

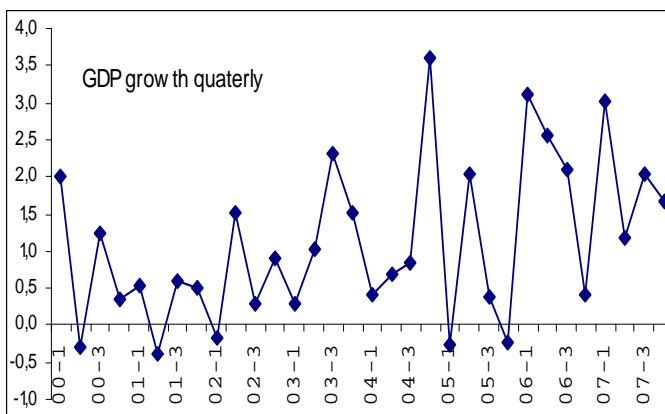
# Use of Informal Mobile Telephony in Low income households in Colombia

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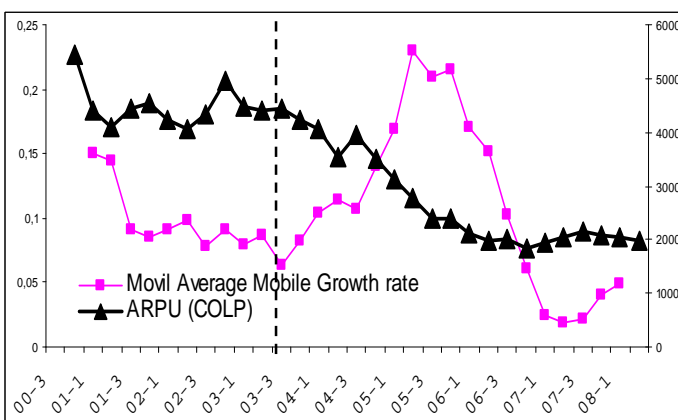
## Motivation

Colombia witnessed the beginning of a new alternative for communication at the beginning of this century, consisting in the use of informal resale of minutes on the streets and small stores.

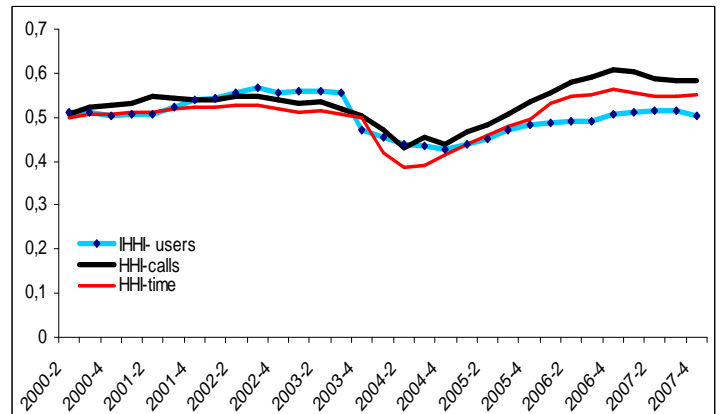
GPD (quarterly growth)



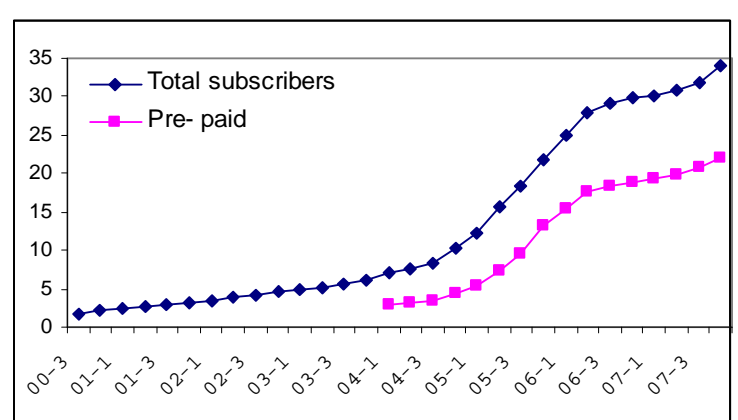
Users and ARPU



Mobile Concentration



Mobile Penetration



## The Hypothesis

Most of the fast growth in mobile penetration could be a consequence of the use of the informal resale of minutes on the streets. We want to test if the type of contract (Differentials in prices) and the type of calls made (*on-net* vs *off-net*) induce poor people to use informal resale of minutes for calling.

## Methodology and Results

We estimate a *Logit model* in which our dependent variable is the use or not of the resale of cell minutes on the streets. The sample is the owners of mobile phone. Data used for this paper comes from DIRSI survey carried out during 2007 in Colombia

<b>Marginal effects Logit model (Owners)</b>				
	(1)	(2)	(3)	(4)
Gender	0,0295 (0,0680)	0,0321 (0,0641)	0,0323 (0,0640)	0,0295 (0,0680)
Age	0,0347*** (0,014)	0,0351*** (0,014)	0,0352*** (0,014)	0,0346*** (0,014)
Age2	-0,0004*** (0,0002)	-0,0004*** (0,0002)	-0,0004*** (0,0002)	-0,0004*** (0,0002)
Logincome	0,0653*** (0,0337)	0,0660*** (0,0331)	0,0672*** (0,0327)	0,0653*** (0,0337)
Contract	0,6796*** (0,0351)	0,6797*** (0,0351)	0,6786*** (0,0354)	0,6796*** (0,0351)
Schooling	0,0000 (0,0006)	0,0000 (0,0006)	0,0001 (0,0005)	0,0000 (0,0006)
othercity	0,0829 (0,0665)	0,0830 (0,0667)	0,0747 (0,0656)	0,0829 (0,0665)
Medellin	-0,1602*** (0,0792)	-0,1603*** (0,0793)	-0,1530*** (0,0774)	-0,1602*** (0,0792)
Laboral	0,0098 (0,0624)			0,0098 (0,0624)
Firm leader	0,2295*** (0,0591)	0,2300*** (0,0590)	0,2298*** (0,0590)	0,2295*** (0,0591)
Internet	0,1151* (0,0760)	0,1135* (0,0748)	0,1139 (0,0746)	0,0838 (0,0962)
Size			0,0014 (0,0167)	
Fixed	0,0320 (0,0618)	0,0320 (0,0618)		
Sensibility	-0,0286 (0,0664)	-0,0287 (0,0664)	-0,0272 (0,0660)	-0,0286 (0,0664)
ICT				0,0320 (0,0618)

## Some Conclusions

The use of informal resale is more probable in people from small cities, users in the modality of pre-payment, users from the leader firm (highest market share) and users with a higher income among poor people.

The intuition behind this is that informal resale is a way to reduce mobile spending because prepaid and off-net calls are more expensive than postpaid and on-net ones.

## Further research

I will be interesting to study the supply side. What are the socioeconomic characteristics of any people who sell minutes on the streets?