

# Population growth and economic growth: a tidy knot?

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# UNB

Does the regional economy have a population growth problem

or

Does the population have an economic growth problem?

Do we need

population growth to spur economic growth?

or

economic growth to spur population growth?

# Suppose the economy has a population problem

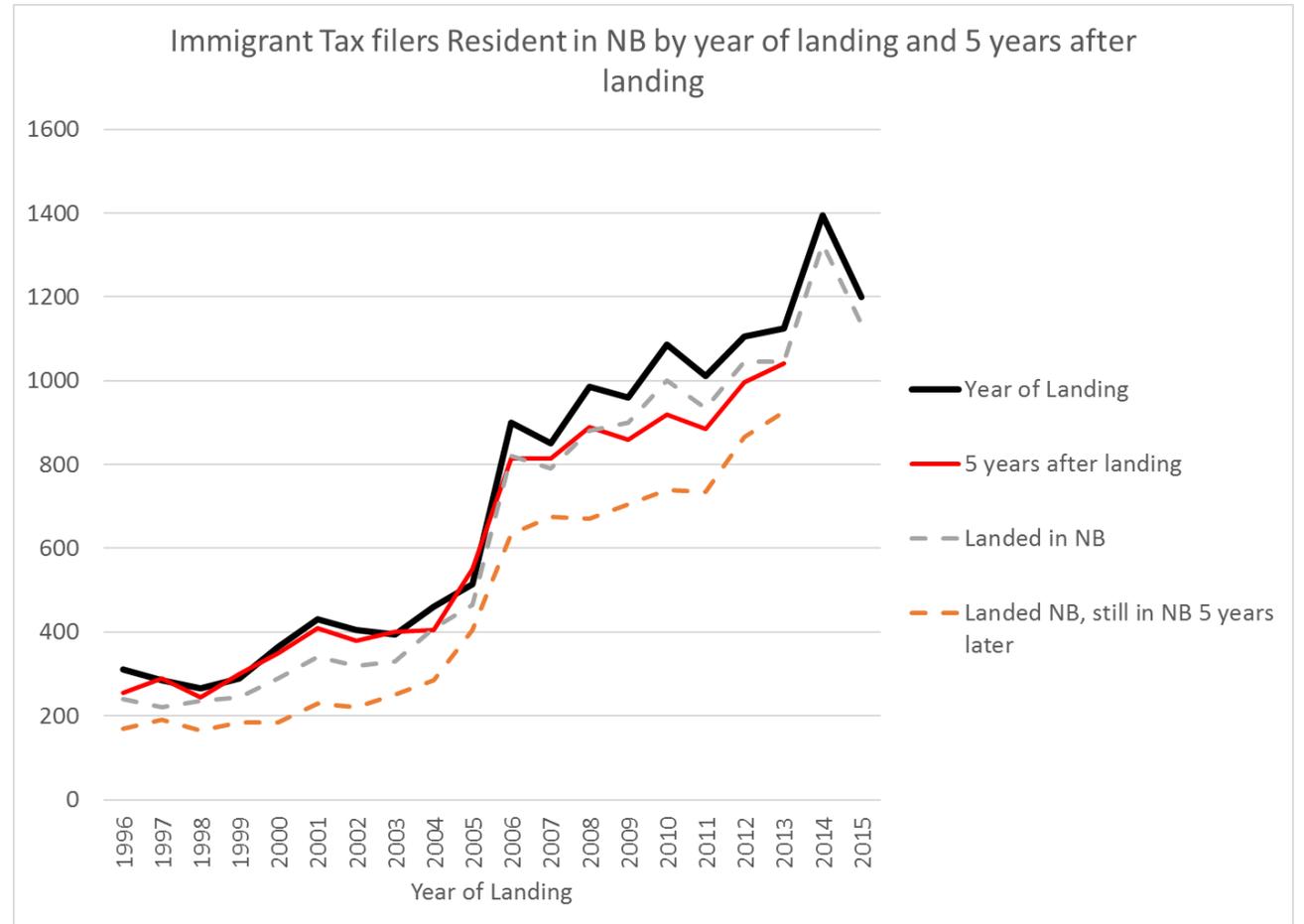
How do we attain the population, skills and human capital that the economy needs to grow?

