Beyond NEET's

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1 Introduction

In the past years the young enable to work persons ie 15-24 years old[1], that do not study do not work and do not participate to a training program (Not in Education, Employment or Training: NEET [2]; have been reputedly criticized as been the main problem of the low activity rate that traditionally suffers Italy. The NEET definition is coarse, as does not distinguish the young unemployed from the young inactive. However it has been widely used as the indicator for measuring the youth labour market lacks. In very recent publications and declarations the politicians and the economic analysts [3] posed in a different way the problem of the young people not in education, in employment or training. Searching the causes of the low activity rate of the youth population, is a more constructive and productive way for facing the NEET problem.
The academic contribution of the present article regards 1) discussing why the NEET definition does not express the young labour market slacks. Is the structural low activity rate of the Italian youth due to the NEETs? 2) In Gatto-Potestio (2008) several indicators has been proposed. Two of them are the young activity rate in education and the young activity rate out of education. Here are considered as the best indicators for individualizing eventual problematics of the youth labour market. In the present paper is argued the validity these indicators and proposed as a unique tool for the young labour force analysis. In fact using them as a tool for comparative analysis is posed the question: is it only an Italian problem the low youth activity rate or other main European countries also suffer? The data used for answering the two questions come from the European Labour Force Survey (LFS) of 33 countries of the Europa area. The data in use are annual and cover six years: from 2007 until 2012. The tool for analysis and comparison, for the 33 countries are: the youth activity rates in education or training and the activity rates not in education or training for each country. Potting the two indicators, per country, a cluster analysis is produced grouping the "good" countries, the "medium" ones ecc and it can be visioned in which group Italy belongs to.
3) Last aim of the paper is to give some policy indicators against the low employment rates of the young. In particular it is proposed an early introduction to the labour market as part of the schooling system (with credits); giving at least 3 years part-time experience in the same organizationenterprise with zero expenses for the employers. The effort for a national education program involving the ministry of Education, the ministry of Productivity and Confindustria is a big commitment however with zero economic costs can be resolved the Italian high youth unemployment. For strengthening the policy position of this paper it has been used the Italian LFS longitudinal data for the years 2009-2010, 2010-2011 and 2011-2012. The evidence regards through logit models the significant positive relation of

[1] Eurostat's age classifications

[2] Eurostat (2011); *Young people - education and employment patterns*

[3] article in La Voce of Caroleo e Pastore; http://www.lavoce.infocaroleo-e-pastore-rispondono-su-troppo-educati-per-lavorare, Eurostat (2013) *Participation of young people in education and the labour market*

working students the year before and being employed the current year.

The present article is divided in three main parts: introduction, main part and conclusions, each of it is sub-divided in two distinct parts. In the introduction are illustrated the questions the article deals with and its main aims. In the main part is firstly analyzed what NEET means and its main aspects. It follows an analysis regarding the participation to education or training in respect to the activity rates of the youth population. In this theoretical part refers to cultural possible prejudice that Italy may suffer regarding the youth in Education or Training. The fourth part regards the results coming from the Labour Force data of 33 counties of the Europa Area (EU country members and candidate members). In the six years is applied a cluster analysis so that can be highlighted eventual getting better or worsting movements in the youth Labour Force of each country. Closing the main part, some policy indications are given with the relative empirical evidence for supporting proposed policy. The conclusion sums up the main aims and the corresponding results of the paper.

2 Fundamental stones regarding the Youth Labour Market, Youth Population and its intrinsic characteristics

In the present section is given a fast overview of the past bibliography regarding the topic of interest: and mainly focusing on the measures for better expressing the school - work transition:
The first article viewed is by Fares-Montenegro-Orazem (2006). At the very beginning of the paper are highlighted the differences between the youth and adult labour market manly because youth is a period of transition and secondly because the Time Allocation differs in the two populations. They mark the necessity ad hoc indicators regarding the youth labour market. If fact it is measured the distance of adult and young unemployment changes, based of how youth time allocations are measured: *A descriptions of the time spend in the labour market needs to take into account the important share of young people how are still in work, who are combining school and work or who are temporary withdrawn from the labour market.*

In the article, for the developing countries, are proposed two measures
1) Home status rate= neither at school nor labour force / pop.15-24
2) Jobless rate= Unemployed + Inactive / pop. 15-24
Using case studies, they evaluate the performance of the traditional employment rate and unemployment rate with the newly proposed indicators arriving to the conclusion that the employment rate and the Jobless rate (how the out of school population is faring) are the best ones for measuring the economy's ability to generate jobs.

Pastore - Caroleo (2007) in there article explore the youth school to work transition problem. The article is divided into two main parts. Firstly is given some analysis of the mainstream policy proposed by the OCSE job study 1994 for fighting the unemployment: flexible labour market and low entry wages linked with fixed term contracts. Arguing that the youth labour market suffers of higher unemployment rate as a result of the youth experience gap [4]. In the second part of the article are analyzed five main education and welfare systems and the youth unemployment level. The different welfare and education system analyzed are North-European, Continental European, Anglo- Saxon, South-European, New Member States. The analysis has as a scope understanding the inner dynamics that each welfare and education produce different youth unemployment levels. The conclusions regards the pros and cons of increasing the flexibility of the labour market

The Gatto-Potestio (2008) article focuses exclusively on the topic of the Italian youth labour market for the period 1993-2005. A deep comparative analysis is given between the five biggest European countries: Italy, France, Spain, Germany and United Kingdom, in

[4] young 15-24, than the adults as have lower level of human capital and lower productivity moreover the young's lack generic and job-specific work experience

respect of a set of indicators taken into consideration as the Activity rate of the youth in education and out of education and the Effort Indicator (impegno). The Effort indicator marks as:

- 0 = the young out of labour force and out of school,
- 1=participation in the labour force or in education/training,
- 2= participation in the labour force and in education or training.

Italy in those years was in the OSCE average in terms of education enrollment and youth employment rate, however the youth unemployment was already in very high levels .

Pastore - Caroleo (2013) in a recent journal article the two authors answered to some declarations of the ex-Minister of Education Maria Grazia Carozza [5] using as a reference the results of the 2007 article. Moreover it is argued that the young Italians are not over educated, however the university education system must be modified from the currently scheme 3+2, to become 3 years for the most of the Italian students, following 2 years of specialization, for some of them and only ones that want to have an academic career. Thus must be given more value to the 3 years bachelors degree than there is at the moment.

In a most recent article by Bruno, Marelli and Signiorelli (2013), is replicated the old work done by Eurostat on the 2011, on the EU countries introducing the NEET concept, but in a more detailed level: NUTS2. The results of the NEET and youth Unemployment are compared and in the paper are given two different econometric models that relate the GDP growth and the unemployment and young unemployment levels.

The reference to the above articles is inevitable as in the present article are going to be used in the analysis the same themes, aiming to find the right answers of the youth unemployment as a statistical ad hoc indicator but also in terms of policy. In the next section begins the first of the main argument of this article that is the structural low activity rate of the Italian youth due to the NEETs ?

[5] the education minister declared that the problem of Italian youth unemployment is due to the fact that the young Italians are over-educated and that as an incentive for increasing the young labour employments will be given 400 per month to the enterprises, for every newly hired under 24 year old employee

3 Youth Labour Market, Youth Population and its intrinsic characteristics

3.1 The NEETs

The agronomic NEETs stands for Not in Education Employment or Training and usually refers to the 18-24 age group [6]. Italy has a structural low activity rate of the youth population and NEETs is associated as the youth labour slackness. The young's that belong in this group (unemployed or looking for the first occupation and inactive out of education) suffer of exclusion and recently of social disapprovals. For the young belonging to NEETs category, is usually blamed the difficult passage school - work and as the Pastore - Caroleo (2007) and Gatto - Potestio (2008), youth labour market problems are influenced by the participation to education and the household duties manly for the young women (Fares - Montenegro - Orazem; (2009)).
Thus for analyzing the Italian NEETs phenomenon and understanding if is to be blamed for the youth low activity rate, is better to view the participation to the education or training of all the youth 15-24. [7].
The population aged 15-24 can be divided in two groups :

- IET: young people in education or training
- NIET: young people Not in education or training.

NEET is a subset of NIET.

3.2 Youth in education and training

Young in education or training (IET), in reference to the labour market, belong to the inactive labour status. As the IET group do not work, may be are part of the problem of the youth labour market slacks. Italian young suffers of long academic carries, some for postponing their entry to the labour force (Potestio-Gatto, 2008). Among the youth set IET there are some individuals totally out of the labour market but they do not suffer of social exclusion as they study.
The traditional weak participation of the Italian youth to the labour market has been documented and it has been proved that is structural (Massarelli, De Santis, (2005)). The structural low activity of the Italian youth may have two opposite interpretations (Potestio-Gatto, 2008) :

[6] Eurostat (2011); *Young people - education and employment patterns*

[7] the reason why 15-24 age group for the analysis instead the 18-24 as refereed to the Eurostat report that introduced the NEET is that the young unemployment rate and the activity rates used in official statistics use the 15-24 age group

- for the age group 15-18, is considered in a positive way as is translated mainly in high education participation.
- for the 19-24 years old is considered in a negative way as this is associated with low activity rate

So regarding the low participation problem is not only the way the young allocate their time [8]but also how the adults consider the time allocation of the youth. It maybe concluded that part of the problem this article deals with has do do with the prejudice. As a consequence the questions posed in the coming subsection deal with the adult considerations regarding the youth time issue.

