



GEORGE MORRIS CENTRE

Minimum Wage Increases in Ontario: Understanding the Significance in Horticulture¹

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November, 2009

¹ This paper was requested and reviewed by the Ontario Fruit and Vegetable Growers' Association. The content and opinions expressed are those of the authors.

EXECUTIVE SUMMARY

The purpose of this project was to measure the impact of the increase in minimum wage on horticulture, to put the implications into context, and to develop alternatives for mitigation.

To do so, an analysis of the apparent cost and risk management impacts of the minimum wage increase was undertaken, and the impacts were interpreted in the context of broader public initiatives that would be impacted. Presented in this paper are the results of the analysis, along with potential policy alternatives that could mitigate the impacts of the minimum wage increase.

Results:

- The costs to growers of the minimum wage increase are estimated at about \$73 million. Good data do not exist from which to calculate aggregate increases in labour cost due to the minimum wage increases. However, based on actual reported expenditure on labour, and assumptions regarding the structure of labour costs in edible horticulture, costs of up to \$73 million over the full implementation of the minimum wage increase are evident
- Increased labour expenses significantly decrease profitability. In particular, when an enterprise with few alternatives to substitute for labour is examined (peaches), a 28% increase in manual labour expense decreases profitability by almost 50%. Since little opportunity currently exists to adjust to this labour cost change in industries like peaches, these constitute real cash losses for farmers.
- Grower eligibility for stabilization funding will decrease significantly. Horticulture stands to lose a significant portion of reference production margins, which define the segment's eligibility for stabilization funding according to production margin. Compared with the current period, this could fall by 35% by 2014, using apples as an illustration. Moreover, it is important to recognize that production margin is an instrument developed to compare a subset of costs to revenue as criteria for subsidy eligibility, and is not a representation of farmers' incomes. For farmers, the reality is that there are many real expenses not accounted for under the production margin calculation. Production margin calculations thus structurally overstate true farm incomes, so the observed declines in production margin understate the true impact on farm households.
- Government legislation affecting horticulture is inconsistent. Horticulture is a significant segment of the Ontario economy, and the significance extends well beyond agriculture. Indeed, government has explicitly supported initiatives drawing on horticulture in local food marketing, and land use planning. They must clearly be counting on horticultural processing to stabilize Ontario's suffering manufacturing sector. Thrusting such a sharp increase in minimum wage on a labour-dependent segment is inconsistent with the broader contribution expected from horticulture.

The emerging view is that of an industry segment with important reaches into the urban economy, one that is expected to form an important part of Ontario rural culture, but that is also uniquely vulnerable to mandated increases in labour costs. It is also a beleaguered segment that has had to survive a host of damaging problems. The minimum wage increase thus artificially piles sharp labour cost increases on an industry that is already struggling. Moreover, it puts public policy at odds with itself, and confuses the public interest that government has articulated for horticulture. This warrants corrective action to restore profitability to Ontario horticulture as it relates to the minimum wage increase. The apparent result of inaction will be a catastrophe for much of Ontario horticulture.

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1. Introduction

In 2007, the Ontario government announced that the hourly minimum wage in the province would be increased from \$8.00 to \$10.25 by early 2010. When fully implemented, the implication of this increase will be in excess of 28%. The nature of the horticultural segment, which is highly labour-intensive with a significant proportion of workers employed at minimum wage, means that mandated wage increases will hit the segment hard, and will likely have secondary effects as wage schedules are adjusted more broadly. The full implications of this have not yet been felt, since the increase in 2008 was relatively nominal. However, the longer term implications need to be understood, and potential mitigating actions determined.

1.1 Purpose and Objectives

The purpose of this project was to measure the impact of the minimum wage increase on horticulture, to put the implications into context, and to develop alternatives to mitigate the impact.

The objectives of this project were as follows:

- To determine the potential impact of the change in minimum wage on Ontario horticultural producers in terms of expense and risk management
- To place the impacts in the broader context of Ontario horticulture
- To develop alternatives that would cushion and mitigate the anticipated impact

1.2 Approach

To meet the objectives articulated above, the following approach was employed. First, an analysis of the apparent cost and risk management impacts of the increase of the minimum wage was undertaken at the individual farm and aggregate levels. Next, these impacts were interpreted in the context of public initiatives that would be impacted. Finally, potential policy alternatives that can mitigate the impact of the minimum wage increase were developed and discussed.

1.3 Organization of the Report

Section 2 assesses the cost and risk management impacts of the minimum wage increase. Section 3 outlines the broader policy context for Ontario horticulture, and places the results for Section 2 into context. Section 4 develops alternatives that can help mitigate the impact of the minimum wage increase. Section 5 concludes the paper.

2. Cost and Risk Management Impacts of the Minimum Wage Increase

Gunderson (2007) investigated the issue of minimum wages in Ontario. According to Gunderson (2007, p. 36), 27.6% of agricultural employees were paid less than \$10 per hour in 2006. The only sector with a higher proportion of employees paid less than \$10 per hour was accommodation and food services, at 37.2%. Moreover, Gunderson does not differentiate horticulture from agriculture more broadly, when horticulture tends to be relatively more labour intensive and less mechanized. In all likelihood, horticulture has a higher proportion of employees paid less than \$10 per hour than agriculture overall.

Table 2.1 presents an overview of average hourly wages paid across sectors. Average wages to full-time employees in agriculture are one of the lowest overall (\$15.03 in 2008). Only wages paid in accommodation and food service are lower (\$13.35 in 2008). The minimum hourly wage increased from \$8.00 in 2007 to \$8.75 in 2008, which is an increase of 9.38%, and the average hourly wage in the agricultural sector increased from \$13.19 to \$15.03. This represents an increase of 13.95%, the largest across all sectors. The next highest increase in average wage was 5.17%, in health care and social assistance.

Horticulture also employs an extensive casual and part-time workforce to assist with seasonal production activities like planting, pruning, and harvesting. Table 2.2 presents comparable information on part-time workers. Similar observations are evident. Agriculture is among the lowest paid sectors for part-time workers, with only those in accommodation and food service receiving a lower wage. The relative increase in wages paid to part-time workers was among the highest across sectors between 2007 and 2008, at almost 6%.

This suggests the following. First, agriculture would appear to be among the most vulnerable sectors to an increase in the minimum wage, as it has the highest proportion of workers earning the minimum wage. In areas of agriculture where hand labour is a large component of operations and where practical technology substitutes for labour do not exist, there is little prospect of mitigating labour cost increases. This is precisely the situation in which horticulture finds itself.

Second, the sharp increase in Ontario average hourly agricultural wages in 2008 vs. 2007, compared with 2007 vs. 2006, suggests that the minimum wage increase had a material effect. Moreover, the fact that full-time agricultural wages increased by more than the percentage increase in the minimum wage suggests an indirect effect of the minimum wage increase. Employers are driven to maintain the wage hierarchy among employees, given the mandated increase under the minimum wage. In other words, while the minimum wage increase only directly affects those being paid the minimum wage initially, it has a secondary effect as employees paid more than the minimum wage are also given raises to preserve the wage surface within an organization.

Table 2.1 Ontario Average Wages by the hour (\$CDN per hour) for full-time employees by industry

	2005	2006	2007	2008	increase 2006-2007	increase 2007- 2008
Goods-producing sector	21.45	22.30	22.85	23.84	2.47%	4.33%
Agriculture	12.64	12.95	13.19	15.03	1.85%	13.95%
Forestry, fishing, mining, oil and gas	24.98	25.08	26.47	26.96	5.54%	1.85%
Utilities	30.87	31.92	32.59	33.43	2.10%	2.58%
Services-producing sector	21.52	22.09	22.82	23.80	3.30%	4.29%
Construction	21.61	21.89	22.59	23.42	3.20%	3.67%
Manufacturing	21.12	22.20	22.53	23.44	1.49%	4.04%
Trade	17.64	17.91	18.30	19.14	2.18%	4.59%
Transportation and warehousing	19.58	20.10	20.99	21.43	4.43%	2.10%
Finance, insurance, real estate and leasing	23.95	24.59	25.67	26.88	4.39%	4.71%
Educational services	26.75	27.40	28.08	29.13	2.48%	3.74%
Health care and social assistance	22.10	22.47	23.39	24.60	4.09%	5.17%
Information, culture and recreation	22.00	22.91	23.84	24.35	4.06%	2.14%
Business, building and other support	14.78	15.43	16.21	16.82	5.06%	3.76%
Accommodation and food services	12.69	12.82	12.83	13.35	0.08%	4.05%
Other services	17.46	17.81	18.26	18.19	2.53%	-0.38%
Professional, scientific and technical serv.	26.68	27.37	28.60	29.57	4.49%	3.39%
Public administration	28.18	29.53	29.84	31.00	1.05%	3.89%
Total	21.50	22.15	22.83	23.81	3.07%	4.29%

Source: Statistics Canada, Labour Force Survey 2009.