# Immigration

NB numbers province have been trending up

NB retains a high proportion of permanent residents 5 years after landing

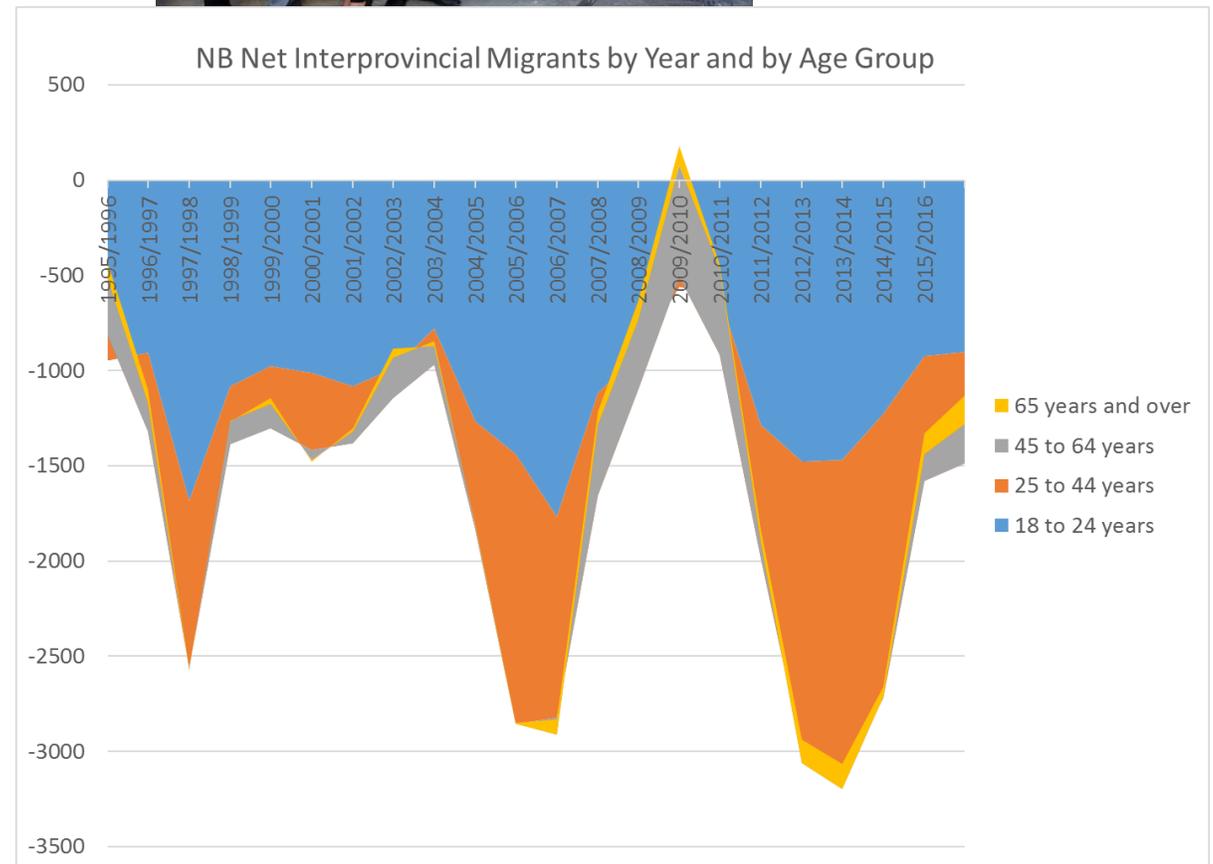
- Resident in NB 5 years after landing
  - with NB as intended destination, 80%
  - any province as landing destination, 90%



# Population Retention



- On Net, NB loses 1,500 population per year
  - mostly young, single, many educated/skilled
    - Recessions in Alberta are good for keeping population in NB
- Immigration levels to date “back filling” labour supply
  - To offset loss through net migration,
    - need 1,000 more immigrants per year
    - Or
    - improve retention of young NB’ers



