THE SCHOOL OF PUBLIC POLICY

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IMPACT OF MUNICIPAL NON-RESIDENTIAL PROPERTY TAXES ON BUSINESS INVESTMENT

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OUTLINE

- Property Taxes and Recent Controversies in Calgary.
- Background on Property Taxation in Alberta Cities.
- Review of the Results of a Study by Dahlby, Ferede and Khanal on Non-residential Property Taxes and Business Investment In Alberta's Cities.
- Key Results and Applications
  - Evaluation of Cities' Expenditure Decisions
  - Allocation of Provincial Infrastructure Grants
  - Impact of Calgary's Elimination of the Business Tax and Increases in Non-Residential Mill Rates

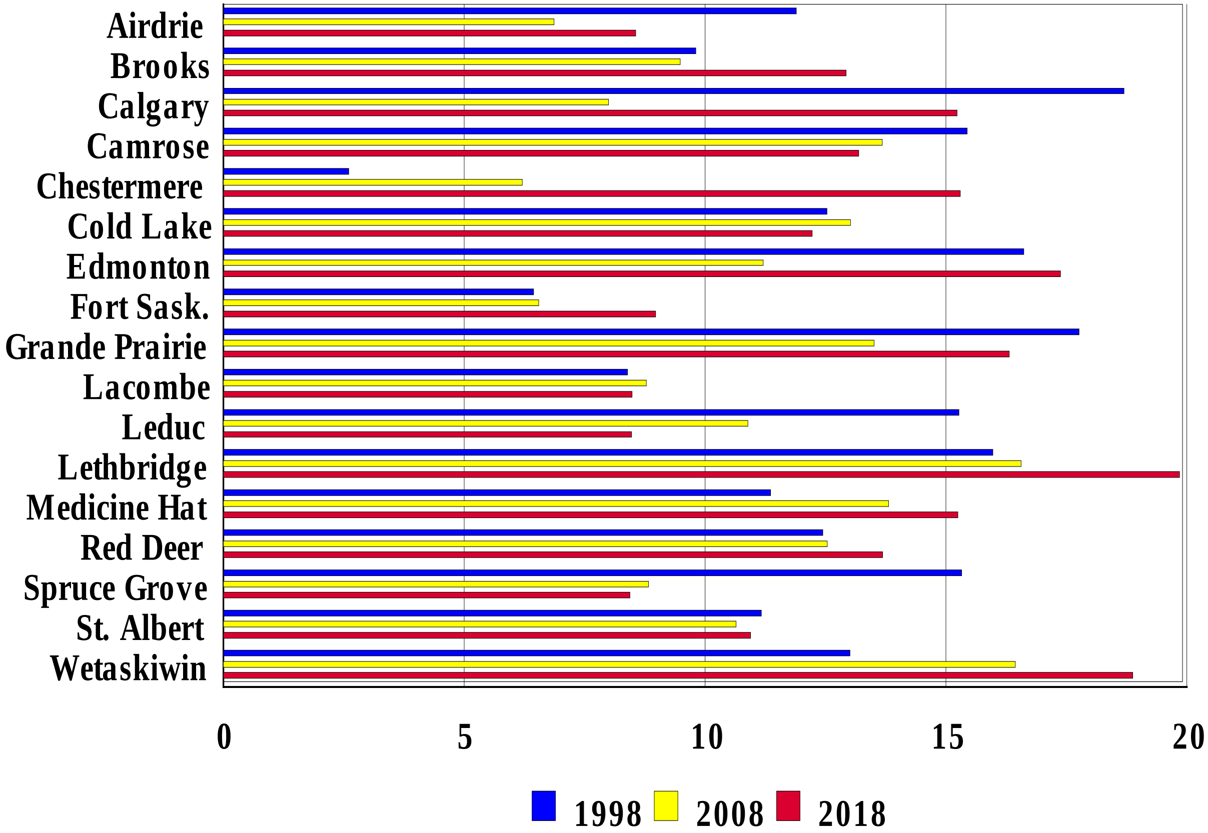
PROPERTY TAXATION

- Economists generally regard property taxes as among the least damaging or “distortionary” taxes.
- The property combines the “best” tax—a tax on land which is inelastic in supply—with the “worst” tax—a tax on capital which is highly elastic in supply at the municipal level.
- The economic effects of property taxes are among the least understood of all taxes.

