

Urban vs. Regional Divide: Comparing and Classifying Digital Divide

By

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Current Debate

Our Approach

Objectives

Object of Study

Methodology

Broadband

Internet Usage

Taxonomy

Conclusions

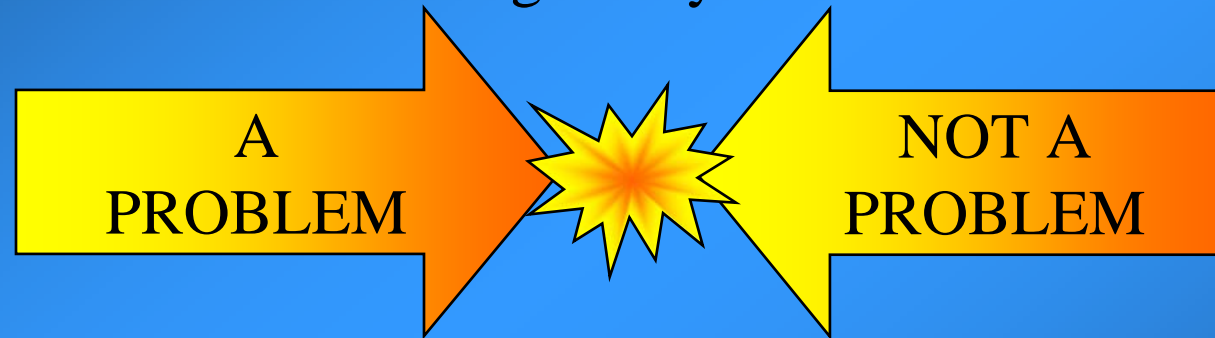
COMPAGNIA
di San Paolo



Current Debate

☑ What is Digital Divide???

