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Piercing the Veil – Methodological Challenges; building a database to support analysis of CCPC owners and their incomes

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Context

- Data linkage and development required to support SSHRC research
- Rising interest in inclusion of corporation income for business owners to understand rising income inequality
- Approach: link T2 CCPC tax return data to T1 individual data of their owners



Context

Major Challenges

- Need to link tax return data from several sources
- Linkage keys not always present
- Data are generally not “analysis ready”

Further Challenges

- Fiscal year versus calendar year
- Common share vs. Preferred share
- Shifting industry codes
- No occupational codes

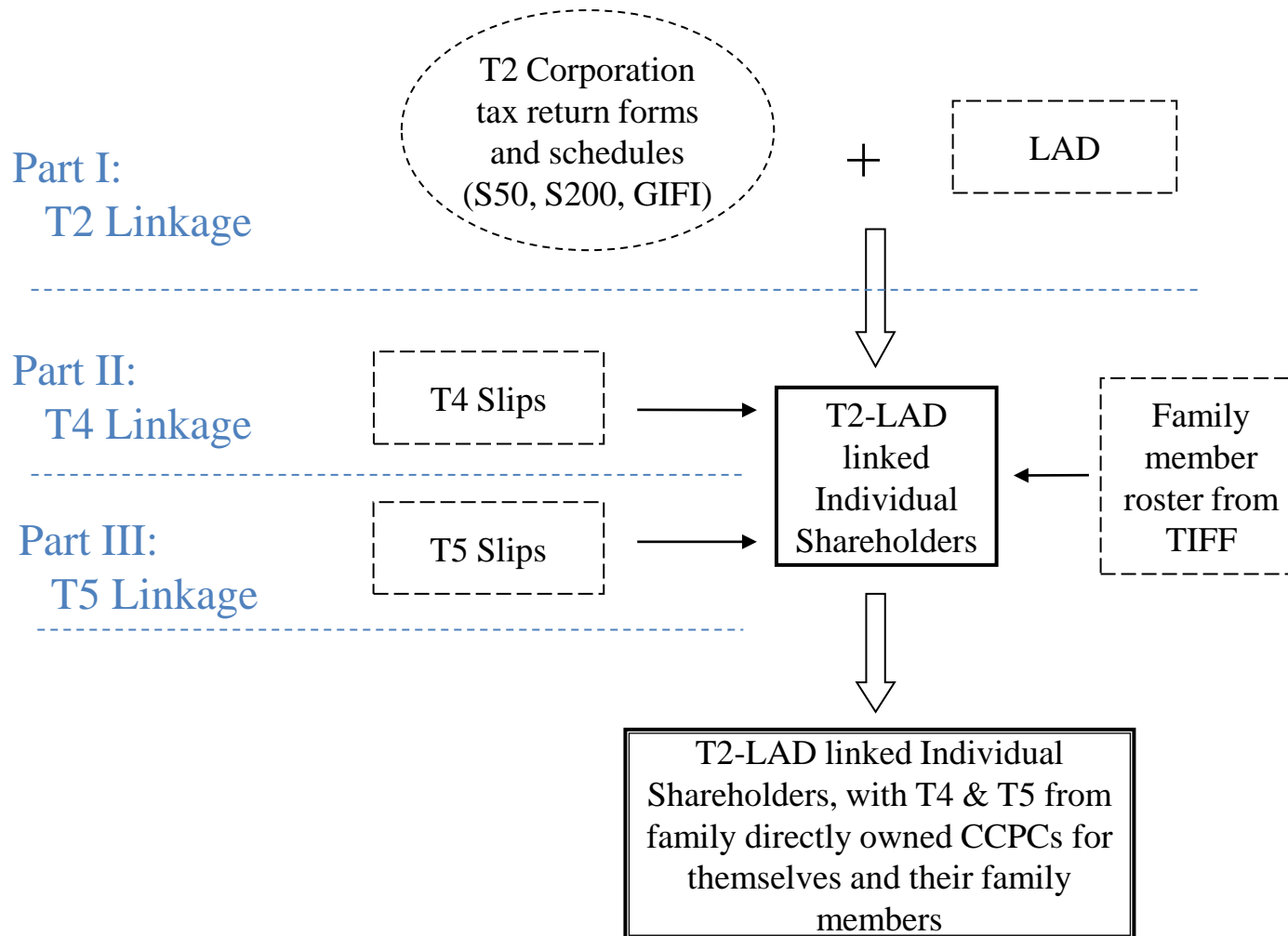


Data Sources

- **Individual tax returns**
 - **LAD** (Longitudinal Administrative Data, 20% T1FF)
T1FF (T1 Family File)