Suppose that the population has  
an economic growth problem

Immigration, population retention, and population growth will all  
increase if we increase labour demand

Closed Economy: Adding population can increase GDP and aging population should raise labour productivity

- Capital stock/investment from domestic savings
  - Young consume out of labour income and save for when old
    - Old consume out of savings
- Wages and interest rates depend on the amount of capital per worker
  - When boomers were young, lots of L relative to K
    - Wages low, interest rates high
  - Now that boomers old old, less L relative to K
    - Wages high, interest rates low
  - Productivity can rise

MUCH ADO ABOUT NOTHING? DEMOGRAPHIC BULGES, THE  
PRODUCTIVITY PUZZLE, AND CPP REFORM

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# But NB and the region is a Small Open Economy: Adding population cannot drive growth

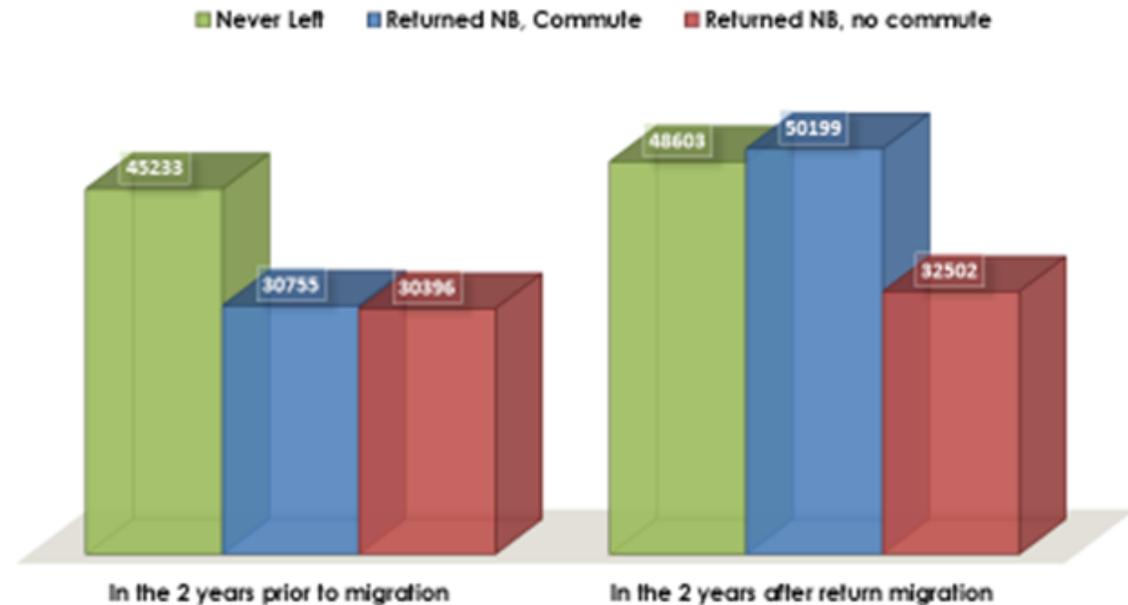
- Labour and capital are mobile to other markets, wages and return to capital set in external market
  - After tax wage can't diverge from that of alternative markets
    - Capital must earn equivalent to the rate of return elsewhere or it leaves
    - $K/L$  is fixed since  $w/r$  set externally
- Adding population without adding capital only displaces existing workers
  - Can backfill for  $L$  exiting labour market due to outmigration, retirements etc...
- Export demand drives growth
  - Attracts capital and labour until same return on capital and wage to labour
- Main impacts of export growth are larger GDP, larger population and higher property values
  - No changes in wages or return on capital



In an SOE, it's the place,  
not the people...