Two schools of thought may be found in the literature

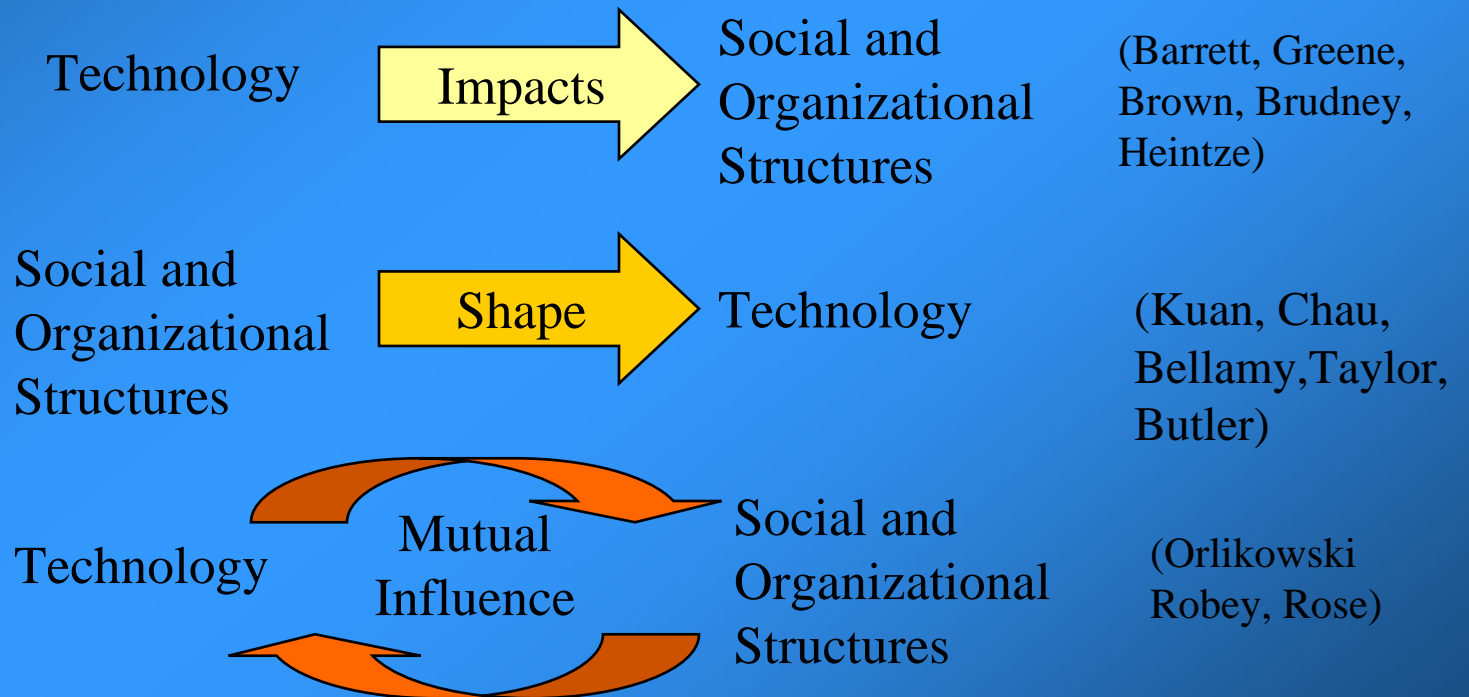


A source of social inequality that mirrors the unbalanced situation in terms of opportunities and quality of life present at global level

A physiological delay inherent in the diffusion of technologies among different geographic areas and social groups

Our Approach

- ☑ Our approach moves away from this dichotomy.
- ☑ From a review of the eGovernment literature



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Objectives

- ☑ Deepen the understanding of the digital divide:
 - ☑ Understand whether and how the determinants of digital divide may vary across regions and definitions of digital divide
 - ☑ Propose a classification of different types of digital divide.
- ☑ Provide a more complete picture to policy maker in order to allow them to make better informed choices

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Object of Study

Two areas of studied:

Piedmont (the region)

Turin (the main metropolitan area)

Two Aspects Investigated:

Broadband Access

Regular Internet Usage (at least once a week)

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Data Collection:

Survey	Sample	Population	Data Collection
Citizens	1000 Turin 700 Piedmont	4,214,677	CATI
Municipalities	275	1,206	Written Questionnaire
Enterprises >10 employees	294	6,324,567	Written Questionnaire

Data Analysis: multivariate log-linear models

Technology to Business Intelligence Unit (T2BI)

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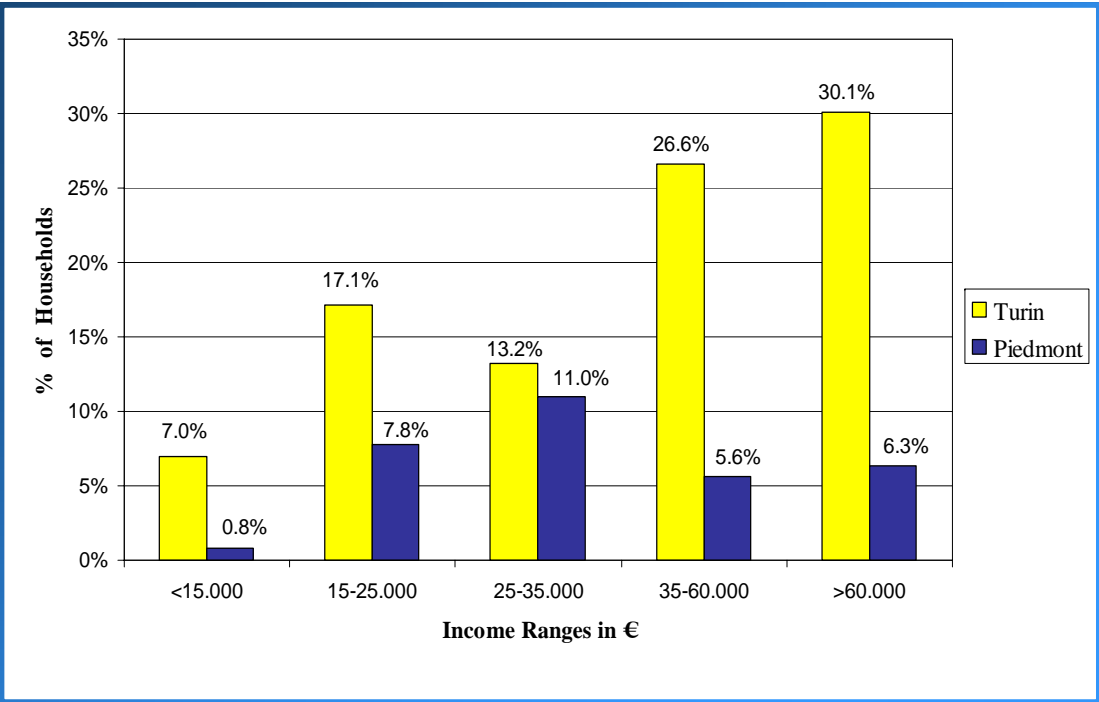
Methodology