- **Corporation tax returns**
 - Key for linkage: owners ID
 - Identify CCPCs
 - Financial information of CCPCs
 - Income Statements
 - Balance Sheets
 - NAICS (North American Industry Classification System)
- **Wages** paid by CCPC to owners and their family members
 - **T2 schedules:**
 - Schedule 50 (private corp. 10%+)
 - Schedule 200
 - GIFI (General Index of Financial Information)
Schedule 125
Schedule 100
 - CRA's BN database
- **Dividends** paid by CCPC to owners and their family members
 - **T4 slips**
 - **T5 slips**
- ~~▪ Money paid to family member through **Trust funds** by CCPC owners → **T3 slips** (No ID for linkage)~~



Overview of the Linkage Framework

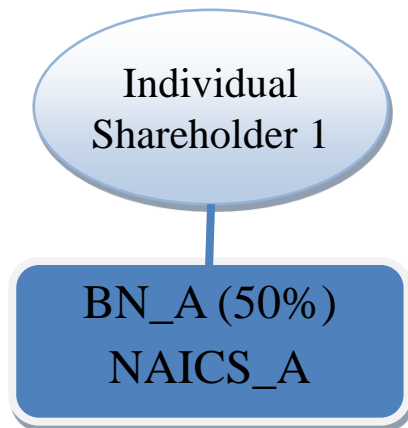




Linkage Part 1: T2-LAD

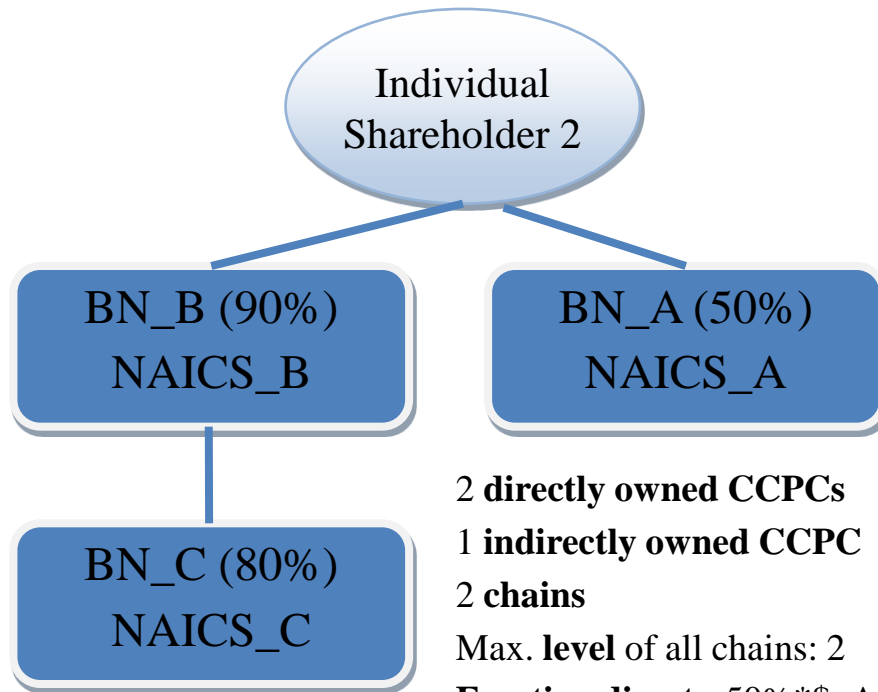
Ownership Structure for individual owners

Example 1:



1 **directly owned CCPC**
 1 **chain**
 1 **level**
Fraction= $50\% * \$_A$
NAICS: NAICS_A

Example 2:



2 **directly owned CCPCs**
 1 **indirectly owned CCPC**
 2 **chains**
 Max. **level** of all chains: 2
Fraction direct= $50\% * \$_A + 90\% * \$_B$
Fraction indirect= $90\% * 80\% * \$_C$
NAICS: NAICS_B
 (if $90\% * RE_B > 50\% * RE_A$)



Linkage Part 1: T2-LAD

- Key of the linkage – Schedule 50

Name of corporation: **ABC INC.** Business Number: **BN_ABC**

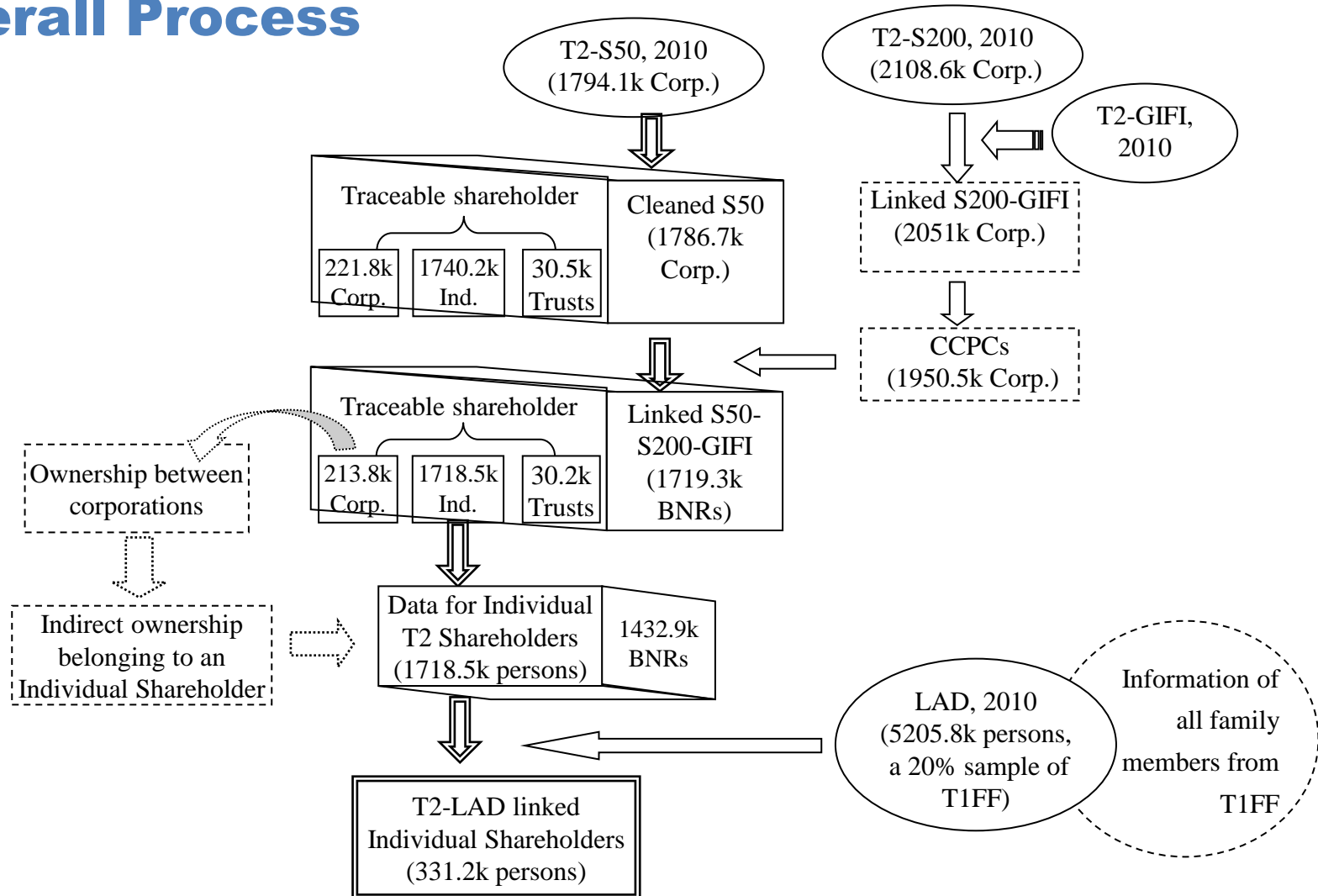
Taxation year-end: Year: | Month: | Day: |

All private corporations must complete this schedule for any shareholder who holds 10% or more of the corporation's common and/or preferred shares.