CONTROVERSY OVER NON-RESIDENTIAL PROPERTY TAXES IN CALGARY

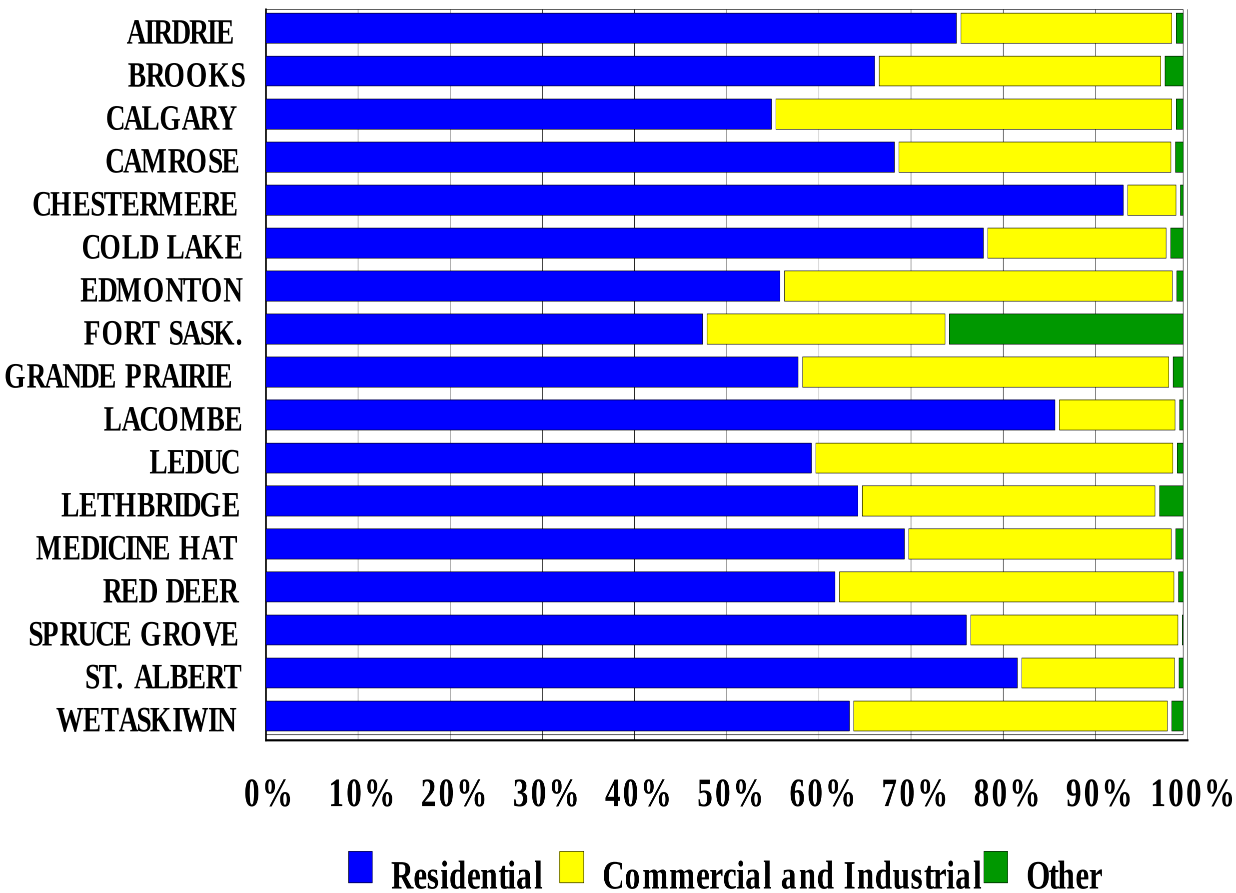
- The non-residential property tax rate increased from 10.9913 mills in 2013 to 17.775 mills in 2019:
  - To replace the business tax;
  - To offset the decline in the non-residential property tax base from the reduction in the assessed value of office buildings in the downtown core;
    - Non-residential assessment declined from $70.5 billion in 2015 to $65.3 billion in 2018.
  - To fund increases in expenditures.

