



1.7 million and counting: constructing and analysing a large-scale panel of charitable organisations from the Register of Charities, 1995 onwards

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Outline of presentation

- A: Constructing the panel: data challenges
- B: Analysing the panel: research agenda
- C: An example of analysis: trends in income concentration

A: Constructing the panel: data challenges

- We have a data set containing the population of registered charities in England and Wales between 1995 and 2008
- Data and challenges in constructing a usable panel
 1. Removing compositional influences (cross-sectional)
 2. Tracking organisations through time (longitudinal)
 3. Identifying appropriate sub-populations

Data Challenges

1. Removing compositional influences

Changes in the kind of organisations on the register over time.
Therefore, use 'general charities' definition (NCVO).

1. formally structure their people and activities;
2. are independent of government and business;
3. are non profit-distributing;
4. are truly self governing;
5. have a meaningful degree of voluntary activity or funding;
6. support the growth of a 'civil society' by providing a wider public benefit that goes beyond any membership.

Data Challenges

1. Removing compositional influences

Table: General charities exclusion rulebook

<u>CODE</u>	<u>REASON FOR EXCLUSION</u>	<u>KEY WORDS USED IN TITLE ORGANISATION</u>	<u>SAMPLE ORGANISATIONS</u>
1	Independent School, College or University, and Vocation / Craft Academy	Education; Education Trust; School; College; University; Higher Education; Further Education; Technical; Education (al) Trust; Academy	Rugby School / University of Surrey Roehampton / UK Sailing Academy
2	NHS administered Charity or Independent Hospital	NHS; Trust; Charitable, Foundation; N.H.S; National Health Service; Hospital	Guy's & ST Thomas Charitable Foundation / King Edward VII Hospital
3	Religious Body or Place of Worship	Church; Jesus; Diocesan; Saint(s); United; Mosque; Jehovah; Witness; Spirit/Spiritual; 'Latter Day';	Birmingham Diocesan Trust / United Synagogue
4	Mutual Organisation (Including Masons)	Freemasons; Grand; Lodge; Fund; Mutual; Friendly Society; Worshipful	Royal Air Force Benevolent Fund / Royal Masonic Benevolent Institution
5	Trade Associations and Professional Bodies	College; Institute; Association; Council; Board; Royal College;	Royal College of Midwives / Institute of Civil Engineers
6	Central or Local Government Administered and Regulated, i.e. NAO Accounts or Quangos	National; Body; Council; Service; Royal	British Council / National Portrait Gallery / Chiltern Leisure Trust
7	Housing Associations	Housing; Trust; Association; Home(s); Homelessness;	Harding Housing Association / Notting Hill Housing Group
8	Benevolent Institutions	Beneficiaries; Benefit; Pension; Fund;	Hackney Benevolent Pension Society / Savoy Company Staff Benevolent Fund
9	Inactive Organisation	(No key words, but no financial data recorded for the last three years)	
10	COIF Organisations		CAF
11	Duplicate	Known duplicate of other organisation, possibly due to re-registration	St Andrews Hospital (cc 202659/1104951)
12	Not yet in existence		



Data Challenges

1. Removing compositional influences

Changes in threshold reporting requirements / accounting requirements over time, e.g:

- Threshold for registration: change from £1,000 income to £5,000 income in 2007.
- Threshold for annual report and accounts: change from income > £10k to income > £25k in 2009.
- Changes in procedures for reporting group, rather than individual charity, accounts (2006?)

Data Challenges

1. Removing compositional influences

Therefore:

- For specific research questions about changes over time, may want to consider only population above £5,000 to ensure consistency
- Less easy to control for changes in reporting (group vs individual)

Data Challenges

2. Tracking organisations through time

Incorporation of a charitable trust/ unincorporated association to a charitable company: re-emerges on the register with a new charity number. Can lead to:

- Overestimate of number of registrations and dissolutions
- Affects building of panel with information on charities over time
 - risk excluding potentially unrepresentative part of charitable sector
 - risk comparing income at beginning of period with income of shell charity at end of period

Data Challenges

2. Tracking organisations through time

Linking Strategy: linking current/former/ working names of an organisation to the current/former/working names of old charity.