Provide only one number per shareholder					
Name of shareholder (after name, indicate in brackets if the shareholder is a corporation, partnership, individual, or trust)	Business Number (If a corporation is not registered, enter "NR")	Social insurance number	Trust number	Percentage common shares	Percentage preferred shares
100	200	300	350	400	500
1. Individual A		SIN_A		50	30
2. Corporation B	BN_B			30	65
3. Trust C			T_C	20	
4.					



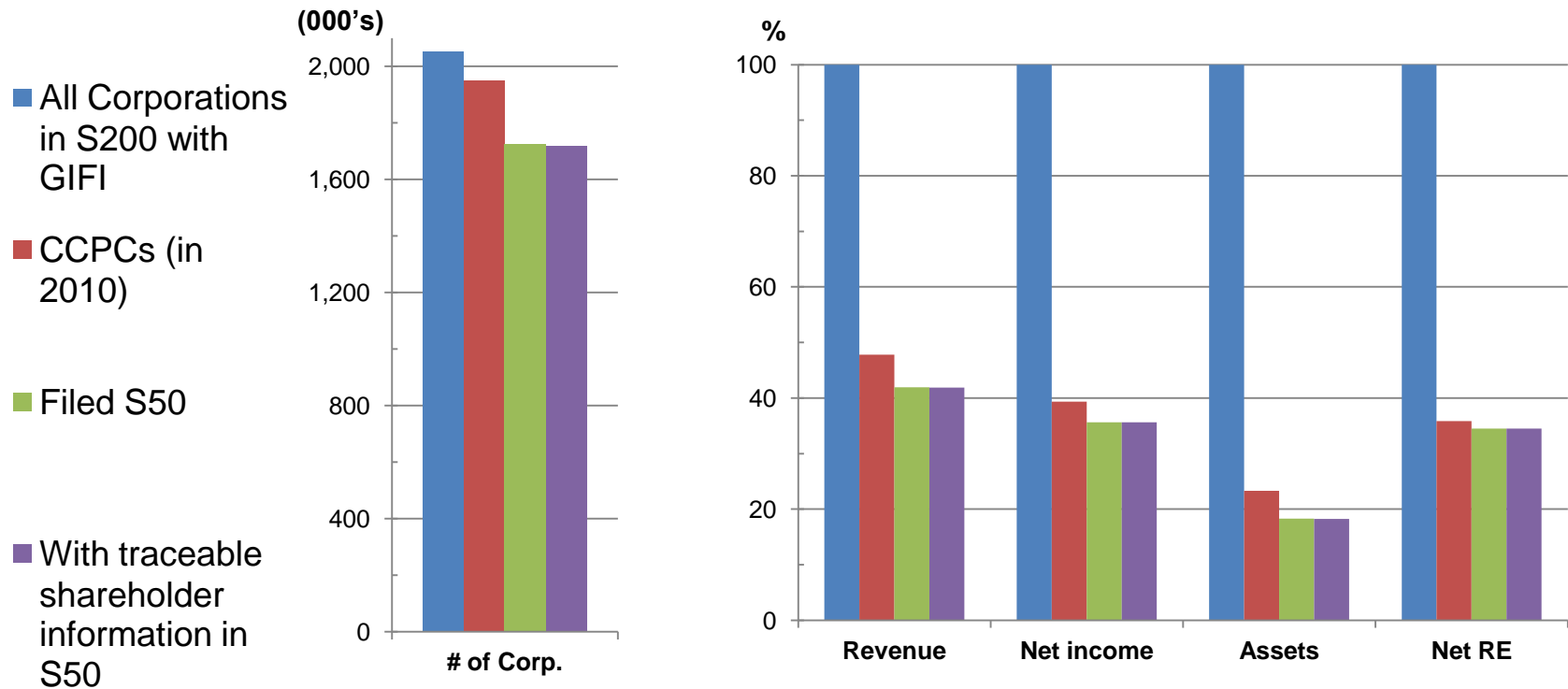
Linkage Part 1: T2-LAD Overall Process





Linkage Part 1: T2-LAD

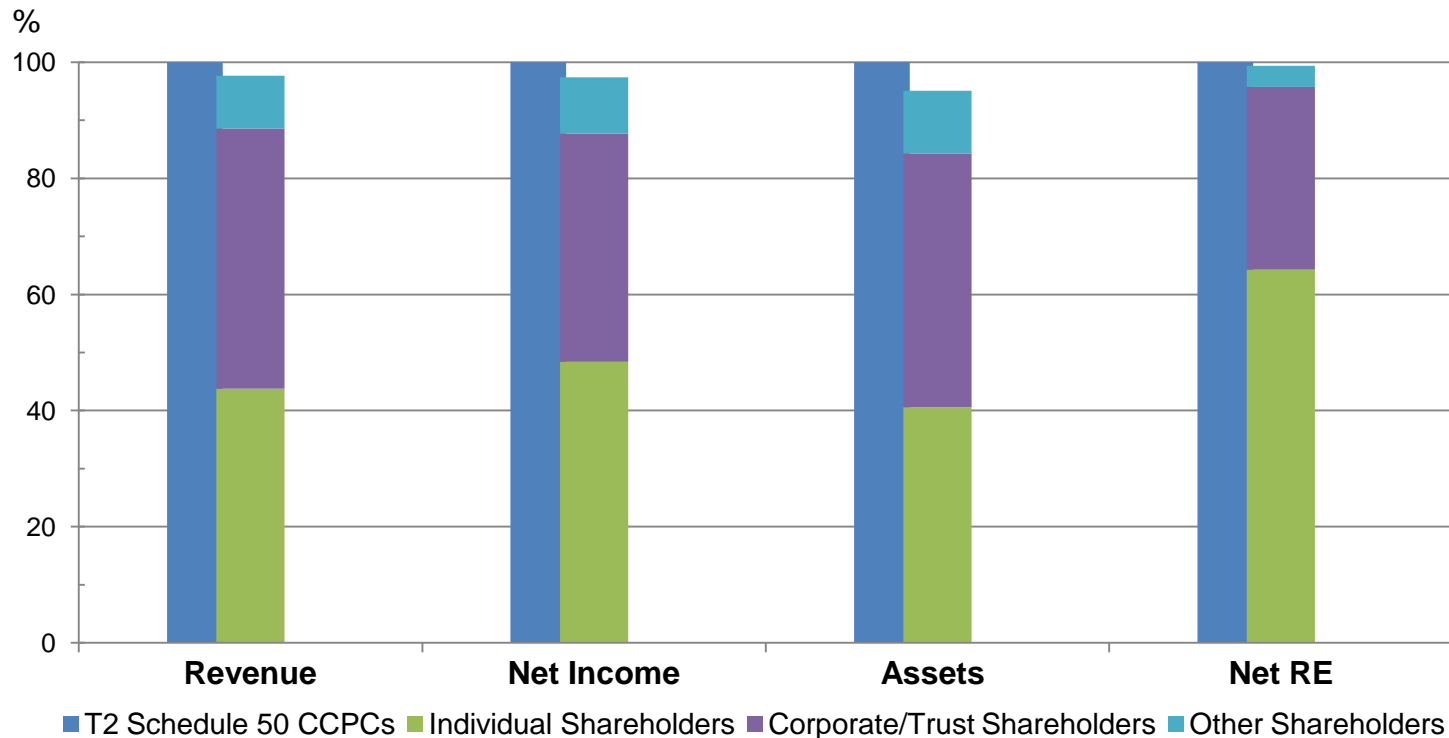
Corporations by data cleaning and linkage process, 2010





Linkage Part 1: T2-LAD

Fractions of the major financial items allocated to owners, Linked S200-GIFI-S50 CCPCs in 2010