Broadband

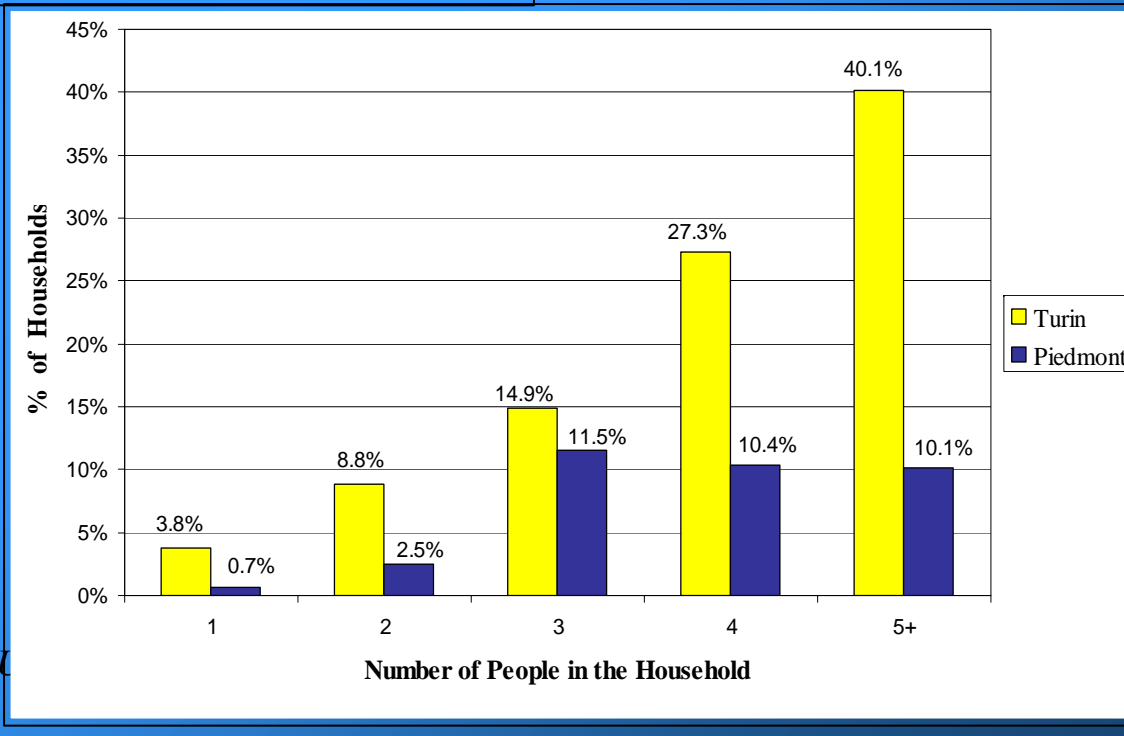
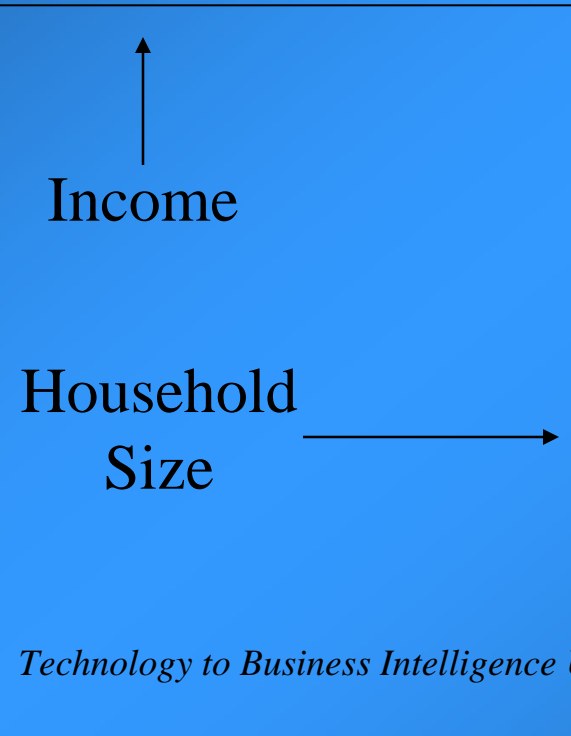
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Broadband Adoption