3.3 The prejudice

Is it a cultural phenomenon we are seeking to analyse? Is the Neets, recent blaming for the youth low activity rate, just a cultural prejudice? The answer is yes. In fact both theoretic and empiric evidence show that the NEETs problem is just a question of prejudice. [9]

Theoretic evidence: The real problem for youth labour market slacks is nested with the level of attachment to the labour market (Hussmanns (2012)) [10]. In the NEET definition all the young that belong in this group unemployed as well as inactive out of education are considered the same. Moreover exist cases were young have long academic careers as their attachment to the labour force is very week. Using the NEET indicator leaks, for including all parts of the youth low activity rate problem. For this reason is necessary to find or reformulate an indicator that respect the activity and the attachment to the labour market, foundation principles of the labour market survey (Hussman et all (1990)) [11] and definitions. It is important to preserve the coherence among the labour market survey definitions in reference.

Empiric evidence shows that the phenomenon of interest is mainly a cultural prejudice part of the Italian adult population. The results supporting this position will be presented in the next section where is re-introduced an old indicator that according to the so far discussion is the one to replace the NEETs indicator. However before passing to the next section, it will be analyzed the proposed indicator that should replace the NEETs.

[8]Fares - Montenegro - Orazem

[9]In Italy is often considered that " when you study have only to study thus is better not to work".

[10]Hussmanns R. (2012), *One-euro jobs and the ILO definition of employment*

[11]Hussmanns R. , Mehran F. and Verma V. , *Surveys of economically active population, employment, unemployment and Underemployment. An ILO manual and methods.*, ILO, 1990

It is important choosing the adequate tool. As Fares - Montenegro - Orazem (2006) indicate in their paper, youth labour market has intrinsic differences that make it differ than the adult Labour market. In addition it is highlighted the need of appropriate ad hoc indicators for the youth labour market.

3.4 The tool

In the previous section is been argued that the NEET indicator does not respect the principles of the labour force survey definitions, making it a misleading indicator for viewing the youth problematics within Labour Force Survey framework and data. Seeking to identify the youth labour slacks, it is chosen to be used an indicator that respects the labor market survey definitions and principals. Thus the logic sequence leads to the activity rate, adapting it to the young, IN education and OUT of education. The two indicators together give a full description of the youth attached in the labour market (being employed, looking for the first employment or being unemployed) and express the involvement of the active young in the education/ training. The young that only study are out of the labour market. A raking of the youth Activity Rate IN education and OUT of education [12] of the European Union member countries expresses the youth attachment to the labour market. The lower raked countries are the ones with high youth labour market inactivity.
Concluding the present section, in the forthcoming section are represented the data in use, an application of the indicators as proposed and a cluster analysis of EU member countries expresses the youth attachment to the labour market. The lower raked countries are the ones with high youth labour market inactivity. All methods help us to place the Italian youth activity rate in EU.

4 The analysis and the results

4.1 The data

The data used in the present article comes from the European Labour Force Survey. The population of reference are the 15-24 years old [13]. The data has been selected for constructing the youth activity in education rate (AR_IET) and the youth activity rate out of education (AR_NIET). They are annual figures, from 2007 until 2012 and refer to the 33 EU and EFTA countries members and candidates. All the elaborations and graphics are placed in the appendix.

[12] This indicator has been also used in the Potestio - Gatto article, among others aiming to describe the school - work transition difficulties. One of the contributions of the present article, is justifying the validity of the specific indicator also on a theoretic labour market basis

[13] Eurostat glossary for LFS

4.2 The comparing the six big European Members

In a first elaboration, data regarding only 2012, are compared (table and histogram) the six biggest European country members: Italy (IT), Germany (DEU), Spain (ESP), France (FRA), the Netherlands (NDL) and United Kingdom (UNK). In the first table there is the comparison are Activity Rate (AR), the youth Activity Rate In Education or (AR_IET) and the youth Activity Rate Not In Education/ Training (AR_NIET).
The histogram in Annex (graph 1 and table 1) compares the activity rates of IET and NIET of the six european main counties: Italy, Germany, Spain, France, the Netherlands and United Kingdom. Italy is the one with the lower percentages regarding the Total Activity Rates (AR), 28,7% while for France is 37,8% and Spain 38,8%. Italian figure of AR_IET is 6,2% while for France (second lowest) is 16,6%. On the other hand the Italian figure for AR_NIET is 66,4%while for Spain (second lowest) is 72%. At this point is important to highlight the Netherlands figure regarding AR_IET is 64,8% [14].

On 2012 the youth participation to education and training[15] in Italy is very near the six countries average 62.7% while the lowest is registered for UK, 58,8%.

In the third graph, can be is illustrated the youth participation rate of young active (IET_AR). It is confirmed that the problem of Italy is mainly the net distinguish of school from work; the Italian IET_AR is 13,6% while the second lowest is Spain with 29,6%. The highest is Netherlands with 70,3%.

Concluding this part of analysis it can be deduced: the AR_IET expresses the disadvantage of young italians in respect to the corresponding european labour market. In other words, AR_IET and not AR_NIET indicates where the problem is. The next subsection is dedicated regarding the Italian trends of the indicators of interests.

4.3 Italian Trends

The first histogram in the appendix indicates that the prejudice: has also another way to be interpreted: the state *student* is associated with the labour state is only a cultural handicap of Italy in respect of the remaining five European countries. Being or not being in education or training is a relevant variable mainly for the young population (Potestio-Gatto, 2008). The fourth graph focuses on Italy's trend of the participation to education and training (IET) which is quite flat since the economic crises was 2008-2009. It can be deduced that the crises did not influence the Italian higher schooling participation. On the other hand, can be noticed that the young Activity Rate from 2007 and forward, worsts, having its main drop on 2011 (27,4%).

[14] nearly 65% of the Dutch young study and work simultaneously
[15] second graph in the appendix

The elaboration consist in cluster analysis with the help of dentrogram cluster and scatter diagram the principal scope of this exercise is to observe in which group of EU countries the Italian youth data in question are more similar to seven years evolution.

4.4 Cluster analysis of the 33 countries

Fares, Montenegro e Orazem (2006) indicate in their paper that youth labour market has intrinsic differences that make it differ than the adult Labour market in addition highlight the need of appropriate ad hoc indicators for the youth labour market. In the present article is used as a unique tool the indicator of activity rate for the NIET and the IET groups.

In Italy IET suffer of long scholastic carriers and delay the entrance in the labour market (Pastore-Caroleo (2007), Gatto-Potestio (2008)). In this part is searched the position of Italy in respect to rest of the European countries members and the EFTA countries. Plotting the AR_IET (y-axis) vs AR_NIET (x-axis) in scatter diagram of the 33 countries for the 2012 can be clearly distinguished four main groups. Italy is positioned in the fourth group.

The first group is composed by Iceland (IS), the Netherlands (NL), Switzerland (CH) and Denmark (DK).
In the second group belong Austria (AT), United Kingdom (UK), Finland (FI), Germany (DE), Sweden (SE) and Norway (NO).
The third group: France (FR), Poland (PL), Estonia (EE), Malta (MT), Cyprus (CY), Slovenia (SI), Spain (ES), Portogal (PT), Ireland (IE), Latvia (LV).
The fourth group is composed by Italy (IT), Macedonia (MK), Croatia (HR), Slovakia (SK), Czech Republic (CZ), Belgio (BE), Romania (RO), Lithuania (LT), Luxembourg (LU), Bulgaria (BG) and Turkey (TR).

In respect to the 2007 situation still can be visioned the four clusters but not so well distinct as the 2012, but mainly are composed by the same country members. Italy on 2007 already belonged in the fourth group but its position was slightly better ie: for 2007 (x,y)=(70,4%, 7,4%) while in the 2012=(66,4%, 6,2%). In fact on the XXX graphic of the appendix, is given the movement of the AR_NIET and AR_IET coordinates of Italy indicating the worsting of the Italian youth indicators the last five years.

Using a formal statistical method for a better evaluation of the European countries and specially the Italian position regarding the AR_IET and AR_NIET have been used cluster analysis methodologies. In particular has been used five different distance methods for giving a more robust results: the Ward, Average, two stages, Centroid and Single. The Ward and Average methods give very similar results while the Two stages and the Centroid give similar results for the overall countries grouping. The Single give awkward results for

all five years; practically gives two main clusters.

In appendix are given the five yeas dentrograms of the "Average" method of distance for the creation of clusters. The results hold for all five years: Italy has always been placed in the fourth cluster. The downward trends is very well viewed comparing the last and first scatter diagram. Italy is the one circled.