Table 2.2 Ontario Average Wages by the hour (\$CDN per hour) for part-time employees by industry

	2005	2006	2007	2008	increase 2006-2007	increase 2007-2008
Goods-producing sector	14.36	14.7	14.94	15.45	1.63%	3.41%
Agriculture	10.41	11.07	10.32	10.91	-6.78%	5.72%
Forestry, fishing, mining, oil and gas	NA	NA	NA	NA	NA	NA
Utilities	NA	NA	NA	NA	NA	NA
Services-producing sector	NA	NA	NA	NA	NA	NA
Construction	NA	NA	NA	NA	NA	NA
Manufacturing	NA	NA	NA	NA	NA	NA
Trade	NA	NA	NA	NA	NA	NA
Transportation and warehousing	16.03	15.66	17.28	17.97	10.34%	3.99%
Finance, insurance, real estate and leasing	13.91	14.27	14.04	15.9	-1.61%	13.25%
Educational services	21.53	21.58	22.05	23.56	2.18%	6.85%
Health care and social assistance	18.78	19.4	20.27	20.55	4.48%	1.38%
Information, culture and recreation	12.3	12.22	12.8	13.1	4.75%	2.34%
Business, building and other support	10.73	11.66	11.82	12.4	1.37%	4.91%
Accommodation and food services	8.82	9.03	9.47	9.72	4.87%	2.64%
Other services	12.83	12.06	14.01	14.72	16.17%	5.07%
Professional, scientific and technical serv.	17.32	17.54	18.43	18.11	5.07%	-1.74%
Public administration	17.13	18.74	17.74	17.86	-5.34%	0.68%
Average	14.51	14.83	15.26	15.85	2.94%	3.87%

Source: Statistics Canada, Labour Force Survey 2009.

2.1 Measuring the Cost Impact of the Minimum Wage Increase

To measure the apparent cost impact in Ontario of the minimum wage increase, we examine the following: First, we consider the impact of an increase in minimum wage at the individual farm, using fresh peaches as an example. Second, we consider the apparent aggregate impact of the minimum wage increase at the level of the horticultural sector.

2.1.1 FARM LEVEL COST IMPACTS

To estimate the impact of minimum wage at the farm level for a horticultural operation, we consider the situation facing a fresh peach grower. This is based on an enterprise budget developed by OMAFRA² in 2006. To simplify the illustration, we simulate results for 2007-2010 assuming the 2006 budgeted values for fixed costs and variable costs remain constant, with the exception of manual labour costs. Revenue and yield data were obtained from OMAFRA³; the average peach price in 2007 was 54.8 cents/lb, and the yield was 10,038 lbs/acre. Based on these values, the sales in 2007 were \$5,501/ acre. For the following years the same revenue per acre was assumed. Based on the OMAFRA enterprise budget, fresh peach production takes 217 hours of manual labour per acre and 31.5 hours of machine labour.

The source and minimum wage status of labour is not given in the OMAFRA budget. For the purpose of illustration it is assumed that all of the manual labour is done by domestic minimum wage and offshore seasonal employees, and that the machine labour is done by domestic workers earning more than the minimum wage⁴. Employment data on horticultural workers is not collected, so the breakdown of the labour in the budget must be based on assumption. It is assumed that 50% of all labour on the farm is offshore, 25% is domestic and receives the minimum wage, and 25% is domestic and is paid more than the minimum wage. Appendix Table 1 presents data that frames this assumption. About 1,430 farms participated in the Seasonal Agricultural Workers Program (SAWP) in 2007 compared with an estimate of just over 4,000 horticultural farms in Ontario. However, at an average of more than 12 foreign workers per farm participating, it is clear that larger and more labour intensive farms are participants, supporting the notion that foreign workers make up a high proportion of labour use in horticulture.

Until 2008, offshore workers received a minimum wage which was above the domestic minimum wage. In 2007, the minimum wage for domestic workers was \$8.00 per hour and \$8.58 per hour for offshore workers. In 2008, the minimum wage for offshore workers became the same as the domestic minimum wage at \$8.75. For 2009 and 2010, the domestic minimum wage will effectively set the offshore worker minimum wage.

² http://www.omafr.gov.on.ca/english/busdev/download/tfruitecon_fmppo.htm

³ <http://www.omafr.gov.on.ca/english/stats/crops/index.html>

⁴ The enterprise budget contains a value for manual labour expense of \$10 per hour; it is understood that this is likely to include paid benefits, housing, and travel for offshore workers, etc. For the purposes of illustration it is reduced to the minimum wage here

Given the share of offshore and minimum wage domestic labour assumed above, the effective labour cost for manual labour is based on a two-thirds weight of offshore wage rate and a one-third share of the domestic minimum wage. For 2007, this gives a manual labour wage cost of \$8.39 per hour, or \$1,820/acre, as illustrated in Table 2.3. Given the increase in the minimum wage, manual labour wages increase to \$8.75 per hour in 2008, \$9.50 per hour in 2009, and \$10.25 per hour in 2010. Thus, the manual labour costs increase from \$1,820/acre in 2007 to \$2,224/acre in 2010.

Table 2.3 Minimum Wages

	2007			2008	2009	2010
	Domestic	offshore	total	Total	Total	Total
Wage Per hour	\$8.00	\$8.58	\$8.39	\$8.75	\$9.50	\$10.25
Total Manual Labour Cost per acre	\$868	\$931	\$1,820	\$1,899	\$2,062	\$2,224

The full impact on fresh peach costs and returns is given in Table 2.4. In 2007, the implied net return, given the labour assumptions above, was \$825/acre. When the minimum wage comes fully into effect in 2010, net returns decrease to \$420/acre. In other words, the 28% increase in the minimum wage decreases profitability in peach production by almost 50%. In fact, this estimate is conservative because no consideration is given to increases in the wage paid to machine labour, contrary to the discussion above indicating that, under the indirect effect of the minimum wage increase, it is likely the machine labour wage rate would increase as well. Peach producers are poorly equipped to mitigate this lost profitability by investing in labour-saving capital because labour is used in pruning, harvesting, and primary collection/assembly which, by nature, cannot be readily mechanized.

2.1.2 AGGREGATE LEVEL COST IMPACTS

Aggregate level impacts of the minimum wage increase are difficult to measure due to a lack of data on employees working in horticulture. Gunderson (2007, p. 36) estimates that 27.6% of agricultural employees earned less than minimum wage before the imposed wage increase in 2008. However, agriculture in general is more mechanized than horticulture. As well, prior to 2008, roughly 15,700 offshore workers in Ontario were paid at the foreign worker wage which, at the time, exceeded the domestic minimum wage.

An alternative means of estimating the aggregate impact of the minimum wage increase is as follows. According to OMAFRA-CAIS data, the total labour expense claimed by horticultural segments in 2007 was \$310.3 million. Under the assumptions stated in the above section, 50% of employees in horticulture are offshore workers, 25% are domestic workers paid the minimum wage, and 25% are domestic workers paid above the minimum wage. The domestic minimum wage will increase from \$8.00 per hour in 2007

to \$10.25 per hour by 2010. In 2007, the minimum wage paid to offshore workers was \$8.58 per hour.

The implication is that the wage increase to domestic workers increases from \$8.00 to \$10.25, or 28%. The increase in wages to offshore workers is from \$8.58 to \$10.25, or 22%. The increase in wages to domestic non-minimum wage workers is not known, but we will assume it is similar to the offshore workers at 22%. Thus, we have the following:

- 25% of the \$310.3 million labour expenditure increases by 28%
- 50% of the \$310.3 million labour expenditure increases by 22%
- 25% of the \$310.3 million labour expenditure increases by 22%

Table 2.4 Peach Enterprise Costs and Returns, With Increasing Minimum Wage

Enterprise budget items	2007	2008	2009	2010
Sales/acre (\$/acre)	\$5,501	\$5,501	\$5,501	\$5,501
Variable costs \$/acre (w/o man. labour)	\$1,893	\$1,893	\$1,893	\$1,893
Manual labour costs (\$/acre)	\$1,820	\$1,899	\$2,062	\$2,224
Fixed costs \$/acre	\$963	\$963	\$963	\$963
Net Return (\$/acre)	\$825	\$746	\$583	\$420

Thus, ignoring the difference in present value between cost increases incurred between 2008 and 2010, and absent an estimate of layoffs and automation of some jobs, the direct implied cost increase is \$72.85 million.

