# Assessing the Impacts of Tenure Changes in British Columbia

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Prepared for the BC Forum Symposium on November 1st 2006:

"Creating New Opportunities: Forest Tenure & Land Management in BC"

### Historical Context of Tenure

- The "social contract"
  - In exchange for access to Crown timber, firms are required to undertake investments to improve the value of the resource (financial resources to the Crown) and provide employment
  - Wood was the engine that was used to develop the province
- The system worked well but conditions changed. Inertial forces have stopped the system from adapting to the new economic realities

# New Economic Realities (highlights)

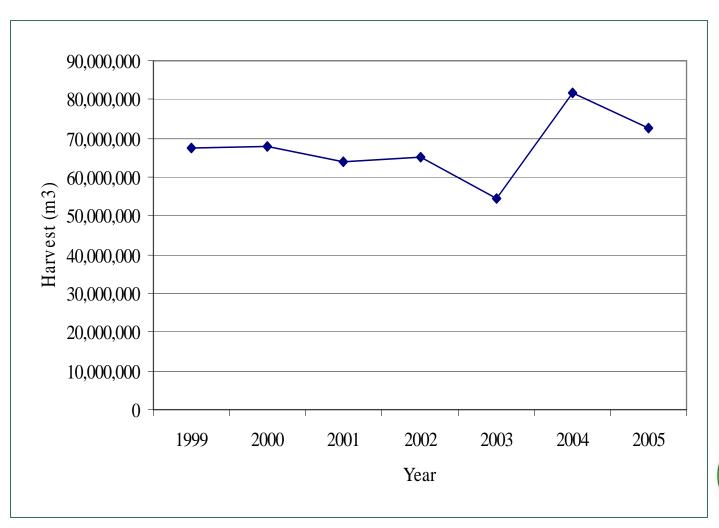
- Increasing global competition (wall of wood)
- Canadian dollar has become a Petrodollar
- Fiber quality advantage lost due to technology changes. Quality of fiber declining in British Columbia
- Costs increasing in Canada



# New Economic Realities (highlights cont)

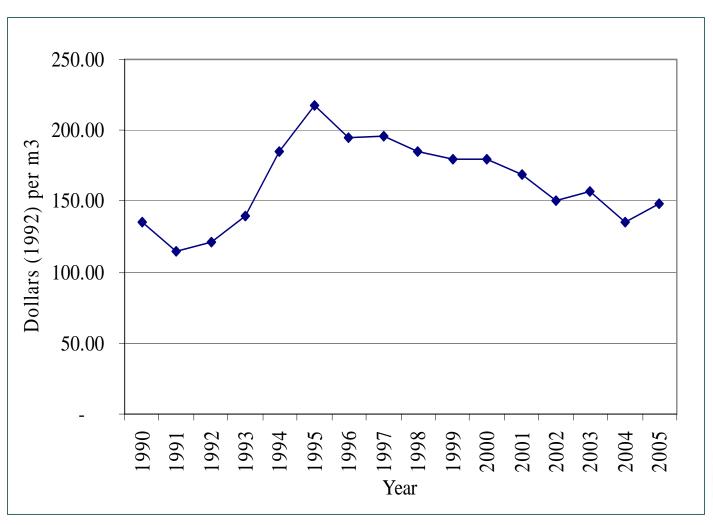
- Social demand for non-timber services are increasing and so is the regulatory burden
- Trade measures costly
- Land claims by First Nations increased uncertainty significantly
- Market changes affecting demand for Coastal lumber (Western hemlock in Japan)