BACKGROUND: NON-RESIDENTIAL MILL RATES, 1998 TO 2018



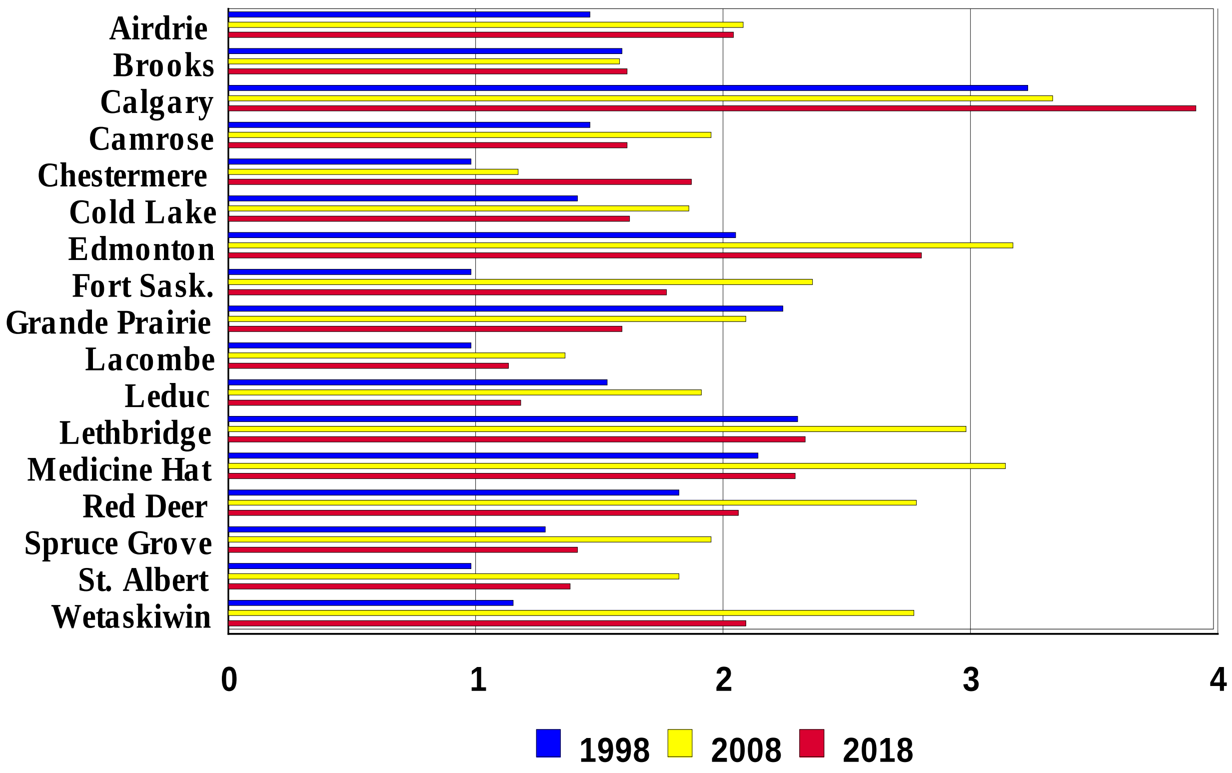
Between 1998 and 2018, non-residential mill rates increased in 9 Alberta cities and declined in the other 8.

