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The Next Generation Safety Net Program in Canada: An Economic Analysis

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1.0 Introduction

Safety net expenditure design and administration are now among the leading priorities for federal and provincial ministries of agriculture. Designing safety net programs and gauging their effectiveness in achieving the public policy goals laid out for them have been intensely debated. This was especially true immediately prior to, and now under, the current Agricultural Policy Framework (APF) which saw dramatic changes in safety net programming and in the nature of demand for safety nets. An indication of this is that the Canadian Agricultural Income Stabilization (CAIS) program became an issue in the most recent federal election and has recently received scrutiny from the federal auditor general. Indeed, one thing that unites most farm groups is dissatisfaction with CAIS. Thus, safety net programming has become an important instrument of public policy, and there is pressure to address the perceived problems within the context of the public policy objectives laid out for safety nets.

The goals of this paper are to review the stated objectives of safety net/business risk management programming in Canada; to compare the design of current and proposed programming; and to provide a preliminary economic assessment around what appears to be developing as the lead safety net program under the next generation APF.

The paper is organized as follows: Section 2 provides a review of stated policy objectives and design principles for safety net programming. Section 3 outlines criticisms of CAIS and provides a description of the apparent design of the new lead safety net program. Section 4 compares the design of the new program with the apparent objectives laid out for it. Section 5 makes observations and concludes the paper.

2.0 Policy Objectives of Safety Net Programming

According to Agriculture and Agri-food Canada (2007), annual agricultural program payments to Canadian farmers have increased from about $1.5 billion in the mid-1990's to approximately $5 billion in recent years. Given this magnitude of spending, and the increase, it is appropriate that farm programs have measurable, clearly stated public policy objectives. This section provides a survey of objectives and design principles that have been described in the recent government and research literature on farm safety nets in Canada.

The Farm Income Protection Act, amended in 2003, provides the following in terms of programming principles and objectives:

- the program should not unduly influence the decisions of producers of agricultural products with respect to production or marketing, and should encourage adjustments with respect to production or marketing so as to improve the effectiveness of the responses of producers to market opportunities;
- the level of protection to be provided by, and the relative share of governmental contributions to be provided to, the program in relation to particular agricultural products or classes of agricultural products should be equitable and reasonably consistent with all other agreements, taking into account regional diversity;
- the program should encourage the long-term social and economic sustainability of farm families and communities;
- the program should be compatible with Canada's international obligations
- the program should encourage long-term environmental and economic sustainability

In an early evaluation of what is now the CAIS program, Brown-Andison *et al* were presented with the following objectives against which to evaluate programming:

- ensure programs are responsive to demand and that government dollars are directed to areas of need with respect to income stabilization, disaster mitigation, insurance coverage and investment
- provide equal treatment for farmers across Canada facing similar risk situations
- minimize the distortion of farmers' production and marketing decisions
- focus on management of risks related to the stability of the entire farm and to avoid duplication of payments
- be relatively simple and easy to understand
- facilitate long term planning by farmers

Martin and Mussell (2003) were presented with the following principles for evaluation in their study of the CAIS program in Ontario:

- stabilize individual farm incomes for the various sectors

- change the distribution of government funds between sectors, regions, and farmers with varying level of income decline and impact on the competitive advantage of Ontario producers versus those in other regions of Canada
- reduce program overlap, maintain appropriate links between government programs and with private risk management mechanisms, and support good risk management practices
- appropriately treat farms with supply managed production
- offset the impact of programs in competing jurisdictions
- incorporate insurance-like principles
- [fail to] distort production or marketing decisions
- reduce the potential for trade disputes
- ensure ease of understanding and participation by farmers, in a cost effective manner
- provide a smooth transition from present programming
- contribute to better farm management decision making and planning

Table 2.1 below presents a comparison of principles for safety net programming under the 2003 APF Framework agreement, and elements that were identified the business risk management policy backgrounder for the next generation APF (AAFC, 2007). The table shows that the 2007 identification of principles is essentially a subset of those listed in the 2003 APF Framework Agreement. Both documents make reference to compliance with international trade rules, risk mitigation, and neutrality with respect to production decisions.