Criteria:

- Involving two records - one an unincorporated charity, the other a charitable company
 - Same local authority

Data Challenges

2. Tracking organisations through time

Result - more charities, and more income, followed through time.

- Example
 - Added an extra 1,566 general charities to a panel of 41,733 of general charities with income in both 1998 and 2007 (4% of total)
 - These extra charities accounted for £1.8bn of income in 2007 (or 9% if the total £19.6bn)
- A number of organisations remain unlinked, but may be best we can do.

Data Challenges

3. Identifying appropriate subpopulations

- Many of the interesting substantive questions relate to specific subpopulations of charities rather than the whole register.
- Classification very important part of our work.
 - General Charities definition
 - SIC (Standard Industrial Classification)
 - ICNPO (International Classification of Nonprofit Organisations)
 - Funding profiles

Data Challenges

'Cross-sectional' and 'Longitudinal' questions

1. For cross-sectional questions, helpful to remove *compositional* influences which would hinder consistent comparison across the time period - want to examine a specific (sub)sector over time
 - 1.1 changes in the kind of organisations on the register over time
 - 1.2 changes in threshold reporting requirements over time
2. For longitudinal questions, there are the challenges involved in ensuring we can *track individual organisations* over time.
3. For both cross-sectional and longitudinal questions, identifying appropriate and meaningful *subpopulations* is a real challenge.

B: Analysing the panel: research agenda

Three kinds of questions

1. The Historical

- Are there long term trends and changes in the sector?

2. The Aggregate and the Cross-Sectional

- How has the sector considered as a whole changed over time?

3. The Longitudinal

- How have individual charities performed over time?

Research Agenda

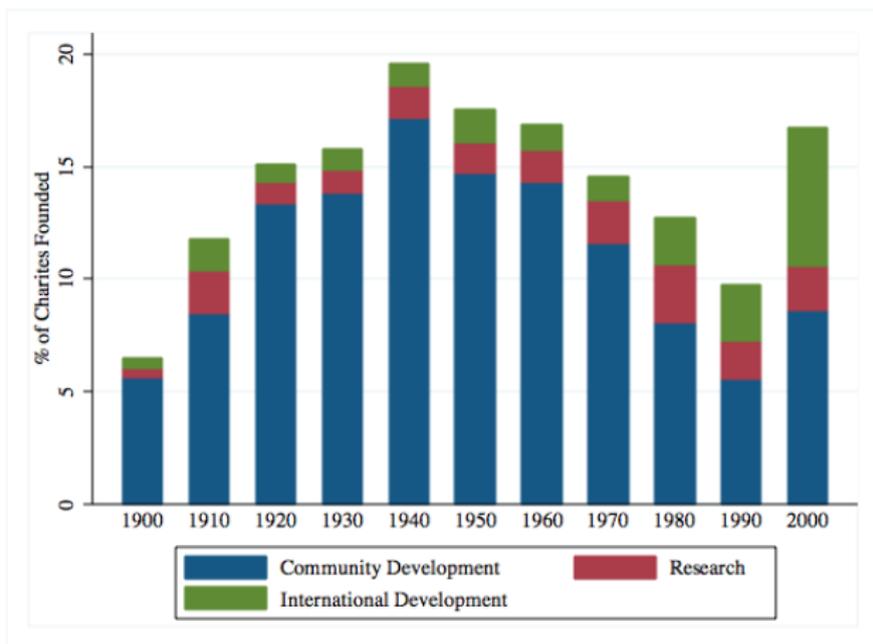
1. The Historical

- Have the priorities of the sector changed over time?
- What has been the impact of economic cycles on the establishment of charities?
- Such questions are essentially unexamined.
- Identification of years of 'foundation'
- Scope for contributions from qualitative researchers

Research Agenda

1. The Historical

Figure: Charitable causes over the last 100 years



Research Agenda

2. The Aggregate and the Cross-Sectional

- How has total sector income/expenditure grown?
- How has the composition of that income/expenditure changed?
- How has the distribution of income across charities changed?
- What is the extent of turnover in the sector?
- How has the composition of new charities changed?

