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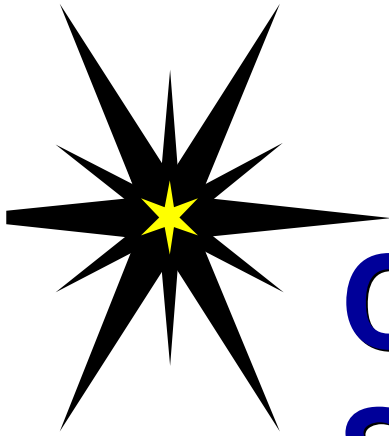
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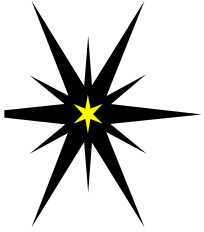
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# Canada's Net Income Stabilization Account (NISA)

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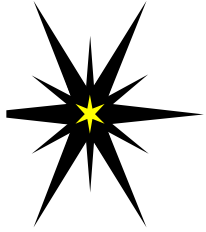
Alan Asselstine



# NISA

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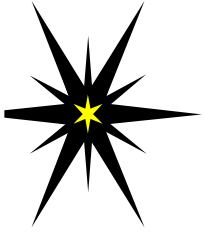
- ★ How NISA Works
- ★ Program Data
- ★ History
- ★ Farm Incomes 1998 and 1999



# How NISA Works - General

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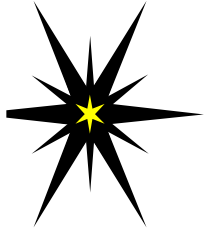
- ★ In good years participants can make a deposit into their NISA account.
- ★ After a low income year, participants can withdraw funds from their NISA account.
- ★ The governments encourages farmers to use their NISA account by
  - matching eligible deposits
  - paying bonus interest on part of the NISA accounts.



# How NISA Works - Deposits

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- ★ Participants can and do make annual deposits into their NISA account.
- ★ The governments will match most participant deposits.
- ★ The amount matched is determined by the participant's eligible net sales.



# How NISA Works - Withdrawals

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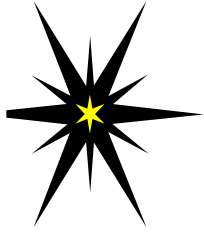
- ★ If the participant's gross margin falls below their 5 year average gross margin

OR

- ★ If income from all sources falls below the minimum income threshold

THEN

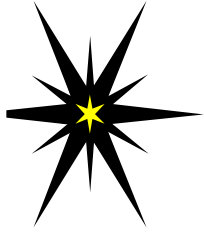
- ★ Participants receive a notice of their withdrawal entitlement



# How NISA Works - Accounts

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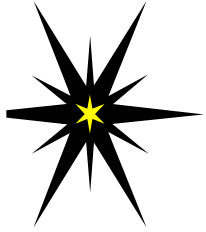
- ★ Both the participant's deposits and any government contribution are put and kept in the individual account.
- ★ Interest earned and the bonus interest are also credited to the participants account.
- ★ Only the participants can make withdrawals from his account.



# How NISA Works - The Process

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- ★ Both deposit and withdrawal entitlements are determined by participants eligible net sales for the year.
- ★ Participants file their NISA income and expense information with their Income Tax form.
- ★ The sooner (after the end of the year) that the participant files his taxes the sooner he is eligible to deposit or withdraw from his NISA account.



# How NISA Works - The Process

**NISA  
Application**



**DWON**  
(Deposit Withdrawal Options  
Notice)



**DWON  
Response**



**CON**  
(Confirmation Notice)

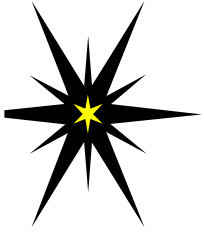
- ★ **Deadline: June 15 - Individuals**  
**June 30 - Corporations/  
Co-operatives**

- ★ **Issued within 60 days of receipt of the  
application**

- ★ **Deadline: December 31 or 60 day after the  
DWON was issued**

- ★ **Participant's deposit or withdrawal request  
is processed**

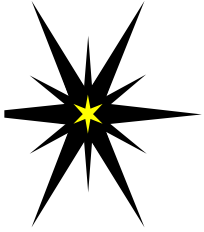
- ★ **Participant's confirmation of transactions  
processed**



# NISA Data

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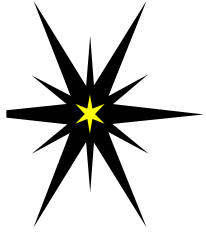
- ★ Individual participant data less personal identifiers are available to AAFC staff for program analysis.
- ★ The data consists of
  - participant deposits and withdrawals
  - participant income and expense data
- ★ Participant data can be linked over years