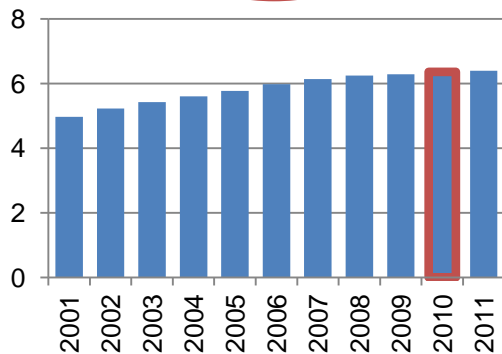
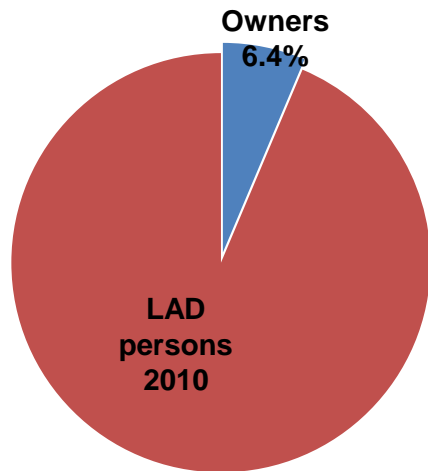




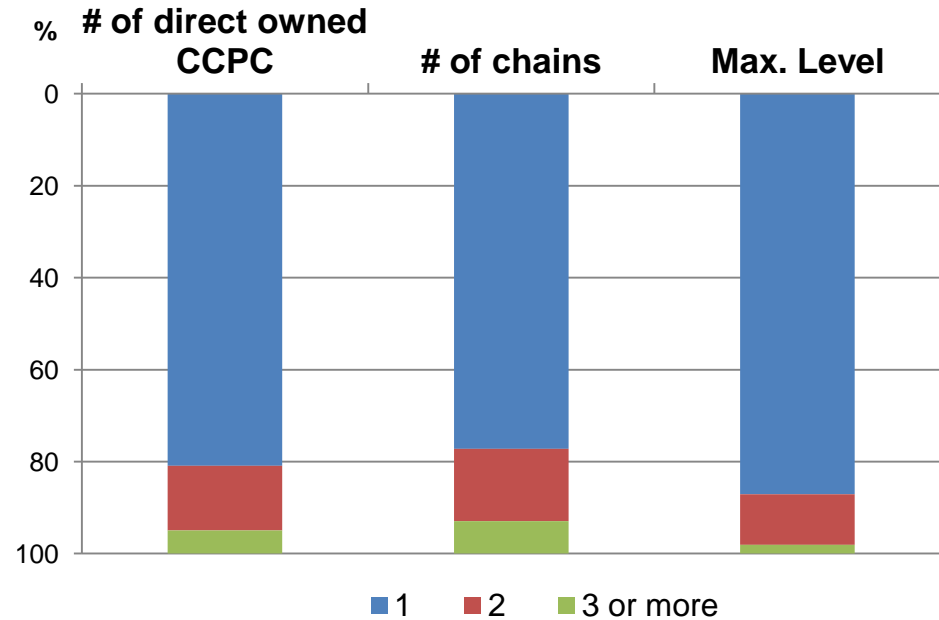
Linkage Part 1: T2-LAD

Brief view of CCPC ownership, T2-LAD linked

% of CCPC owners in LAD



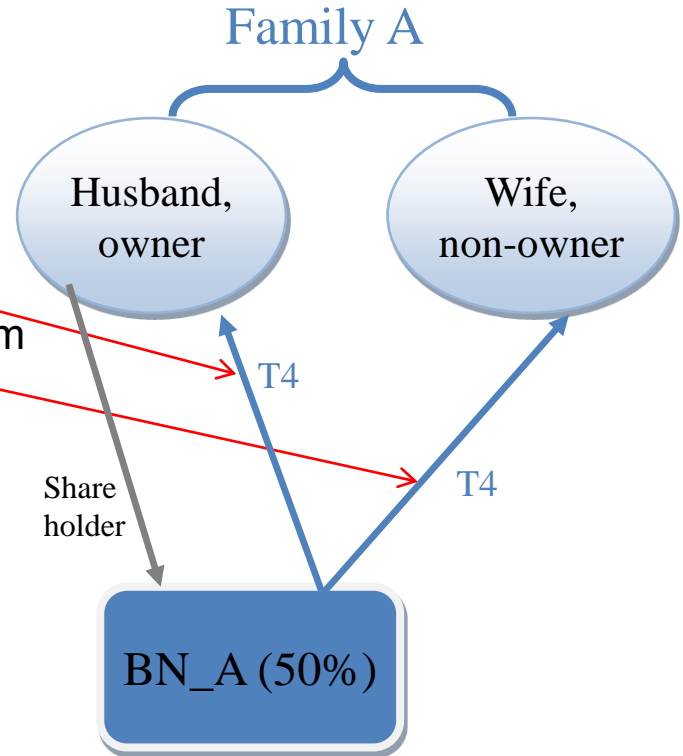
LAD owners by ownership structures, 2010