- Often addressed by NCVO etc - we know a lot about these.
- Much to add (e.g. geographical differences)

Research Agenda

3. The Longitudinal

- What is the relationship between initial size and growth?
- To what extent has turnover affected the sector ?
- What are the factors contributing to a charity's success/failure?
- To what extent have established charities changed their focus?
- What is the impact of changes in income streams on fundraising/charitable expenditure?
- What is the relationship between publicly and privately provided public goods (e.g. nursing homes)
- Such questions will constitute much of our future work

C: An example of analysis: trends in charitable income concentration

'There now seems to be an established trend towards the concentration of [total charitable] income in the very richest charities' (Duncan Smith 2005)

- There are two ways to consider this question of changing distributions:
 1. The Cross-Sectional
 - Are larger charities getting an bigger piece of the 'pie'?
 2. The Longitudinal
 - Do larger charities grow faster than small ones?

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Trends in income concentration

Sector Growth

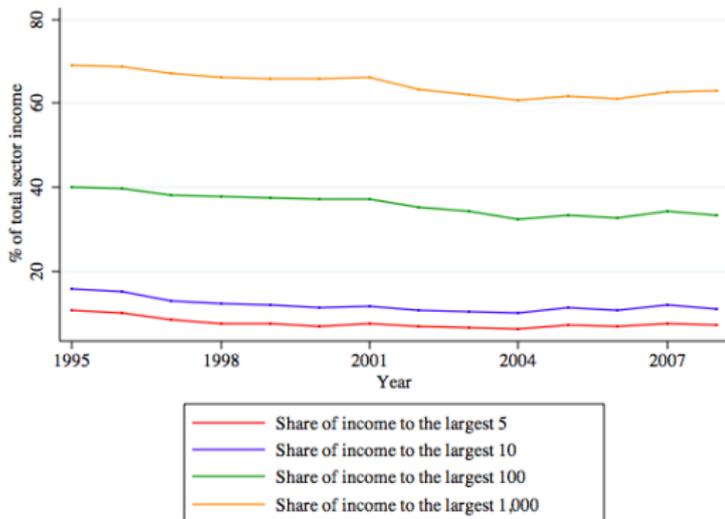
- More well established (see NCVO Almanac)
- Growth from 1995-2007 in terms of
 - total income (7.9% pa)
 - number of charities (~42,000 new registrations)
- Questions remain as to how income is distributed and how that distribution has changed.

Trends in income concentration

Cross-sectional: n -charity concentration ratios

“the richest 1.6% of charities account for 67.5% of all charity income” (Duncan Smith 2005)

Figure: Share of income captured by the largest 5, 10, 100 and 1000 of charities, 1995-2007



Trends in income concentration

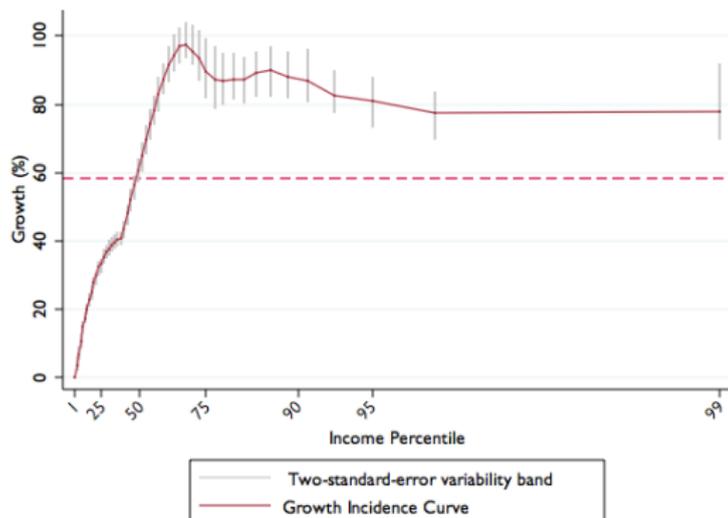
Cross-sectional: the Growth Incidence Curve

- Changes in the distribution outside the arbitrary largest n charities or top $p\%$ are not captured
- Single value global measures exist
- Graphical summation of changes can be more revealing.
 - Growth Incidence Curve
 - plots the growth of each quantile from year t to $t + \tau$.