4.5 A proposed policy and evidence

The principal action policy indications of the paper, against for reducing the high youth Italian unemployment rate, is that an early entry in the labour market while still studying will:

- facilitate the school - working world transition that here in Italy is particularly difficult
- improve the high youth unemployment situation
- decrease the long academic carriers that the Italian students suffer
- the skills mismatching between enterprises and workers will be decreased

The current policy [16] gives incentives for employing youngs' 16-24 gives incentives 400 to the enterprise for every young employed. It is argued in this article that no help is given to the young for solving the Italian low activity rate but a help towards the enterprises. Here it is proposed to give true long-term incentives for hiring students, stages ecc with zero economic cost, so that the young enter in the working world as soon as possible even if in education. In collaboration with the Ministry of Education Ministry on Productivity and Confindustria, as a comity for creating Vocational Training Programs for the 15-18 and 18-24 years old students with school program with credits. The proposal includes the permanence at the same industry or enterprise for at least 3 years. The blue collar and clerical jobs (ISCO (2008)) [17] can be optimally allocated and educated by 3 hours per day in the afternoon after the school. For the managerial and professional jobs a different training vocational programs can be applied but with the same permanence of 3 years in the same industry or enterprise.

For strengthening the proposed policy actions against youth unemployment, it has been applied 3 different logit models using the Italian longitudinal data 2009-2010: - a Logit model of Neet 2010 with working students in 2009 aged 16-24. The model suffers from

[16] Degreto del fare

[17] International Standard Classification of Occupations 2008 (ISCO-08), ILO; ISCO-08 classifies jobs into 436 unit groups. These unit groups are aggregated into 130 minor groups, 43 sub-major groups and 10 major groups, based on their similarity in terms of the skill level and skill specialization required for the jobs.

autocorrelation bias as highly motivated persons as working students, will always be highly motivated and the intensity of looking work is not registered in the data. the model specification:

$$ln(\frac{P(status{=}Neet_{10})}{P(status{=}NonNeet_{10})}) = b_o + b_1 * ln(\frac{P(status{=}WorkingStudent_{09})}{P(status{=}Other_{09})})$$

The model supports the negative relationship of being a working student on 2009 and becoming Neet on 2010 with 90% confidence.

Correcting the bias with shrinking the sample reference with youngs that already obtained the diploma on 2009, however the percentage of trust drops to 72,9%. In any case, as argued above the NEET definition is not the best for analysis as considers the unemployed as inactive. For this reason, a second more indicated model, has been applied with the following specification:

$$ln(\frac{P(status{=}Employed_t)}{P(status{=}NonEmployed_t)}) = b_o + b_1 * ln(\frac{P(status{=}WorkingStudent_{t-1})}{P(status{=}Other_{t-1})})$$

The model suffers from autocorrelation bias, but supports with 99,98% for the year 2009-2010 confidence level the proposal for early introduction to the working world of the young. For the years 2010-2011 and 2011-2012 are 99,96% and 99,99% respectively. The Relative Risk Ratio for the 3 years are: 3,46; 3,40 and 4,24. Correcting the data with limiting the reference sample to only the diplomati, the confidence decreases to 84,4% for the year 2009-2010.

An alternative model has been applied but its analytical can be considered limited as it quite vast:

$$ln(\frac{P(status{=}Employed_t)}{P(status{=}NotEmployed_t)}) = b_o + b_1 * ln(\frac{P(status{=}StudentorinLabourForce_{t-1})}{P(status{=}outofedu.andLF_{t-1})})$$

The model suffers from autocorrelation bias, but supports with 99,98% for the year 2009-2010 confidence level the proposal for early introduction to the working world of the young. For the years 2010-2011 and 2011-2012 are 90,9% and 99,99% respectively. The Relative Risk Ratio for the 3 years are: 0,22; 0,977 and 1,88.

5 Conclusions

The prejudice against the work during studies is one of the main causes of the delay of the Italian youth labour market. The second, but not less important, is the high total

unemployment rate combined with the low economic activity growth rhythms. The late entrance on the labour market implicates a probable delay in orienteering within the market and finding the own role.

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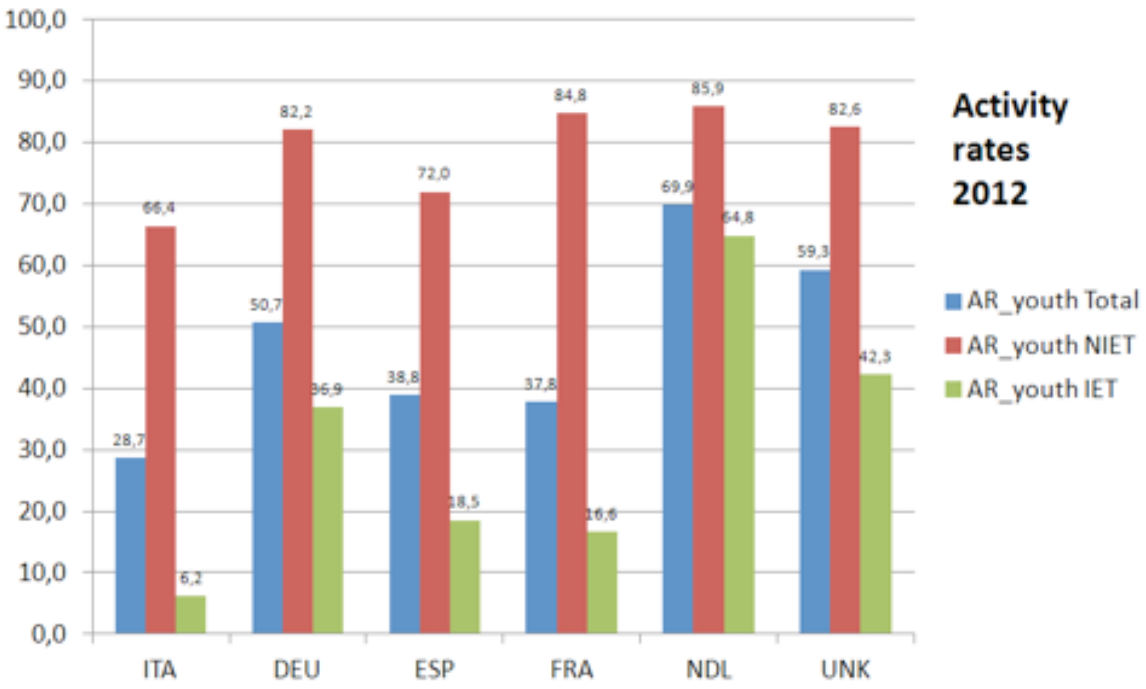
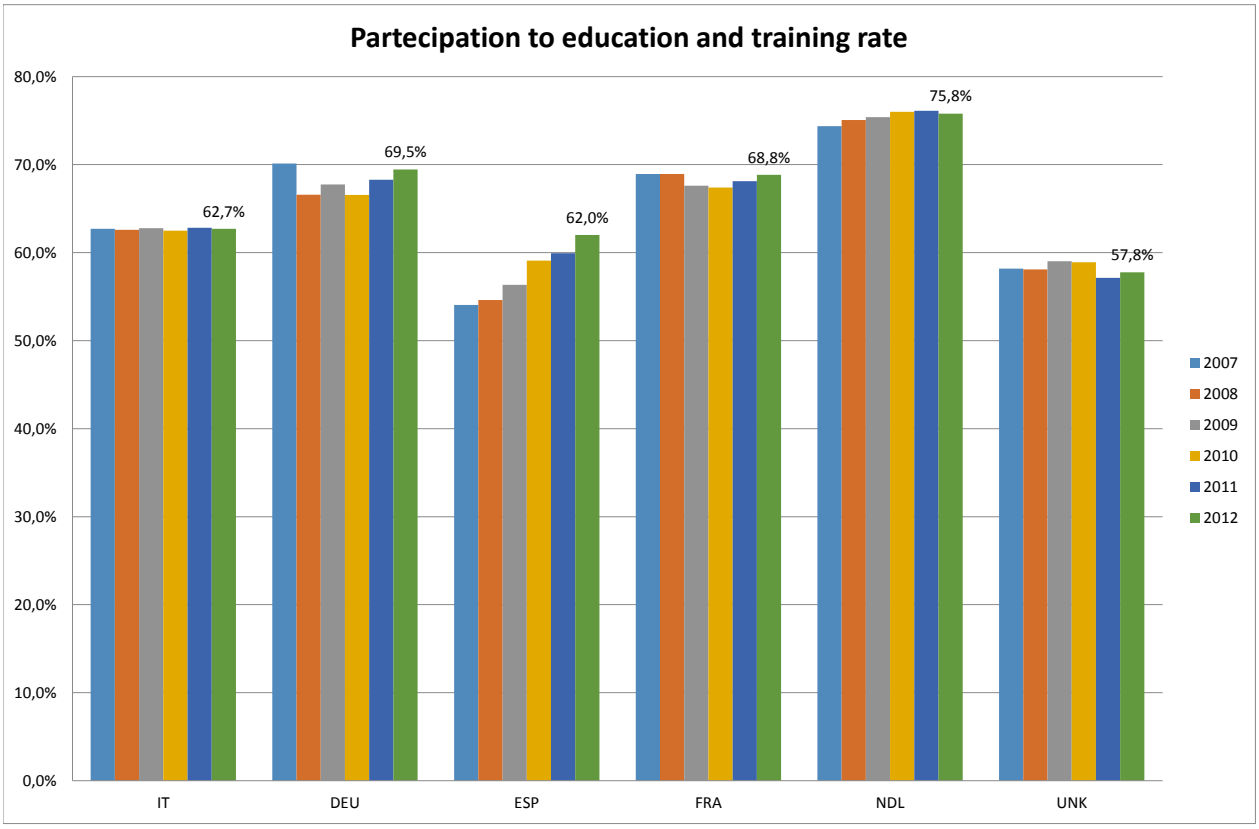
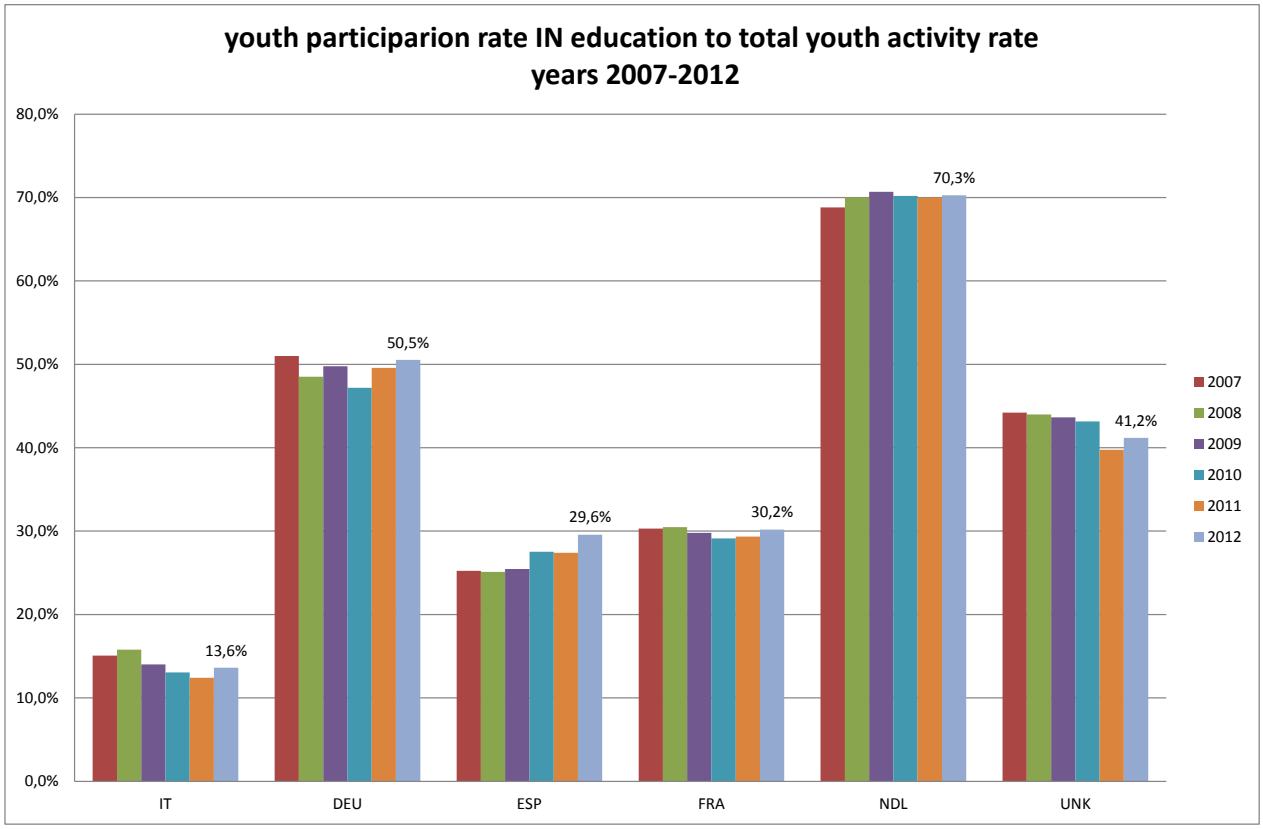
7 Appendix