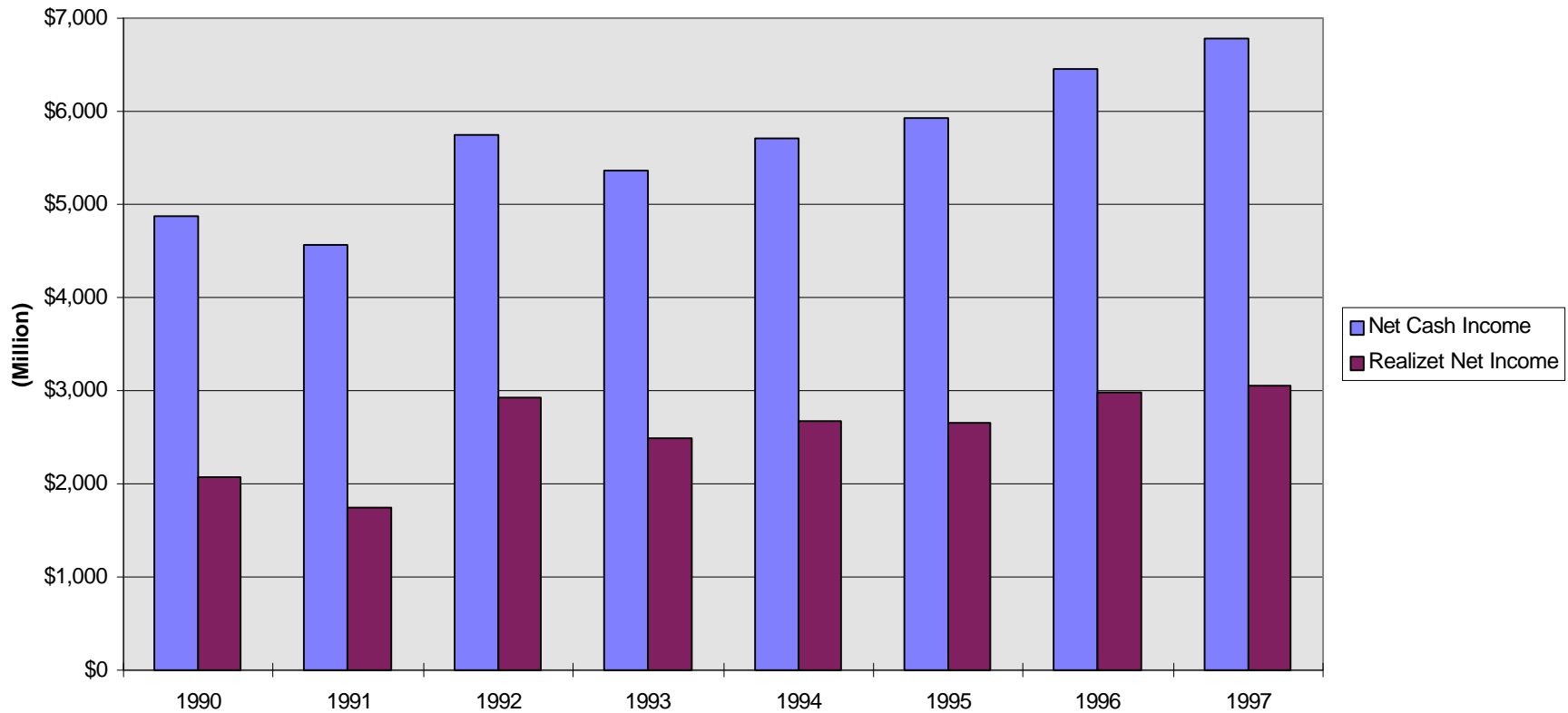
# NISA Data - Other

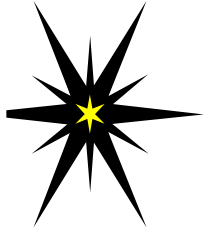
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- ★ In addition to the regular NISA data AAFC conducted a survey of participants on their withdrawal decisions.
- ★ Aggregate Farm Income data is also used in this analysis.