Trends in income concentration

Cross-sectional: the Growth Incidence Curve

Figure: Growth incidence curve for 1995 to 2007



Trends in income concentration

Cross-sectional: concentration by ICNPO subsector

Table: Concentration ratios by ICNPO classification

ICNPO Classification	1995		2007		Change in	
	5-charity	10-charity	5-charity	10-charity	5-charity	10-charity
Education	13.9	20.7	8.0	11.9	-5.9	-8.8
Health	18.5	26.7	27.9	38.2	9.5	11.5
International	49.1	66.0	33.2	47.4	-15.9	-18.7
Social Services	18.9	30.3	14.3	23.7	-4.6	-6.6

Trends in income concentration

Cross-sectional: the Growth Incidence Curve for different subsectors

Figure: GIC for International

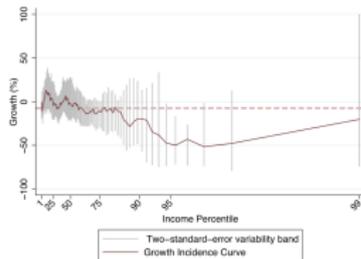
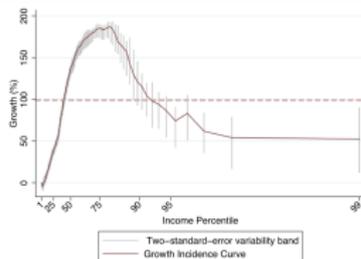


Figure: GIC for Education



Trends in income concentration

Longitudinal

- Considering only the cross-sectional perspective provides an incomplete picture
 - composition of the top quantiles or largest n charities will change
 - does not reveal the relationship between initial size and growth
- We consider the longitudinal perspective
 - 41,732 charities from 1997-2008
- We graphically summarise the relationship between a measure of initial size, charitable income in 1998 (on the x-axis), and subsequent charitable growth between 1998 and 2007 (on the y-axis).
 - Income Mobility Profile (median)
- How did the *distribution* of relative growth vary with initial size?

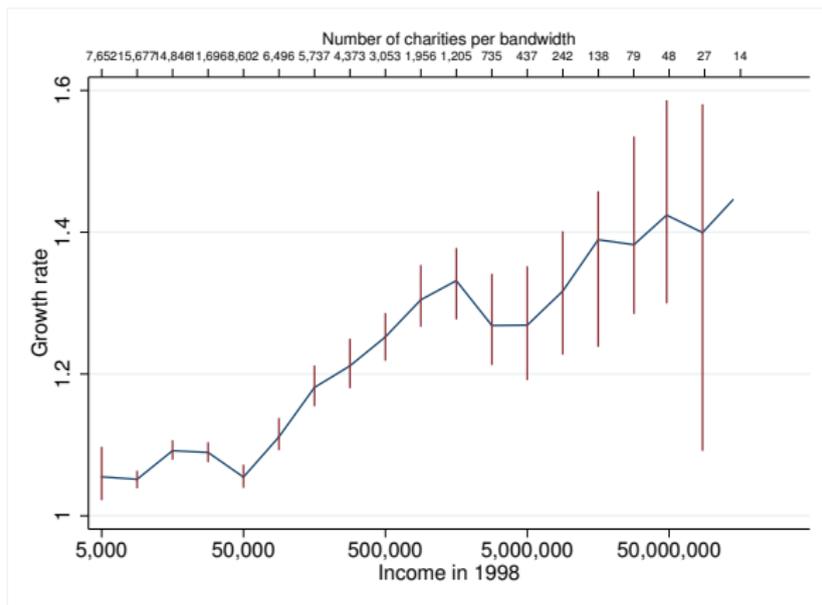
Trends in income concentration

Longitudinal: Income Mobility Profile (IMP)