SOURCES OF PROPERTY TAX REVENUES IN 2017



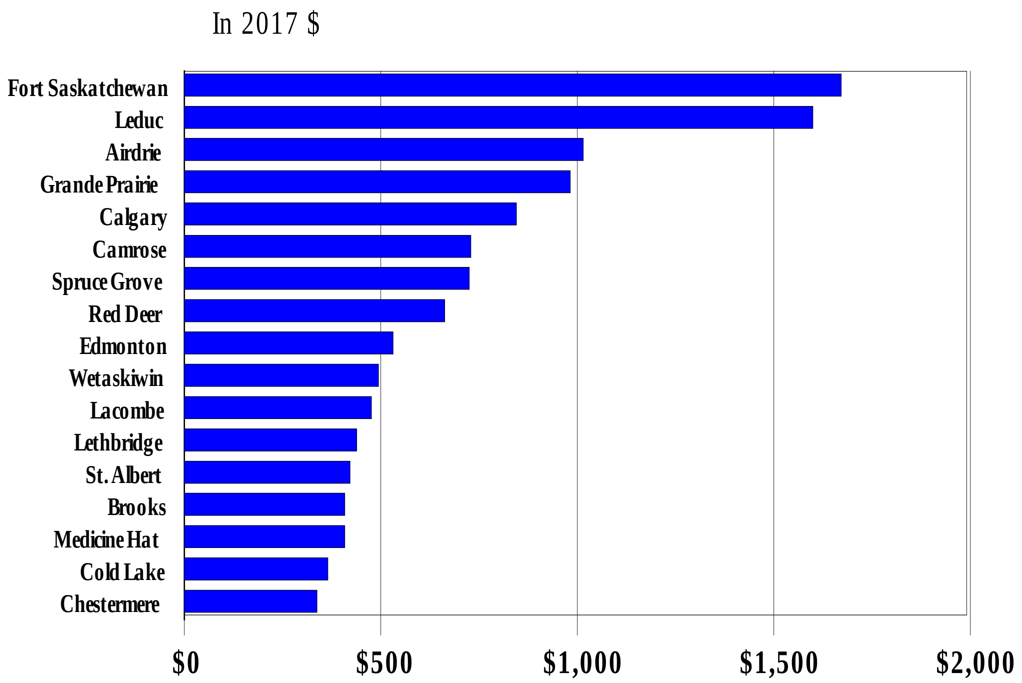
- Fort Sask. was the least dependent on residential property taxes (48%).
- Chestermere was the most dependent (93%).
- Calgary and Edmonton were the most dependent on commercial and industrial property (43%).

RATIO OF NON-RESIDENTIAL TO RESIDENTIAL PROPERTY TAX RATES, 1998, 2008, AND 2018



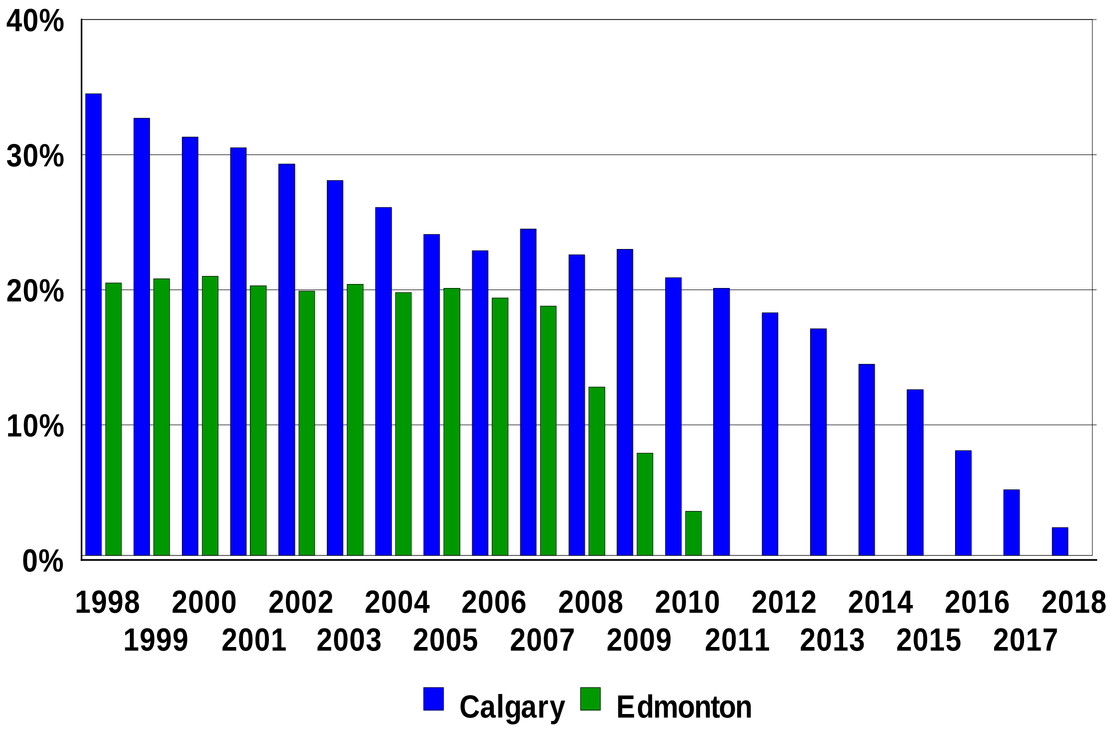
The average ratio was 1.64 in 1998, 2.27 in 2008, and 1.94 in 2018. Over the entire 20-year period, only Grande Prairie and Leduc reduced their ratios. Calgary (3.93) and Edmonton (2.82) had the highest ratios.