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Broadband Adoption

(II)

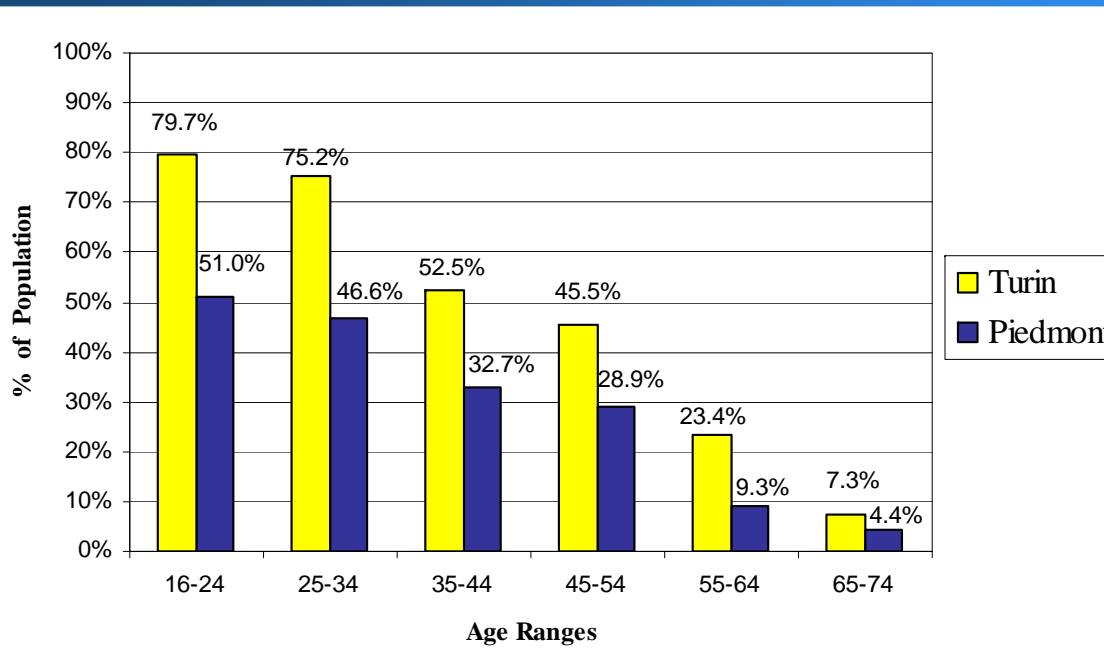
Log-linear model design:

Income and family size → explanatory variables

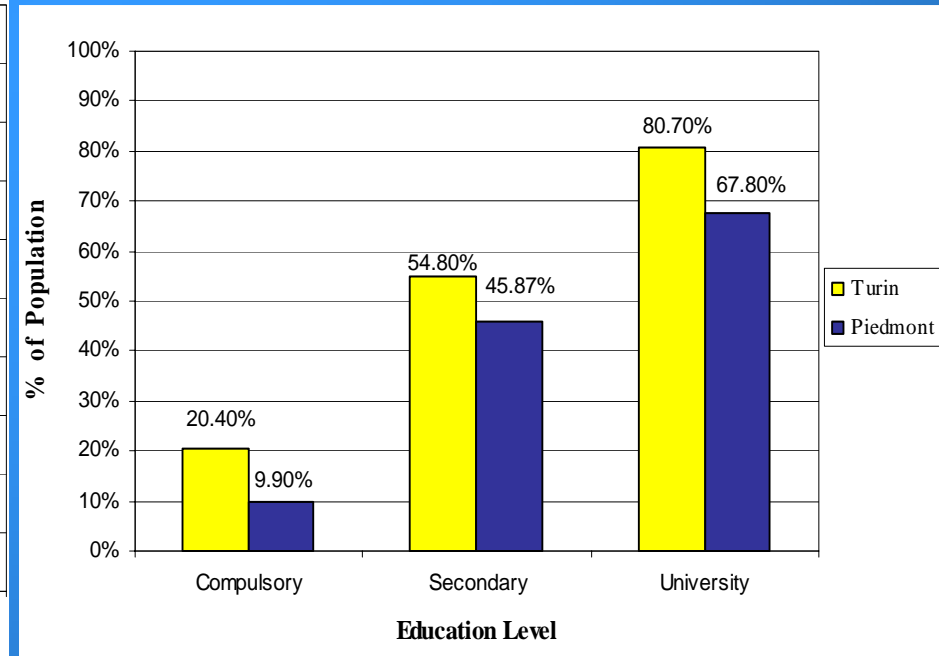
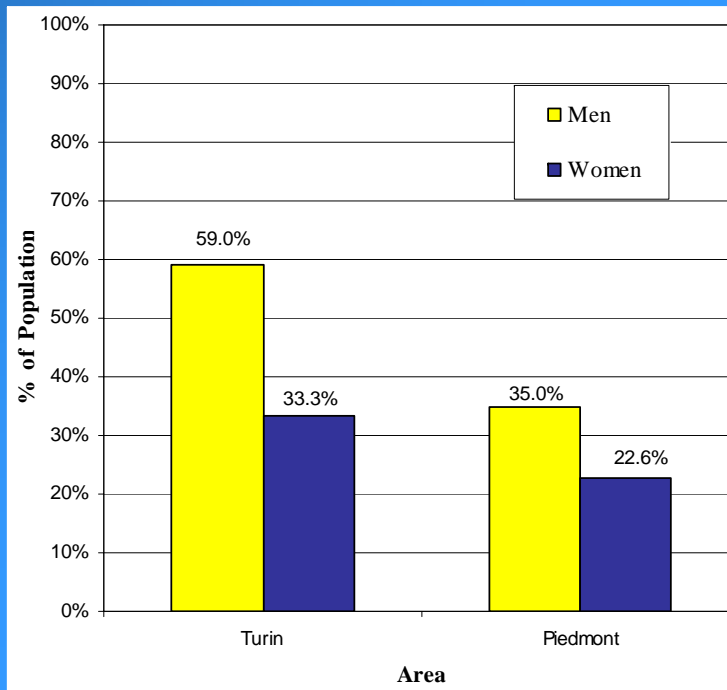
Broadband adoption → outcome

Results:

$P(\overline{BB})$	Piedmont	Turin
HH Size	✓ (1 & 2)	✓ (1 & 2)
Income	X	✓ (<15.000€)



Regular Internet Usage



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Internet Usage

(II)

☑ Log-linear model design:

- ☑ Age, Education and Gender → explanatory variables
- ☑ Regular Internet Usage → outcome

☑ Results:

- ☑ All the variables considered exert a statistically significant influence on adoption in both areas, but...
- ☑ It emerged that in Turin the width of digital gaps is wider than in Piedmont
 - ☑ The gap between mature and young users in Turin is over 3 times wider than in Piedmont
 - ☑ The gender gap is about the two times wider in Turin
 - ☑ As per education, instead, gaps seem to be similar

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Digital Divide Taxonomy

DIGITAL DIVIDE TAXONOMY

OFFER	<ol style="list-style-type: none"> 1. Availability of PCs and Internet connections in schools and public places 2. Diffusion of WAI compliant websites 	<ol style="list-style-type: none"> 1. Lack of e-Government service provisioning in small municipalities 2. Availability of broadband networks outside metropolitan areas
	DEMAND	<ol style="list-style-type: none"> 1. Gap associated to age, gender, education and income 2. Gap associated to enterprise size, sector of activity and type of management
		INTRA-MUNICIPAL (Social Classes)

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Conclusions

- ☑ Digital divide is not a monolithic concept but is a multifaceted moving target
- ☑ Digital divide determinants inside a region may vary in both nature and intensity (according to areas, definitions)
- ☑ Digital divide seems to be higher in areas with higher penetration rates (is the gap really closing?)
- ☑ Different types of digital divide arise from the interplay of demand and offer related gaps

*THANK YOU FOR YOUR
ATTENTION !*

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