	youth AR Total	youth AR NIET	youth AR IET
ITA	28,7	66,4	6,2
DEU	50,7	82,2	36,9
ESP	38,8	72,0	18,5
FRA	37,8	84,8	16,6
NDL	69,9	85,9	64,8
UNK	59,3	82,6	42,3


100,0
90,0
80,0
70,0
60,0
50,0
40,0
30,0
20,0
10,0
0,0
ITA
DEU
ESP
FRA
NDL
UNK
28,7
66,4
6,2
50,7
82,2
36,9
38,8
72,0
18,5
37,8
84,8
16,6
69,9
85,9
64,8
59,3
82,6
42,3
Activity rates 2012
AR_youth Total
AR_youth NIET
AR_youth IET


Partecipation to education and training rate
80,0%
70,0%
60,0%
50,0%
40,0%
30,0%
20,0%
10,0%
0,0%
62,7%
69,5%
62,0%
68,8%
75,8%
57,8%
IT
DEU
ESP
FRA
NDL
UNK
2007
2008
2009
2010
2011
2012


youth participarion rate IN education to total youth activity rate
years 2007-2012
80,0%
70,0%
60,0%
50,0%
40,0%
30,0%
20,0%
10,0%
0,0%
13,6%
50,5%
29,6%
30,2%
70,3%
41,2%
IT
DEU
ESP
FRA
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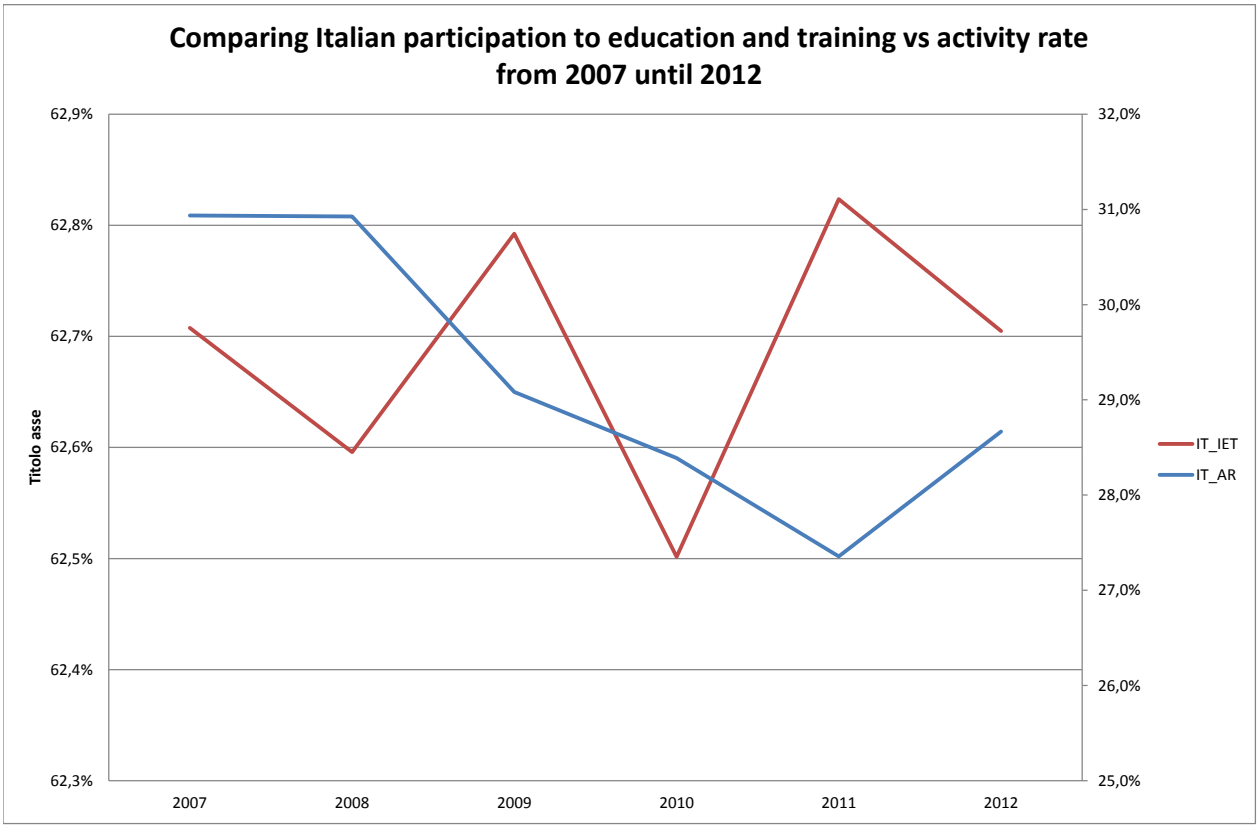
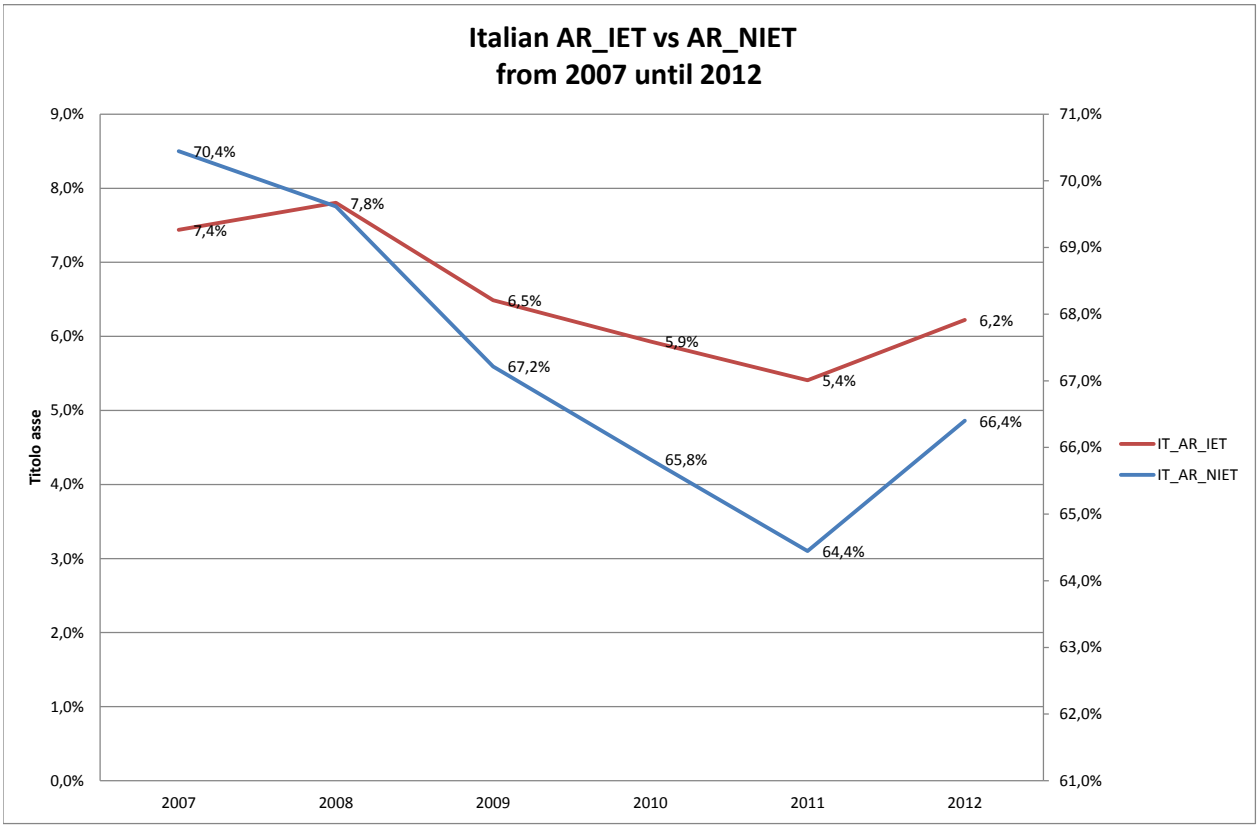
UNK
2007
2008
2009
2010
2011
2012