Linkage Part 2: T4 + T2-LAD

Information added from T4

- Individual level:
 - T4 employment income
 - For owners: T4 received from any directly owned CCPC
 - For owners' family members: T4 received from any CCPC directly owned by the owners
- Firm level – for each CCPC directly owned by a LAD owner:
 - Total T4 employment income paid
 - Total number of employees





Linkage Part 2: T4 + T2-LAD

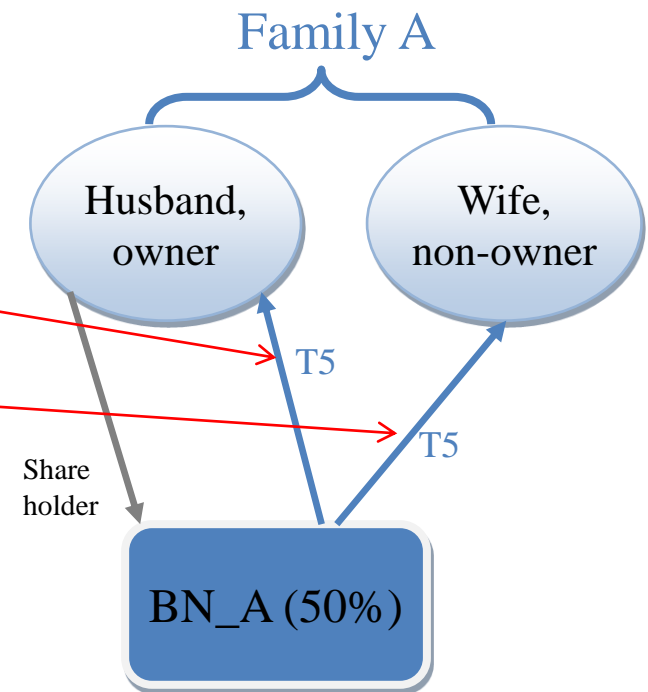
T4 linkage Rate

- Among CCPCs owned by a LAD owner,
 - 40.1% issued T4 to their owners and/or their family members
 - 83.9% unlinkable CCPCs did not pay any wage according to GIF
- Among these LAD owners, from the CCPCs directly owned by any of their family members,
 - 43.4% received T4 themselves
 - 15.8% had an owner family member who received T4
 - 10.5% had a non-owner family member who received T4

Linkage Part 3: T5 + T2-LAD

Information added from T5

- T5 contains data on various kinds of investment income
 - Focus is on dividends
- Individual level:
 - For owners: T5 received from any directly owned CCPC
 - For owners' family members: T5 received from any CCPC directly owned by the owner
- Firm level – for each CCPC directly owned by a LAD owner:
 - Total T5 dividends paid





Linkage Part 3: T5 + T2-LAD

Challenges and Limitations - 1

- ID for T5 issuer was different from that for T2 corporations prior to 2009
 - only linkable starting from 2009
- Various types of currency amounts were reported
 - About 95% of all T5 slips were reported in CAD
 - Slips reported in other currencies are excluded