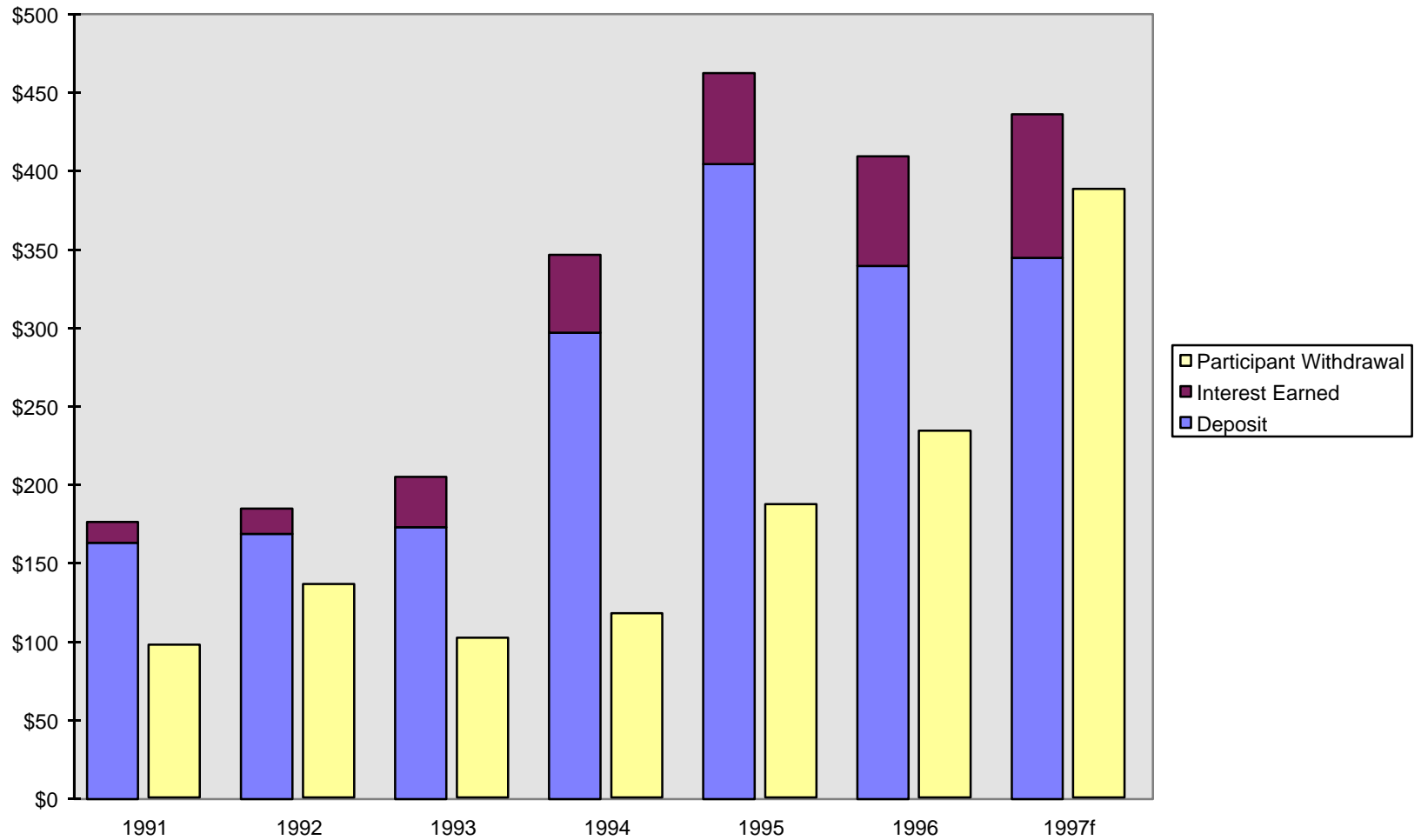


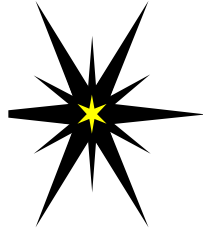
# History - Farm Net Income





# History - Participant Transactions





# History - Account Balances

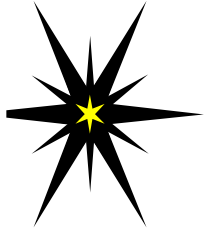
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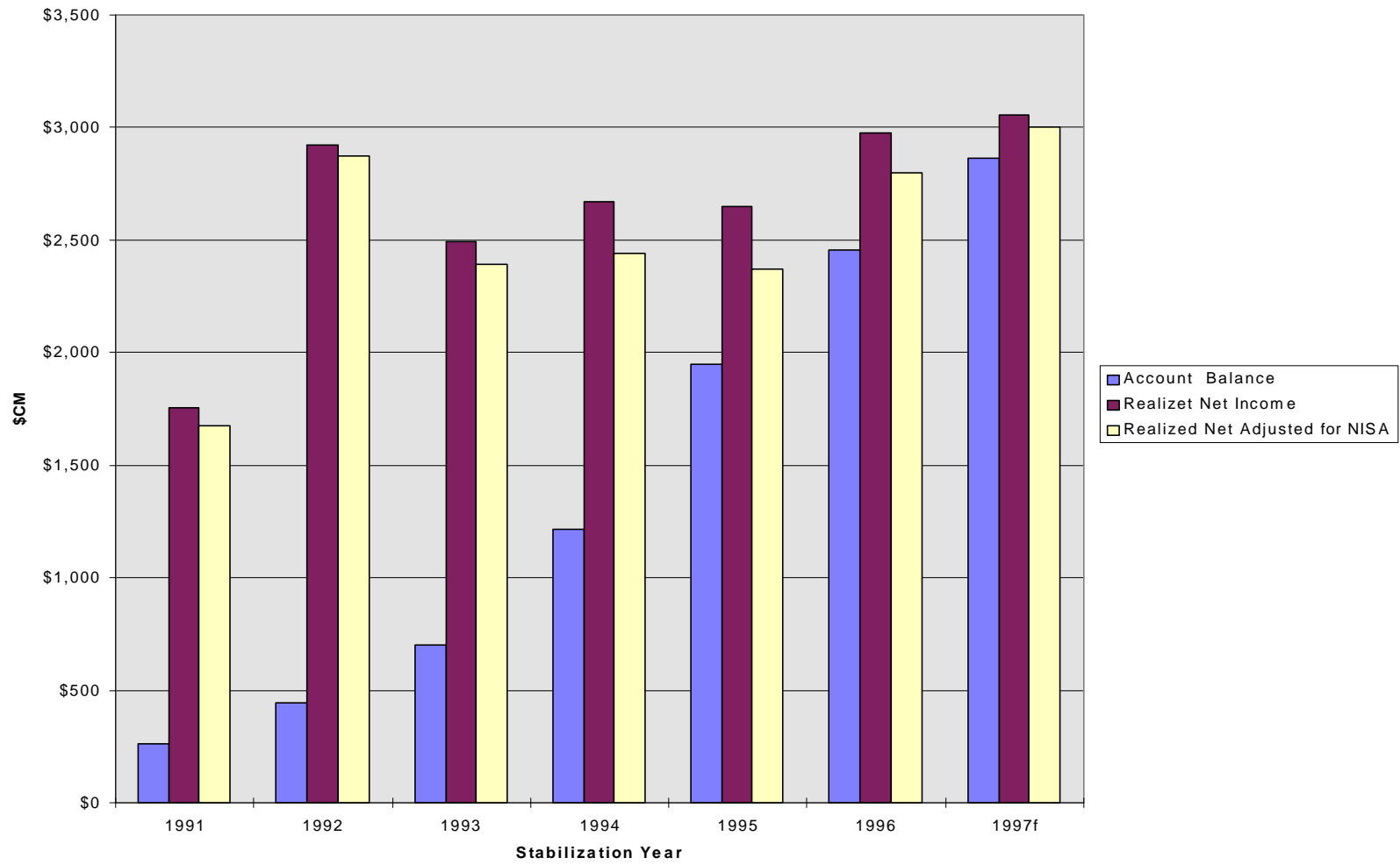
(\$C Million)

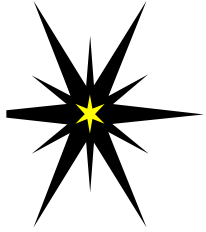
Stabilization Year	Participant Net Deposits	Government Contributions	Total	Accumulated Balance
1991	73.3	129.9	203.2	262.3
1992	43.8	136.9	180.7	443.0
1993	98.4	157.2	255.6	698.6
1994	203.0	315.8	518.8	1,217.4
1995	267.7	463.0	730.7	1,948.1
1996	168.0	341.7	509.7	2,457.8
1997f	41.0	365.3	406.3	2,864.1

1997f is a forecast



# History - Account Balances

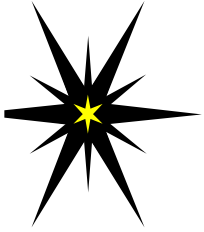




# History - Withdrawals

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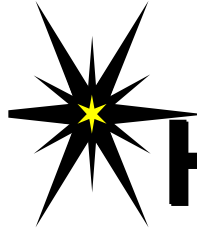
- ★ For stabilization year 1996 - 1 in 2 NISA participants had the option to withdraw money from their accounts.
- ★ ... About 40% of those triggering withdrawals took them.



# History - Withdrawals

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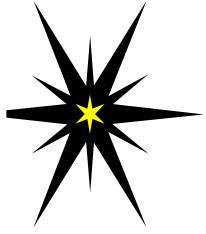
- ★ Why did farmers leave about \$400 million untouched in their accounts?
- ★ NISA survey respondents:
  - 36 % felt it might be needed later;
  - 24% handled the shortfall differently;
  - 23% were in better financial positions when they would have received their money.



# History - Withdrawal Decisions

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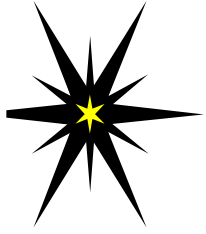
- ★ Participants make their withdrawal decision months after the end of the year.
- ★ Withdrawal behaviour is motivated by the particular circumstance they find themselves in at that point in time; and
- ★ Since it is their account, they must consider their short, medium and long-term objectives.