ANNUAL AVERAGE PER CAPITA COMMERCIAL AND INDUSTRIAL BUILDING PERMITS, 1998 TO 2017



- There is a wide variation in average real per capita building permit values across cities and over time for a given city.
- For example, Fort Sask. had per capita building permits of over $14,000 in 1998 and a minimum value of $313 in 2010.

BUSINESS TAX REVENUE AS A PERCENTAGE OF NET MUNICIPAL PROPERTY TAXES AND GRANTS IN PLACE



- Calgary, Camrose, Edmonton, Grande Prairie, and St. Albert levied a business tax.
- Edmonton, starting in 2008, and Calgary, starting in 2013, eliminated their business taxes.
- Calgary adopted a "revenue neutral" policy shifting the business tax burden to the non-residential property tax.

THE DAHLBY, FEREDE AND KHANAL STUDY

- Investigates the effects of non-residential property taxes on business investment—as measured by commercial and industrial building permit values — using annual panel data for 17 Alberta cities from 1998 to 2017.
- These are preliminary results. The paper is currently under review for publication as an SPP Research paper.
- A (possibly revised) version will be available on the School of Public Policy website in the future.

KEY ECONOMETRIC MODEL RESULTS

- A one mill increase in the non-residential property tax rate is associated with a $49 decline in real per capita business investment.
- An increase in business tax revenue per $1000 of non-residential property assessment is associated with a $42 dollar reduction in real per capita business investment.
- An increase in expenditures on municipal services **does not** have a significant impact on real per capita building permits.

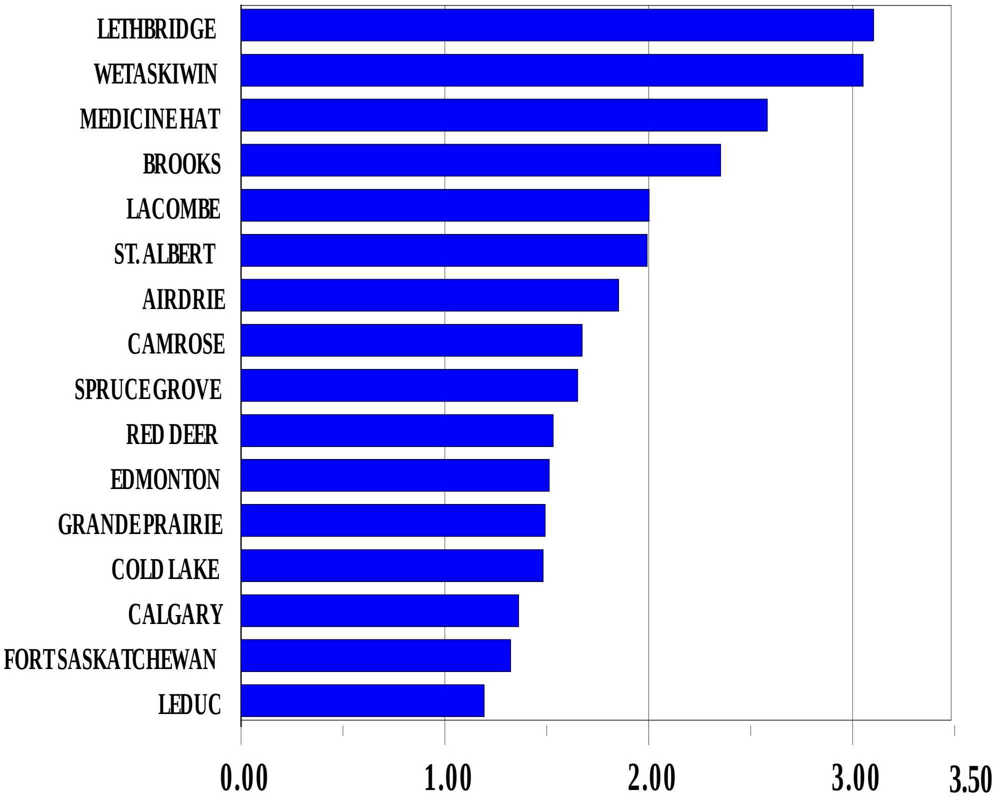
THE MARGINAL COST OF PUBLIC FUNDS (MCF)