- Is the value of a worker determined by :
  - ~~the human capital of the worker~~
  - or
  - labour demand (K/L)
- The same worker is worth more outside of NB
  - symptomatic of opportunities in the economy

## ANNUAL EARNINGS OF MALE RETURN MIGRANTS TO NB AND THOSE WHO NEVER LEFT

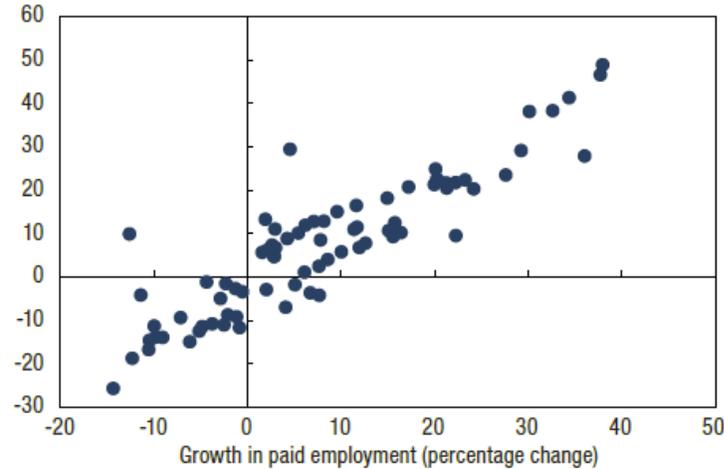


# Evidence that labour demand drives population growth

- Exhibit 1: Morissette (2018)
- Exhibit 2: Saskatchewan post 2005
- Exhibit 3: Harvard Economists' study:
  - “increases in labor demand appear to have greater impacts on employment in areas where not working has been historically high”
  - “Pro-employment policies, such as a ramped up Earned Income Tax Credit ... could plausibly reduce suffering and materially improve economic performance.”

**Chart 2**  
**Growth in paid employment and in the population aged 15 to 64, by economic region, 2001 to 2015**

growth in population aged 15 to 64 (percentage change)



**Note:** The growth in paid employment is measured as the percentage change in the number of tax filers aged 15 to 64 with paid employment income. The figures for the growth in paid employment and in the population aged 15 to 64, by economic region, are similar.  
**Sources:** Statistics Canada, Canadian Employer–Employee Dynamics Survey; and the Demography Division.

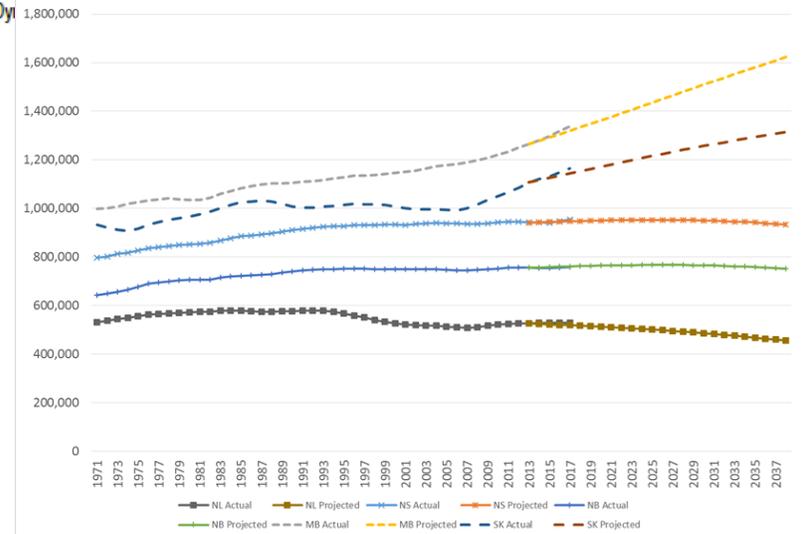
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BPEA Conference Drafts, March 8–9, 2018

