



NEW ZEALAND INSTITUTE FOR THE STUDY
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Policy Watch: Governments at the Bidding Table

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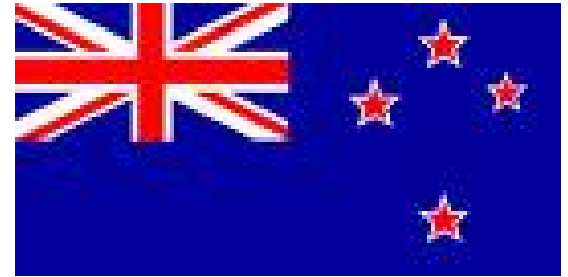
A familiar situation?



- Firms of neighboring superpower scooping up domestic firms
Incoming U.S. FDI: 2/3 of \$450B in 2006
- Soaring currency
2003-07: CAD/USD rate up 70%
- Burgeoning budget surplus
2007-08: \$14 billion



Familiar to you as well...



- Firms of neighboring superpower scooping up domestic firms
Incoming AUS FDI: 45% of \$77B in 2005
- Soaring currency
2003-07: NZD/USD rate up 45%
- Burgeoning budget surplus
2007-08 forecast: \$7.4 billion



POLICY RESPONSE

→ Calls for manufacturing support



- Investment incentives:
 - Capital Cost Allowance increased to 50% (federal)
 - Automotive investment strategy (ON): \$500m
 - Advanced manufacturing investment strategy (ON): \$650m
- Support for training and innovation:
 - Canadian Skills & Innovation Project (federal): \$1,000m
 - Next Generation Jobs Fund (ON): \$650m
- Aid coping with currency rise:
 - Economic Hardship Fund (federal): \$1,000m
 - Quebec: \$620m
- Etc.



POLICY RESPONSE

→ Similar calls for manufacturing support



In particular, to spend money and effort attracting FDI:

- Prof. Michael Porter
- New Zealand Institute
- Boston Consulting Group
- Progressive Party
- WTO
- OECD



POLICY RESPONSE



→ Response

“New Zealand needs to attract more and better quality foreign direct investment. [...] The above suggests a clear role for government to [...] attract investment with desirable characteristics through guaranteed access to government services and, where necessary, incentives that are closely aligned with the generation of spillover benefits.”

Economic Development Minister, Jim Anderton (May 10, 2004)

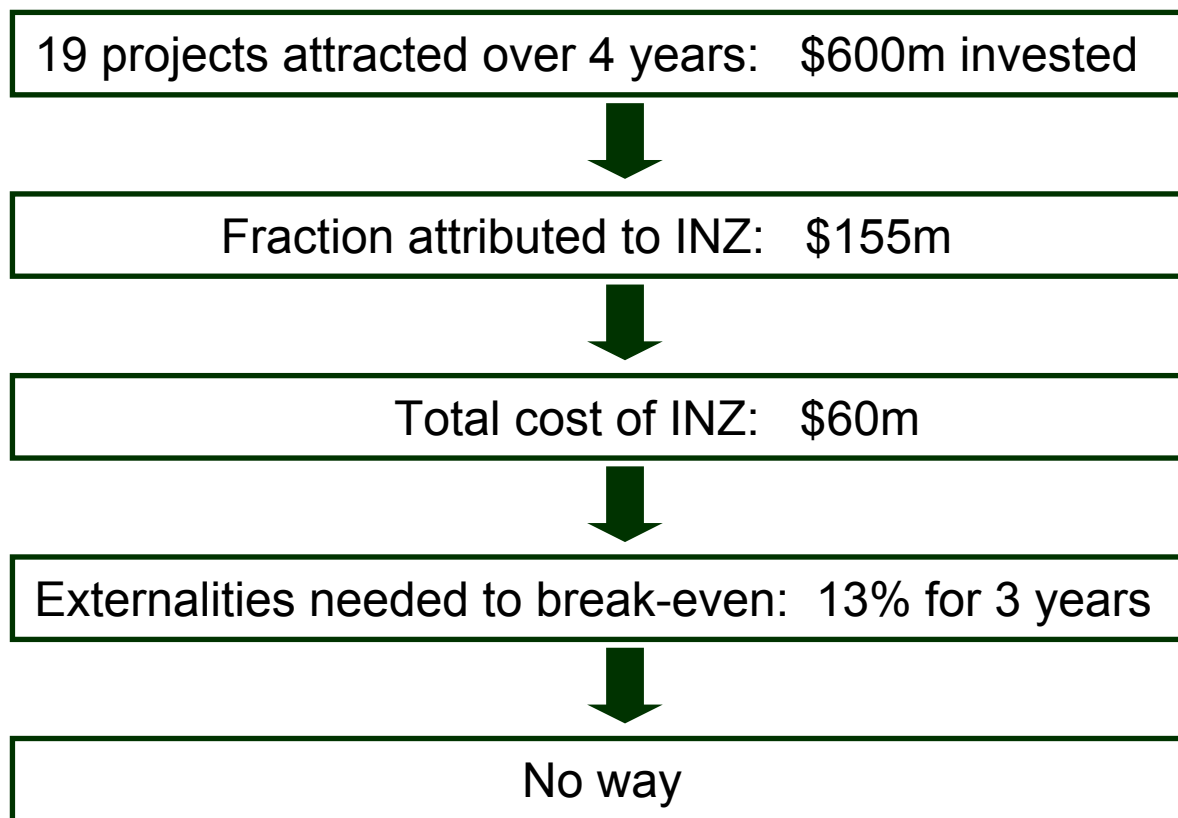
“We are therefore going to fine tune the inward investment programme. [...] Specifically, we will discontinue the major grants and loan guarantees element of the Strategic Investment Fund. [...] The second step, which I am announcing today, is a new focus on assisting firms to undertake outward investment.”

