Just Passing Through

Persistent and Transient ICT Poverty

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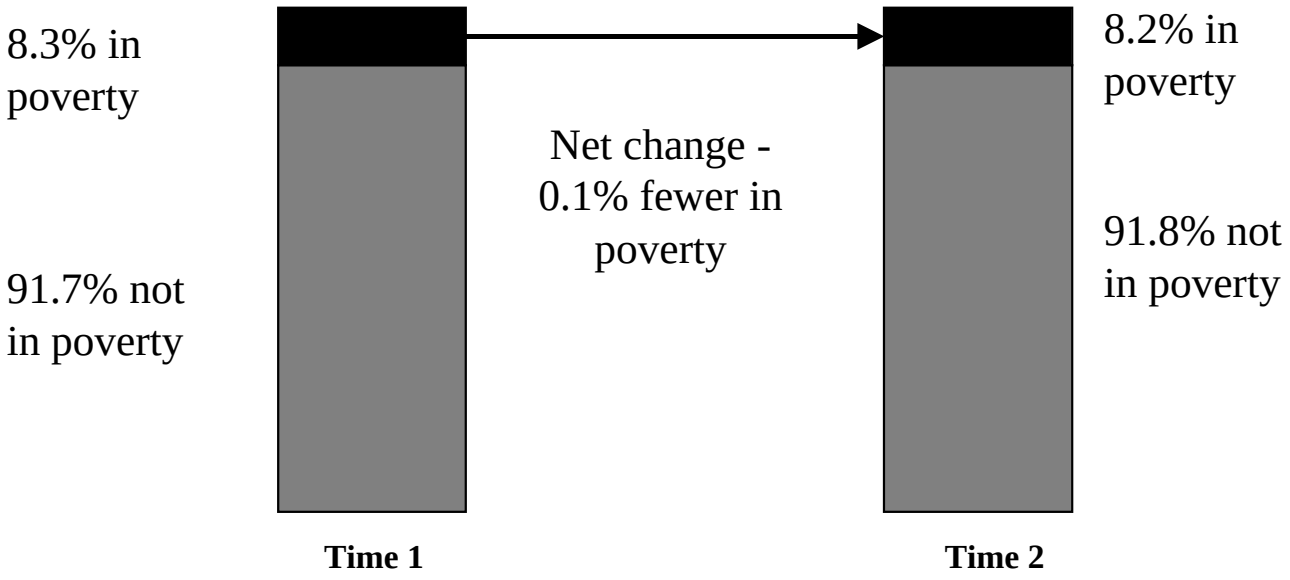
The issue

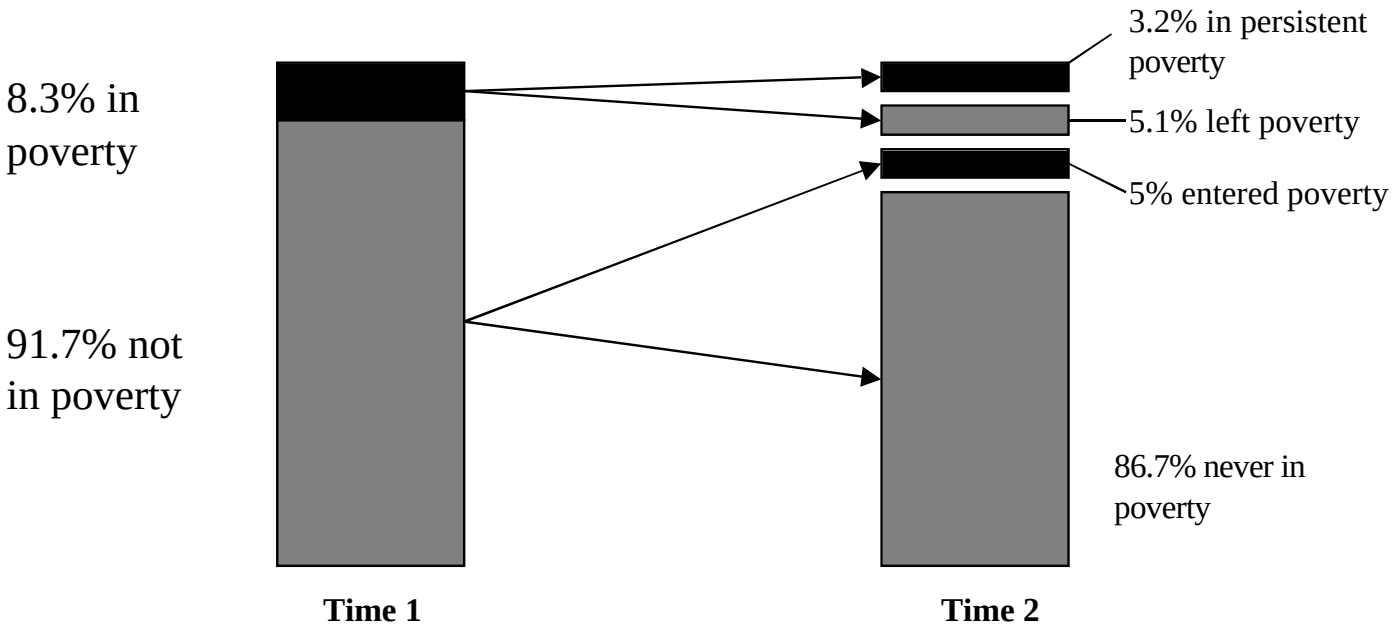
- "***With 61% of the population now reporting that they have used the internet at some time, 'e-citizens' now make up a majority of the adult population***." p6 - e-Envoy, 2004.
- But just because I used it 3 years ago
  - Am I still a user?
  - Might I use it again?
  - Or have I permanently rejected it?
- And what about the 39% - will they ever be users?