## Crown timber harvest in BC (1999-2005)



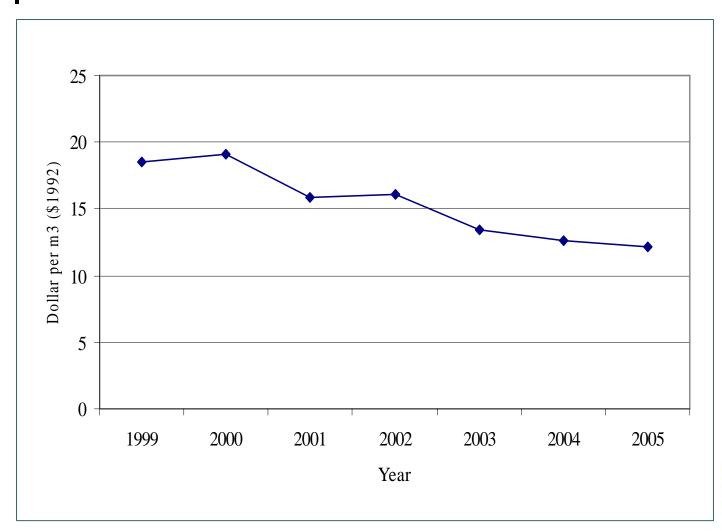


#### Export Revenues in \$ per m<sup>3</sup>





## Average provincial revenue per cubic metre (\$1992 per m³)





# • • Consequences

- Lack of incentives to invest
- Lack of innovation
- Low profitability that diminished the projection of uncollected rents by the government thus reducing the wealth of tenure holders
- Coastal industry in <u>deep crisis</u>. The interior with superior milling technology, low cost, logging somewhat less in crisis

## • • Policy Arena

- Increased protected areas and the Forest Practices Code made BC a leader in environmentally (but not industry) friendly forest practices
- Significant increases in regulatory costs
- Stumpage increased, in part, because
   US pressure

### • • Policy Arena (cont)

- The Coastal crisis led to commissioning of the Pearse 2001 report. The report called for removing regulatory restrictions that forced companies to behave in uneconomic ways in a highly competitive global market
- US trade negotiations putting pressure for tenure reform
- Forest Revitalization Plan



### • • Forest Revitalization Plan

- FRP package
  - Tenure re-allocation
  - Timber auction
  - Cut control and processing regulations (abolish Appurtenancy requirements)
  - Tenure transfers and subdivision
- The trade-off: reallocation of AAC for flexibility and less regulatory burden = the breaking of the social contract?

# Could the social Contract Survive the New Economic Realities?

#### We examine:

- Hints of the high costs of mixing social and economic objectives
- Expected benefits by industry
   (as reflected in financial markets)
- Pre and post FRB employment trends
- Affects on communities



# FRP: Effects on Firms (Financial)

- The announcement of the FRP did not have significant impact on the expectations of the financial markets with respect to the value of the publicly traded companies with exception for the negative impact on Norske (as its fiber suppliers might be affected)
- Post announcement risks, however, went significantly up
  - Uncertainty with respect to implementation and compensation
  - De-integration increases the risk to processors who can rely less on "even flow". The market created is not sufficiently deep to guarantee stable wood supply



# A Study of Cost of the Social Contract

- The Small Business Forest Enterprise Program (SBFEP) was designed to facilitate new entrants and provide timber supplies to smaller loggers and manufacturers, particularly those with a focus on job and value added creation
- As part of FRP the SBFEP was restructured, expanded and received a revenue focused mandate
- Socio-economic tenure conditions were dropped and the program was renamed BC Timber Sales (BCTS)

# A Study of Cost of the Social Contract (cont)

- Short term bias: using a dataset of TSLs issued in the Interior under sections 20 and 21 between 1999-2004 we developed a model which related bid on any TSL to its characteristics. Some of these characteristics were the constraints reflecting the "social contract"
- Long term tenure bias: to investigate the cost of the non-lumber capacity restrictions as well as restrictions that focused on employment criteria we analyzed auction results for NRFLs in the Interior 2002-2006

### • • Results

#### Short term

- Restricting methods was costly. By requiring the use of horses in extraction of lumber the Crown lost \$12.25/m<sup>3</sup>
- Restricting timber sales under section 21 bid proposals have lost the Crown \$8.61/m³ compared to section 20 timber sales to market loggers (costs to the Crown about \$42.2 million a year)



# • • Results (cont)

#### Long term

- Bidders expected higher payment between \$.04/m³ and \$.06/m³ for every 10 000m3 increase in AAC
- Lower payments are expected by tenure holders that have to build non-lumber manufacturing capacity and meet employment commitments. Indeed prior to FRP, government could expect virtually no revenue from the sale of tenure, tenures were essentially bought with jobs

Conclusion: the social contract is expensive, but does it help?