# History - Factors Influencing Withdrawal Decisions

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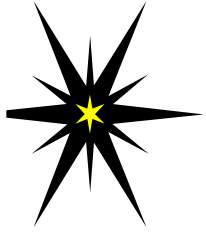
- ★ Cash flow requirements
- ★ Actual and expected incomes
- ★ Availability of other sources of money
- ★ Opportunity costs of taking a withdrawal
- ★ Short, medium, long-term intentions



# History - Provinces and Sub-Sectors

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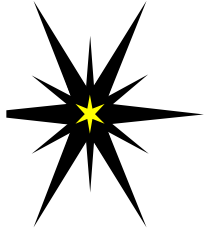
- ★ NISA is focused on the requirements of individuals.
- ★ All things being equal, provinces and farm types do not have much influence on participant behaviour.
- ★ Basically:
  - *A margin loss is a margin loss and low income is low income.*



# History - Does Farm Size Make a Difference?

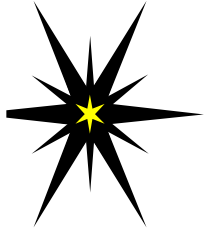
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- ★ No, on average, participants taking withdrawals have sales of \$116,600 while participants not taking withdrawals have sales of \$113,000.
- ★ While small farms (sales less than \$100,000) are more likely to trigger, they are no more likely to withdraw funds.



# History - NISA Participants Triggering and Taking Withdrawals by Sales Class, Stabilization Year 1995 <sup>1</sup>

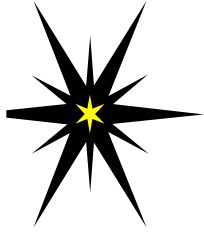
	# Taking Withdrawals	# Potential Withdrawals	All Participants	Actual Withdrawals as a % of Potential	Potential Withdrawals as a % of All Participants
<b>All Participants</b>	<b>18,141</b>	<b>46,664</b>	<b>93,606</b>	<b>39%</b>	<b>50%</b>
Less than \$50,000	7,540	20,024	33,636	38%	60%
\$50,000 - \$99,999	5,060	12,553	25,298	40%	50%
\$100,000 - \$249,999	4,111	10,563	25,646	39%	41%
\$250,000 - \$499,999	936	2,381	6,203	39%	38%
\$500,000 - \$999,999	291	712	1,832	41%	39%
\$1,000,000 and greater	173	453	1,024	38%	44%



## History - Does the Magnitude of the Gross Margin Loss Play a Role?

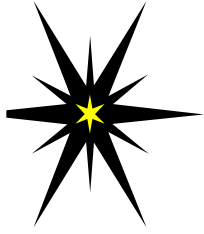
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- ★ There is no significant difference between the size of the “hurt” experienced by participants taking or not taking withdrawals (\$7,129 versus \$6,956).
- ★ Participants experiencing less than 10% margin loss are less likely to access their accounts (33%). Participants triggering withdrawals under the “Minimum Income Trigger” are more likely to exercise their withdrawal option (43%).



## History - NISA Participants Triggering and Taking Withdrawals by 1995 Gross Margin as a Percent of 5 Year Average, Stabilization Year 1995<sup>1</sup>

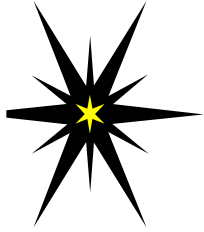
	# Taking Withdrawals	# of Potential Withdrawals	Withdrawals as a % of Potential
<b>All Participants</b>	<b>18,141</b>	<b>46,664</b>	<b>39%</b>
<b>% of 5 Year Average Margin:</b>			
<b>Less than 60%</b>	<b>6,209</b>	<b>16,424</b>	<b>38%</b>
<b>60% - 69%</b>	<b>1,355</b>	<b>3,473</b>	<b>39%</b>
<b>70% - 79%</b>	<b>1,549</b>	<b>4,097</b>	<b>38%</b>
<b>80% - 89%</b>	<b>1,810</b>	<b>4,595</b>	<b>38%</b>
<b>90% - 99%</b>	<b>1,786</b>	<b>5,352</b>	<b>33%</b>
<b>100% and greater</b>	<b>5,432</b>	<b>12,545</b>	<b>43%</b>



## History - How Important Are the Participants' Financial Situations When They Can Access Account Funds?

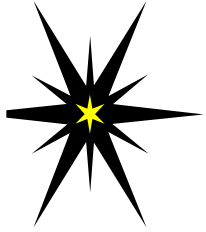
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- ★ Participants accessing funds tend to be in worse shape in the subsequent year than those who do not.
- ★ Especially if they sustained losses in excess of 40% of their 5 year average gross margin (45%).
- ★ Conversely, those triggering a “MIT” withdrawal in the following year are less likely to withdraw funds (35%).