2.2 Risk Management Impact of Minimum Wage Increase

Horticulture, like the other segments of Canadian agriculture, accesses stabilization programs to mitigate the effects of biological and market risks. The margin-based stabilization program available to horticulture has been the Canadian Agricultural Income Stabilization (CAIS) program, and more recently the AgriStability program. The programs are analogous in their means of operation. Each year, for each farm, a measure of economic returns (“production margin”) is calculated, and compared to an olympic average of historic production margins. If a farm’s realized production margin in a given year falls below the historical reference, the farm becomes eligible for payments under CAIS/AgriStability.

With regard to the increase in the minimum wage, the following effect can be anticipated on CAIS/AgriStability in horticulture. As the minimum wage increases and labour costs increase, production margins will decrease, triggering program payments. However, as the structurally lower production margins continue under the higher labour cost environment, over time the lower production margins also draw down the reference production margin. The implication is that, over time, horticultural producers end up with a reduced eligibility for stabilization funding due to the increase in the minimum wage, even as they need stabilization to cope with increased labour costs. Thus,

horticulture is hit with a double whammy due to the minimum wage increase- higher costs that cannot be passed on, and a decreased eligibility for stabilization to assist with recovery from the labour cost increase and the vagaries of a biology-based business.

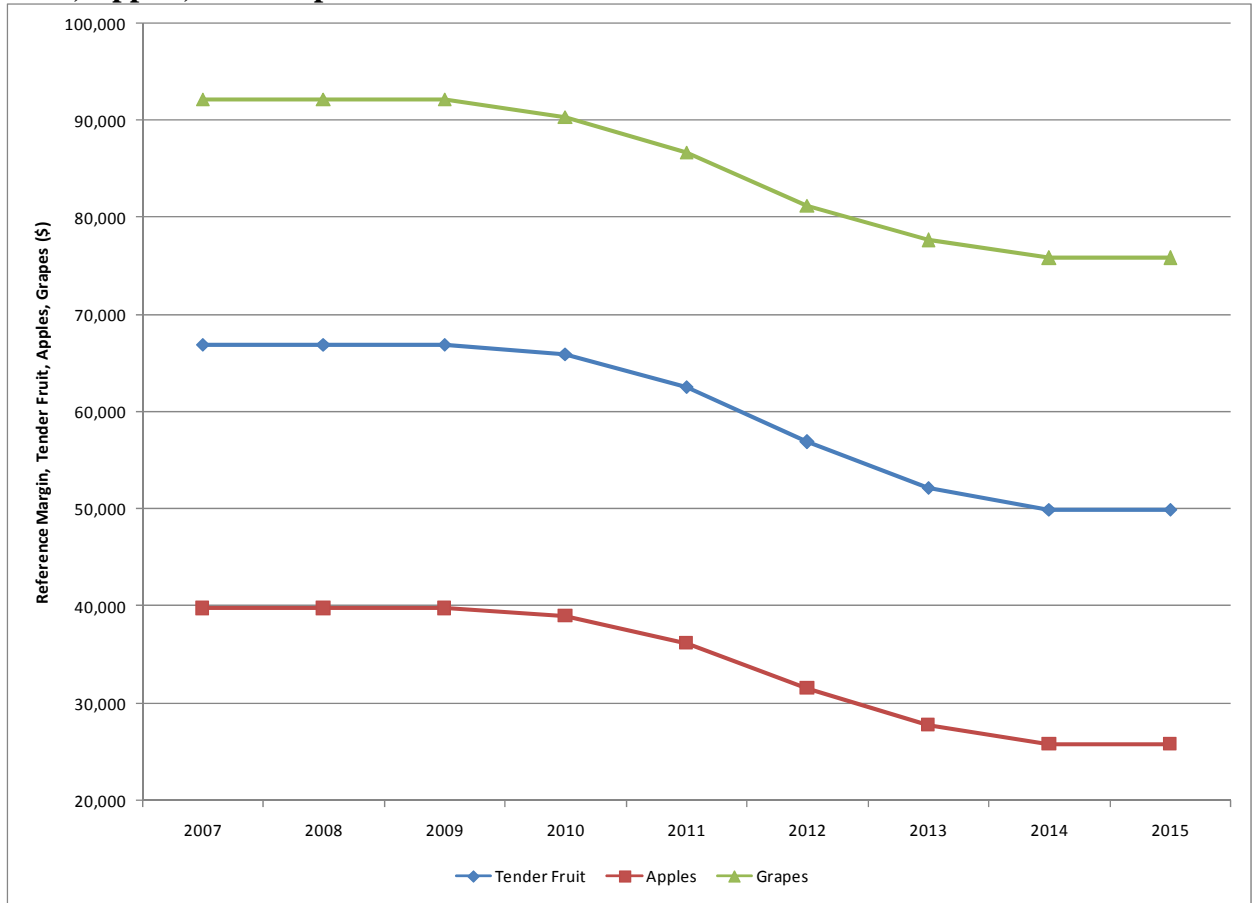
2.2.1 INTERPRETING THE REDUCTION IN REFERENCE MARGINS

To measure the above effect on eligibility for stabilization under CAIS/AgriStability, the following was undertaken. First, data for the various sub-segments of horticulture were obtained for 2007 from OMAFRA. These included eligible income per farm, total eligible expenses, and labour expense. Based on this data, the labour expense as a proportion of total expense and total expense per farm were calculated, and resulting production margin per farm calculated. These are then projected forward to 2015 to allow for the full impact on reference margin erosion to be captured.