#### Trends (prior to FRP)

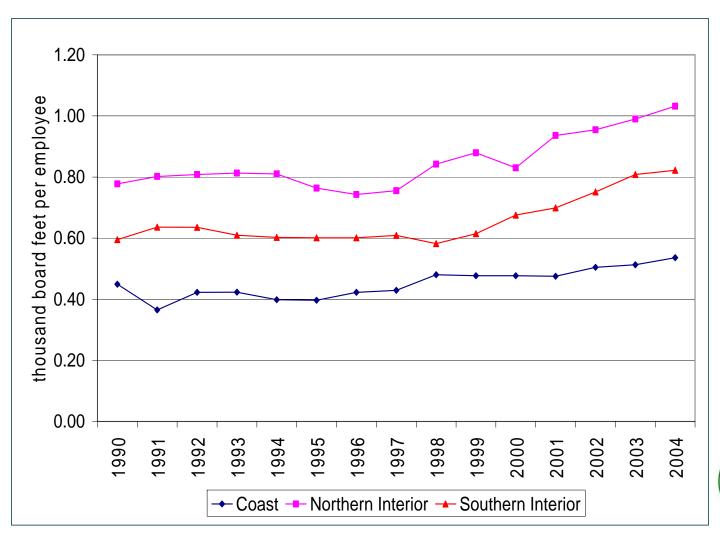
- Firms expanding capacity in large mills, closing small ones
- Many increases in production took place in larger mills and reduction in smaller mills
- Production increased in the Interior where firms benefited in recent years from short term increases in harvest levels and a stronger demand

### Trends (prior to FRP) (cont)

- Production decreased on the Coast as firms struggled to adapt to the changing nature of the resources (increases in the share of hemlock, increases in the proportion of second growth, and changing preferences and lower prices in product markets)
- Coast saw most of closures, followed by Southern Interior. Few closures in Northern Interior
- Most closures involved licensees with several plants
- In total capacity increased but spatial redistribution

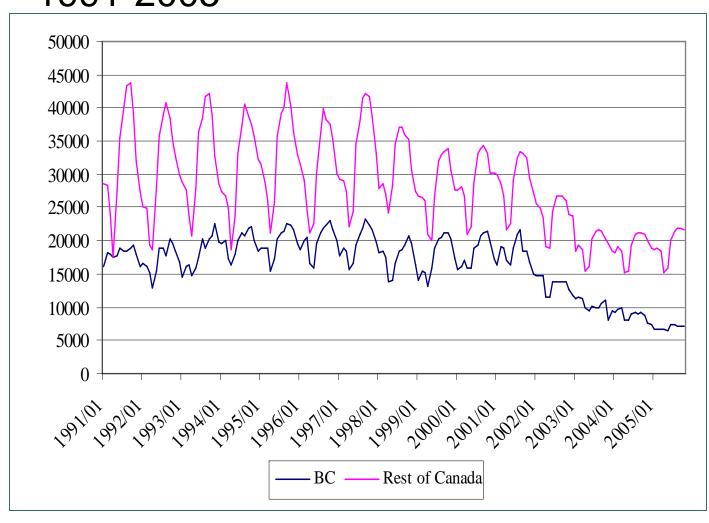


# Productivity increases; Output per Employee in Different Regions in BC, 1990-2004



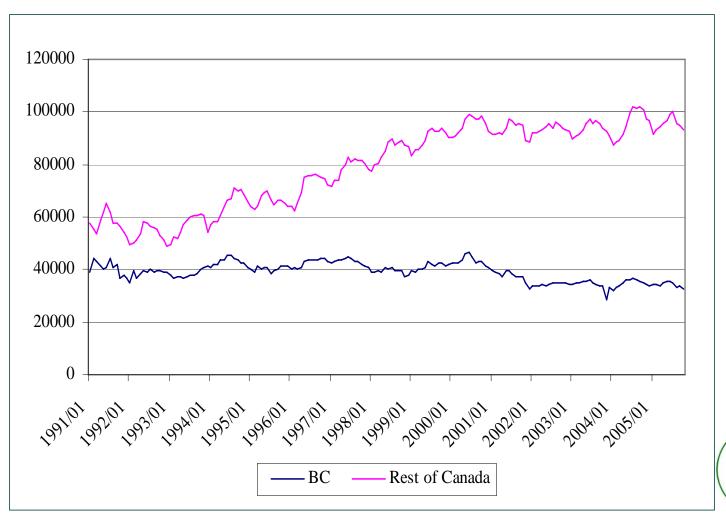


Recently BC decreased more than rest of Canada; Monthly Employment – Forestry and Logging BC vs. Rest of Canada 1991-2005