Comparing Italian participation to education and training vs activity rate from 2007 until 2012
Titolo asse
62,9%
62,8%
62,7%
62,6%
62,5%
62,4%
62,3%
32,0%
31,0%
30,0%
29,0%
28,0%
27,0%
26,0%
25,0%
2007
2008
2009
2010
2011
2012
IT_IET
IT_AR


Italian AR_IET vs AR_NIET
from 2007 until 2012
Titolo asse
9,0%
8,0%
7,0%
6,0%
5,0%
4,0%
3,0%
2,0%
1,0%
0,0%
71,0%
70,0%
69,0%
68,0%
67,0%
66,0%
65,0%
64,0%
63,0%
62,0%
61,0%
2007
2008
2009
2010
2011
2012
70,4%
7,4%
7,8%
6,5%
67,2%
5,9%
65,8%
5,4%
64,4%
6,2%
66,4%
IT_AR_IET
IT_AR_NIET


placement of countries of youth (15-24) Labour Force in and out of Education Year 2007
LF out education
youth LF in education
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
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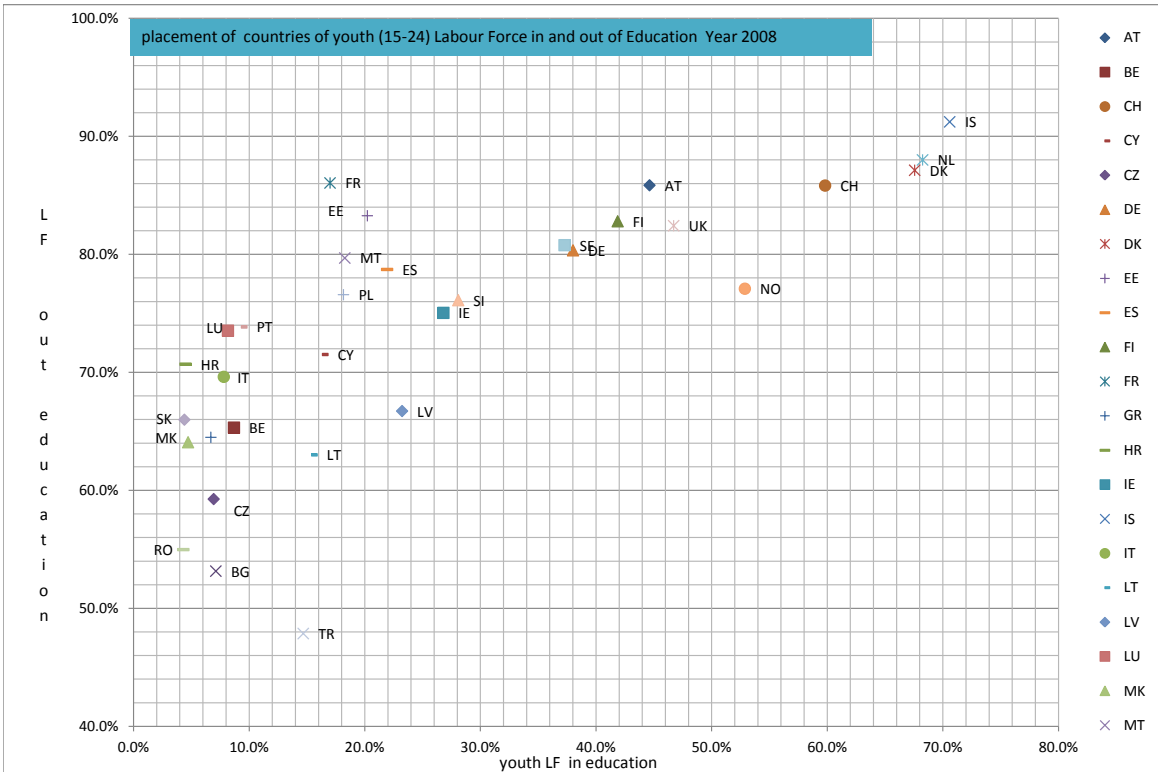
placement of countries of youth (15-24) Labour Force in and out of Education Year 2008
LF out education
youth LF in education
100.0%
90.0%
80.0%
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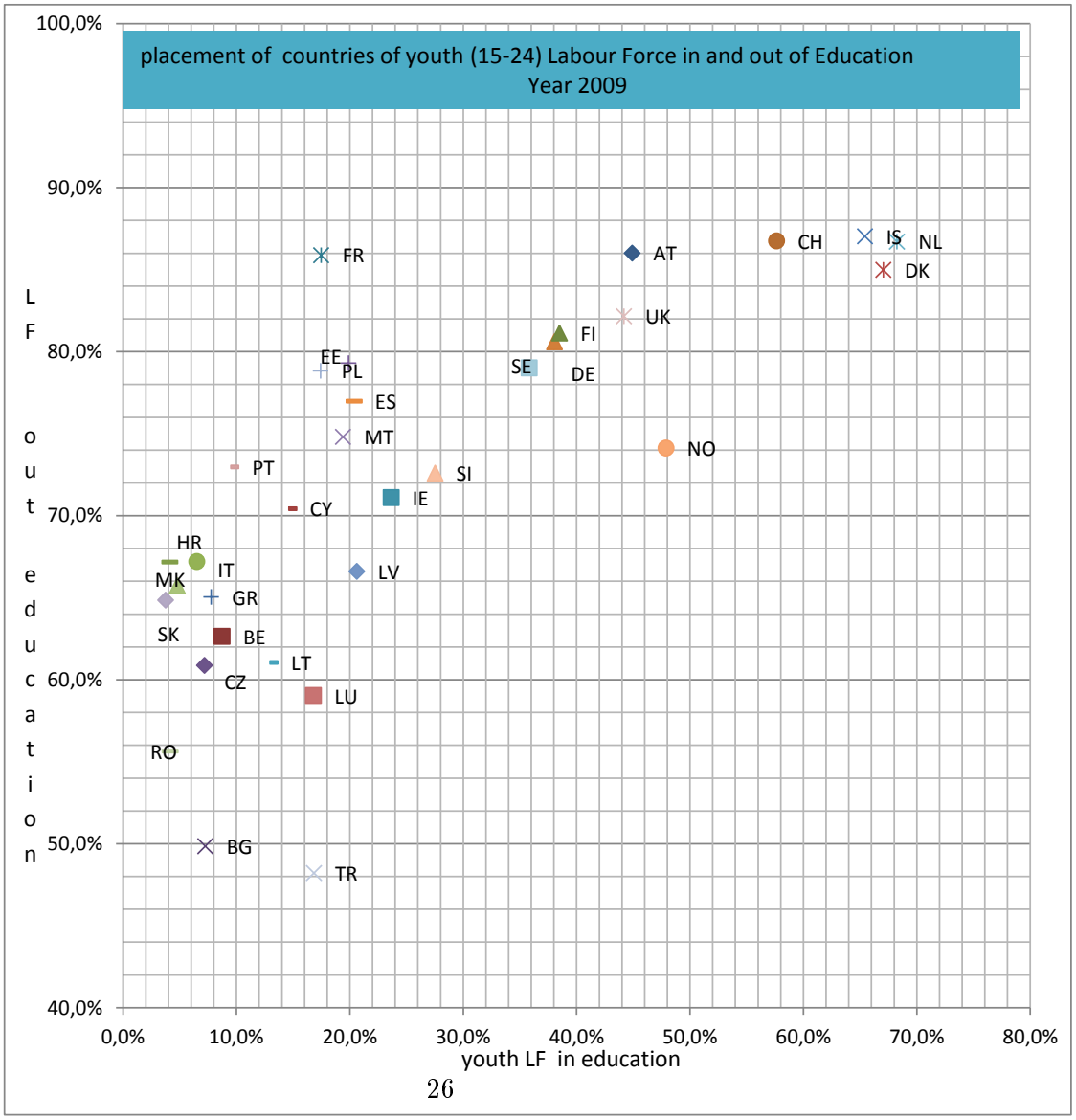
placement of countries of youth (15-24) Labour Force in and out of Education