Poverty incidence



- => Happy politicians

Poverty dynamics

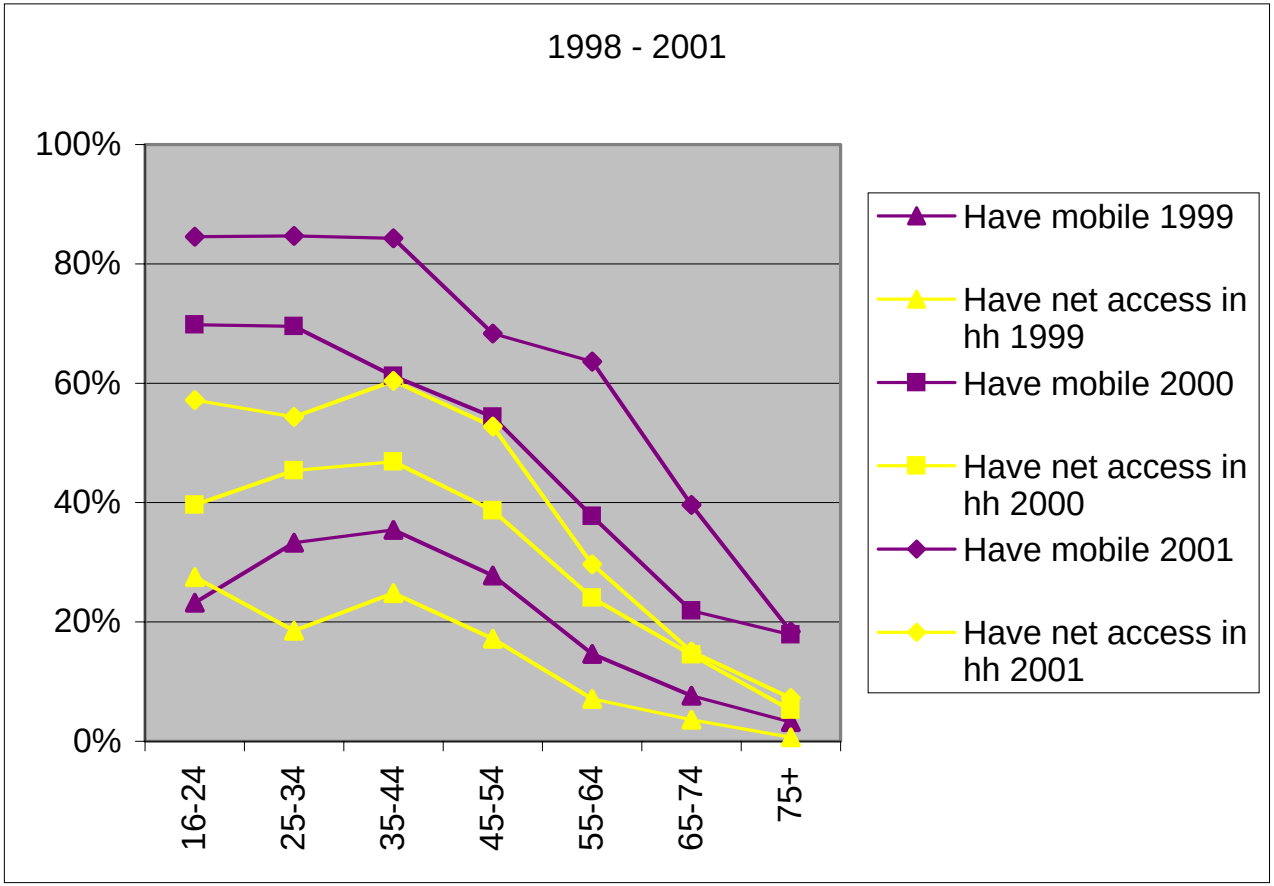


- => some politicians happy
  - poverty action groups unhappy
- Transient & persistent poverty need different policy actions

Significance for ICTs

- We know very little about transient and persistent ‘ICT poverty’
  - We know there are dropouts
  - We know there are ‘excluded’ groups
- But how transient are they?
  - Are they just passing through or have they passed by or passed out?
  - What are the risk factors?
  - Is this why internet diffusion is stalling?
- Cross-sectional surveys just won’t do
  - Requires longitudinal data (follow people over time)

Example 1 - UK 1999-2001



- Source: Home OnLine Longitudinal Panel Survey (1999-2001, w1, w2, w3, weighted for non-response, n~= 1200 in each wave)