Finally, the economic backgrounder to business risk management programming for the next generation APF (AAFC, 2006) describes the purpose of business risk management programming as follows: “to protect Canadian agricultural producers from income declines and loss of production caused by circumstances beyond their control”.

The following observations may be made regarding the information above. First, what is observed is a mix of design principles that programs should satisfy, and programming objectives. This becomes immediately evident by observing whether an outcome or a characteristic of a program is being described. For example, “complying with trade rules” and “ensuring equity of access to program resources” are not programming objectives - they are program design principles. Most of the points cited above are program design principles, rather than public policy goals. Indeed, a concise discussion of the specific public policy objectives to be achieved through safety net programming is fleeting.

Some programming objectives are evident. Many of the references contain some mention of “income stabilization” or “protection of income from losses due to circumstances not within a farmer’s control”. There is also mention of facilitating long-term and/or improved farm planning as an objective. Sustainability of farms, farm families, and the environment are mentioned

Finally, based on the two background documents prepared for the next generation APF and cited in this section, the combination of objectives and program design principles appear not to have changed markedly relative to those that were in use as CAIS was being developed under the APF. This is clear from the discussion of stabilization and protection from income loss outside a farmer's control as an objective in AAFC (2006) compared with earlier references relating to CAIS. It is also true of the design principles, as is evident from the commonality in the columns of Table 2.1.

Table 2.1 Programming Principles Identified Under the 2003 APF and by AAFC (2007)

APF Framework Agreement, 2003	AAFC BRM Discussion Paper, 2007
16.1.1 minimizing countervail risk;	Conform with international trade rules and minimize countervail risk
16.1.2 minimizing the distortion of farmers' production and marketing decisions;	Provide for equity of access to program benefits across producers and regions
16.1.3 focusing on the management of risks related to the stability of the entire farm entity and avoiding duplication of payments;	Provide for neutrality in terms of production decisions
16.1.4 encouraging the use of risk management practices and the use and development of private sector risk management tools;	Mitigate negative impact of uncontrollable and unforeseen events
16.1.5 being relatively simple to administer and easily understandable;	Not encourage excessive risk taking
16.1.6 minimizing the capitalization of program benefits;	
16.1.7 contributing to profitability through innovation and value-added activity;	
16.1.8 assisting in the management of risks related to environmental stewardship and food safety; and	
16.1.9 facilitating long-term planning by farmers.	

3.0 Existing and Proposed Safety Net Programs

The suite of programs under the current APF consists of the CAIS program, and Production Insurance. CAIS was conceived as a margin-based program in which losses of current margin relative to an historic reference margin formed the basis for program payments, with government payments matched according to a schedule of producer deposits. In the current APF, Production Insurance is essentially re-branded crop insurance under the expectation that a broader range of crops and (especially) livestock would be covered. To date, livestock insurance has not been rolled out as an APF program.

This section provides a discussion of the criticisms of the CAIS program and a description of the new margin-based program that apparently will replace it.

3.1 Criticisms of CAIS

The CAIS program has been roundly criticized by farm groups for a range of reasons. The major criticisms are, or have been, the following:

1. It can be vulnerable to erosion in reference margin, especially due to price declines over time. This is the so-called "trade injury" argument advanced by grain and oilseed producers, i.e. that foreign competitors' subsidies create too much production and drive down prices, creating constant downward pressure on margins and, therefore, less government support.
2. There is uncertainty over what CAIS payments will be from year to year, as well as what a CAIS payment will be within a given year because of the way margins are calculated. Some refer to this as "bankability".
3. The means of dealing with changes in inventory values is complex and/or inaccurate
4. The means of dealing with structural change is complex and/or inaccurate
5. The producer deposit requirement is onerous
6. The application forms are too complex
7. There are significant lags between filing CAIS applications and the receipt of payment.