- IMP used in literature on individual income inequality (van Kerm 2009, Jenkins and van Kerm 2008).
- Relative income growth $y = z/x$, where x is income at time t_1 and z is income at time t_2
- Uses local regression to summarise relationship between relative growth y and initial size x
 - local linear regression for smoothed estimates of the conditional mean of the relative growth distribution
 - local quantile regression (Yu and Jones 1998, Koenker 2005) for smoothed estimates of conditional quantiles
- Note that results are conditional on organisational survival

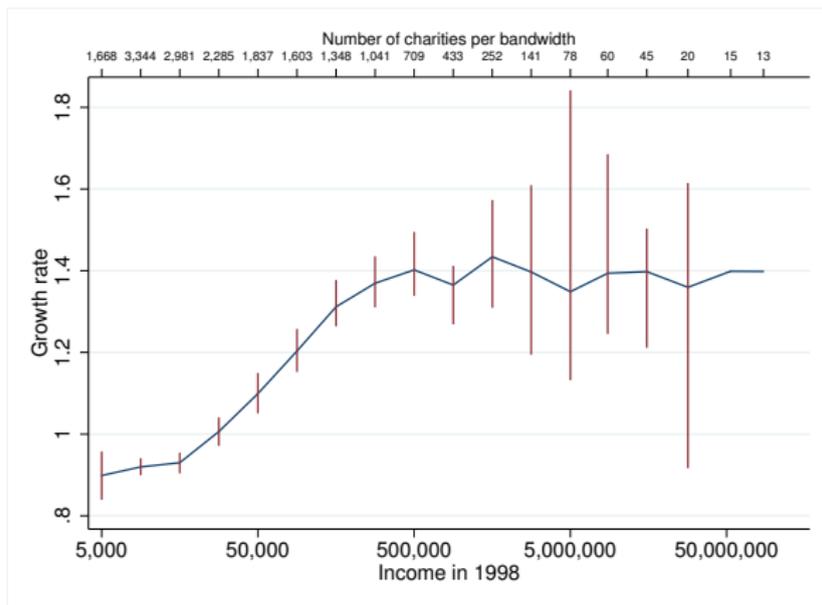
Trends in income concentration

Figure: Income Mobility Profile, 1997-2008



Trends in income concentration

Figure: Income Mobility Profile for Social Services, 1997-2008



Trends in income concentration

Longitudinal: Income Mobility Profile

- Profile is consistent with the “Tesco-isation” hypothesis
 - Larger charities have highest median growth rate
- Smaller charities have a capacity for high relative growth (reflected in income mobility profile for 90th percentile)
- Profile is consistent with the “professionalisation” hypothesis
 - growth has favoured charities with sufficient income to support paid staff
- Profiles differ across sub-sectors
 - Results are inconsistent with “Tesco-isation” for Social Services

Trends in income concentration

Conclusions

- The evidence from the cross-sectional perspective suggests that the charitable sector has experienced a *fall* in concentration.
 - Little evidence of 'Tesco-isation' for the sector as a whole
 - Results are consistent with 'professionalisation'
- However, the larger charities at the start of the period have had a higher median growth rate
- Results are different in different sub-sectors.
- Further work needed on 'turnover' and how the survival of charities relates to initial size

Working Papers

- Clifford, D & Backus, P.G., (2010): “Are big charities becoming increasingly dominant? Tracking charitable income growth 1997-2008 by initial size,” TSRC Working Paper
- Backus, P.G. & Clifford, D., (2010): “Trends in the concentration of income among charities,” TSRC Working Paper

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References

- Roger Koenker. Quantile regression. Cambridge University Press, 2005.
- Keming Yu and M. C. Jones. Local linear quantile regression. *Journal of the American Statistical Association*, 93(441):228237, 1998.