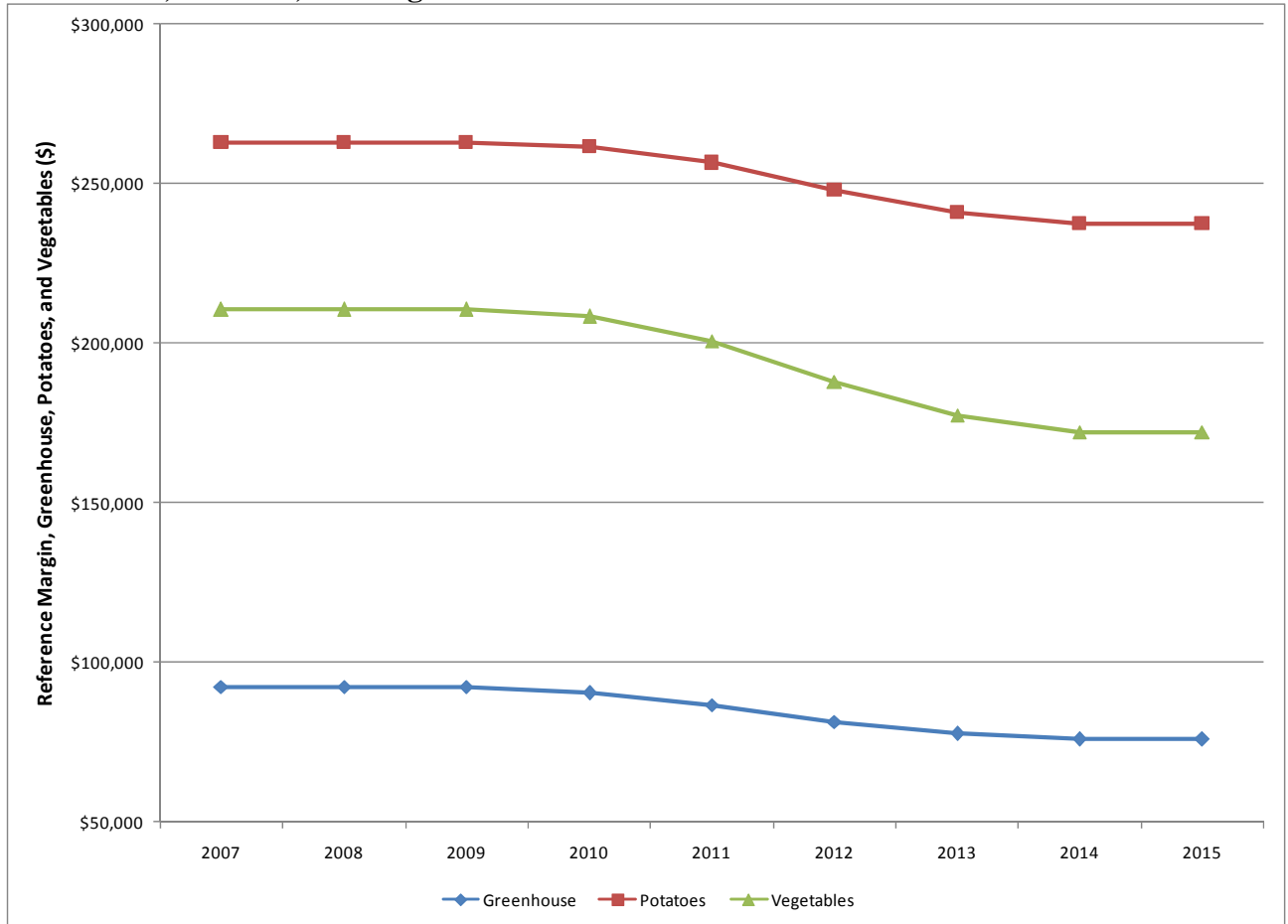
In addition, the following assumptions were made. First, based on the above, it was assumed that the following structure of labour cost increases would apply. Consistent with the above, it is assumed that 50% of labour is comprised of offshore workers, 25% are domestic workers paid the minimum wage, and 25% are domestic workers paid more than the minimum wage. Given this structure, starting with 2007 as a base, the 2008 labour cost increase was from \$8.58 per hour to \$8.75 per hour for offshore workers (about 2%), from \$8.00 per hour to \$8.75 per hour for domestic minimum wage workers (about 9.4%) and an assumed 2% for domestic non-minimum wage workers. The labour expense category was adjusted upward by the weighted average of these increases for 2008. In 2009 and 2010 it was assumed all categories of hired labour would increase in expense by 8.6% and 7.9%, respectively. For expository purposes, it was assumed that eligible revenue and non-labour eligible expenses remain constant in the future. Finally, since average production margin data prior to 2007 were lacking for reference margin calculations, it was assumed that the calculated 2007 production margin prevailed for 2002-06.

The results of this procedure are presented in Appendix Table 2 and summarized in Figures 2.1 and 2.2 below. In all cases, the anticipated increase in labour costs based on the minimum wage increase significantly reduces the reference margin, after the full cost-increasing effect is allowed to work through the reference margin calculation. The most significant impacts are observed in apples and tender fruit, which suffer a loss in reference margin between 2007 and 2015 of 35% and 25%, respectively. Segments of horticulture that tend to be more mechanized, such as potatoes, see a smaller reduction in reference, amounting to about 10%. However, the losses in stabilization coverage are quite material when the reference margin converges with the full effects of the minimum wage increase in 2014. The loss in stabilization eligibility ranges from \$14,000 per farm in apples, to almost \$110,000 for greenhouses.

Figure 2.1 Reference Margin Erosion Under Increased Minimum Wages- Tender Fruit, Apples, and Grapes



**Figure 2.2 Reference Margin Erosion Under Increased Minimum Wages-
Greenhouse, Potatoes, and Vegetables**



3. Horticulture in the Broader Ontario Economy

This section explores the broader aspects of policy in which horticulture plays a part. Notionally, horticulture is clearly part of economic development, particularly in rural areas. It is also a core element of food marketing, land use, and tourism development. These are discussed below.

3.1 *Horticulture in Economic Development*

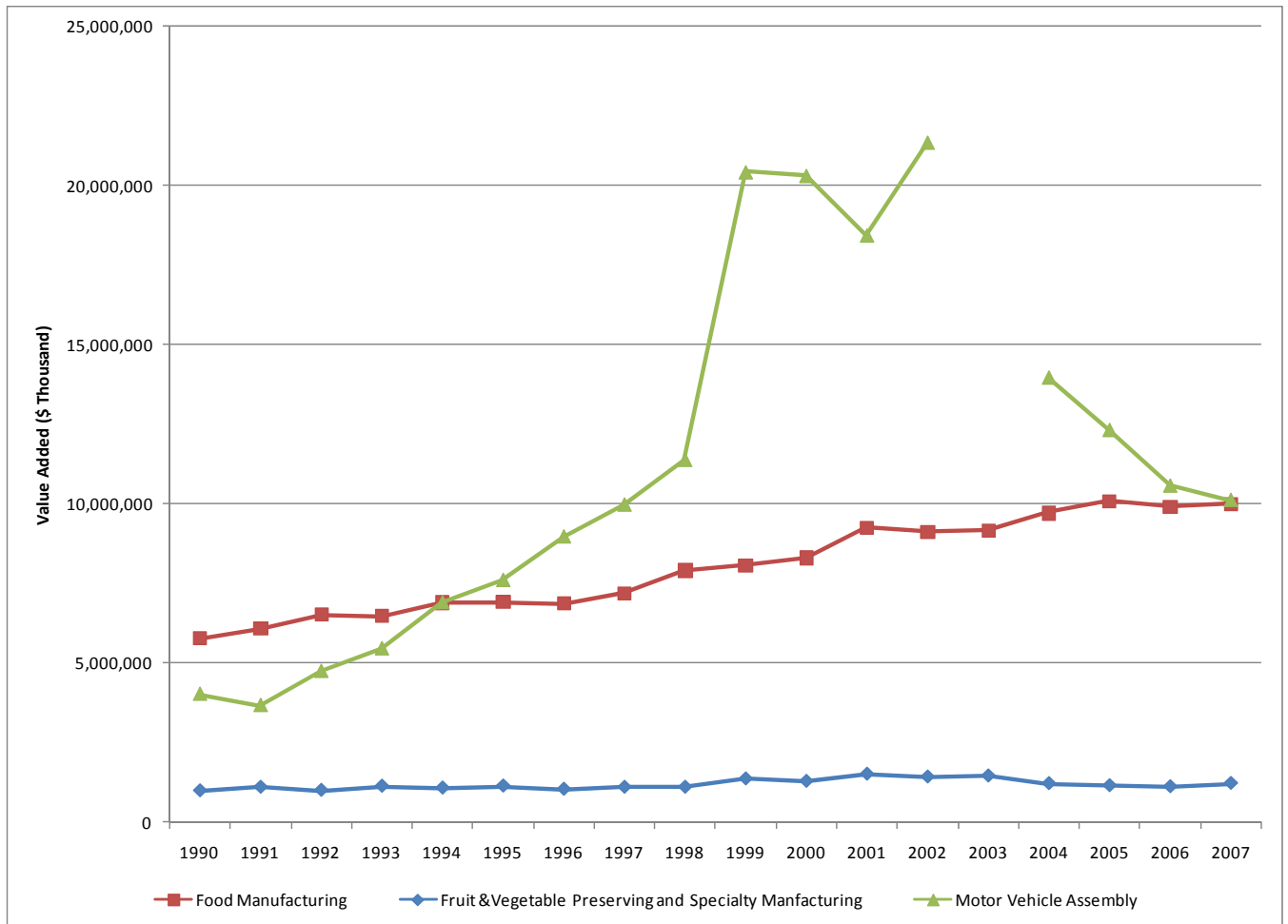
Horticulture constitutes a significant component the Ontario economy. Farmgate sales of Ontario fruits and vegetables in 2008 were valued at over \$1.2 billion, as shown in Appendix Tables 3 and 4. According to a study conducted on behalf of the Canadian Ornamental Horticulture Association (Deloitte and Touche, 2009) the farmgate value of ornamental horticultural crops in Ontario in 2007 was about \$1.15 billion. Splicing together 2007 and 2008, it can be inferred that the farmgate value of horticultural production in Ontario is well over \$2 billion per year.

In addition, the food processing in general and horticultural processing more specifically are large segments of the Ontario manufacturing sector. This is illustrated in Figure 3.1 below, which plots value added (sales less costs of raw product). The figure shows that Ontario food processing value added has ranged around \$10 billion per year in recent years. Value added in “Fruit and Vegetable Preserving and Specialty Food Manufacturing”, which includes horticultural manufacturing, freezing, and manufacturing of frozen ready-to-eat dinners and side dishes (most of which contain fruit and vegetables) has recently ranged just over \$1.2 billion.