## Saving the heartland: Place-based policies in 21st century America

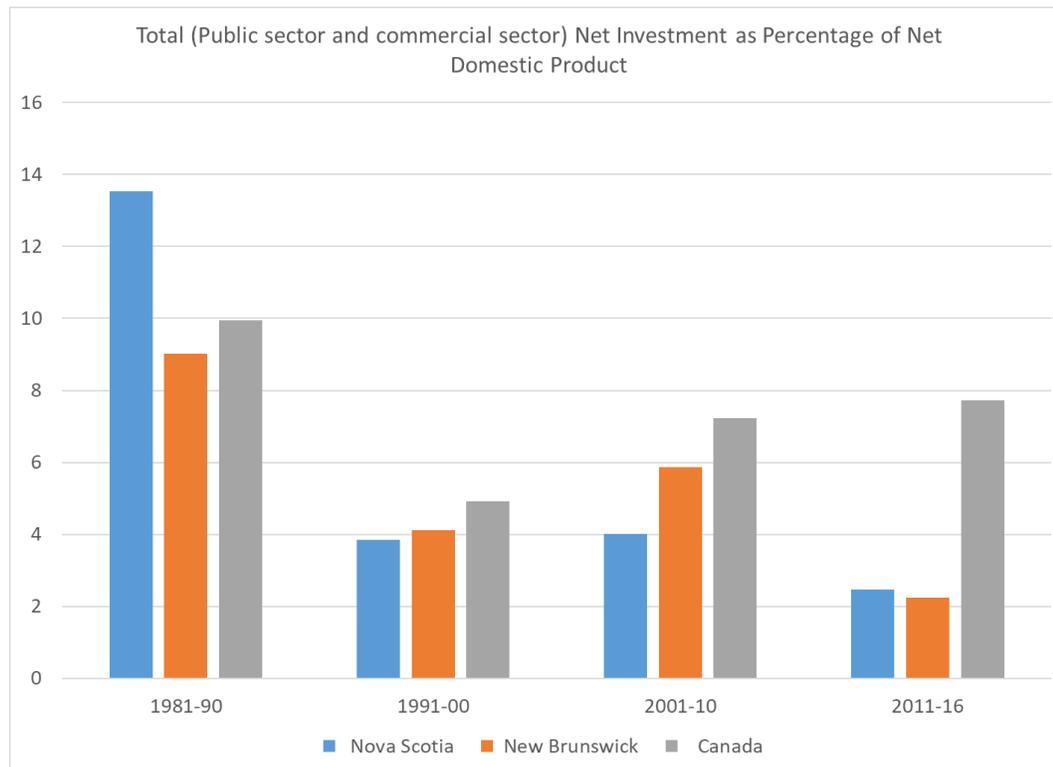
Benjamin Austin, Harvard University  
 Edward Glaeser, Harvard University  
 Lawrence H. Summers, Harvard University

Population size 1971 to 2017 actual, 2013 to 2038 Projected (medium growth scenario)