## History - NISA Participants Triggering and Taking Withdrawals for Stabilization Year 1995<sup>1</sup> by 1996 Gross Margin as a Percent of 5 Year Average

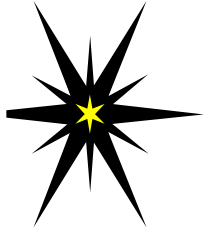
	# Taking Withdrawals	# of Potential Withdrawals	Withdrawals as a % of Potential
<b>All Participants</b>	<b>18,141</b>	<b>46,664</b>	<b>39%</b>
<b>% of 5 Year Average:</b>			
<b>Less than 60%</b>	<b>6,547</b>	<b>14,439</b>	<b>45%</b>
<b>60% - 69%</b>	<b>826</b>	<b>2,059</b>	<b>40%</b>
<b>70% - 79%</b>	<b>903</b>	<b>2,332</b>	<b>39%</b>
<b>80% - 89%</b>	<b>927</b>	<b>2,421</b>	<b>38%</b>
<b>90% - 99%</b>	<b>898</b>	<b>2,394</b>	<b>38%</b>
<b>100% and greater</b>	<b>8,040</b>	<b>23,041</b>	<b>35%</b>



# History - Does Age or Experience Count?

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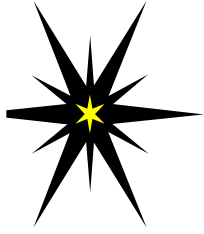
- ★ It seems to - the “least” and “most” experienced participants are less likely to access funds than their counterparts.
- ★ Account balances and average withdrawals show little relationship with experience.



# History - Average Account Balance and Average Withdrawal of NISA Participants by Years Experience, Stabilization Year 1995<sup>1</sup>

Years of Experience	Average Withdrawals	Average Account Balance*	Distribution of Participants
Less than 5	\$6,056	\$14,770	6%
5 - 9	\$7,003	\$17,011	9%
10 - 24	\$6,943	\$18,255	41%
25 - 35	\$6,214	\$16,192	19%
35 or more	\$4,678	\$13,940	25%
All	\$6,244	\$16,105	100%

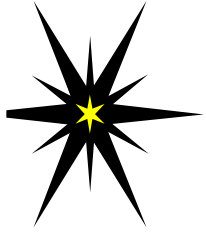
\* For participants taking withdrawals, adjusted for transactions



# History - NISA Participants Triggering and Taking Withdrawals by Years of Experience\*, Stabilization Year 1995<sup>1</sup>

	# of Withdrawals	# of Potential Withdrawals	All Participants	Withdrawals as a % of Potential	Potential as a % of Total
All Participants	11,004	28,522	56,800	39%	50%
Less than 5 years	549	1,527	3,138	36%	49%
5 - 9	1,048	2,553	5,330	41%	48%
10 - 24	4,858	11,635	23,257	42%	50%
25 - 35	2,179	5,573	10,995	39%	51%
35 or more	2,370	7,234	14,080	33%	51%

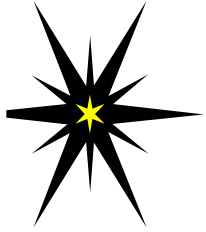
\* Report of years experience was voluntary



# History - What is the Pattern?

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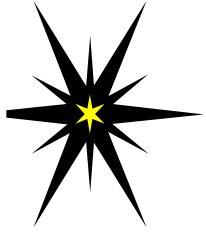
- ★ There is no particular pattern.
- ★ Some relationships are significant (years experience, cash flow) but none seem to be substantive.



# 1998 - Farm Income Crisis

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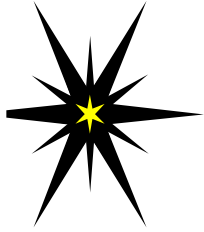
- ★ In the fall of 1998, grain and pork prices dropped to historical lows.
- ★ Farm leaders declared a “farm income crisis”.
- ★ The October government forecast showed falling farm incomes for 1998 and 1999.



# 1998 - Farm Income Forecast

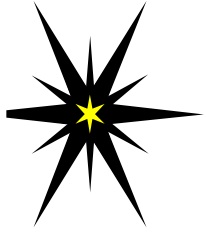
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- ★ On a national level, farm income reached near record levels in 1997.
- ★ In 1998, farm income is expected to be down about 20 per cent from 1997, but just four per cent below the previous five-year average.
- ★ Farmers in Manitoba and Saskatchewan are expected to be most severely affected, with farm income down over 40 per cent in Manitoba and almost 70 per cent in Saskatchewan, relative to the previous five-year average.