For the purposes of context, Figure 3.1 also plots value added data on automotive assembly. The most recent data show that automotive assembly value added in Ontario has fallen to about \$10 billion, or about the value added as food manufacturing. This most recent data is for 2007 and does not account for the sharp challenges and broad shrink in the auto sector in 2008 and the first half of 2009. Moreover, the figure shows that food manufacturing in Ontario has grown steadily since 1990, while automotive assembly has experienced sharp growth, followed by a steep decline.

The implication of the above is that food manufacturing should legitimately be viewed as a key manufacturing industry in Ontario, particularly as the auto industry suffers. Horticultural processing is a key component of Ontario food manufacturing, but its location in Ontario is highly dependent upon an efficient local supply of farm products to supply it. Elements that impose additional cost on Ontario farm production that do not provide offsetting efficiency benefits, and do not also impact competing regions thus threaten Ontario food manufacturing.

Figure 3.1 Value Added in Ontario Food Processing, Fruit and Vegetable and Specialty Food Manufacturing, and Automotive Assembly



3.2 *Horticulture in Ontario Food Marketing Strategy*

Horticulture is a critical component of food marketing strategy in Ontario. This is clear in a number of initiatives by government, most notably under the *Foodland Ontario* banner. The objectives of the Foodland program include, “maintaining consumer intent-to-purchase (Ontario) over 80%, thereby assisting Ontario producers to maximize their market share.” To do so, Foodland Ontario promotes Ontario product in stores, coordinates with farm groups in product marketing, and conducts market research in support of Ontario product⁵.

A major component of the Foodland program relates to in-season Ontario fruits and vegetables. The information reprinted in Appendix Table 5 from the Foodland Ontario website provides some evidence of this. As part of its communication function, Foodland advises consumers with regard to when Ontario horticultural produce will be available for sale.

Ontario fruits and vegetables are also a core component of the local food movement, which is supported by provincial government. One example is Local Food Plus, an organization that establishes standards and certifies farmers and processors as “local”⁶. This facilitates the availability of local Ontario product in food service and institutions for consumers wishing to follow a local diet. More broadly, the Ontario government supports local food marketing under the Ontario Market Investment Fund. The purpose of the program is to “improve consumer access to locally produced foods by supporting industry and local food network marketing and coordination efforts”⁷. To date, many of the provincial and regional projects funded under this program are for fruits and vegetables, or include fruits and vegetables as part of an Ontario product mix.

3.3 *Horticulture in Ontario Land Use and Tourism Development*

As Ontario moves to centralize aspects of land use planning, agriculture, and by extension horticulture, are important components. In particular, the 2005 Ontario *Greenbelt Act* brought almost 2 million acres in Niagara and the periphery of the Greater Toronto Area under provincial land use regulation. Under Section 5 of the Greenbelt Act, the following are presented as its objectives:

- (a) to establish a network of countryside and open space areas which supports the Oak Ridges Moraine and the Niagara Escarpment;
- (b) to sustain the countryside, rural and small towns and contribute to the economic viability of farming communities;
- (c) to preserve agricultural land as a continuing commercial source of food and employment;

⁵ For more information on Foodland Ontario see <http://www.foodland.gov.on.ca/english/about.html>

⁶ For more information, see <http://www.localfoodplus.ca/index.htm>

⁷ For more information, see <http://www.omafra.gov.on.ca/english/food/domestic/omif/omif.html>

- (d) to recognize the critical importance of the agriculture sector to the regional economy;
- (e) to provide protection to the land base needed to maintain, restore and improve the ecological and hydrological functions of the Greenbelt Area;
- (f) to promote connections between lakes and the Oak Ridges Moraine and Niagara Escarpment;
- (g) to provide open space and recreational, tourism and cultural heritage opportunities to support the social needs of a rapidly expanding and increasingly urbanized population;
- (h) to promote linkages between ecosystems and provincial parks or public lands;
- (i) to control urbanization of the lands to which the Greenbelt Plan applies;
- (j) to ensure that the development of transportation and infrastructure proceeds in an environmentally sensitive manner;
- (k) to promote sustainable resource use

Thus, the objectives of the Greenbelt relate heavily to the protection and development of agriculture, and simply due to the location of the protected area, horticulture constitutes a very large component of agriculture.

In support of the Greenbelt legislation, the Friends of the Greenbelt Foundation was created to support activities in the Greenbelt, based on a grant of \$25 million from the Ontario government. To date, the preponderance of its funded projects has been in agriculture, and many are explicitly in horticulture. Appendix Table 4 presents data on funded projects obtained in August 2009, and highlights the agriculture-food related projects. These amount to more than \$6 million, or about 69% of the projects funded by the Friends of the Greenbelt since its inception.

3.4 Observations

The sections above demonstrate that horticulture is an important aspect of the Ontario economy, and that this extends beyond basic agricultural industries.

- Food processing is among the leading manufacturing industries in Ontario, especially as other manufacturing sectors have declined, and processing of horticultural crops is a core component.
- Consumers have articulated an interest in local food and government has invested in promoting Ontario food marketing, of which horticulture is core aspect.
- Finally, Ontario has advocated land use policy changes that actively promote agriculture and horticulture.

Government has supported much of this multi-faceted contribution to the Ontario economy, and appears to have implicitly assumed that this role will continue despite the losses resulting from the full implementation of the minimum wage increase. The point

that imposing losses through minimum wage increase on horticulture is at odds with other priorities of government has been missed.

4. Policy Alternatives for Horticulture under Mandated Minimum Wage Increases

The above sections identify that real material losses will be suffered by Ontario horticulture as the minimum wage increase is implemented. The above sections also anticipate a decrease in the horticultural segments' eligibility for assistance under existing margin-based programs. This will occur as labour costs increase significantly, without any offsetting increase in revenue, and with limited means of substituting capital for labour. At the same time, it is clear that horticulture is valued in providing growth through food manufacturing, local food, and in the Greenbelt plan. Thus, government policy is at odds with itself as it creates injury to horticulture just as it is counting on horticulture as part of its broader set of priorities. This section considers the nature of compensation alternatives for Ontario horticulture that could bring congruence back to policy for horticulture.

4.1 Nature of Compensation Required

Based on the above, there are two related effects of the minimum wage increase that harm Ontario horticulture. First, there are direct unrecoverable cost increases that generate losses in net income. Second, there are losses based on the reduction in eligibility for stabilization payments as reference margins decrease. As a result, two types of compensation programs warrant consideration- one that compensates for losses, and another that compensates for lost risk management program eligibility.

4.2 Compensation for Lost Earnings

As observed in Section 2, total annual cost increases relative to 2007 are expected to be almost \$73 million in the horticultural segment by 2010. Acknowledging that horticulture is not broadly in a position to recover from this cost increase by mechanizing operations, laying off workers, or by increasing product prices, a significant proportion of that \$73 million loss is realized as a cash loss to producers. The apparent instruments available to deal with this loss are the following:

1. *Ad hoc* business risk management programming
2. Establishment of an industry capital fund
3. Use of the income tax system to compensate increased costs

With regard to the first instrument, a deficiency payment scheme could be designed to offset the effect of a portion of the increased due to the increased minimum wage. Since the effective cost increase will differ across crops based on the extent of labour use and substitution of capital for labour, a crop-based cost of production model can be used to trigger and allocate deficiency payments. From a program design perspective, it would be necessary to include a deductible provision in the payment trigger to create incentives for adjustment to the higher labour cost environment. Alternatively, based on a cost increase estimate, funds could be forwarded to producers as an AgriInvest top up and drawn out to compensate for the minimum wage increase.

Another alternative for loss compensation is to capitalize a portion of the annualized losses due to the minimum wage increase into a development fund that can be drawn upon by industry to fund investments that mitigate labour cost. Under this concept, industry would apply to the fund for specific projects that reduce labour costs or otherwise generate value. These could range from technology investments that reduce labour costs, investment in research targeted to reduce labour use, and other types of investment that increase productivity and value. The advantage of this type of scheme is that it is flexible and can be used to help industry reposition itself; for example, this type of industry compensation approach was used when the Crow freight subsidy was phased out in western Canada. The disadvantage is that the investments can take time to pay off and some of the needs are immediate.