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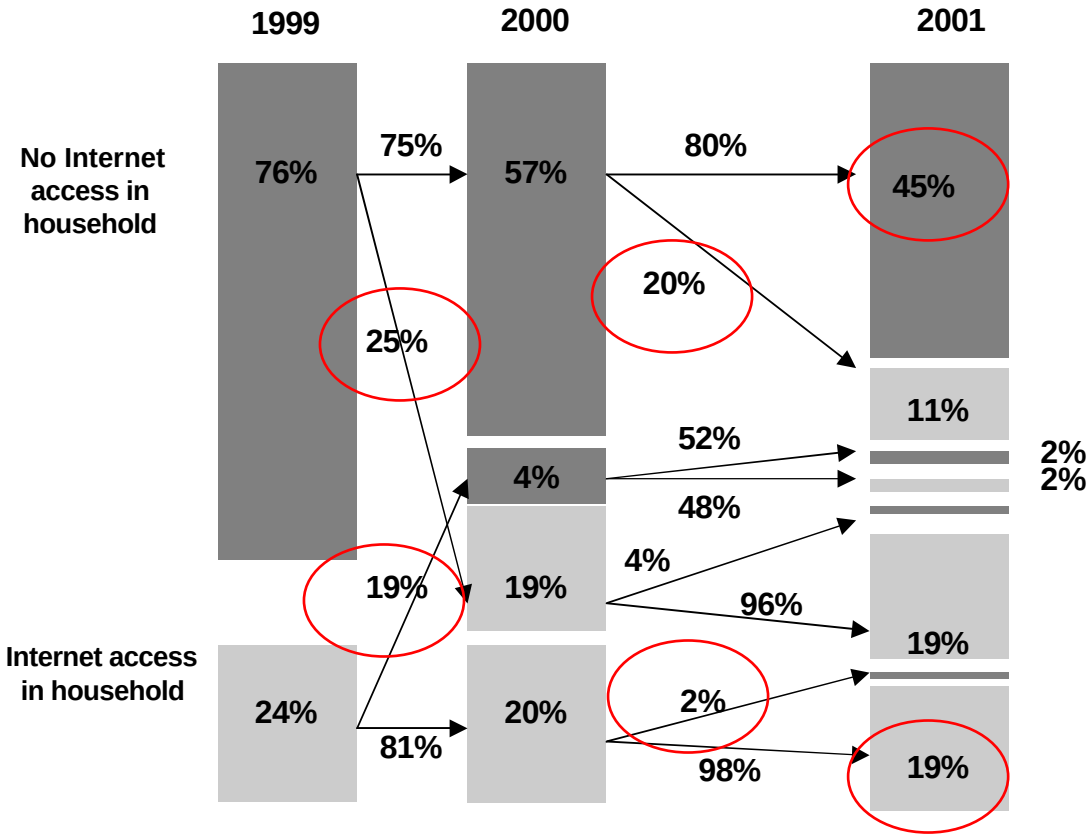

- Source: Home OnLine Longitudinal Panel Survey (1999-2001, longitudinal sample only, weighted for non-response, n~= 800 in each wave)

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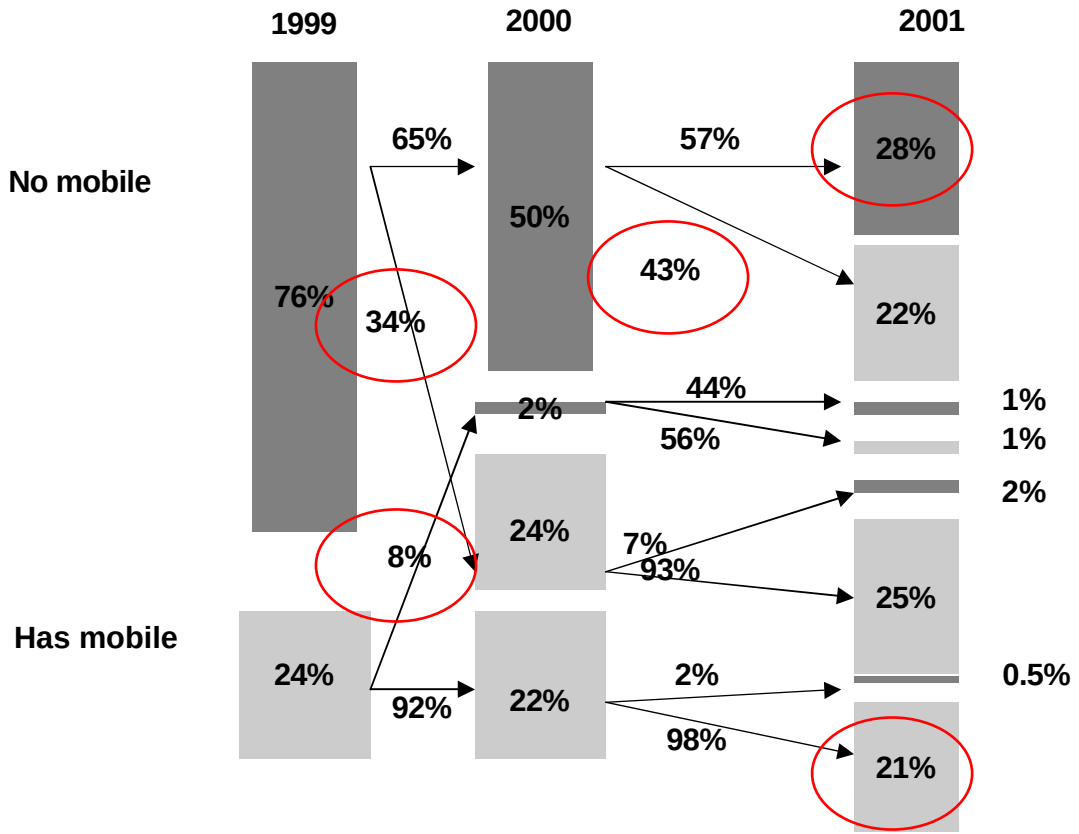