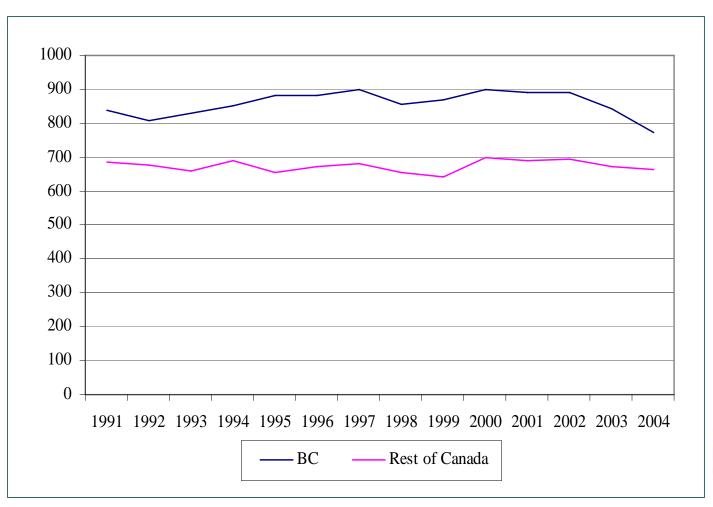


BC Declines, Rest of Canada increases in Processing Employment; Monthly Employment in Wood Product Manufacturing in BC vs. the Rest of Canada, 1991-2005



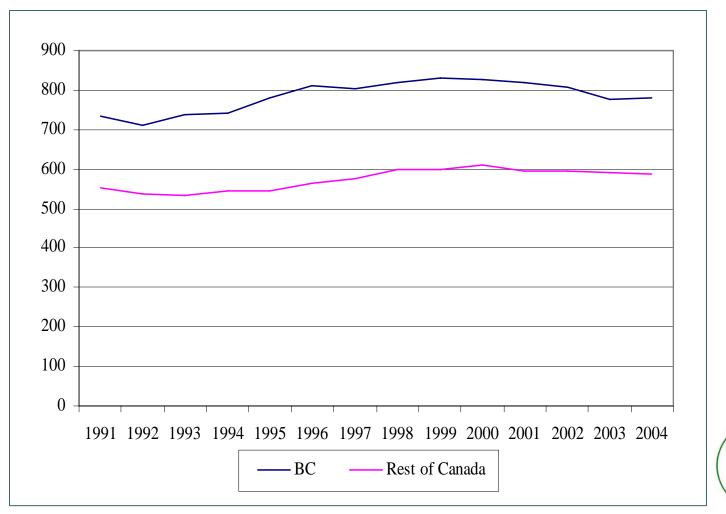


BC Employees are better paid; Average Weekly Earnings by Year (\$/week), Adjusted for Inflation, in the **Forestry and Logging** Sector in BC vs. the Rest of Canada





BC Employees are better paid; Average Weekly Earnings by Year (\$/week), Adjusted for Inflation, in the **Wood Product Manufacturing** Sector in BC vs. the Rest of Canada





## • • Interpreting the Trends

#### Confounding factors

- Expiration of SLA and the imposition of trade duties
- Collapse of the traditional markets for the BC Coast
- Surge in beetle-killed timber



# Interpreting the Trends (cont)

- Crises provided political opportunity for radical changes in policy
- The dominant trend in saw-milling move toward larger mills and increased in productivity. This trend happens everywhere in the province: FRP enabled faster consolidation and the emergence of super-size mills. Most important enablers: dropping appurtenancy and allowing tenure transferability and divisibility (no more 5% take back or ministerial approval)
  - Rationalization within companies and consolidation through mergers and acquisitions. Efficiency gains by closing inefficient plants
  - Investment in capacity largely beetle wood