Economic Development Minister, Trevor Mallard (August 30, 2007)

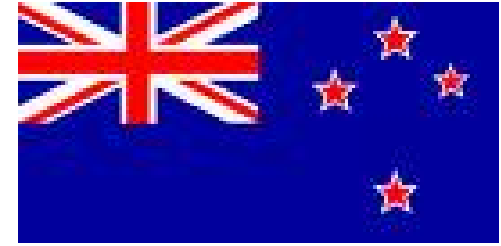


POLICY RESPONSE

→ Review of Investment New Zealand (INZ)



POLICY RESPONSE



→ Local government activism

- World of WearableArts Awards show: → Wellington
- V8 Supercar: → Hamilton
- LA Galaxy (David Beckham): → Wellington
- Ellerslie International Flower Show: → Christchurch



DOES IT MAKE SENSE?

If externalities outweigh costs

- On output side – firm cannot appropriate all the benefits
- On input side – distortions in the factor markets
- Main measurement problem: **account for opportunity costs**
 - “Best alternative use for the resources”
 - Wellington city council: 20 - to - 1 multiplier
 - Ex-post evaluation possible: Greenstone & Moretti (2003)

With **competition**, advantages need to be unique

- Private advantage (costs or benefits)
- Social advantage (spillovers)



EXTERNALITIES

Take automobile assembly plants as an example
(output side)

- Technologically advanced
 - R&D subsidies
- Generate massive export earnings
 - Exporter support & development grants
- Agglomeration effects (multiplier)
 - Regional development grants
 - Infrastructure grants



EXTERNALITIES

Take automobile assembly plants as an example
(input side)

- Highly skill-intensive
 - ➔ Training grants
- Firm can pay more than going market wage
 - ➔ Strategic trade policy
- Market wage can differ from shadow wage (private cost of working)
 - ➔ Minimum wages, regulation



EXTERNALITIES

- Many common externalities are widely recognized and governments already run programs targeting them, obviating the need for further action.
- Interventions only warranted to facilitate attraction of large projects.
- Call for support will also work in reverse: once a government has a reputation to subsidize, firms can threaten to leave to extract subsidies.



EXTERNALITIES

Assess welfare benefits using ‘natural experiment’

- Million dollar plants (Greenstone & Moretti, 2003)
 - Special issue in *Site Selection* journal
 - One county is the winner – one or two losers
 - Identical, except for... (coin-toss?)
- 1.1% – 1.7% jump in local property valuations
 - Asset: PDV of future profit stream, incorporates all relevant costs (subsidies, opportunity costs)
 - 1.5% jump in wage earnings in plant’s industry in winning county



COMPETITION

Jurisdictions compete with incentive packages

- Tax breaks
- Training subsidy
- Land grant
- Infrastructure provision
- Promotional/marketing support

- Million dollar plant conclusion
 - ➔ Contrary to expectations, some net local welfare gains materialized