Finally, changes in the income tax system can be used to provide assistance for horticulture in response to the minimum wage. By creating a tax credit for arm's length labour expense, a means can be devised in which producers are made whole with the increased labour cost burden, on an after tax basis. This type of approach has been articulated as a means of increasing the uptake of certified seed⁸. The advantage of this approach is that it provides assistance to producers without requiring cash from government. The disadvantage is that it is regressive (producers with higher marginal tax rates get relatively more advantage from it) and it requires federal support.

4.3 Compensation for Lost CAIS/AgriStability Reference Margin

A range of alternatives could be employed to mitigate the erosion of CAIS/AgriStability reference margins. First, any form of direct payment to producers that can be included as eligible revenue for the purposes of the *reference* margin calculation offers the prospect of stabilizing reference margins, provided it is proportional to the increase in labour expense. Under CAIS, program payments from sources other than CAIS were eligible revenue in the production margin calculation, but not in the reference margin calculation, so a change would be required for a deficiency payment to stabilize the reference margin.

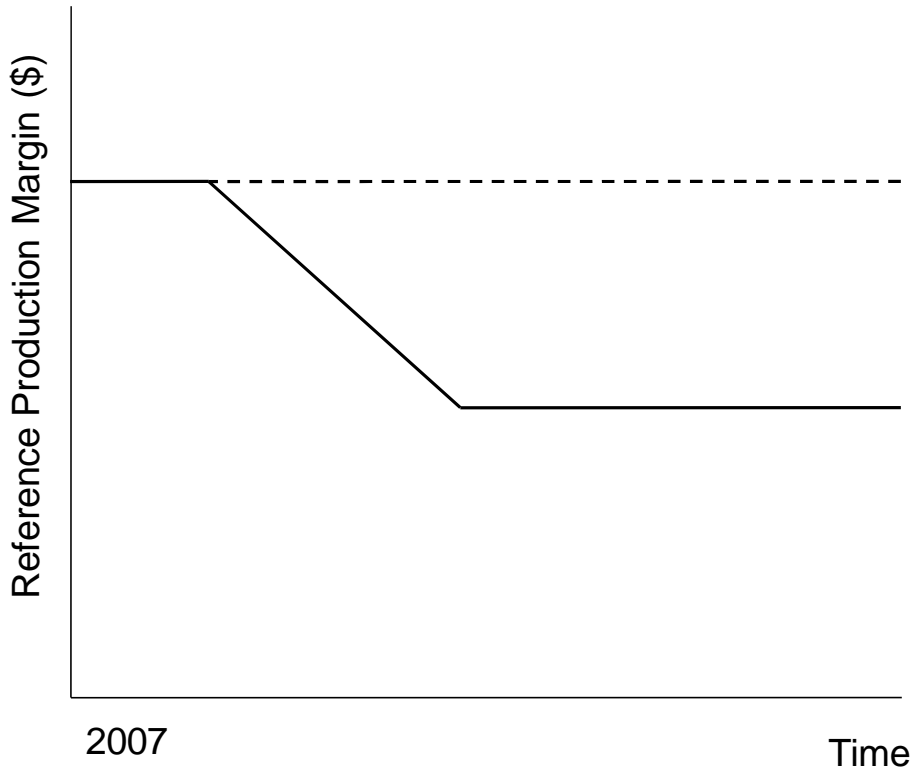
Alternatively, a change in the structure of reference and production margins could be used to mitigate the erosion in reference margins. The notion is illustrated in Figure 4.1, which is consistent with the observations in Figures 2.1 and 2.2. In the absence of mitigating measures, the reference margin declines as per the solid line in the figure. In anticipation of this, adjustments to the reference margin are made that restore the reference margin to pre-increased labour cost levels, in effect moving the solid line up to the dashed line in the figure.

One means of implementing the above is to adjust production margins from the post-minimum wage increase period as they enter the reference calculation by the anticipated increase in labour costs. This scheme could both compensate for lost profitability due to the labour cost increase, and mitigate the erosion of reference margin. A related alternative is to give horticultural producers the option to make labour an ineligible expense under the program. This would immediately increase the production margins

⁸ <http://cdnseed.org/pdfs/Fact%20Sheets/EconomicStimulus.pdf>

and reference margin. This would then require compensation for losses due to increases in labour expense using one of the mechanisms described in section 4.2, under the assumption that these payments would be excluded from the reference margin calculation.

Figure 4.1 Erosion of CAIS/AgriStability Reference Margin



5. Conclusions

The purpose of this paper was to provide some understanding regarding the implications of the minimum wage increase on the Ontario horticultural sector, and to provide broad suggestions for mitigation. To do so, the cost implications were explored at the individual farm and aggregate levels, as well as in terms of stabilization eligibility. Next, the broader policy context for Ontario horticulture and the apparent consistency with other initiatives were examined. Finally, alternatives to compensate the horticultural segment were discussed.

The results showed the following:

- Increased labour expenses decrease profitability. When an enterprise that generally has few alternatives to substitute for labour is examined (peaches), a 28% increase in manual labour expense decreases profitability by almost 50%. Since little opportunity currently exists to adjust to this labour cost change in an industry like peaches, these constitute real cash losses to farmers.
- Costs to growers are estimated at about \$73 million. Good data do not exist from which to calculate aggregate increases in labour cost due to the minimum wage increases. However, based on actual reported expenditure on labour, and assumptions regarding the structure of labour costs in edible horticulture, costs of up to \$73 million are evident over the full implementation period.
- Grower eligibility for stabilization funding will decrease significantly. Horticulture stands to lose a significant portion of reference production margins, which define the segment's eligibility for stabilization funding according to production margin. Compared with the current period, this could fall by 35% by 2014, using apples as an illustration. Moreover, it should be recognized that production margin is an instrument developed to compare a subset of costs to revenue as criteria for subsidy eligibility, and is not a representation of farmers' income. For farmers, the reality is that there are many real expenses not accounted for under the production margin calculation. Production margin calculations thus structurally overstate true farm incomes, so the observed declines in production margin understate the true impact on farm households.
- Government legislation affecting horticulture is inconsistent. Horticulture is a significant segment of the Ontario economy, and this significance extends well beyond agriculture. Indeed, government has explicitly supported initiatives drawing on horticulture in local food marketing, land use planning, and must clearly be counting on horticultural processing to stabilize Ontario's suffering manufacturing sector. Thrusting such a sharp increase in minimum wages on a labour-dependent segment is inconsistent with the broader contribution expected from horticulture.

The view that emerges is of an industry segment with important reaches into the urban economy that is expected to form an important part of Ontario rural culture, but one which is uniquely vulnerable to mandated increases in labour costs. It is also a beleaguered segment that has had to survive a host of damaging problems, such as increased penetration of imports (including in-season imports); a lagging regulatory system that limits the inputs farmers have access to, yet allows for import penetration of products with access to products not approved here; a sharply strengthening currency that structurally removes revenue from the system; and recent losses in domestic processing capacity.

The minimum wage increase thus artificially piles sharp labour cost increases on an industry that is already struggling. Moreover, it puts public policy at odds with itself, and confuses the public interest that government has articulated for horticulture. This warrants corrective action to restore profitability to Ontario horticulture as it relates to the minimum wage increase. The apparent result of inaction will be a catastrophe for much of Ontario horticulture.