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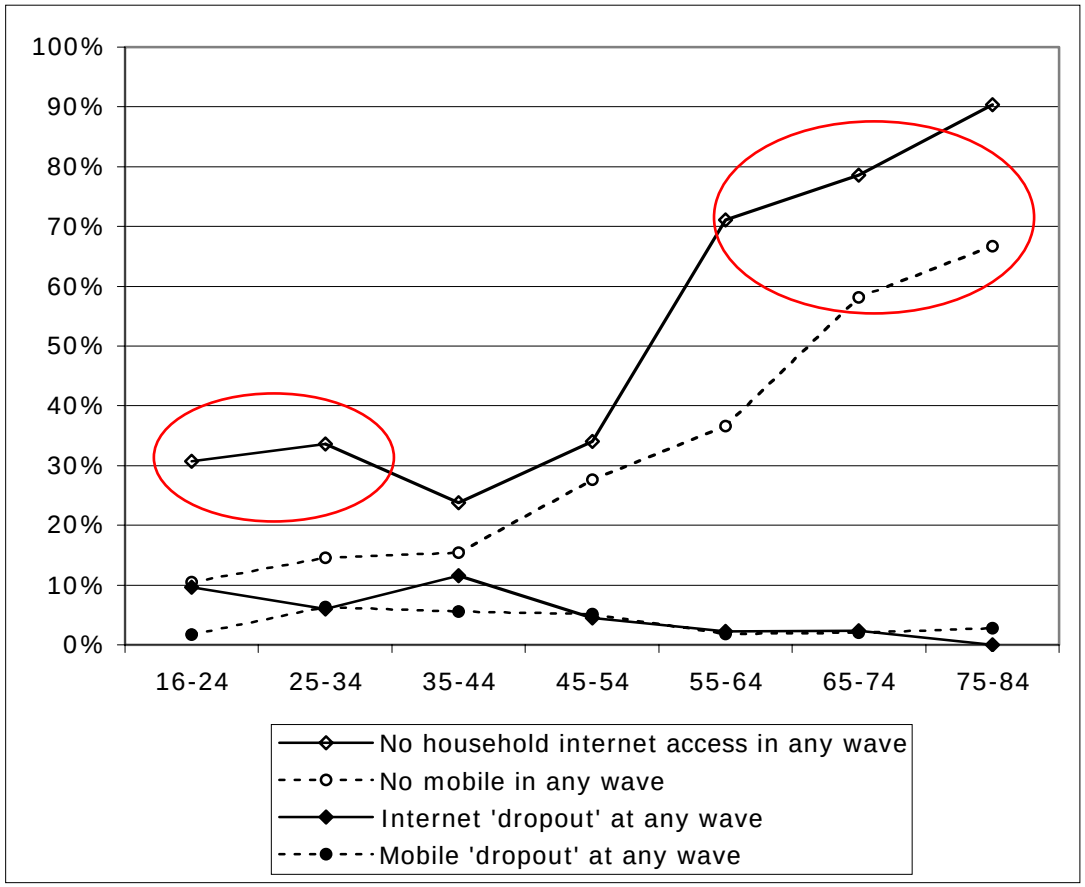
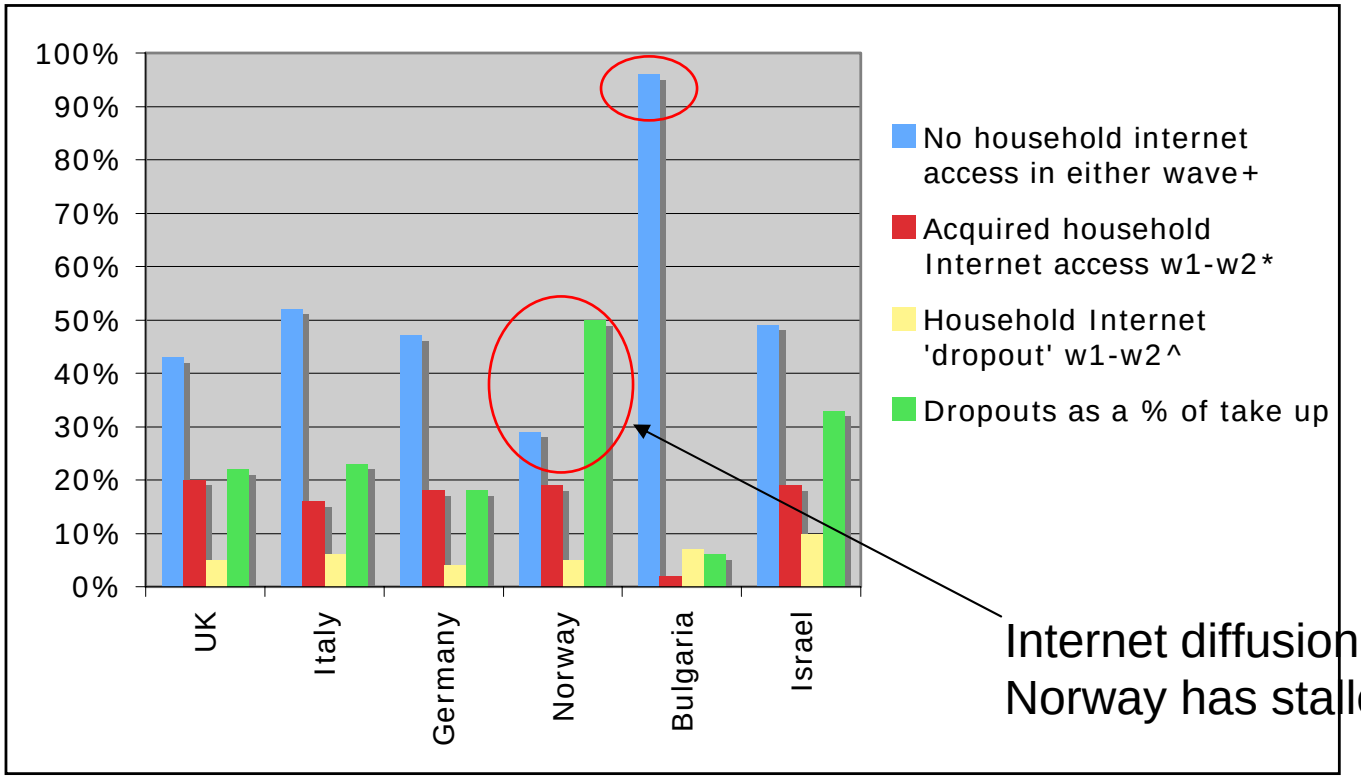
Example 1 - UK



