeable future, highly correlated with world crude prices.
Currently, policy risk is at the forefront given rhetoric regarding a NAFTA renegotiation and component pricing in supply management. Sometimes rhetoric turns into reality as in the case of the softwood lumber countervailing duty. As an agricultural sector that depends heavily on trade, or the protection from trade, policy is perhaps the biggest risk facing Canadian producers right now. The impacts of changing policy are most often manifested in changing prices as seen from Mandatory Country of Origin Labelling. Policy changes can have dramatic effects on producer income and consequently their ability to meet debt obligations. Moreover, policy changes can rapidly alter the value of assets such as land, quota, and machinery. Given the increasing global sentiment for stronger borders and the uncertain behaviour of the U.S., I expect policy risk to remain high in the short to medium term.

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In summary, I believe that the current level of debt is not a cause for great concern given current asset levels, and, farm cash receipts. I think the greatest risk to producer’s ability to meet their debt obligations in the short run is policy risk related to stronger or weaker borders, always present exchange rate risk, and interest rate risk. In the long run, greater attention in developing Business Risk Management policy that assists producers manage risk while not incentivizing risky practices is needed. There is empirical evidence consistent with producers adopting high reward high-risk technologies and using publicly subsidized crop insurance to manage any resultant yield shortfalls. In fact, doing so makes economic sense under current publicly subsidized multi-peril crop insurance programs. Designing future policy that provides adequate risk coverage without incentivizing producers to adopt riskier practices will be challenging, and that challenge, will be exacerbated by uncertainty with respect to changing climate, consumer demands, and policy.

Thank you for the opportunity to speak to you today. I look forward to answering your questions.

More details of this meeting can be found here: http://www.ourcommons.ca/DocumentViewer/en/42-1/AGRI/meeting-55/notice
I very much appreciate the opportunity to testify to the House of Commons’ Standing Committee on Agriculture and Food. It is an honour and I hope that I can justify the invitation with information that is useful to your deliberations. Today I will be speaking about the effects of debt on the ability to expand any farm and to transfer an operation between generations. To begin this discussion, I would like to give you a brief personal background that I will relate to the issue of debt and young farmers.

My parents immigrated to Canada from the Netherlands in the late 1950s. Like many who came from the Benelux countries after World War II, they came seeking the opportunity to farm; an opportunity that was not available due to conventional rules for inter-generational transfer at that time in which the eldest son was gifted the farm, and the relative economic opportunities outside of Western Europe. They came with very little, but thanks to good fortune and hard work, they achieved their dream and built a successful farm operation. As I will argue later, they may have been one of the last generations to be able to move into commodity agriculture without significant capital behind them.

I had full intentions of taking over this family farm along with one of my younger brothers. We both came back to the farm in 1984 after graduating from university; he with an undergraduate in Agricultural Mechanization and myself with a Masters in Agricultural Economics. He took over the dairy end of the operation from my parents, who then focused on the cash crops. I worked part-time on the farm and had a full-time job as a credit manager with a major bank. The timing of this job coincided with the Farm Debt Crisis and since my portfolio was largely farm-based, I saw first-hand the effects of debt levels beyond the repayment capacity of farmers. The experience was partially responsible for my decision to pursue a PhD, which was likely in the long-term best interests for both my brother and myself. As I will discuss later, the circumstances of the Farm Debt Crisis of the 1980s are unlikely to play out today but there are lessons to be learned.

I was fortunate to obtain a faculty position at the University of Guelph upon graduation from Cornell in 1989. A constant over my time at Guelph is the teaching of a fourth-year class to students in the Food and Agricultural Business major in the Bachelor of Commerce Degree. There have been two trends in this major over time reflecting the changing perceptions about agriculture in general and farming in particular. One is the increasing number of students from non-rural areas, who are attracted by the employment opportunities in the agri-food sector. Second is the increasing share of students from farms that want to go back and take over the family farm. The number of students enrolling with a farm background has not changed, due partially to the shrinking number of farmers in the country (less than 2% of the population), but more of that number want to return to the farm. I think this reflects the excitement about the long-term prospects for agriculture and the challenging skill set required to be a successful operator. However, there are significant challenges facing the transition of a business that has become so capital-intensive. Family members including my brother and two brothers-in-law are now facing these challenges.

The Committee has been asked to deliberate on three points with respect to debt: (1) young farmers and generational transfer of farms; (2) start-up farms operating for 10 years or less; and (3) the ability to expand farming operations. I will start with the last one.

**Debt and Ability to Expand**

Debt is incurred as a means to pay up-front for investments deemed to be profitable for the operation without having to use personal funds. The likelihood of borrowing increases with the annual returns to the farm business from the purchase of the asset while the demand for credit falls with increases in borrowing costs. Thus, the increase in debt level alone can be a sign of strength in the agricultural economy; it signifies a sector re-investing in technology to increase its productivity and competitiveness. Financial institutions, such as the Farm Credit Corporation (FCC), are providing loans based on a similar assessment on the value of purchases made through credit.