References

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<http://www.fin.gov.on.ca/english/publications/2007/Gunderson/index.html>

Appendix

Table 1 Ontario Seasonal Agricultural Worker Program Participation and Total Horticultural Farms, 2007

	Farms	Workers	Workers per Farm
SAWP Edible Horticulture Farms	1017	13,665	13.4
SAWP Inedible Horticulture Farms	413	3,885	9.4
Total SAWP Participation	1430	17,550	12.3
Total Ontario Horticultural Farms	4080		

Source: Foreign Agricultural Resource Management Services (FARMS) and Statistics Canada Tax-filer data

	Eligible Expenses	\$1,763,266.97	\$1,782,664.90	\$1,827,724.39	\$1,872,763.76	\$1,872,763.76	\$1,872,763.76	\$1,872,763.76	\$1,872,763.76	\$1,872,763.76
	Labour	\$506,383.81	\$525,781.74	\$570,841.23	\$615,880.61	\$615,880.61	\$615,880.61	\$615,880.61	\$615,880.61	\$615,880.61
	Production Margin	\$636,372.03	\$616,974.10	\$571,914.61	\$526,875.24	\$526,875.24	\$526,875.24	\$526,875.24	\$526,875.24	\$526,875.24
	Reference Margin	\$636,372	\$636,372	\$636,372	\$629,906	\$608,420	\$571,921	\$541,888	\$526,875	\$526,875
Potatoes		2007	2008	2009	2010	2011	2012	2013	2014	2015
	Eligible Income	\$816,343	\$816,343	\$816,343	\$816,343	\$816,343	\$816,343	\$816,343	\$816,343	\$816,343
	Eligible Expenses	\$553,279.43	\$557,834.95	\$568,416.98	\$578,994.28	\$578,994.28	\$578,994.28	\$578,994.28	\$578,994.28	\$578,994.28
	Labour	\$118,922.09	\$123,477.61	\$134,059.64	\$144,636.94	\$144,636.94	\$144,636.94	\$144,636.94	\$144,636.94	\$144,636.94
	Production Margin	\$263,063.15	\$258,507.63	\$247,925.59	\$237,348.29	\$237,348.29	\$237,348.29	\$237,348.29	\$237,348.29	\$237,348.29
	Reference Margin	\$263,063	\$263,063	\$263,063	\$261,545	\$256,499	\$247,927	\$240,874	\$237,348	\$237,348
Tender Fruit		2007	2008	2009	2010	2011	2012	2013	2014	2015
	Eligible Income	\$219,580	\$219,580	\$219,580	\$219,580	\$219,580	\$219,580	\$219,580	\$219,580	\$219,580
	Eligible Expenses	\$152,636.88	\$155,653.79	\$162,661.77	\$169,666.63	\$169,666.63	\$169,666.63	\$169,666.63	\$169,666.63	\$169,666.63
	Labour	\$78,756.57	\$81,773.47	\$88,781.46	\$95,786.32	\$95,786.32	\$95,786.32	\$95,786.32	\$95,786.32	\$95,786.32
	Production Margin	\$66,942.95	\$63,926.04	\$56,918.05	\$49,913.20	\$49,913.20	\$49,913.20	\$49,913.20	\$49,913.20	\$49,913.20

	Reference Margin	\$66,943	\$66,943	\$66,943	\$65,937	\$62,596	\$56,919	\$52,248	\$49,913	\$49,913
Vegetables		2007	2008	2009	2010	2011	2012	2013	2014	2015
	Eligible Income	\$667,076	\$667,076	\$667,076	\$667,076	\$667,076	\$667,076	\$667,076	\$667,076	\$667,076
	Eligible Expenses	\$456,520.47	\$463,322.56	\$479,123.16	\$494,916.71	\$494,916.71	\$494,916.71	\$494,916.71	\$494,916.71	\$494,916.71
	Labour	\$177,568.98	\$184,371.07	\$200,171.67	\$215,965.21	\$215,965.21	\$215,965.21	\$215,965.21	\$215,965.21	\$215,965.21
	Production Margin	\$210,555.68	\$203,753.59	\$187,952.99	\$172,159.45	\$172,159.45	\$172,159.45	\$172,159.45	\$172,159.45	\$172,159.45
	Reference Margin	\$210,556	\$210,556	\$210,556	\$208,288	\$200,754	\$187,955	\$177,424	\$172,159	\$172,159

Table 3 Farmgate Value of Fruit Sales

Crop	Farm Value, Fresh Sales (\$'000)	Farm Value, Processing Sales (\$'000)
Apples	55,000	18,000
Apricots	190	-
Blueberries, High Bush	3,820	-
Blueberries, Low Bush	100	-
Watermelons	2,800	-
Melons, Other	3,340	-
Cherries, Sour	40	3,341
Cherries, Sweet	x	X
Grapes, Labrusca	3,500	1,220
Grapes, Vinifera	70	78,300
Nectarines	2,900	-
Peaches	29,000	1,433
Pears	x	X
Plums and Prunes	2,300	-
Raspberries	3,400	-
Strawberries	19,200	220
Total	125,660	182,034
Total Fresh and Processing	307,694	

Source: OMAFRA

Table 4 Farmgate Value of Vegetable Sales

Crop	Farm Value, Fresh Sales (\$'000)	Farm Value, Processing Sales (\$'000)
Asparagus	10,400	-
Beans, Green and Wax	x	X
Beets	x	X
Broccoli	x	-
Brussels Sprouts	x	X
Cabbage, Chinese	x	X
Cabbage, Other	x	X
Total Carrots	13,500	4,567
Cauliflower	x	X
Celery	2,350	2,025
Corn, Sweet	19,500	8,500
Cucumbers and Gherkins	x	X
Cucumbers, Greenhouse	130,659	-
Garlic	x	X
Leeks	1,730	-
Total Lettuce	4,150	-
Mushrooms	173,431	9,526
Onions, Dry	17,800	3,500
Onions, Green	3,500	-
Parsley	1,110	-
Parsnips	600	-
Peas, Green	x	X
Peppers	8,310	4,395
Peppers, Greenhouse	127,563	-
Pumpkins	x	X

Squash and Zucchini	7,280	410
Radishes	1,355	-
Rhubarb	150	-
Rutabagas^g	5,000	700
Spinach	3,100	-
Tomatoes, Field	10,530	59,184
Tomatoes, Greenhouse	204,579	0
Total	746,597	92,807
Total Fresh and Processing	839,404	

Source: OMAFRA

Table 5

Availability Guide: Ontario Fruits & Vegetables

Note: Availability dates may change by several weeks with respect to rare varieties and/or weather conditions

Commodity	J	F	M	A	M	J	J	A	S	O	N	D
<u>Apples</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Apricots</u>							J	A				
<u>Asian Vegetables</u>						J	J	A	S	O	N	D
<u>Asparagus</u>					M	J						
<u>Beans – Green/Wax</u>						J	J	A	S	O		
<u>Beets</u>	J	F	M	A			J	A	S	O	N	D
<u>Blueberries</u>							J	A	S			
<u>Broccoli</u>						J	J	A	S	O		
<u>Brussels Sprouts</u>									S	O	N	
<u>Cabbage</u>	J	F	M	A		J	J	A	S	O	N	D
<u>Carrots</u>	J	F	M	A	M		J	A	S	O	N	D
<u>Cauliflower</u>						J	J	A	S	O	N	
<u>Celery</u>							J	A	S	O		
<u>Cherries</u>						J	J					
<u>Corn</u>							J	A	S	O		
<u>Crabapples</u>									S	O	N	
<u>Cranberries</u>										O		
<u>Cucumber – Field</u>						J	J	A	S	O		
<u>Cucumber – Greenhouse</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Currants – Red/Black</u>							J	A				
<u>Eggplant</u>								A	S	O		
<u>Garlic</u>	J	F					J	A	S	O	N	D
<u>Gooseberries</u>							J	A				
<u>Grapes</u>								A	S			
<u>Leeks</u>	J	F						A	S	O	N	D
<u>Lettuce – Assorted</u>						J	J	A	S	O		
<u>Lettuce – Greenhouse</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Muskmelon</u>								A	S			

<u>Mushrooms</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Nectarines</u>								A	S			
<u>Onions - Green</u>						J	J	A	S	O	N	
<u>Onions - Cooking</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Onions - Spanish/Red</u>									S	O	N	D
<u>Parsnips</u>	J	F	M	A				A	S	O	N	D
<u>Peaches</u>							J	A	S			
<u>Pears</u>								A	S	O	N	D
<u>Peas - Green</u>						J	J					
<u>Peas - Snow</u>						J	J	A	S			
<u>Peppers - Field</u>							J	A	S	O		
<u>Peppers - Greenhouse</u>			M	A	M	J	J	A	S	O	N	
<u>Plums</u>							J	A	S	O		
<u>Potatoes</u>	J	F	M				J	A	S	O	N	D
<u>Radicchio</u>						J	J	A				
<u>Radishes</u>					M	J	J	A	S	O	N	
<u>Rapini</u>							J	A	S	O		
<u>Raspberries</u>							J	A	S			
<u>Rhubarb</u>	J	F	M	A	M	J						
<u>Rutabaga</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Spinach</u>					M	J	J	A	S	O		
<u>Sprouts</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Squash</u>	J	F	M					A	S	O	N	D
<u>Strawberries</u>						J	J					
<u>Sweet Potatoes</u>	J	F	M	A	M	J	J	A	S	O	N	D
<u>Tomatoes - Field</u>							J	A	S	O		
<u>Tomatoes - Greenhouse</u>			M	A	M	J	J	A	S	O	N	
<u>Zucchini</u>							J	A	S	O		