- Older people at risk from persistent ICT poverty in general
- Young people at risk from persistent internet poverty
- Dropouts are evenly distributed by age

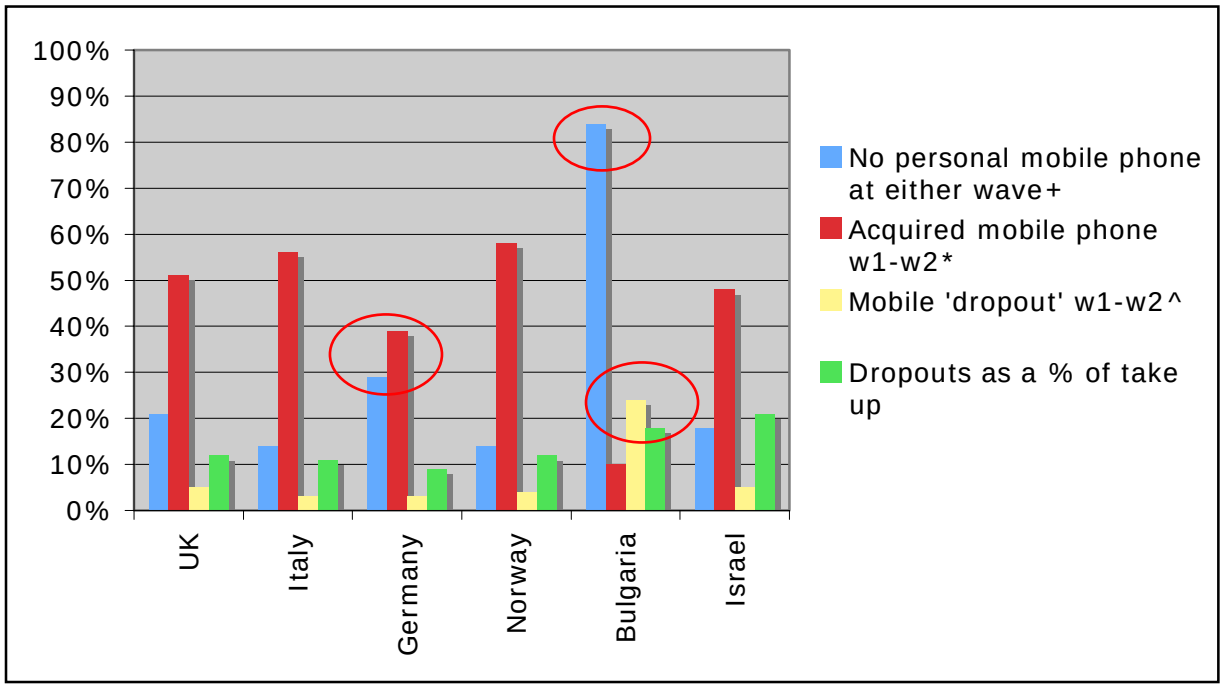
- Source: Home OnLine Longitudinal Panel Survey (1999-2001, longitudinal sample only, weighted for non-response, n~= 800 in each wave)

Example 2 - Europe 2001-02



- + % of all respondents in country
- * % of all those who did not have household Internet access at wave 1
- ^ % of all those who had household Internet access at wave 1
- Source = eLiving waves 1&2, weighted for non-response, n ~=1200 in wave 2

Example 2 - Europe 2001-02



- + % of all respondents in country
- * % of all those who did not have a personal mobile phone at wave 1
- ^ % of all those who had a personal mobile phone at wave 1
- Source = eLiving waves 1&2, weighted for non-response, n ~=1200 in wave 2

So who's at risk?