These concerns were validated in a recent audit by the Auditor General of Canada, Sheila Fraser, who added concerns regarding a disproportionate focus on policing of overpayments by AAFC administration, and concerns relating to conflicts of interest on behalf of those that both prepare CAIS applications on behalf of farmers and process them for AAFC.

In light of these concerns, adjustments have occurred in CAIS program design and delivery. Within the design of CAIS, the inventory methodology was adjusted to a P1-P2 Hybrid Accrual basis, and the deposit requirement was replaced with a fee. The trade injury issue has driven a renewed call for companion safety net programs: for example, in Ontario, farm groups have argued forcefully for their proposed Risk Management

Program. The remaining issues with CAIS, if they are to be addressed, apparently will be under the next generation APF.

3.2 Safety Nets under the Next Generation APF

The suite of safety net programs under the next generation APF is still being developed, and much is left to be determined. But the following seems clear. There will be three pieces to the safety net suite:

- A margin-based income safety net program
- Production insurance, perhaps including livestock insurance
- An event-driven disaster program

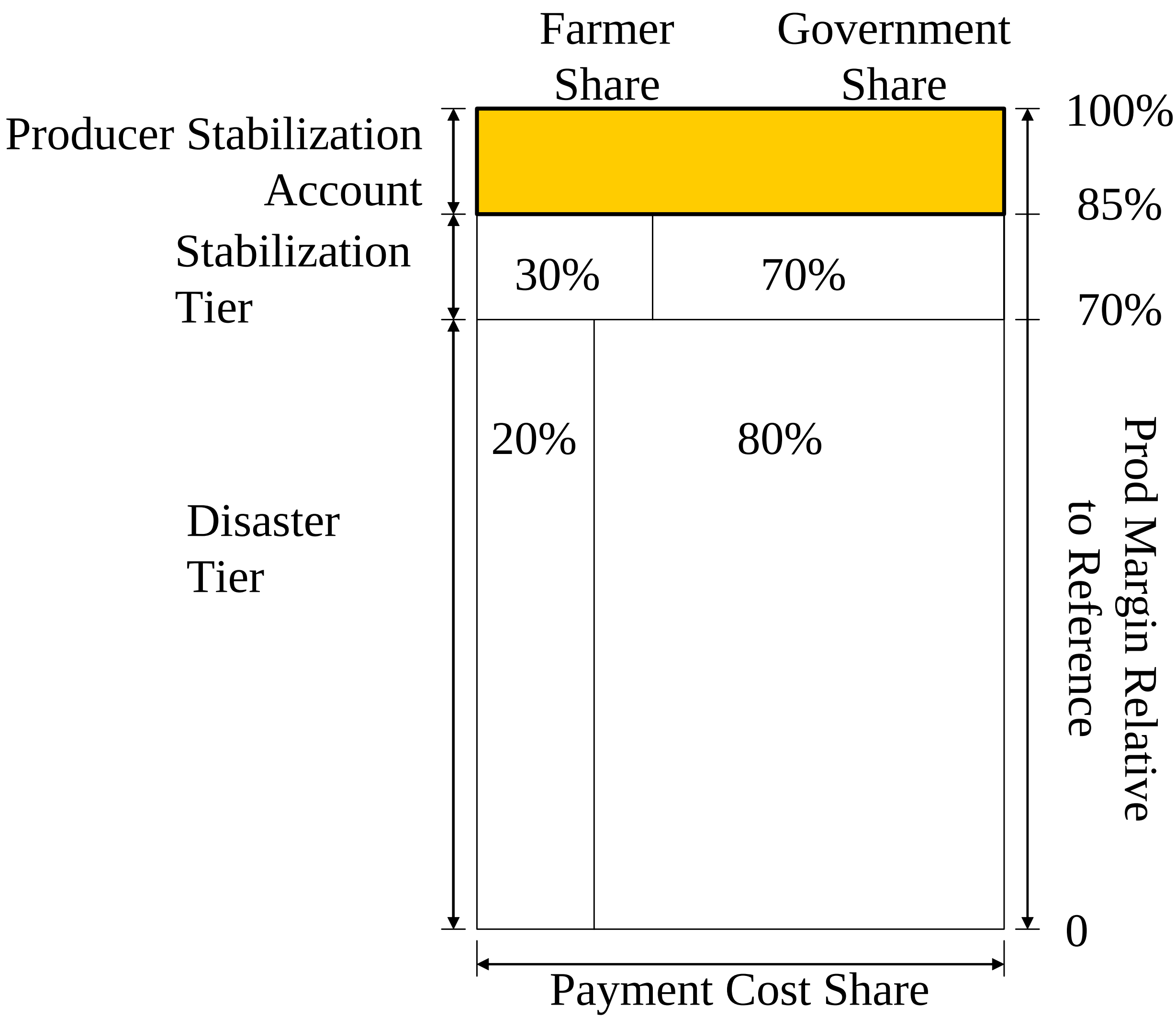
Of central importance in the discussion is how the margin-based program will work. Discussions around the essential design have included the following:

- Retain many of the elements of CAIS, but replace the top “stabilization” tier with one that allows for a producer deposit, matched by government. These deposits would accrue in an account, much like deposits under the old Net Income Stabilization Account (NISA). This deposit component will be called the Producer Stabilization Account (PSA).
- In the event of a payment being triggered because of a decline in margin from the “reference” margin, there would be a forced withdrawal from the PSA, with the government portion withdrawn first. There would be no interest subsidy on producer PSA deposits, and government funds would be taxable when withdrawn.
- Producers could have the latitude to access PSA funds (producer and government deposits) on demand, whether or not the current production falls below the reference margin.
- The basis for PSA contributions is still subject to discussion, but could be a percentage of the reference margin; a percentage of eligible net sales (ENS) as was the case under NISA; or a modification of ENS.

The implication of the above on the apparent operation of the program is illustrated in Figure 3.1 below. Under CAIS, losses in the top tier were funded 50% by government and 50% by producers. Under the new concept, funding would come from PSA withdrawals. Losses in the next 15% of reference (between 85% and 70% of reference) would be funded 70% from government, and 30% would be left to the producer who could fund these losses from PSA withdrawals. Similarly, losses in the disaster layer would be funded 80% by government, and producers could fund their 20% share from PSA withdrawals.

This describes how payments would likely operate in the case of triggered claims. Deposits would operate at arm’s length to this. Using an example of a farm with a reference production margin of $100,000 and a contribution of (for example) 5% of reference production margin, the farm could contribute $5,000 **per year** to its PSA which would be matched by government. Thus, up to $10,000 **per year** would accumulate in the producer’s PSA to fund triggered losses, or (potentially) to be withdrawn at the producer’s discretion. Indeed, there is no obvious reason (absent tax considerations) why a producer would not simply make the deposit, obtain the government match, and then withdraw both the producer and government portions every year even without a "loss" from the reference margin.

Figure 3.1 Potential Operation of Next Generation APF Safety Net Program



4.0 New Margin Based Program: A Preliminary Assessment

The above describes current discussions relative to a new margin-based safety net program. While much is unknown, and some of the specifics described above may change, the essence of the program and its reference to programming objectives and design principles can be observed.

4.1 New Margin Based Program Relative to its Objectives and Design Principles

As observed in Section 2, the apparent programming objectives that apply to the new safety net program are the following:
- income stabilization
- protection of income from losses due to circumstances not within a farmer's control
- sustainability of farm businesses and the environment

The apparent design principles consistently observed in Section 2 are as follows:
- not distorting production decisions
- consistency with international trade obligations
- equity of access to program benefits
- avoiding capitalization of program benefits
- simplicity in administration and producer understanding

The objectives identified seem to fall within the general notion of "stabilization". With respect to objectives, the notion of "stabilization" must be differentiated from "support". Stabilization is typically thought of as protection from downside variability over time; support is assistance regardless of variability to the downside. Under the new program there is a component that appears to work very much like CAIS in which, consistent with the notion of stabilization, a farm must lose money (relative to historical reference) in order to obtain government support that compensates for some of the loss. However, the PSA component adds to this stabilization component by creating an entitlement to government funds that is independent of any "loss" or "need" for stabilization. In fact, the PSA aspect is support rather than stabilization.