COMPETITION

Nash equilibrium

- To predict outcome of bidding game, we turn to game theory.
- Local governments will bid on their best response function
 - (similar to Bertrand-price or Cournot-quantity competition in industrial organization)
- Two hypothetical examples
 - New Zealand competes with Australia to attract movie shoot
 - Figure 1: $PB_{NZ} > PB_{AU}$ and $SB_{NZ} > SB_{AU}$ ($A > 0$ and $B > 0$)
 - Figure 2: $PB_{NZ} > PB_{AU}$ and $SB_{NZ} < SB_{AU}$ ($A > 0$ and $B < 0$)



Figure 1: An illustration of the optimal subsidies offered

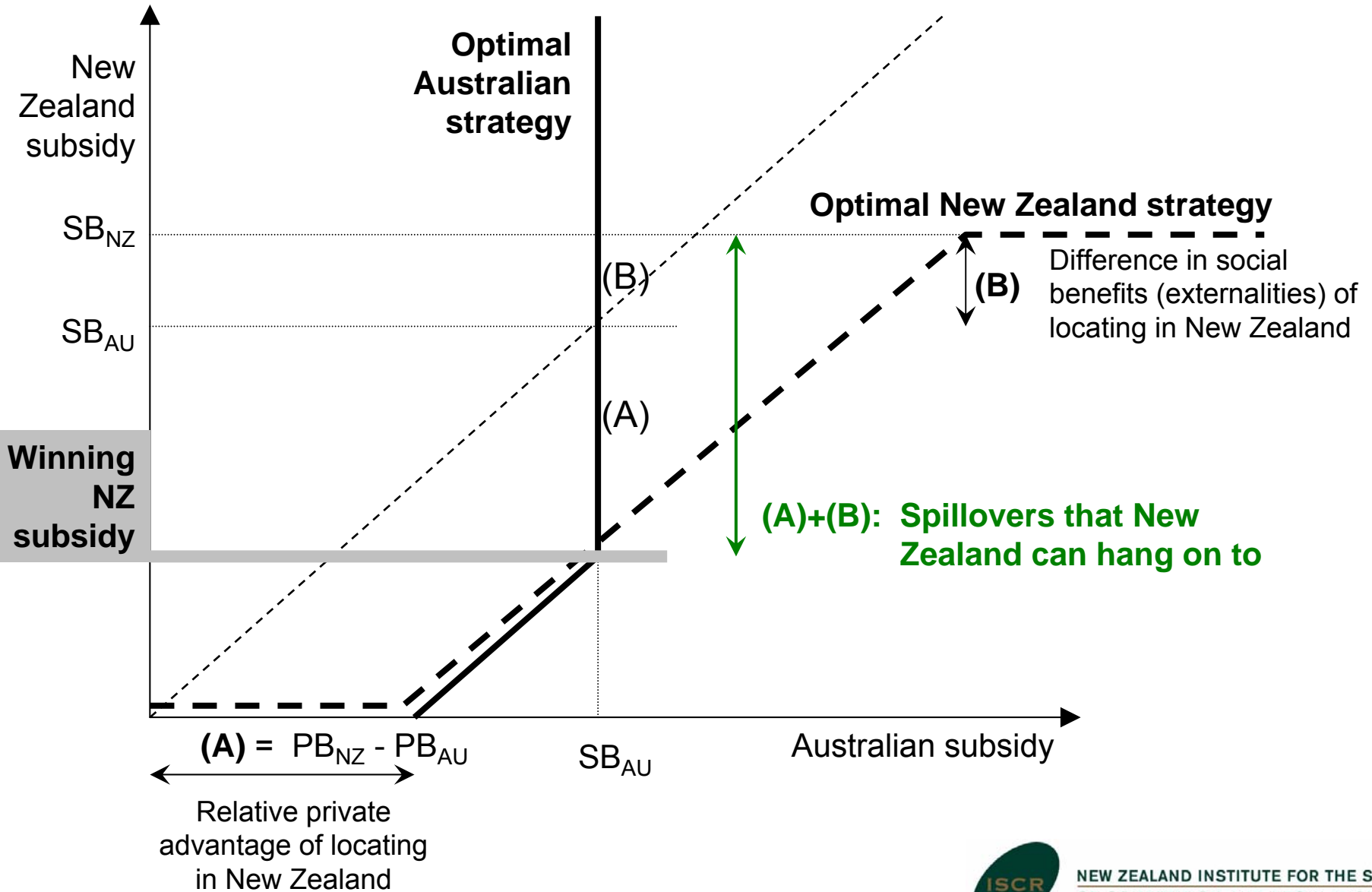