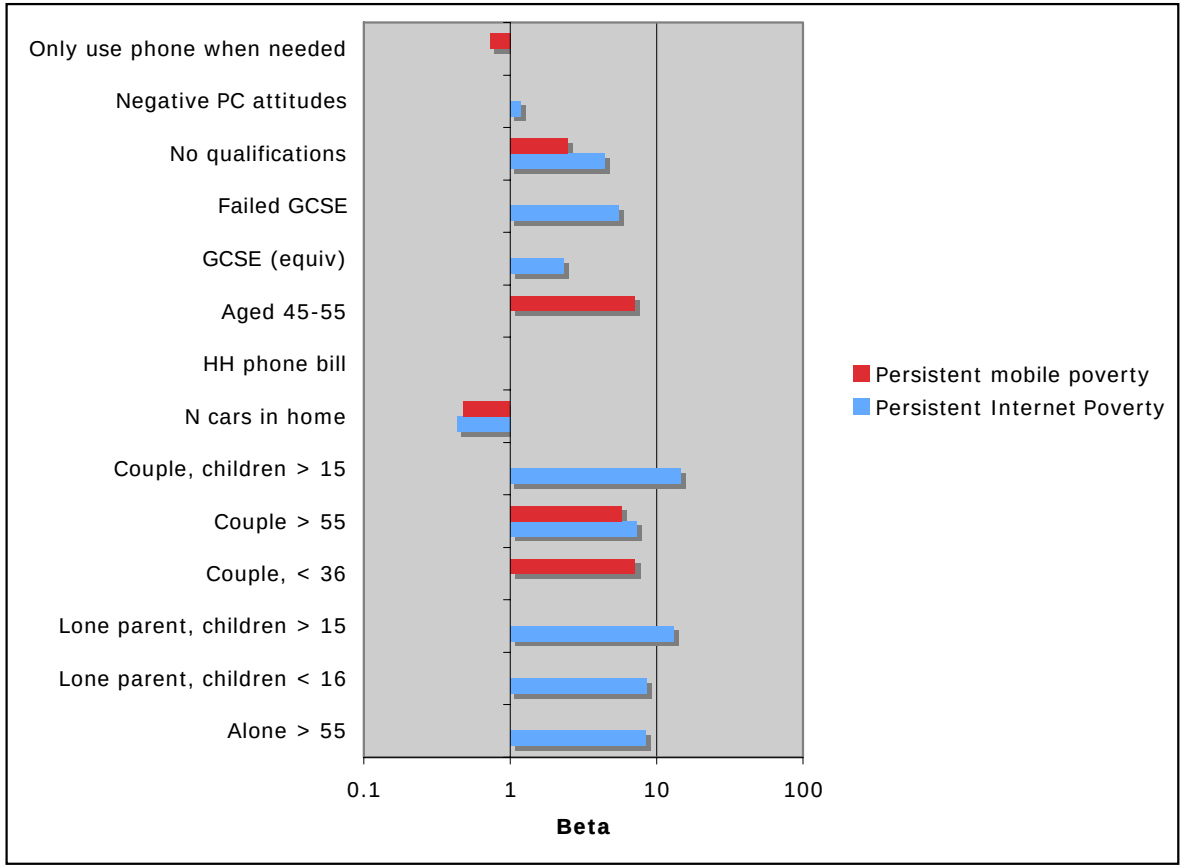
- UK 1999-2001 data
- Logistic regression models analyse risk factors for persistent and transient ICT poverty
- Qualitative data and literature informs models
    - Socio-demographics (Age, wealth indicators, family situation, education level, gender etc)
    - Attitudes to, usage of and experiences with ICTs before dropping out
    - Life transitions (retiring, losing/getting job etc)
    - Social networks

The results !