# 1998 - Farm Income Forecasts

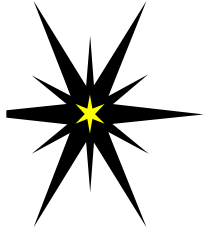
	Average 1993-97	1997	1998	1999
	Million \$			
Farm Cash Receipts	27,031	29,514	28,657	28,559
Operating Expenses	20,964	22,565	22,384	22,982
Net Cash Income	6,067	6,949	6,273	5,577
Depreciation Charges	3,503	3,947	3,824	3,752
<b>Realized Net Income</b>	<b>2,786</b>	<b>3,226</b>	<b>2,669</b>	<b>2,053</b>
Inventory Change	355	-1,414	-44	255
Total Net Income	3,141	1,812	2,625	2,308
Change in Realized Net Income (relative to '93-'97 average)		440	-117	-733
NISA Fund Balance (mid-October, 1998)			2,465	



# 1998 - Public Form (One)

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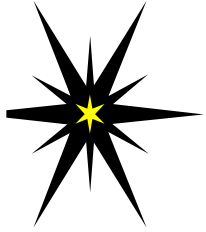
- ★ First the farm and rural media ran stories on the “farm income crisis”. They dealt with farmers going out of business, demonstrations and the destruction of unwanted piglets.
- ★ Farm leaders requested assistance comparable to that provided in the United States and Europe
- ★ The mainstream media ran stories on farmers in distress. One story described a family farm that had gone bankrupt before prices fell.



# 1998 - Public Form (Two)

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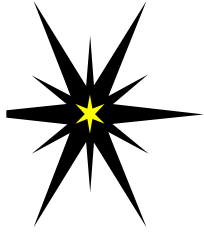
- ★ Provincial governments looked to the federal government to take the lead with a new disaster program.
- ★ Little public discussion dealt with the availability of existing safety nets programs - NISA and Crop Insurance.
- ★ Academic professionals provided balanced comments on the situation. Some expressed a desire to have more information on NISA and NISA accounts



# 1998 - NISA Analysis

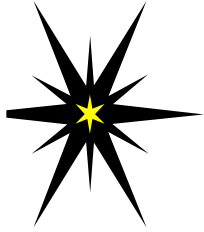
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- ★ Agriculture and Agri-Food Canada used the NISA data to analyze the situation as follows.



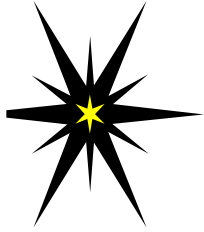
# 1998 - Average Account Balance and Level of Coverage - Stabilization Year 1997

Sales Class			Number of Participants	Average Account Balances	Average Five-Year Gross Margin	Balance/Five-Year Gross Margin (%)
\$0	to	\$49,999	60,799	\$5,727	\$10,241	56%
\$50,000	to	\$99,999	31,665	\$12,879	\$25,175	51%
\$100,000	to	\$249,999	33,799	\$23,766	\$46,393	51%
\$250,000	to	\$499,999	9,844	\$40,744	\$86,628	47%
>= \$500,000			4,910	\$83,934	\$202,686	41%
Unallocated			2,889	\$5,967	\$10,325	58%
<b>Total</b>			<b>143,738</b>	<b>\$16,614</b>	<b>\$33,843</b>	<b>49%</b>



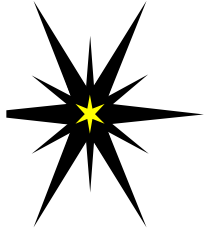
# 1998 - Participants Triggering and Taking Withdrawals, Year-to-Date

Sales Class	Triggered		Actual	
	Number of Participants	Average	Number of Participants	Average
<b>\$0 - \$9,999</b>	8,394	11,430	1,481	4,384
<b>\$10,000 - \$24,999</b>	13,203	11,246	2,549	3,769
<b>\$25,000-\$49,999</b>	15,097	13,450	3,237	4,938
<b>\$50,000 - \$99,999</b>	17,659	16,734	4,021	7,616
<b>\$100,000-\$249,999</b>	16,244	24,860	3,647	14,379
<b>\$250,000 - \$499,999</b>	4,692	49,911	955	28,018
<b>\$500,000 and over</b>	2,458	137,631	494	62,230
<b>Unallocated</b>	1,450	26,014	349	11,748
<b>Total</b>	79,197	22,185	16,733	10,563



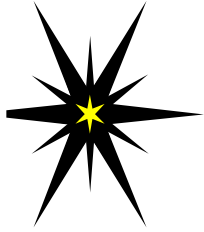
# Number of NISA Participants with Balances of Less than \$1000, Canada, Stabilization 1997

Sales Class	New Entrants	Maintaining an Account by ENS Class	Total
		All	
<b>\$0 - \$9,999</b>	187	4,006	4,193
<b>\$10,000 - \$24,999</b>	227	5,379	5,606
<b>\$25,000-\$49,999</b>	176	4,938	5,114
<b>\$50,000 - \$99,999</b>	172	4,710	4,882
<b>\$100,000-\$249,999</b>	100	3,530	3,630
<b>\$250,000 - \$499,999</b>	34	859	893
<b>\$500,000 and over</b>	9	471	480
<b>Unallocated</b>	10,114	7,345	17,459
<b>Total</b>	11,019	31,238	42,257
* Sales classes are based on 1996 levels. Unallocated participants include new entrants into the program.			