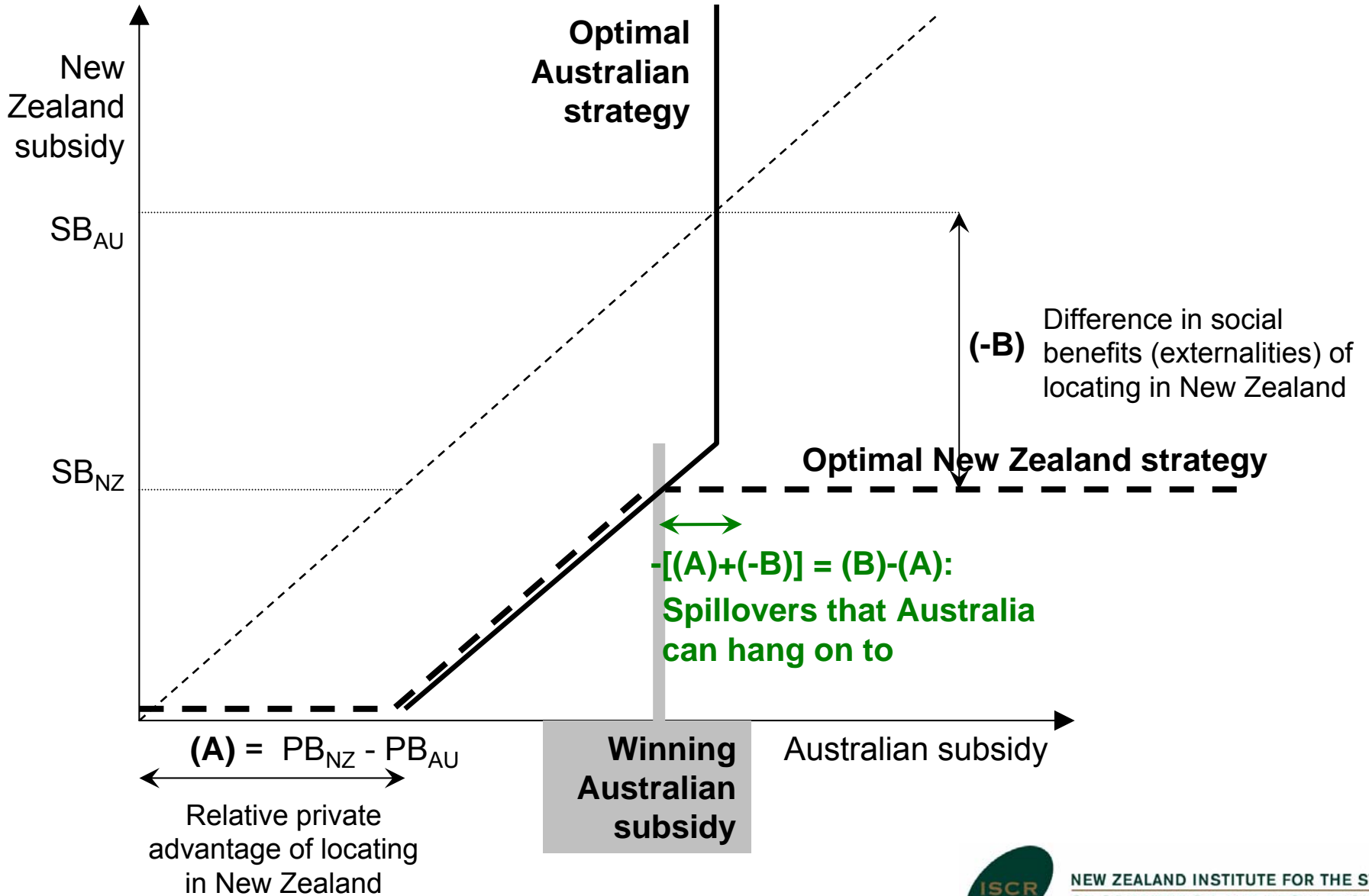


Figure 2: Optimal subsidies when Australian externalities dominate



COMPETITION

Main finding

- Even if externalities are positive, competition will lead to some of them being transferred to the firm
 - Optimal bid is positive and proportional to size of total externalities
- Net welfare accruing locally is the fraction of externalities that is unique (private cost advantage or location-specific spillovers)
 - Only the difference between the total value of the project (intrinsic private plus social/externalities) in the winning versus the runner-up location.