	Variable (contrast)	Model 1 1.1 Persistent Internet Poverty B	Exp (B)	1.2 Persistent Mobile Poverty B	Exp (B)
Household level variables at wave one	Household type (alone under 56)				
	Alone over 55	2.124	8.364*	1.494	4.455
	Unrelated others	-3.812	0.022	-1.522	0.218
	Lone parent, children < 16	2.155	8.625*	0.671	1.957
	Lone parent, child >15	2.563	12.973**	0.903	2.467
	Couple, household 'head' < 36, no child	-0.221	0.802	1.967	7.146*
	Couple, household 'head' < 56, no child	0.995	2.705	0.556	1.744
	Couple, respondent > 55, no child	1.989	7.310*	1.759	5.805*
	Couple, all children < 12	1.186	3.273	1.596	4.934
	Couple, at least one child > 11	0.312	1.366	1.683	5.380+
	Couple, at least one child > 15	2.685	14.659**	1.603	4.970+
	Number of cars in home	-0.839	0.432***	-0.736	0.479***
	Number of people in home	-0.175	0.840	-0.112	0.894
	Household phone bill	-0.003	0.997*	0.002	1.002
Individual level variables at wave one	Gender (female)	0.698	2.011*	0.557	1.746+
	Age (16-24)				
	25-34	0.463	1.589	0.440	1.552
	35-44	0.146	1.157	0.678	1.971
	45-54	-0.649	0.523	1.954	7.058*
	55-64	0.748	2.112	0.910	2.485
	65-74	0.069	1.071	0.900	2.461
	75+	1.242	3.463	1.945	6.993+
	Education (Degree)				
	A level or equiv	0.628	1.874	0.433	1.541
	GCSE or equiv	0.836	2.306*	0.559	1.749
	Failed GCSE	1.710	5.531*	0.660	1.935
	None	1.490	4.436***	0.902	2.464*
	Working status (working)				
	unemployed	0.586	1.797	-0.786	0.456
	retired	-0.240	0.787	0.778	2.178
	maternity leave	-6.179	0.002	1.604	4.971
	looking after family/home	-0.449	0.638	0.098	1.103
	full time student/school	-1.833	0.160*	0.823	2.278
	long term sick/disabled	0.895	2.446	0.927	2.527
	other	-1.425	0.241	-0.244	0.783
	Negative PC attitudes score	0.168	1.184***		
	Size of local social network	0.002	1.002	0.002	1.002
	Size of non-local social network	-.002	0.998	-0.004	0.996
	Freq. calling local social net			-0.103	0.902
	Freq. Calling non-local social net			0.006	1.006
	'Enjoy speaking on phone' (1-5)			0.180	1.198
	Phone is essential for keeping in touch' (1-5)			0.086	1.089
	Careful of cost' (1-5)			0.088	1.092
	Could spend hours using phone' (1-5)			-0.070	0.932
	Only use phone when I need to' (1-5)			-0.316	0.729*
	Constant	-.030	.971	-1.102	0.332
	n	482		503	
	Nag. R sq	0.533		0.300	