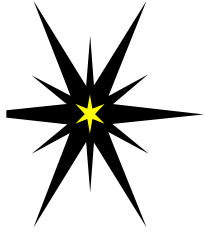
## 1998 - Percentage NISA Participants with Insufficient Funds to Cover the Current Income Shortfall

NISA Shortfall as a Percentage of Income Shortfall						
Sales Class	0-20%	20-40%	40-60%	60-80%	80-100%	Total
LT \$10,000	0.9	1.1	1.1	1.3	2.6	7.0
\$10,000-\$24,999	2.0	2.0	2.4	2.6	6.1	15.0
\$25,000-\$49,999	2.7	2.9	3.5	4.7	7.8	21.6
\$50,000-\$99,999	4.0	4.2	4.8	5.9	8.9	27.9
\$100,000-\$249,999	3.8	4.1	3.8	4.7	5.9	27.4
\$250,000-\$499,999	0.9	1.0	1.0	1.0	1.2	5.0
GE \$500,000	0.2	0.2	0.2	0.2	0.3	1.1
<b>Total</b>	<b>14.6</b>	<b>15.6</b>	<b>16.7</b>	<b>20.3</b>	<b>32.8</b>	<b>100%</b>



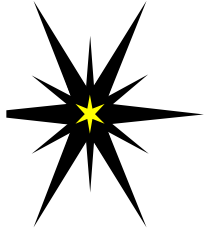
# 1998 - Participants' Account Balances by Sales Class

Eligible Net Sales Range			Number of Active Participants	Total Account Balances	Average Account Balances
>= \$0	to	< \$25,000	41,411	\$425,811,333	\$10,283
>= \$25,000	to	< \$50,000	24,986	\$227,934,345	\$9,122
>= \$50,000	to	< \$75,000	16,709	\$226,623,800	\$13,563
>= \$75,000	to	< \$100,000	11,918	\$216,006,273	\$18,124
>= \$100,000	to	< \$150,000	14,098	\$348,444,066	\$24,716
>= \$150,000	to	< \$200,000	7,436	\$247,134,185	\$33,235
>= \$200,000	to	< \$250,000	3,904	\$168,094,617	\$43,057
>= \$250,000			7,094	\$488,497,976	\$68,861
<b>Totals</b>			<b>127,556</b>	<b>2,348,546,595</b>	<b>\$18,412</b>



## 1998 - NISA Participants with Account Balances in Excess of Net Cash Income Losses

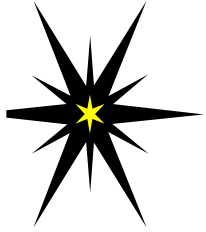
Sales Class	All	All Above	%
LT \$10,000	3,293	2,104	63.8
\$10,000 - \$24,900	9,043	6,494	71.8
\$25,000 - \$49,900	14,080	10,421	74
\$50,000 - \$99,900	19,963	15,263	76.5
\$100,000 - \$249,900	21,725	18,932	83.3
\$250,000 - \$499,900	5,535	4,676	84.5
\$500,000 +	970	784	80.8
* Based on continuing participants only.			



## 1998 - Interim Withdrawals To Date

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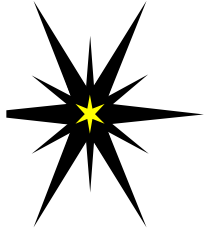
- ★ Since July 1998, participants have been allowed to make interim withdrawals based on their estimated current year income.
- ★ As of December 31, 1,064 participants applied for and withdrew \$26.5 million in interim withdrawals.



# 1998 - Disaster Program

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- ★ In December, the federal government announced a commitment of \$900 million to a new disaster program.
- ★ The provinces are requested to provide a \$600 million contribution to this program.
- ★ There is no farmer or participant contribution.
- ★ Farmers will be eligible for assistance if their income in 1998 is 70% of a 3-year average. Details are now being worked out with provinces and producers.
- ★ Since assistance is based on 1998 income that cannot be calculated until March or April, some provinces are offering short-term interest-free loans.



# NISA - Conclusion

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- ★ Up to now, NISA has responded as intended as a long run income stabilization program.
  - It has responded to individual needs.
  - Participants have developed significant account balances.
- ★ The NISA data has only started to make a unique contribution to policy analysis.
- ★ More work is required to improve the use of NISA data in the political arenas.
- ★ 1998 will be a critical year in NISA's development.