Viewed in a broader public policy context, the proposed design appears to have some conflicts with the apparent design principles laid out for it. It is likely to conflict with Canada's stated trade position on domestic support, and potentially with a new WTO agreement which appears to be developing. It is also likely to accelerate capitalization of assets. Further, the design will prove problematic for supply management, which influences producer equity.

4.1.1 Canada's Amber Support Would Likely Increase

By creating a producer entitlement in the deposits, Canada will structurally increase its level of amber support under WTO. Canadian legal opinion on the CAIS program was that program payments on the first 30% of loss were "amber" under WTO. If, however, the “loss” exceeded 30% then the payments in all tiers were deemed to be “green”. Under CAIS, program payments must be triggered by the actual production margin falling below the reference; if no “loss” occurs, no payment is made, and no amber support is counted.

With the producer contribution-government matching feature (PSA) in the new program design, the amber payment will occur, contingent on producer deposit rather than loss. Given the proposed design of withdrawals, it is very likely that producers will want to make deposits regularly and probably at the maximum level, since the program is in effect a no risk, 100% return on investment for them. This means that government payments are likely to occur more regularly and, over time, at higher levels, not just when losses occur.

Consider a farm that has rising revenue and a rising reference margin over, say, a five year period. Under the CAIS program, no payments would have been made. Under the new program, payments could be made each year and at progressively higher levels because the farm’s reference margin would be rising.

It is, therefore, difficult to understand how the same level of “amber” producer support could be retained as was under CAIS. Much of the scheme at levels of loss greater than 15% would appear to be a holdover from CAIS, and might then be reported to WTO similarly to the past situation (although that is not certain). In any event, it would appear that Canada’s amber support levels would structurally increase under this design. With current WTO-Doha discussions indicating a potential cut in non-product specific Aggregate Measure of Support (AMS) of 37-60% for Canada (Falconer, 2007), this program structure is directionally in conflict with current negotiations, and with Canada’s stated trade position.

4.1.2 Program is Likely to Affect Farm Asset Values

One of the standard policy design principles observed above is that safety net programming should not result in accelerated capitalization of farm assets. However, because the design described creates an entitlement, and one that potentially could be accessed on demand, it is very likely to accelerate capitalization of farm assets. Almost by definition, the addition of an entitlement component to a safety net program results in asset price inflation. Both economic theory and past experience have shown that when producers receive an entitlement from government that either puts cash in their hands directly or structurally removes risk from farming, capitalization of those benefits into land and residual asset values will result. This will be exacerbated if producers have discretionary access to deposit funds under the program design.

It can be argued that CAIS already generates some of these effects, although the requirement that a loss occur prior to payment of benefits must sharply limit capitalization effects. One could argue that the lack of transparency in the current program regarding the potential level of payment is also a deterrent to capitalization; if I don’t know how much I might get, I can’t gauge how much I have to spend on my land rent, the new tractor, or the neighbour's farm. Under NISA the capitalization effect was muted because of the conditions placed on account withdrawals, and because the lure of interest subsidies tended to hold accumulated balances in NISA accounts. By introducing a government matched fund that can be accessed on demand, with no interest subsidy, the ease of access and capitalization effect of the new program is surely intensified.