Debt levels alone are not a measure of financial stress. As noted by several other witnesses to this Committee, asset values have increased at a faster rate than liabilities resulting in an increase in equity to the sector. In addition, arrears on loans at FCC are at

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low levels suggesting no major concern about the current repayment ability for the majority of operations. This could change with production, market, and policy risks as outlined by Dr. Ker. There will be continued downward pressure on agricultural returns in the short-run but the long terms prospects are bright. I would concur with Dr. Ker that the biggest risk on repayment capacity is associated with an unexpected and dramatic change in policy. The Farm Debt Crisis was arguably brought about by such a policy change. Negative real interest rates had become the norm in the 1970s but the U.S. Federal Reserve’s attempt to reduce inflation through a dramatic cut in the money supply resulted in record high rates in the space of a short time period. For example, the Bank of Canada prime rate nearly doubled in 1982 to nearly 22% in less than a year. The rise in interest expense in combination with lower commodity prices pushed many farms into farm bankruptcy; there were 550 in 1984 whereas the average annual number has been approximately one-tenth that number over the last several years.

One of the lessons from that Farm Financial Crisis that I observed as a lender is the importance of distinguishing between social policy and farm policy. In the 1980s, the two were inter-linked. For example, interest rate reduction policies for all did little to help the farmers really struggling financially and slowed the adjustment within the sector. Farm policy should help ensure a competitive sector that is efficient and able to weather the inevitable storms. In contrast, social policy should help the disadvantaged. There were many distressed farm families during the Farm Financial Crisis and there were some very important and effective efforts to provide counseling to aid farmers in the difficult transition away from the farm. Hopefully, there is no need for such policies but if there is, the distinction between farm and social policy is important.

Another lesson from the Farm Financial Crisis is the need for the farm sector to distinguish between the owner and operator. It used to be that the farmer felt it necessary to own all assets necessary to operate the farm. Purchasing rather than leasing puts the farm at greater financial risk. One of the major discussion points in the 1980s was how the sector could attract outside equity. The growing farmland rental market provided by non-farmers is an example of the provision of outside equity that reduces the financial risk of the farm business. This type of market can also help new farmers enter into the sector.

**Debt and Young Farmers**

While debt levels are not acting to constrain existing farm operations, the access to sufficient credit can serve as a barrier to some entrants but it depends on the type of new farmer. Christie Young of FarmStart, who will be a witness to the Committee next week, has identified four types of new farm entrants: (1) young moving into an existing family operation; (2) young seeking entry into a niche market; (3) middle-aged looking for a second supplemental career; and (4) new Canadians. Each of these groups have differing interests and needs. For example, the first group tends to have issues with inter-generational transfer, the middle groups with obtaining equity, and the latter with understanding institutions to produce and serve a growing ethnocultural market. I am assuming Christie will discuss the latter three groups and I will focus on the traditional new entrants.
Support from Parents

Farm families help their children get into farming by developing their knowledge of farming, and transferring assets through bequest (through a will), gifts, or sale. In many cases farm families use a combination of all of these approaches. Increased debt can complicate this situation. As an extreme example, in the event that a parent dies intestate (without a will) there may be confusion as to who is responsible for paying the debt and it may go into arrears. Moreover, the farming operation may suffer as the family attempts to clarify how the farm assets should be distributed. Importantly, the appreciation in key assets like land poses a challenge to parents who, on retirement, want to treat themselves and all their children equitably. Children who may want to continue the farm operation at the same scale as their parents may have a difficult time purchasing farmland from their parents, or from their siblings’ share of inherited land.

There are presently a variety of institutions designed to support young farmers and the transfer of farms from one generation to the next. There are a variety of tax policies that influence these transfers of assets. Provincial-Federal cost-share programs support succession planning. FCC has a young farmers program designed to help younger farmers borrow money at favourable interest rates. Universities throughout Canada, including the University of Guelph, are actively engaged in preparing the next generation of farmers with the management skills they will need to effectively manage a farm operation.

Finally, if you will allow me to end this testimony on a sentimental note: I have spent the last 13 years of my life working with young people. Many have become farmers, many want to become farmers, and many have gone on to research issues relevant to our agricultural sector. I am constantly impressed by their work ethic, and their innovative capacity. I have been the beneficiary of their new ideas, and Canada and our agricultural sector will benefit as well. Our investment in youth, which needs to be a focus of many policies, is our best chance at making the most of the good times..."

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While the growing net worth of farmers has enhanced their financial well-being, it has also complicated the inter-generational transfer of their operations. It was simple for my grandfather; the farm went to the oldest son, which was not my father, and it left my parents with the choice of moving to Canada or not farm. They could farm because asset values were significantly less and returns were generated largely through labour rather than capital. It is much more complicated for my brother and brothers-in-law. Successful transfers today in such a capital-intensive sector involve clear communication between all parties. Policies that aid and foster this conversation would be more beneficial to the majority of operations than direct financial assistance.

Thank you again for the opportunity to speak to you today and I look forward to discussing the issues further with you.

More details of this meeting can be found here: https://www.ourcommons.ca/DocumentViewer/en/42-1/AGRI/meeting-55/minutes