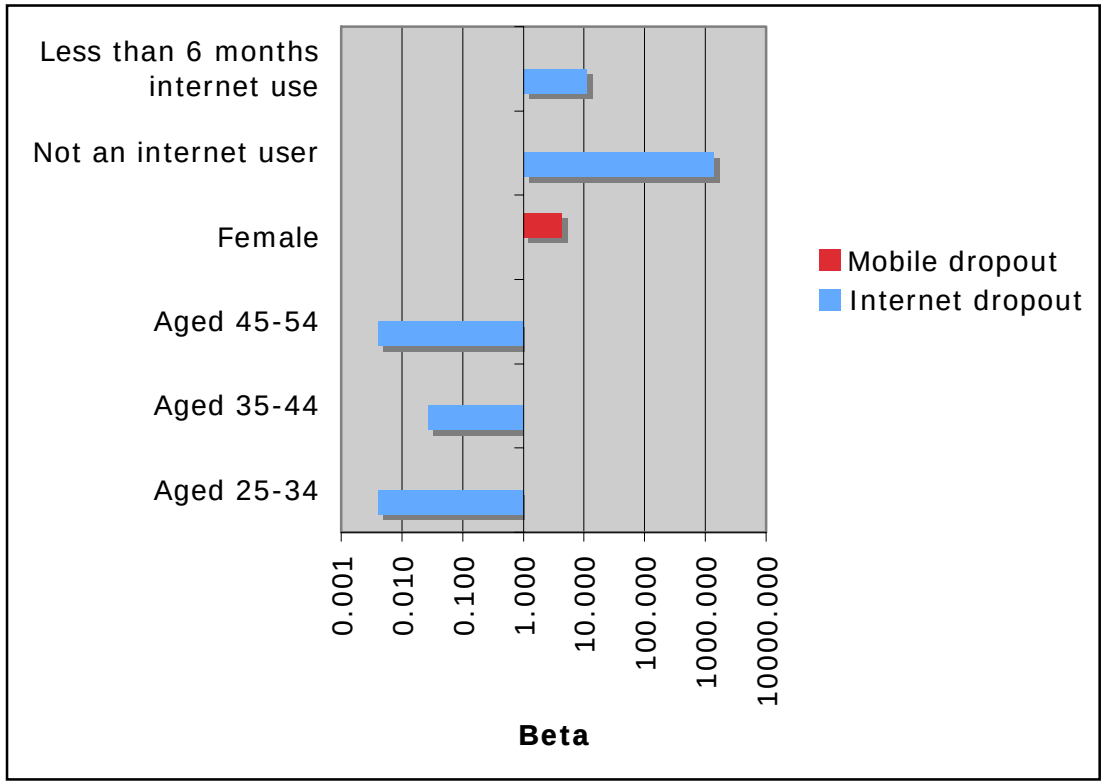
	Variable (contrast)	Model 2 2.1 Internet Dropout B	Exp (B)	2.2 Mobile Dropout B	Exp (B)
Household level variables at t1 (before dropping out)	Household type (alone under 56)				
	Alone over 55	-10.201	0.000	-1.527	0.217
	Unrelated others	-9.007	0.000	-2.205	0.110
	Lone parent, children < 16	0.472	1.603	-2.663	0.070
	Lone parent, child >15	-1.099	0.333	8.632	5609.321
	Couple, household 'head' < 36, no child	-1.194	0.303	-1.960	0.141
	Couple, household 'head' < 56, no child	-1.722	0.179	6.526	682.733
	Couple, respondent > 55, no child	-4.939	0.007+	6.704	815.504
	Couple, all children < 12	0.230	1.258	7.224	1372.409
	Couple, at least one child > 11	1.757	5.792	7.556	1912.299
	Couple, at least one child > 15	-2.867	0.057		
	Number of cars in home	1.066	2.904+	-.595	.552
	Number of people in home	-0.484	0.616	.786	2.195+
	Household phone bill	-0.028	0.972+		
Individual level variables at t1	Gender (female)	0.481	1.617	1.467	4.337*
	Age (16-24)				
	25-34	-5.452	0.004**	-.487	.614
	35-44	-3.630	0.027**	-2.048	.129
	45-54	-5.454	0.004**	-.720	.487
	55-64	-3.563	0.028	-1.453	.234
	65-74	-3.370	0.034	7.924	2763.094
	75+	-9.999	0.000	-1.902	.149
	Education (Degree)				
	A level or equiv	0.021	1.022	-1.644	.193
	GCSE or equiv	-0.696	0.498	-.603	.547
	Failed GCSE	-13.898	0.000	-.190	.827
	None	-2.500	0.082+	.557	1.745
	Working status (working)				
	unemployed	-0.113	0.893	-7.219	.001
	retired	2.522	12.447	-7.230	.001
	maternity leave	-4.342	0.013		
	looking after family/home	-0.011	0.989	.399	1.491
	full time student/school	-1.333	0.264	-9.715	.000
	long term sick/disabled	-7.137	0.001	-6.395	.002
	Government training scheme	10.193	26708.357		
	Other	-0.113	0.050		
	Personal internet experience (2+ years)				
	Not a user	7.215	1359.343***		
	Under 6 months	2.407	11.104*		
	6 months to 2 years	0.695	2.003		
	PC attitudes score	0.019	1.019		
	Number mobile calls made			-.226	.798
	Size of local social network			-.002	.998
	Size of non-local social network			-.005	.995
	Freq. calling local social net			-.177	.838
	Freq. Calling non-local social net			.515	1.674+
	'Enjoy speaking on phone' (1-5)			-.384	.681
	Phone is essential for keeping in touch' (1-5)			-.366	.694
	Careful of cost' (1-5)			.532	1.702+
	Could spend hours using phone' (1-5)			.531	1.701
	Only use phone when I need to' (1-5)			-.439	.645
Transition variables t1-t2	Employment transition (all others include none)				
	Retired from paid work	-4.272	0.014	-12.040	.000
	Returned to work	-0.694	0.500	-8.110	.000
	Started work after education	1.706	5.509	-.181	.834
	Lost job	-11.146	0.000	-7.188	.001
	Began maternity leave	-2.650	0.071	-7.133	.001
	Family transition (all others including none)				
	Household member went to University	-11.620	0.000		
	Was alone, now in couple	-4.745	0.009	.423	1.526
	Was couple, now alone	-6.172	0.002	-6.711	.001
	Lost access to a PC (1)	15.224	4088333.279		

Summary - Persistently ‘Poor’



- Statistically significant effects only, beta (< 1 = negative effect, log scale)
- Wealth is relatively less important
- Internet: cohort (need/value) and education effects?

Summary - Dropouts



- Statistically significant effects only, beta (< 1 = negative effect, log scale)
- Very few ‘effects’ - for mobiles other than gender (why?) its random!

So what?

- Dynamics matter (things look different)
  - Rates of ‘churn’ vary between groups and ICTs
  - Those who drop out may not be coming back
  - ‘Perceived value’ and ‘experience’ issues with PC based internet in the UK, cost seems less of an issue (?)
- Persistent Internet poverty ‘worse’ than mobile poverty
  - There’s more of it about
  - And its more socially uneven (usual indicators of social deprivation are good predictors)
  - But costs and ‘attitudes/experience’ might be the only policy levers

So what?

- So there's still a divide for 'PC internet'
  - And it may not be improving much (despite policy efforts)
- Mobiles are more equitably distributed
  - despite limited (no?) policy efforts - market provision by pre-pay :-)
- Without longitudinal data the dynamics are unknown
  - It is critical for evidence based policies and commercial strategies

So what?

- => Ubiquitous internet?
  - Only on a mobile!
    - And not for the elderly even then!

Further reading

- Paper to appear in iCS (Aug 2005)
- Chapter in Kraut & Brynin (2005)
- Chimera Working Paper
  http://www.essex.ac.uk/chimera/content/Pubs/wps/CWP-2004-06-Passing.pdf
- Get the data:
  - Home OnLine http://www.data-archive.ac.uk/findingData/snDescription.asp?sn=4607
  - E-Living http://www.data-archive.ac.uk/findingData/snDescription.asp?sn=3479

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