# Interpreting the Trends (cont)

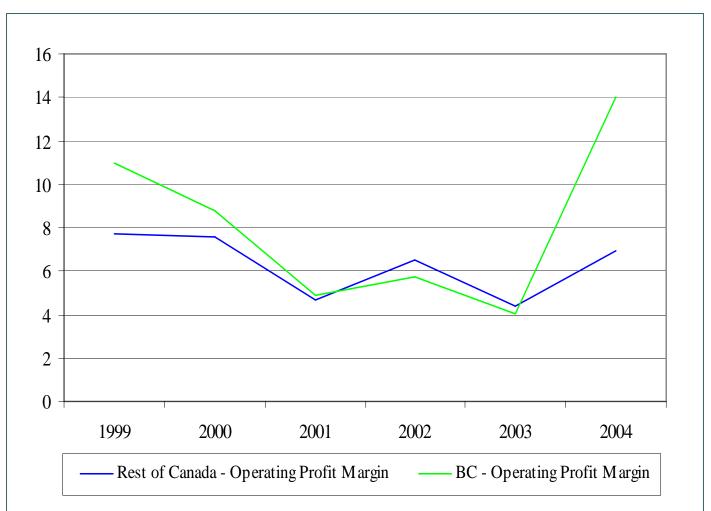
- Most of the reduction in employment happened after the expiration of the SLA prior to FRP
- The deepening of the market did not create the desired opportunity for small added value investors
- The recent agreement with the US may have, however, impact on added value manufacturers who do not have tenure, as they will face duties only on the inputs while integrated firms may face duties on both the inputs and the added value

## • • Other Consequences

- Changes in ownership patterns
  - The redistribution of rights slower than expected. Increased flow to communities and First nations may provide resources but the magnitude of impact will depend on their capacity to manage the resources and generate economic opportunities
- Most noticeable changes in ownership Cascadia emerging
  - Focus: wringing more efficiencies out of existing operations (no new kind of processing investment)
  - Other new entrants with new types of investments have yet to emerge



# Payoffs for companies; Operating Profit Margin for Wood Manufacturing Firms in BC Compared to the Rest of Canada





#### • • Community Impacts

- Forty one forest dependent communities in BC. Consolidation will threaten outlying communities with small mills
- On average home values assessments increased 2.3% between 2002-2005 in forest dependent communities compared to 35.5% form the province as a whole



## Changes in Assessed Home Values for Selected Communities (\$)

Community	2002	2005	Change
Midway	99,200	87,583	-11.7%
Port Alice	95,000	74,174	-21.9%
Slocan	65,756	59,714	-9.2%
Valemount	77,400	78,998	2.1%
Vancouver	400,000	585,798	46.4%



### • • Policy Implications

- By granting firms more flexibility it enabled firms to more quickly respond to competitive pressures they are facing
- Canadian forest product firms will continue to seek lower cost. Since wood costs are likely to increase as the higher quality more accessible stands are harvested, capital intensification and consolidation are likely to continue. Employment will continue to drop (Canadian employees are among the highest paid in the forest products sector in the world)
- There is no apparent significant surge in the added value sector and investment in new products
- Forestry cannot be expected to serve any more as a major instrument of regional development

### • • Policy Recommendations

- Research suggest that there are several characteristics that make communities more resilient to economic shocks
  - Presence of local amenities
  - Local infrastructure
  - Ability of the community to generate and pursue viable economic opportunities
  - Population size (>5000)
  - Strong civic infrastructure



# Policy Recommendations (cont)

#### Scholars proposed that:

- Communities may benefit from increasing their local scope of control over resources if they have the capacity to utilize these resources. The option of establishing a community forest may not reverse its economic woes when a mill is shut down
- We argue that a strategic shift in regional policy is necessary. Helping some communities as they transform and others as they exit



# Policy Recommendations (cont)

- Targets for transformation:
  - Communities that become centers for production of traditional commodities (leave decisions to the market)
  - Communities marked for exit (outlying communities, support individuals)

#### Resilient communities:

- Diversifying communities (provide transition support to individuals affected by closures)
- Forestry added value clusters (community forests, investment in training facilities and local research, etc)