Assess local initiatives

- V8 Supercar (Hamilton)
 - Mayor Michael Redman: “there is no reason to believe the return for Hamilton would be any less than the amount forecasted in the Wellington economic impact assessment.”
- LA Galaxy (Wellington)
 - Spillovers to future soccer games are a likely unique externality
- World of WearableArts Awards show (Wellington)
 - Better fit: More international appeal / fashion
- Ellerslie International Flower Show (Christchurch)
 - Fit may be better (SB↑), but costs higher / sales lower (PB↓)
 - Risk of overbidding greatest



POLICY CONCLUSIONS

1. Competition leads to project locating in highest value location
 - ➔ Even if coordination is feasible, not necessarily ideal
2. Jurisdiction can only affect its own strategy
 - ➔ Not bidding is not on best-response function
3. Only a fraction of the externalities are captured locally
 - ➔ Stay out of the bidding game unless you are committed to get estimates right (avoid overbidding).
4. Rules-based policies are unlikely to identify “unique” advantages
 - ➔ Stay out of the bidding game unless you can tolerate discretion (avoid winner’s curse)



INTERESTING CONTRAST

(Both from political economy and industrial organization / international trade perspective)

- **CANADA:**

- Large budget, popular programs
- Effectiveness in doubt

- **NEW ZEALAND:**

- Small budget, controversial program
- Interesting experiment



Canada



Table 3: Most important recent subsidy and incentive programs for manufacturing investments in Canada

| Fund | Juris- diction | Duration | Value (C\$ mil) | Focus |
|---|-------------------|------------|----------------------|--|
| Large Scale Strategic Investment Initiative | ON | axed | 650 | Promote R&D, skills training, and infrastructure |
| Strategic Manufacturing Investment | ON | indefinite | 63/year ¹ | Industry support under general "Investment and Trade Strategy" |
| Ontario Automotive Investment Strategy | ON | 5 years | 500 | Automotive assembly & Tier 1 suppliers (min. \$300m or 300 jobs) |
| Advanced Manufacturing Investment Strategy | ON | 5 years | 500 | Investments in technology & innovation (min. \$25m or 100 jobs) |
| Next Generation Jobs Fund | ON | 5 years | 650 | Clean automotive and green technologies (+ three more sectors) |
| Agreement with GM | QU | 5 years | 290 | Developing a network of automotive suppliers in Quebec |
| Strategic Investment Support Program | QU | indefinite | 75 | Investment support for manufacturing and six other sectors |
| Regional Economic Intervention Funds | QU | indefinite | 210 | (i) direct business support, (ii) regional investment fund, (iii) venture capit. |
| Capital Tax Credit | QU | 4 years | N/A | Elimination of tax on capital by 2011 and increased credit until then |
| Aid package (cope with currency appreciation) | QU | 5 years | 620 | Manufacturing: 70% for training and direct assistance, rest in tax measure |
| Canadian Skills & Innovation Project | Fed | 5 years | 1,000 | Investment support for automotive (half of the fund) and aerospace |
| Capital Cost Allowance rate increased to 50% | Fed | 3 years | N/A | Investment incentive for manufacturing and processing machinery & equip |
| Economic hardship fund | Fed | 1 year | 1,000 | Aid single-(traditional) industry towns suffering from volatile markets |



New Zealand



Offshore investment partnerships

- Achieving a global presence, not by selling out to a foreign firm with the right external presence and scale, but retain NZ ownership for the prosperity of local communities.
 - NZ Venture Investment Fund (\$344m / 37 firms over last 5 years)
- Offshore location (marketing, processing,...) requires outward investment if the firm is to retain control of that part of its operations
 - Change international tax rules: tax exemption for active income earned by New Zealand companies offshore
 - **Tax funded support for outward investment** if it could:
 - introduce new technology, R&D activity, ability to commercialise innov.
 - establish new or enhanced linkages & networks to benefit other NZ firms
 - improve position of other NZ firms in international supply chains, distribution networks and markets



BACKGROUND PAPER

Policy Watch: Governments at the Bidding Table

- ISCR Working paper available <http://www.iscr.org.nz/n390.html>
- ISCR newsletter article, July 2008

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