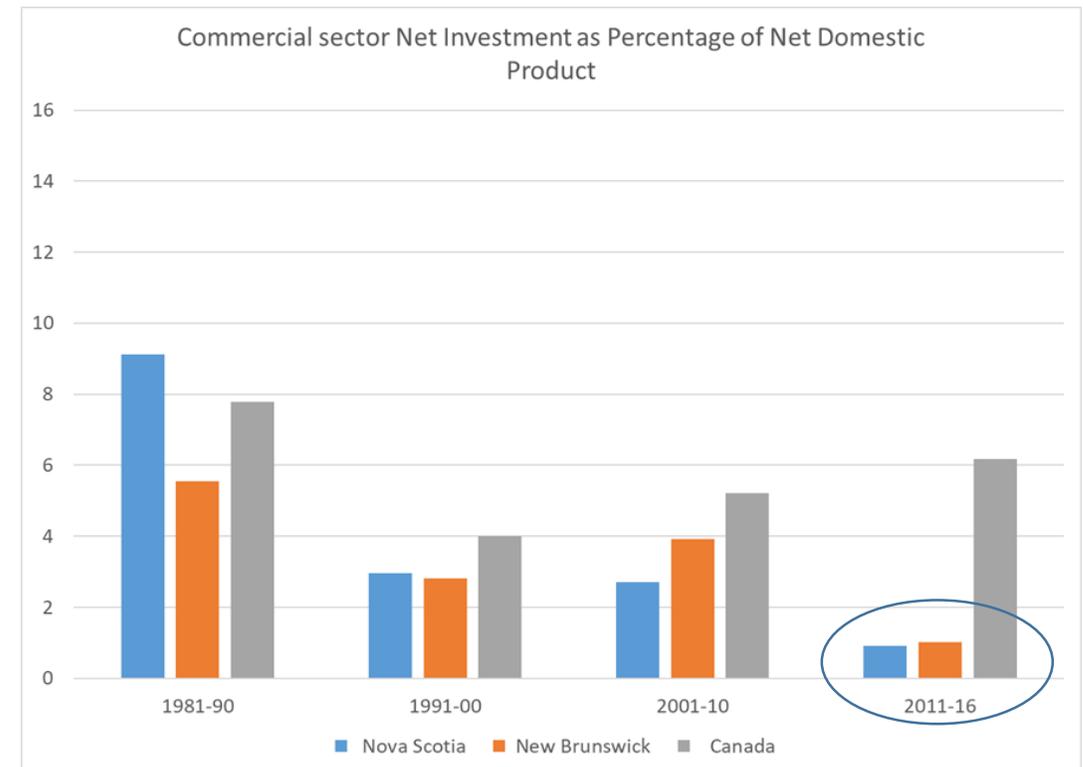


# Is there less investment, weaker labour demand growth, in NB than elsewhere?

% change in public and private non-residential capital stock

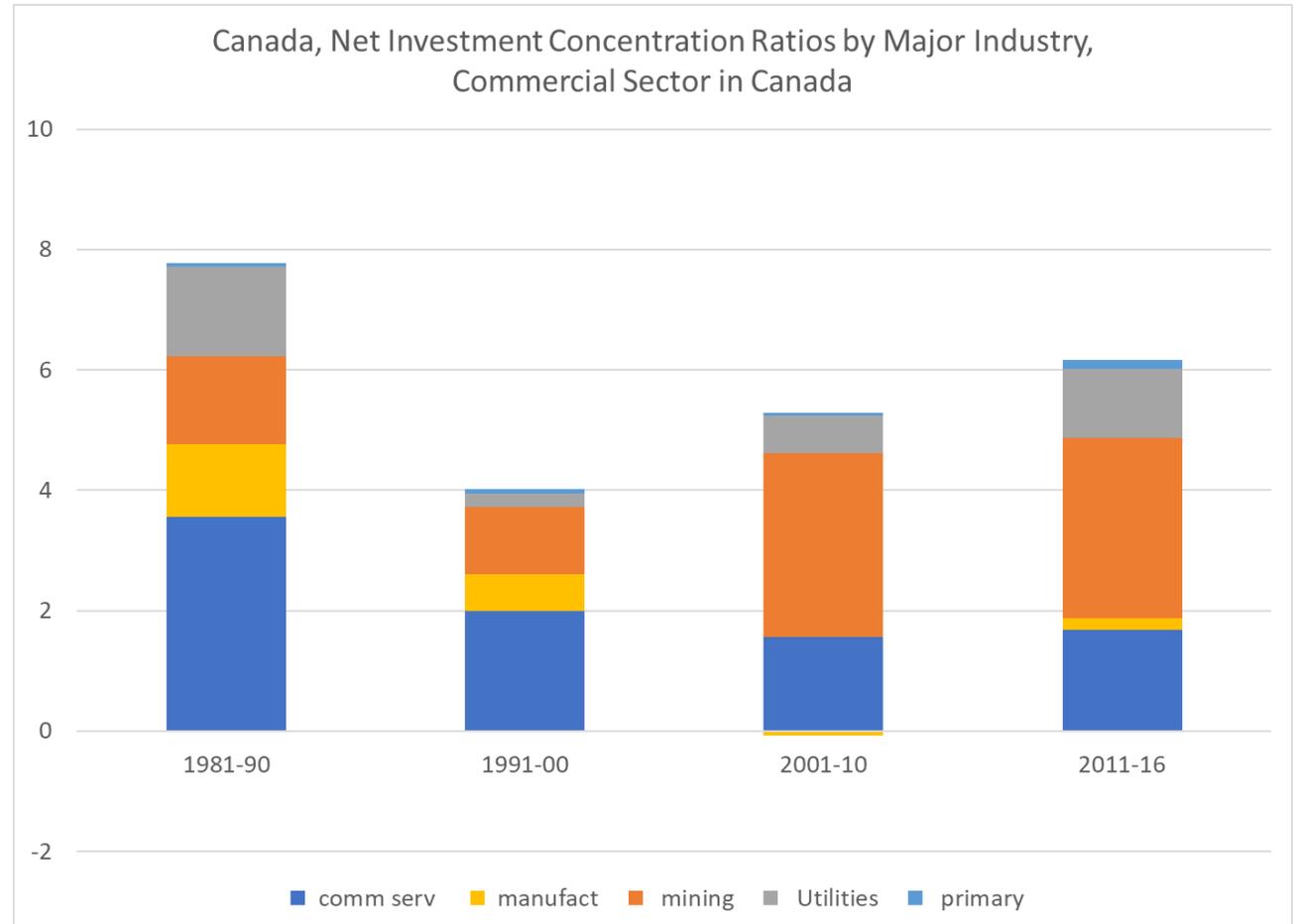


% change in private non-residential capital stock

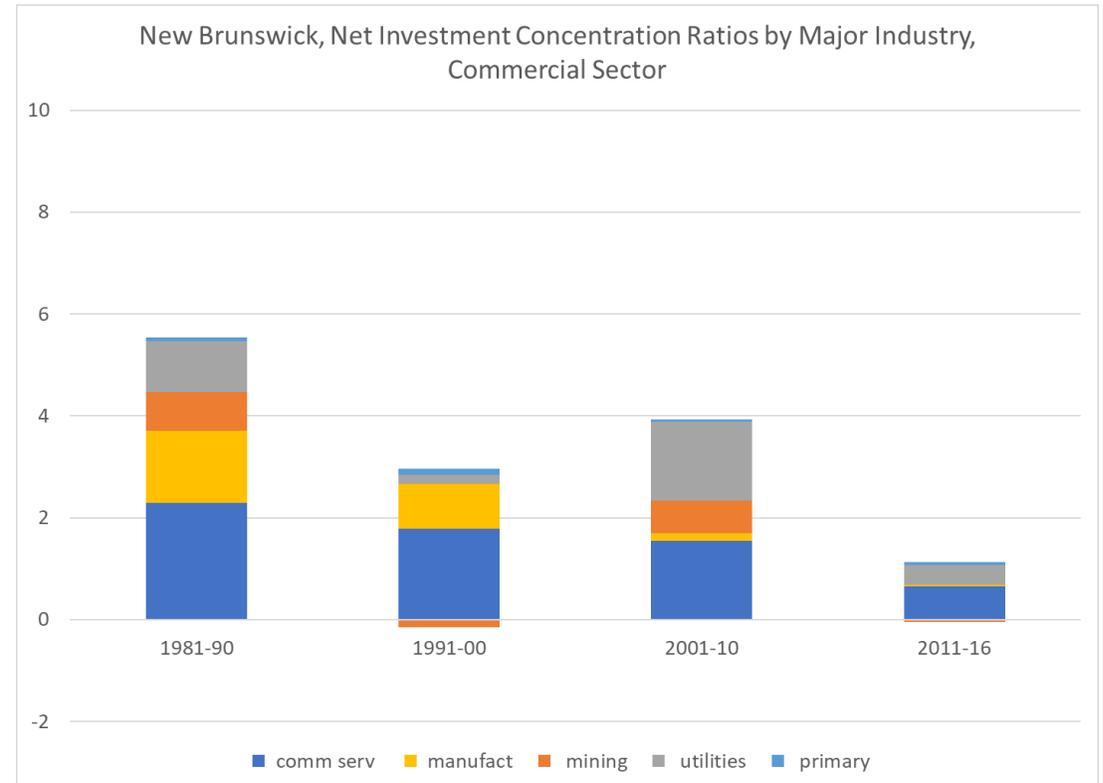
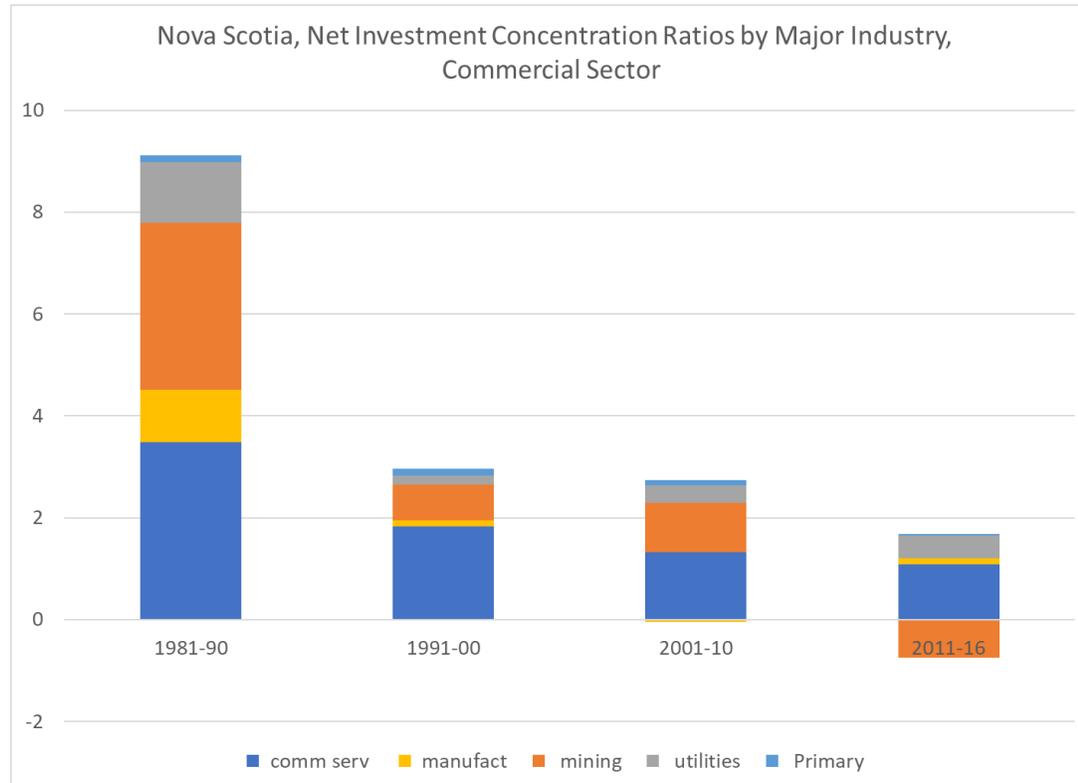


# Investment in Canada driven by exports

- Mining/Energy and utilities offsetting manufacturing weakness since 2000
  - Commercial services holding steady



# Meanwhile in NB and NS...



# If the population has an economic growth problem...

- Human capital policies alone = “Pushing on a rope”
  - Increasing labour supply will not grow the economy
- The regional economy needs investment to stimulate labour demand
  - That will attract immigrants, retain young NB’ers and grow the population
- For investment we need exports
  - Which means we need to ensure NB producers are competitive
- But we already knew that...



# A stagnant economy is an economy with a population problem

- Immigration, and immigrant retention, seems so important for NB and the broader region – what other options do we have?
  - Seems easier to stimulate and manage than investment and export demand
    - Hard to reverse decades of educating and incenting young Maritimers to leave
  - Sustains the economy as it is
    - replacing skills lost to out-migration and retirement
      - filling labour market gaps without needing to raise wages
        - Importing skills for the modernization of the economy since we can't get our own education system to invest in the programs aligned with labour market needs
  - Provides an option value for hope for growth
    - Entrepreneurial newcomers may solve our growth problem
      - See opportunities we do not, take risks we will not