

# Longitudinal Administrative Databank (LAD)

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# LAD

- Primarily income tax returns from the CRA
  - *Spans 1982 through 2016*
- A superset of administrative files
  - *CRA: T1FF with T4 file, CCTB file and SIN files*
  - *Statistics Canada: Postal Code Conversion File*
  - *Provincial birth files*
- Linkages
  - *An extract from the IMDB (key characteristics)*

# Sample

- 20% Bernoulli sample of the T1FF
  - *Filing a T1 tax-return or received CCTB*
  - *Topped up each year*
- Longitudinal design
  - *SIN number creates a longitudinal profile*
  - *Once selected, remain in LAD*
- Individual level
  - *Spousal information available*

# Coverage

- T1FF covers about 95% of Canadians
- Increased incentives to file
  - *20% sample: from 3,227,485 in 1982 to 5,579,280 in 2016 (73% increase)*
  - *Other than population increase: FST in 1986 & GST in 1989*
- $< \frac{1}{4}$  of the sample consists of non-filers
  - *Imputed information based on deductions & tax-credits*
  - *Presence of a spouse*
  - *Information retrieved from T4 file*

# Attrition and related issues

- Emigration
  - *Income Tax Act: severing social & economic ties in Canada*
  
- Delayed tax-filing
  - *8 month cut-off date to file*
  - *~ 3.5% to 4.8% delay*

# Detailed income information

- Total income
  - *Market income*
  - *Government transfers received*
  
- Income taxes
  - *Federal income taxes & credits*
  - *Payroll taxes on (self) employment*
  - *Provincial income taxes & credits*
  
- TFSA post 2009

# Additional information

- Detailed geography
  - *Constructed via Statistics Canada's Postal Code Conversion File (PCCF)*
  - *CMA/CA's, CD's and CT's --- use PCCF to get Economic/Fed region*
- Landing record linkage
  - *Post-1980 arrivals*
- LAD register file
  - *Year-of-death, filing flag and other important non-income variables*

# Selected LAD papers

- LaRochelle-Côté, S., Myles, J., & Picot, G. (2012). Income Replacement Rates among Canadian Seniors: The Effect of Widowhood and Divorce. *Canadian Public Policy / Analyse De Politiques*, 38(4), 471-495. Retrieved from <http://www.jstor.org/stable/41756765>
- Messacar, D. (2017). Intra-household Labour Income Responses to Changes in Tax Rates Among Older Workers. Analytical Studies Branch Research Paper Series, Statistics Canada, Issue no. 2017400
- Ostrovsky, Y. (2012). The dynamics of immigrant participation in entitlement programs: Evidence from Canada, 1993-2007. *The Canadian Journal of Economics / Revue Canadienne D'Economique*, 45(1), 107-136.

# Confidentiality

- Anonymity of individual tax-filers
  - *Perturbation weight is applied to computations*
  - *Does not affect calculation of aggregates, averages, ratios, etc..*
- Minimum cell counts
- Rounded income values
  - *Removal of atypical observations*

# Summary

- Representative sample of Canadian tax-filers
- Lends itself nicely to the analysis of (socio) economic trends
- Economic behaviour over the life-cycle
- Policy analysis
- Demography