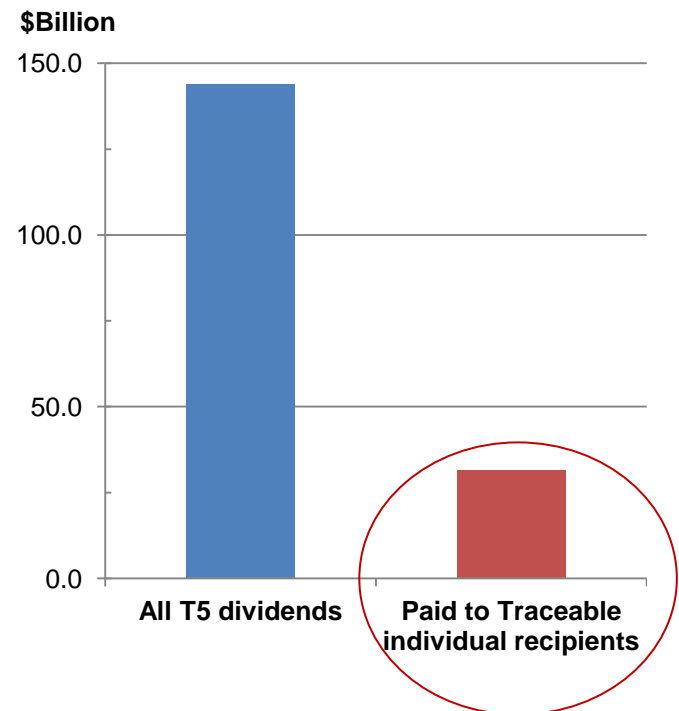


Linkage Part 3: T5 + T2-LAD

Challenges and Limitations - 2

- Various types of recipients on T5
 - Individual;
Corporation;
Association, trust, club or partnership;
Government institution;
 - Only keep individual recipients
 - Missing SIN

**T5 dividends paid
from all corporations**





Linkage Part 3: T5 + T2-LAD

T5 linkage Rate

- Among CCPCs owned by a LAD owner,
 - 25% paid T5 dividends to their owners and/or their family members
 - 87.6% unlinkable CCPCs did not pay any dividends according to GIF1

- Among these individual shareholders, from the CCPCs directly owned by any of their family members,
 - 26.6% received T5 dividends themselves
 - 10.6% had an owner family member who received T5
 - 0.8% had a non-owner family member who received T5



Conclusion

- Data linkage accurately reflect source data levels and distribution in general
 - Few impacts from non-filers or partial-filers of the S-50
 - Few impacts of missing or unlinked T4 or T5 slips

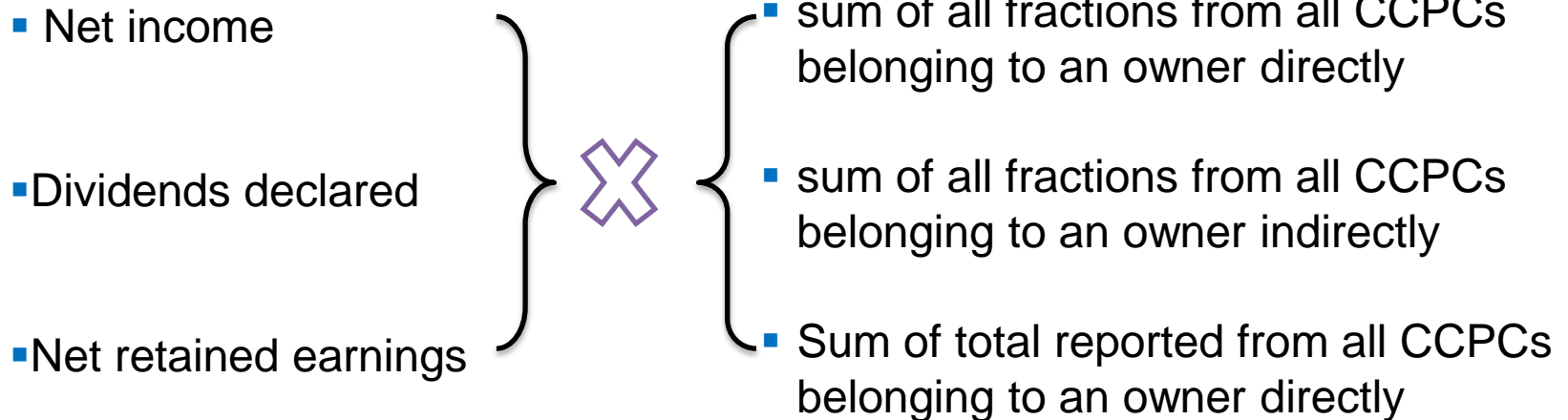
- Administrative data are not perfect and need careful treatment in practice



Appendix 1

Linkage Part 1: T2-LAD, Key variables

- Key income variables from the T2-LAD linkage





Appendix 2

Linkage Part 1: T2-LAD, Calendarization

- T2 Fiscal Period and Calendarization - examples