4.1.3 Equity of Access to Program Benefits for Supply Management

It is not clear how farms with supply managed sales will participate in the new program, nor how effective it will be. Two basic options for determining eligibility for farms with supply managed sales to participate in the PSA have been discussed. One uses a proportion of CAIS reference margin from non-supply managed sales as a basis, and the other uses "Allowable Net Sales" (ANS) which for supply management is ENS adjusted to remove supply managed revenue and the supply managed portion of eligible expenses in the ratio of supply managed revenue to total revenue. This is essentially the same method used to determine eligibility for supply management in the top two tiers of CAIS.

As described by Martin and Mussell (2003) regarding CAIS, this design can create a perverse incentive for farms with supply managed sales to intentionally exaggerate losses so that claims fall in the disaster layer, if losses outside a producer's control approach it. The design will also create a strong incentive to split farms into supply managed and non-supply managed components and allocate expenses appropriately for the purposes of increasing PSA deposit eligibility. As an analogy, farms with supply managed products had difficulty effectively participating in NISA unless they found a way to split the farm business into separate supply managed and non-supply managed components. The allowance for farm "splitting" was removed under CAIS, and since the lower layers of the new program operate much like CAIS it is unclear why splitting would be allowed for the new program.

In the past, supply managed industries had not perceived great urgency in having access to safety net programming; some had even shunned it. However, as certain supply managed commodities face difficult challenges in the near future, access to safety nets needs to be considered as a contingency. In particular, the dairy industry is approaching a period of potentially protracted problems with import penetration and resulting pressure to reduce milk prices. As the Canadian dollar strengthens, the prospect of import penetration also increases for other supply managed products. The prospect of a meaningful WTO agreement increases this threat.

4.2 New Program vs. CAIS

The clearest conceptual departure from CAIS under the new margin-based program is the matched deposit. While CAIS had the feature of the matching of triggered payments (differentially according to loss tier), the matching concept here creates a producer entitlement. That is to say that under the next generation APF safety net discussions, through the PSA scheme, a participant need not suffer a "loss" in order to receive government funds. This feature was not present under CAIS.

Finally, the proposed design does not appear to deal with most of the current criticisms of the CAIS program. The only aspect addressed from the list of criticisms above is "bankability". Perhaps some of the diversions from programming objectives and design principles associated with the proposed design could be tolerated if the new program dealt with a broad range of the criticisms leveled against CAIS. However, that has yet to be demonstrated.

5.0 Observations and Conclusions

Sections 2 through 4 provide an overview of program objectives and design principles, a description of the operation of the new program, and an assessment of the new program against the apparent objectives and design criteria laid out for it. This section puts the information into context and concludes the paper.

5.1 Revealed Objectives of the New Program

What is the public policy purpose of farm safety net programming? Governments have done a poor job of precisely articulating the public policy objectives to be obtained through safety net programming. By piecing together snippets from agricultural policy literature, it appears that income stabilization, mitigating risks outside of one's control, and, thereby, creating sustainable farms and environment are central to the objective. Under this concept, safety nets operate as public policy to mitigate potentially catastrophic losses due to the vagaries of biology or volatile markets, and the resulting displacement of people and capital.

Alternatively, safety net programming can be used as a means of income redistribution and elite accommodation. The notion of entitlement in government programs is consistent with this view because of its connection to economic size (ENS or reference production margin) rather than economic loss.

In practice the new program contains elements of both stabilization and income redistribution. This differs from its predecessor, CAIS which, while flawed, was as focused on stabilization as any farm program previously seen in Canada. Thus, the revealed policy objectives under the next generation APF contain a mix of income redistribution and stabilization, although none of the current or past program objectives and design principles suggests this.

5.2 Perils of Elite Accommodation vs. Stabilization in Safety Net Programming

Those of us who do agricultural economic research must periodically confront those from outside the sector who view agriculture as just another special interest being accommodated by a government handout. Under a program designed to compensate for actual losses, the logic of safety nets as a public policy tool to mitigate risks and harsh adjustments could be justified. In a profitable, commercial agricultural system, public policy that protects against catastrophic risks and the resulting disruption by compensating for a portion of actual losses can be defended because private risk management products have not been broadly developed for this purpose.