- The MCF is a measure of the economic loss in raising an additional dollar of revenue.
- The efficiency loss from taxation occurs when taxes alter taxpayers' decisions to work, save, produce, and invest.
- The MCF is higher when, as a result of taxpayers' tax avoidance behaviour, tax bases "shrink".
- The MCF for a property tax is a weighted average of the MCF from taxing the stock of capital, which may be quite high because of the negative impact on investment, and the MCF from taxing land which, given its inelastic supply, is 1.00.

THE ESTIMATES OF THE MCFS

- We use our estimate of the impact of an increase in non-residential property taxes on investment to calculate the MCFs for the non-residential tax for 16 cities in Alberta.
- For Alberta’s two largest cities, Calgary and Edmonton, the MCFs are 1.38 and 1.53, respectively.
- These estimates of the MCFs are substantially lower than the Found (2017) estimate of 5.58 for non-residential property taxes in Ontario

THE MCFS FOR FOR NON-RESIDENTIAL PROPERTY TAXES FOR 16 ALBERTA CITIES IN 2018



- A city's MCF increases with its non-residential mill rate and decreases with its per capita non-residential assessments.
- Chestermere has a low per capita non-residential assessment, $7,143, and a relatively high mill rate (18.78610)
- The model predicts that a reduction in Chestermere's mill rate would increase total municipal, provincial and federal tax revenues.

APPLICATIONS: COST-BENEFIT ANALYSIS

- Could be used in performing cost-benefit analysis of municipal services and infrastructure financed by the property tax.
- $MB_g > MCF(C_g – R_g)$
  - MB_g is the marginal benefit from an increase in the service
  - C_g is the marginal cost of producing the service
  - R_g is the additional tax revenue that the service will generate.

APPLICATION: ALLOCATION OF INFRASTRUCTURE GRANTS

- In Alberta per capita infrastructure grants to municipalities are higher for municipalities that have **greater** fiscal capacity.
  - An additional $1000 per capita in assessment increases a municipality's per capita MSI grant by $2.00.
- The MCF is inversely related to the fiscal capacity of the municipality.
- The MCFs could be incorporated, along with other factors such as length of roads to be maintained, in the infrastructure grant allocation formulas to provide larger grants to municipalities with lower fiscal capacity and greater fiscal responsibilities.

2018 MSI PER CAPITA GRANTS

MUNICIPALITY	KM OF ROADS PER CAPITA	ASSESSMENT PER CAPITA	GRANT PER CAPITA
LETHBRIDGE COUNTY	0.195	183,471	298
M.D. OF GREENVIEW	0.409	1,827,800	1,012

NON-RESIDENTIAL AND BUSINESS PROPERTY TAX RATE CHANGES IN CALGARY, 2013 TO 2019

- Calgary's non-residential mill rate increased by 6.7837 mills.
- The provincial non-residential education property tax mill rate increased by 0.942 mills.
- The effective business tax rate (business tax revenue per 1000 of non-residential assessment) declined by 4.6266.

IMPACTS ON INVESTMENT AND CAPITAL STOCK

- What is the likely effect of these tax rate changes on business investment in Calgary?
  - The net impact is a reduction in **annual** per capita investment by (330 + 46 – 201) = $175 or by 20% from the long-term annual average.
- What will be the **long-run** net impact on the capital stock?
  - Per capita capital stock reduced by $2,150.
  - Total non-residential assessment (land and structures) 4% lower.

CONCLUSIONS

- Higher non-residential property taxes and business taxes reduce business investment.
- The economic loss from non-residential property tax revenues can be measured by the marginal cost of public funds (MCF).
- The MCFs range from 3.12 for Lethbridge to 1.21 for Leduc.
  - For Calgary and Edmonton, the MCFs are 1.38 and 1.53 respectively.
- The net impact of eliminating the business tax and increasing the non-residential mill rate in Calgary since 2013 has been to reduce annual per capita business investment by $175 or by 20% from the long-term annual average.