Source: Foodland Ontario

Table 6 Friends of the Greenbelt Project Funding, Cumulative as of August, 2009

	Agricultural Projects	All Projects
Greenbelt Partners in Preservation, 4-H Ontario, \$200,000		200,000
Agriculture Hits the Trails, AGCare, \$180,000 over three years	180,000	180,000
Escarpment Blues Benefit & Greenbelt Profiles, Alternatives Journal, \$5,000		5,000
<i>Niagara Greenbelt Routes and Discovery Centres, Brock University / Tourism Niagara, \$219,000</i>		219,000
Paint the Town Green Through Community Mapping, Caledon Countryside Alliance, \$30,000		30,000
International Greenbelts Study, Canadian Institute for Environmental Law and Policy, \$15,000		15,000
New Farmers in the Greenbelt, Centre for Land and Water Stewardship at the University of Guelph, \$62,000	62,000	62,000
New Farmers to Grow - New Places to Go, Centre for Land and Water Stewardship at the University of Guelph, \$400,000	400,000	400,000
Clean Air & Environment Guide 2007, Clean Air Partnership, \$10,070		10,070
Gateway to the Greenbelt, Conservation Foundation of Greater Toronto, \$105,000		105,000
Rouge Park's Little Rouge Corridor Ecological Restoration Initiative, Conservation Foundation of Greater Toronto, \$147,300		147,300
Greenbelt Community Outreach Program, Conservation Halton, \$75,000		75,000
Promoting Corporate Social Responsibility in the Greenbelt, Corporate Knights Foundation, \$10,000		10,000
Currents Magazine, Credit Valley Conservation Foundation, \$12,000		12,000
An Assessment of the Greenbelt's Ecosystem's Non-Market Values, David Suzuki Foundation, \$120,000		120,000
Savour Durham Tour, Durham Farm Fresh Marketing Association, \$36,500	36,500	36,500
Increasing Organic Production in the Greenbelt through Farmer-to-Farmer Training and Support, Ecological Farmers Association of Ontario, \$150,000	150,000	150,000



Greenbelt Farm to School Program, EcoSource, \$106,000		106,000
Smart Living Guide 2007, Eneract, \$2,120		2,120
Supporting the Greenbelt, Environmental Defence Canada, \$600,000 over two years		600,000
Eat Local Map, Environment Hamilton, \$15,000	15,000	15,000
Farm Fresh Hamilton, Environment Hamilton, \$10,000	10,000	10,000
Environment Hamilton's Farm Fresh Hamilton, Conserver Society of Hamilton, \$180,000	180,000	180,000
18th Annual Organic Advocates Feast of Fields, Everdale Environmental Learning Centre, \$9,500	9,500	9,500
Greenbelt Field to Fork Celebration at the Don Valley Brick Works, Evergreen, \$10,000	10,000	10,000

Local Farmers' Food Terminal, Evergreen, \$12,000	12,000	12,000
Promotion of "My Markets", Farmers' Markets Ontario, \$50,000	50,000	50,000
Promoting Fruit Wine at Farmers' Markets, Farmers' Markets Ontario, \$2,000	2,000	2,000
Supporting Greenbelt Farmers' Markets, Farmers' Markets Ontario, \$1,000,000 over three years	1,000,000	1,000,000
Promoting the Grape Growing Industry through the Niagara Wine Festival, Grape Growers of Ontario, \$15,000	15,000	15,000
Wine Grape Replant Program, Grape Growers of Ontario, \$50,000	50,000	50,000
Green Living Show 2007, Green Living Enterprises, \$25,000		25,000
Greenbelt Information Piece, Green Living Magazine, \$15,000		15,000
Conservation among Rural Landowners, Hamilton Naturalists' Club, \$12,550		12,550
10K Nature Walk for the Environment, Hamilton Naturalists' Club, \$5,000		5,000
Visitors' Guide & Map, Hills of Headwaters Tourism Association, \$9,000		9,000
Headwaters Tourism Program, Hills of Headwaters Tourism Association, \$100,000		100,000
A Farming Future for the Eastern Greenbelt, Kawartha Heritage Conservancy, \$45,000	45,000	45,000
Assisting Farmers with Environmentally-Friendly Farm Stewardship, Lake Simcoe Region Conservation Authority, \$1,000,000	1,000,000	1,000,000
Assisting Farmers with Environmentally-Friendly Farm Stewardship, Lake Simcoe Region Conservation Authority, \$1,400,000	1,400,000	1,400,000
Food Buyers for Greenbelt Farmers, Local Food Plus, \$1,000,000 over three years	1,000,000	1,000,000
Greenbelt Youth Leaders, Niagara College, \$25,000		25,000
Niagara Escarpment Development Tracking System & Southern Ontario Land Resource Information System, Niagara Escarpment Foundation, \$178,150		178,150
Niagara Agri-Education Day, Niagara North Federation of Agriculture, \$25,000		25,000

	25,000	
Niagara Peach Celebration Day 2007, Niagara-on-the-Lake Chamber of Commerce, \$40,000	40,000	40,000
Toronto Niagara Bike Train, Niagara-on-the-Lake Chamber of Commerce, \$5,000		5,000
Growing the Niagara Culinary Trail, Niagara Peninsula Community Resource Centre, \$200,000	200,000	200,000
Revitalizing the Ball's Falls Conservation Area, Niagara Peninsula Conservation Foundation, \$200,000		200,000
Ontario Fruit and Vegetable Convention 2006, Niagara Peninsula Fruit & Vegetable Growers' Association, \$5,000	5,000	5,000
Marketing Farm Visits in the Greenbelt, Ontario Farm Fresh Marketing Association, \$25,000	25,000	25,000
Keeping Greenbelt Farmland in Farming, Ontario Farmland Trust, University of Guelph, \$75,000	75,000	75,000

Ontario Fruit and Vegetable Convention 2007, Ontario Fruit and Vegetable Convention, \$25,000	25,000	25,000
Ontario Fruit and Vegetable Growers' Association Annual General Meeting 2007, Ontario Fruit and Vegetable Growers' Association, \$2,000	2,000	2,000
Viability of the Fruit and Vegetable Industry in the Greenbelt Study, Ontario Fruit and Vegetable Growers' Association, \$98,000	98,000	98,000
Leading Edge Conference 2006, Ontario Heritage Trust, \$10,000		1,000
Greenbelt Forum 2007, Ontario Institute of Agrologists, \$11,900		11,900
Greenbelt Connections, Ontario Nature - Federation of Ontario Naturalists, \$235,000		235,000
Green Power in the Greenbelt, Ontario Sustainable Energy Association, \$50,000		50,000
Alphabet City FOOD Festival, Phoenix Community Works Foundation, \$25,000	25,000	25,000
Sarah Harmer's Escarpment Blues, Planet in Focus Foundation, \$2,500		2,500
Port Perry Agricultural Fair, Port Perry Agricultural Society, \$10,000	10,000	10,000
A Clean Lake Simcoe, Rescue Lake Simcoe Charitable Foundation, \$40,000		40,000
Cootes to Escarpment Conservation and Land Management Strategy, Royal Botanical Gardens, \$185,000		185,000
Showcasing the Greenbelt at the Royal, Royal Winter Fair, \$600,000 over three years	600,000	600,000
Scarborough Taste Culinary Festival: World's Largest Multicultural Salad, Shri S.S. Jain Foundation, \$32,500	32,500	32,500
Brampton Northwest Urban Boundary Expansion, Sierra Legal Defence Fund, \$35,000		35,000
Greenbelt Lecture Series 2007, St. George's Church, \$15,000		15,000
Green-belting Toronto's Governments, Toronto Environmental Alliance, \$250,000		250,000
Greenbelt Food from Home, Toronto Environmental Alliance, \$23,000	23,000	23,000



Trails in the Valley Festival, Uxbridge Chamber of Commerce, \$30,000		30,000
Winemaking in Ontario: An Environmental Charter for the Wine Industry, Wine Council of Ontario, \$49,500	49,500	49,500
Total	6,862,000	9,948,590
Agriculture as Proportion of Total	69%	

Source: <http://www.greenbelt.ca/greenbelt-grants/grants-made-by-the-friends-of-the-greenbelt-foundation> accessed August 30th, 2009.