It is much more difficult to defend a program involving entitlement as anything different than simple accommodation of a vested interest. One wonders whether this will be lost on increasingly urban-based government cabinets. As well, if a focus on entitlement and income redistribution is the will of farm groups, one must wonder whether the farm lobby in Canada really has the political muscle to take on, and compete with, the other special interests in the broader political arena of income redistribution. The increase in safety net payments observed in the past decade or so was based primarily on stabilization losses incurred by a commercial sector, rather than sheer lobbying power. And it would be surprising if the general public was really very supportive of targeting government support to profitable, commercial farm businesses, many of which have very strong balance sheets.

Proponents of the new program are likely to argue that by underwriting a matching fund through the PSA, a stabilization fund is effectively created. However, when no conditions are placed on accessing the government portion of the PSA, and it isn't even clear why producers would hold balances in their PSA after the government portion has been received, this simply does not hold up. Its only pretense as a stabilization fund is that participants might hold PSA withdrawals for risk management purposes in their private bank accounts, and any assurance of that requires participants' resolve for good risk management to be stronger than the lure of the latest sales incentive on new pickup trucks.

Others may argue that by basing subsidy on reference production margin or eligible net sales, government is rewarding efficiency. This is true in the sense that farmers who increase their reference production margin or ENS will obtain greater eligibility for subsidy. But what public policy objective is attained by using subsidies to drive increased profits to obtain more subsidy eligibility? The optics would make it appear that the rich get richer under the program. What market failure regarding production margin or ENS requires this kind of government fix? This brings us precariously close to US farm program design, in which increased crop yields result in increased subsidy eligibility (so US farmers find a way to increase yields). Canada fought a countervail case and is currently pursuing a WTO challenge against the US corn program that operates in precisely this way.

5.3 Conclusion

In designing safety net programs in the next generation APF, the established objectives and design principles should be adhered to, or they should be more clearly articulated if the objectives and principles are now different. One would also expect that they should address the criticisms leveled against CAIS. As observed above, because of the entitlement component, the new program contains a mix of stabilization and income redistribution as objectives, and has less consistency with programming principles than CAIS did.

The new program also misses an opportunity to resolve some of the problems with CAIS. These relate to program design, administrative resources deployed, and producer experience and perception. The key elements from the design perspective would seem to be trade injury/declining reference margins, and structural change. If these could be appropriately addressed, it is likely that the "bankability" issue might be advanced in the process. Building entitlement into safety nets, while popular with producers, does not appear to address basic design issues with CAIS.

Rather than wallpapering over the problems with CAIS with a dose of entitlement, policy makers should refocus on fixing them. Innovative thought needs to be given to how eroding reference margins can be tempered to deal with trade injury in a WTO-compliant manner. The mechanics of structural change under CAIS could be improved by developing a mechanism that allows producers to use their own proven data; where basic production unit models must be employed they should be made fully transparent, and be discussed with industry to ensure they are accurate and reasonable. CAIS participation can be further simplified and made more transparent for farmers, and additional resources added to speed application processing.

As it stands, a budget commitment has been made to fund the new program, and agriculture ministers will be meeting in June 2007 to finalize the design. While it is late in the process, there may be some prospects to deviate from the entitlement design of the program. One idea would be to tie PSA participation to the provision of a public good, such as environmental goods and services (EGS). These services are valued by the broader population of Canadians, and farmers are in a position to influence the quality and quantity of them. Up to this point farmers have not been compensated for the EGS that they provide. Indeed, this is not new as a proposed target for agricultural policy; it was identified by Martin and Stiefelmeyer as a component of a broader agricultural policy that recognizes the opportunity for agriculture to have beneficial environmental effects, while acknowledging that there are costs to providing them. This may also provide an opportunity for the agricultural sector to appear as something less than a raw vested interest looking for a handout, and more like a good environmental citizen with public support.

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