Year 2009
LF out education
youth LF in education
100,0%
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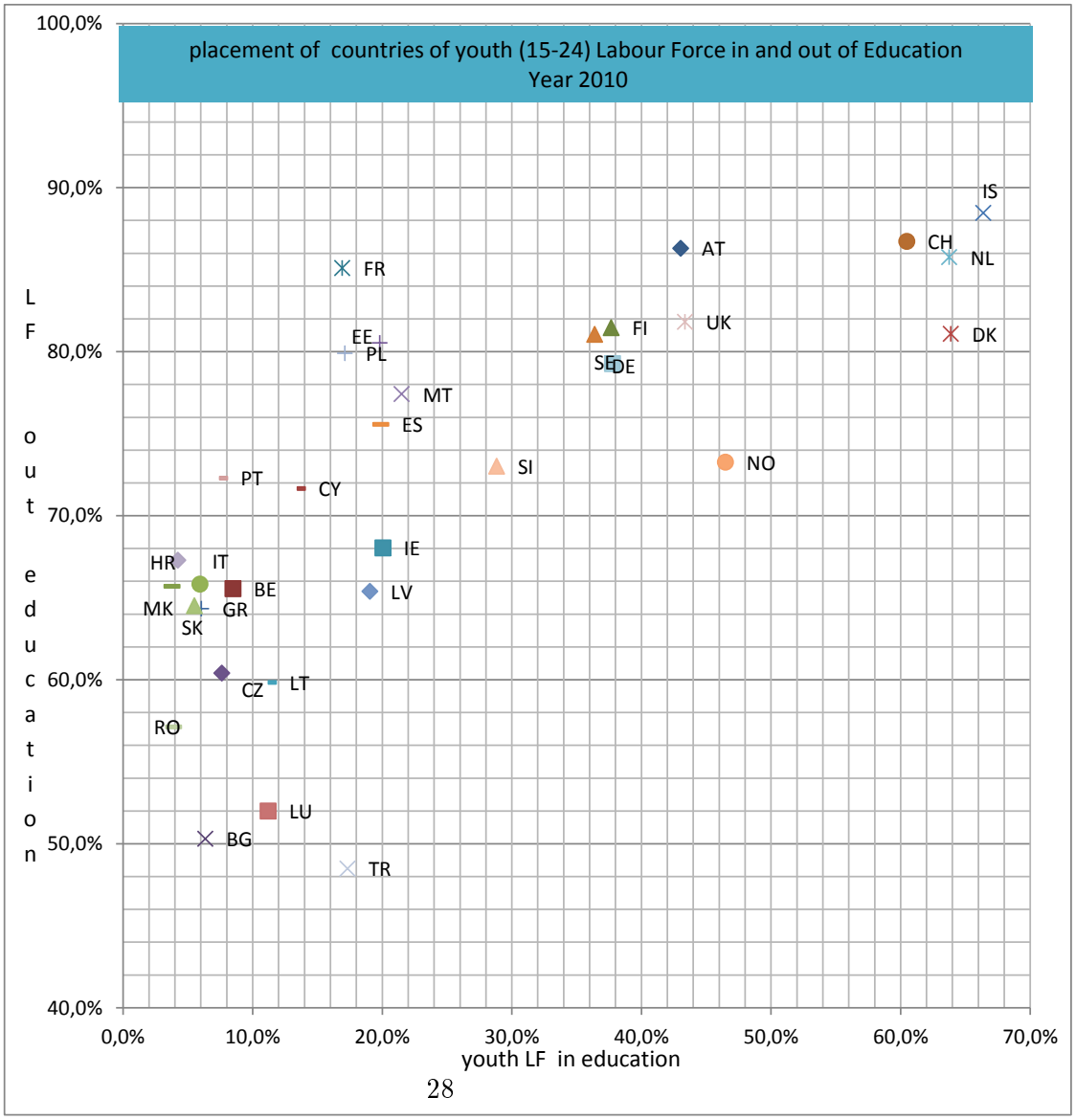
placement of countries of youth (15-24) Labour Force in and out of Education
Year 2010
LF out education
youth LF in education
100,0%
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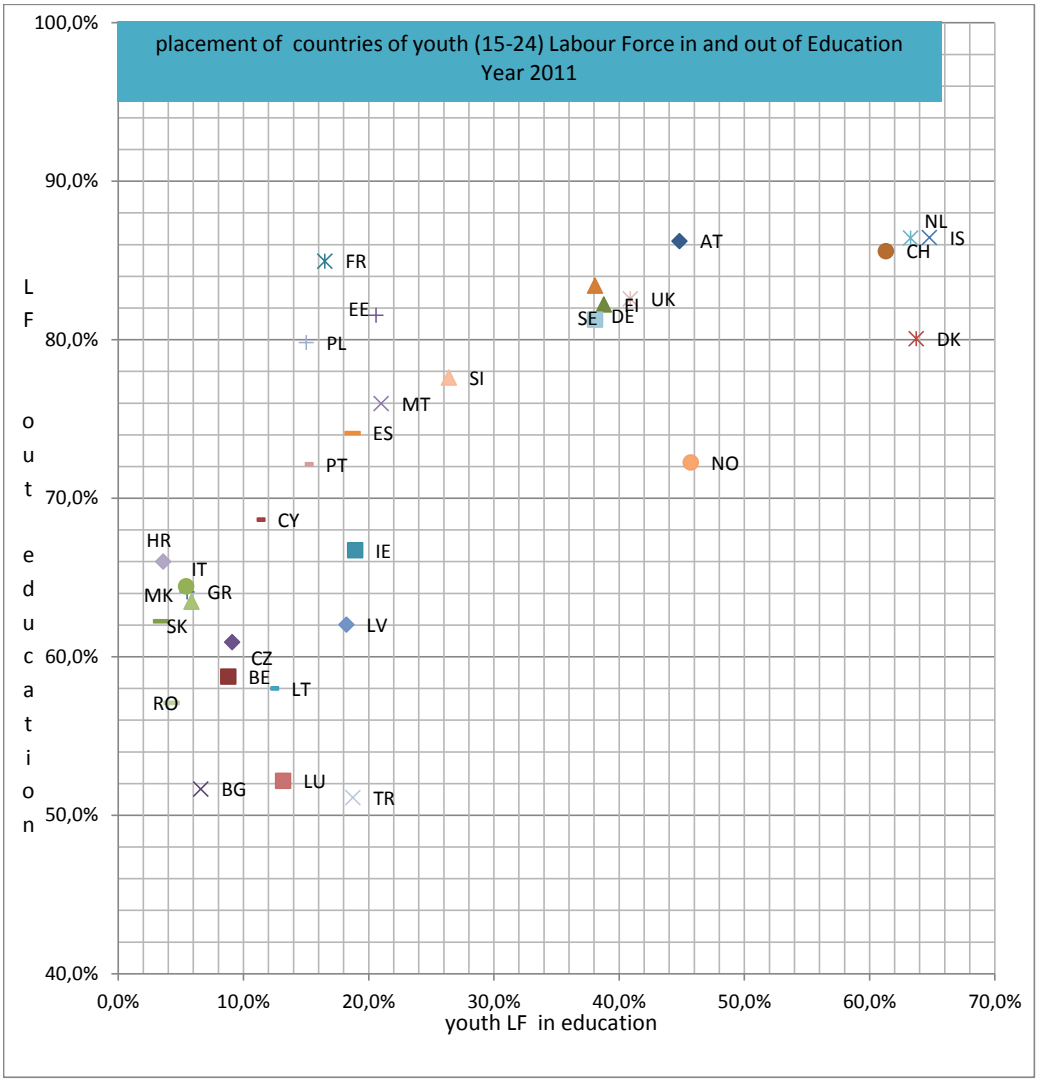
placement of countries of youth (15-24) Labour Force in and out of Education
Year 2011
LF out education
youth LF in education
100,0%
90,0%
80,0%
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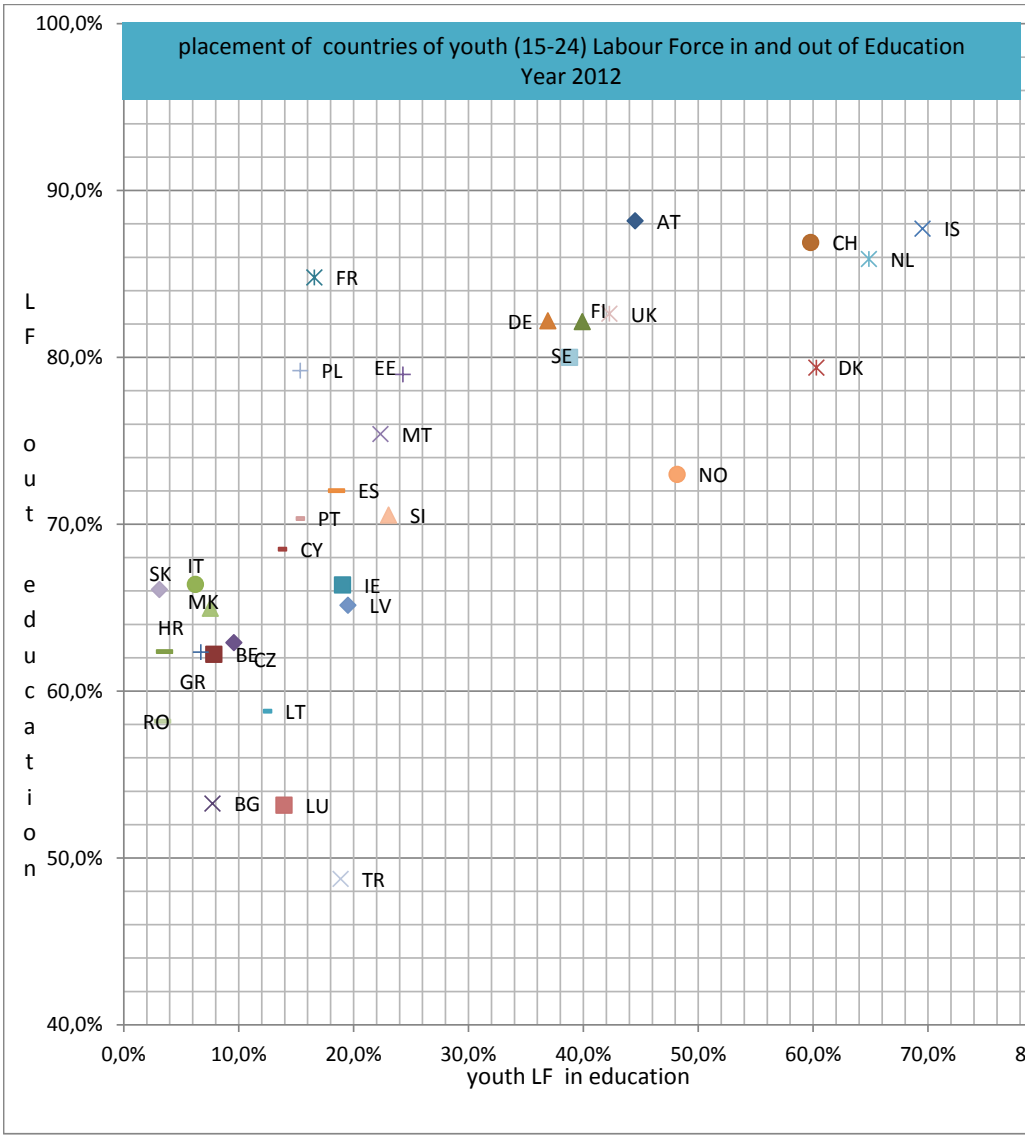
placement of countries of youth (15-24) Labour Force in and out of Education
Year 2012
LF out education
youth LF in education
100,0%
90,0%
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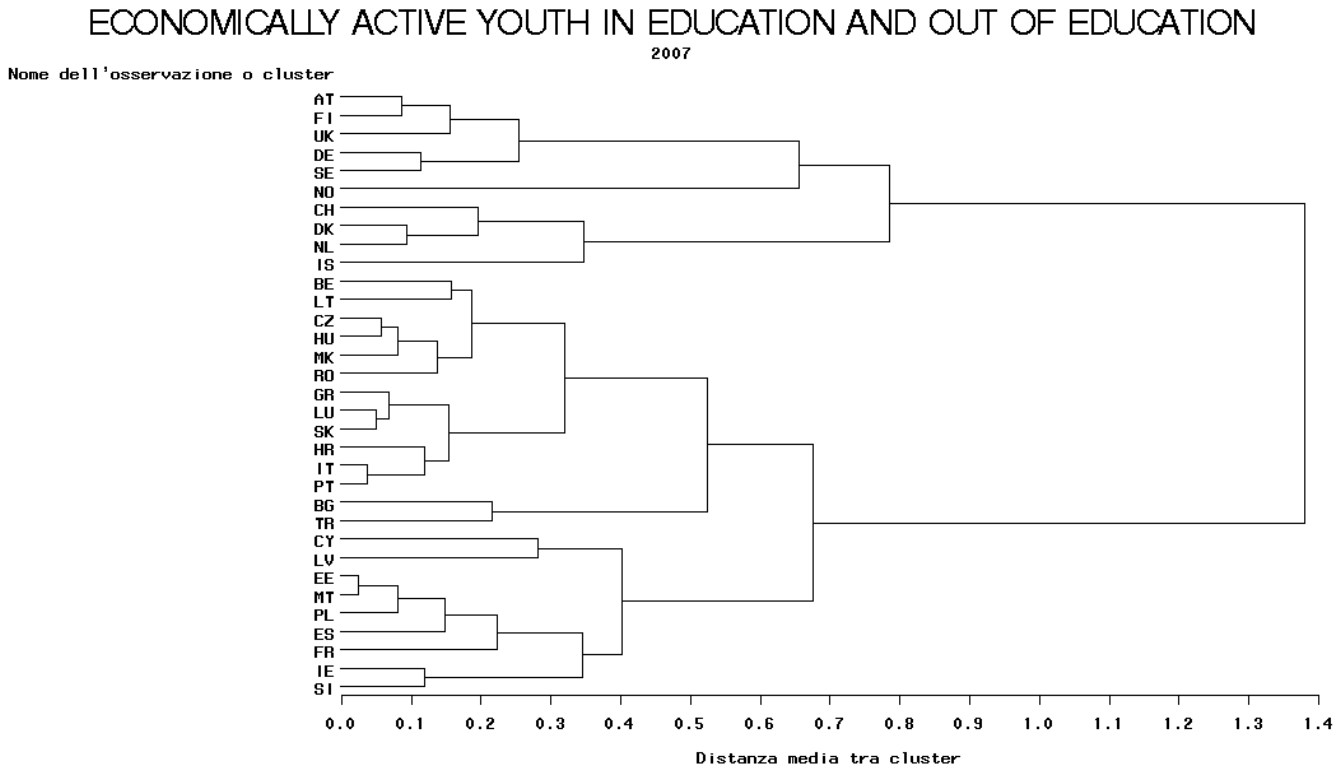
ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2007
Nome dell'osservazione o cluster
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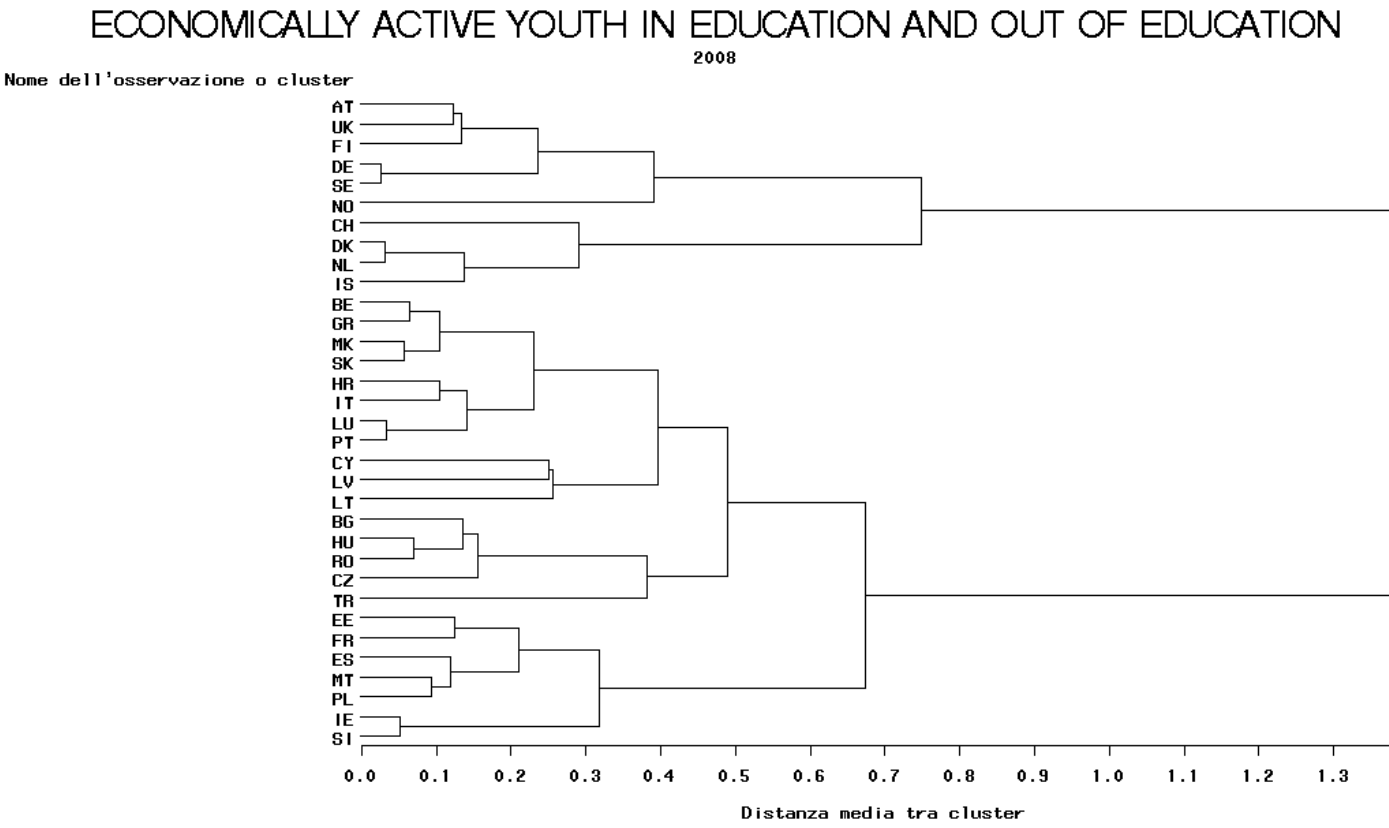
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4
Distanza media tra cluster


ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2008
Nome dell'osservazione o cluster
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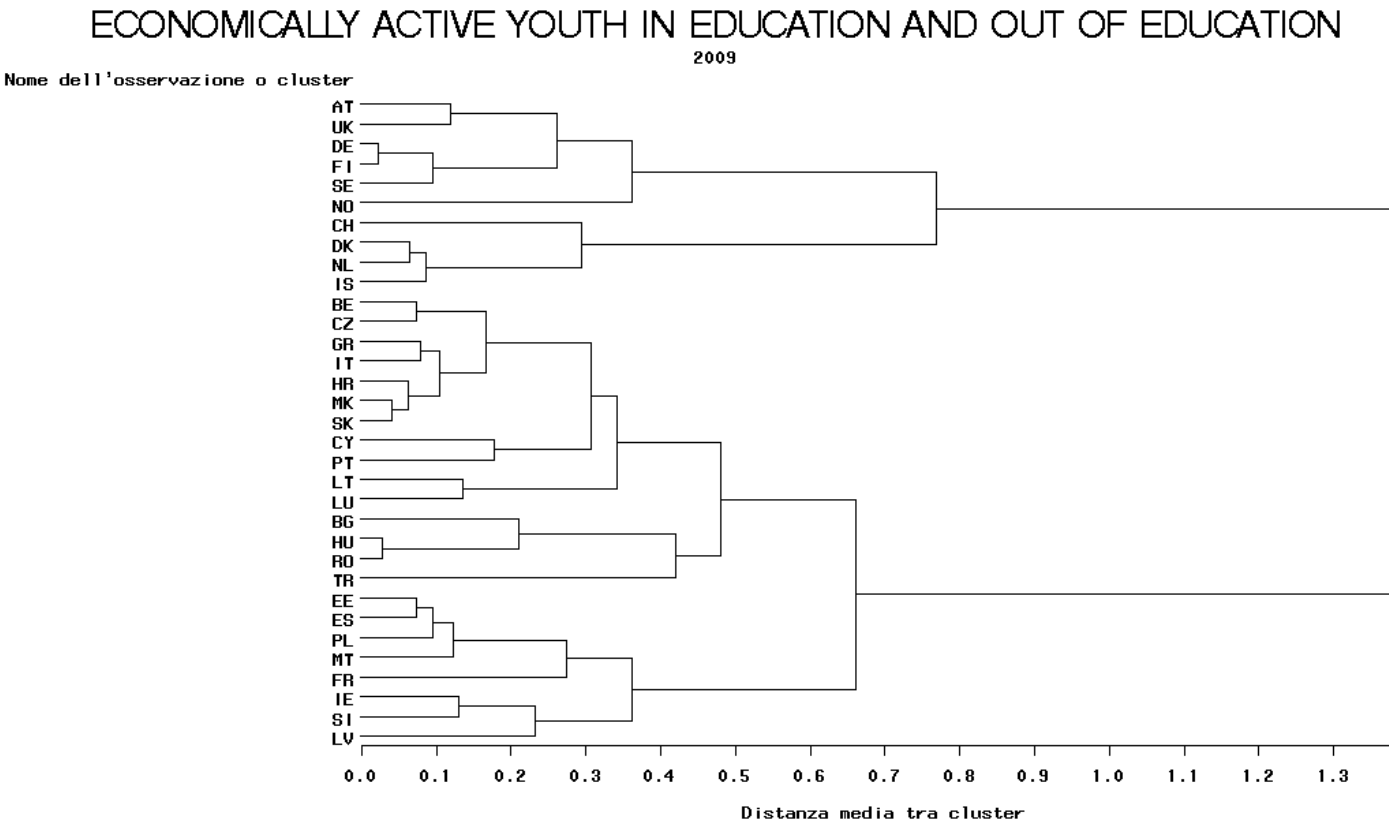
1.3
Distanza media tra cluster


ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2009
Nome dell'osservazione o cluster
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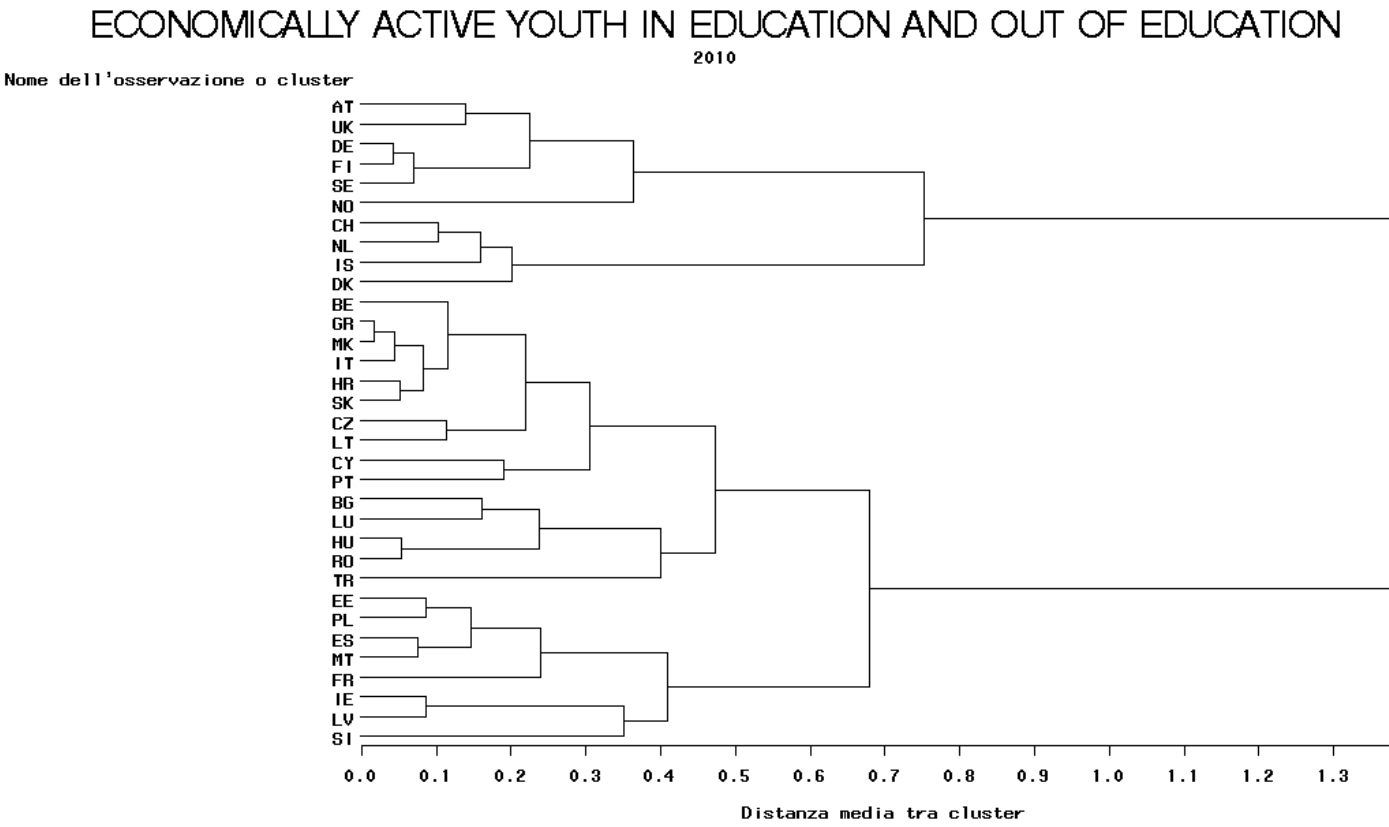
Distanza media tra cluster


ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2010
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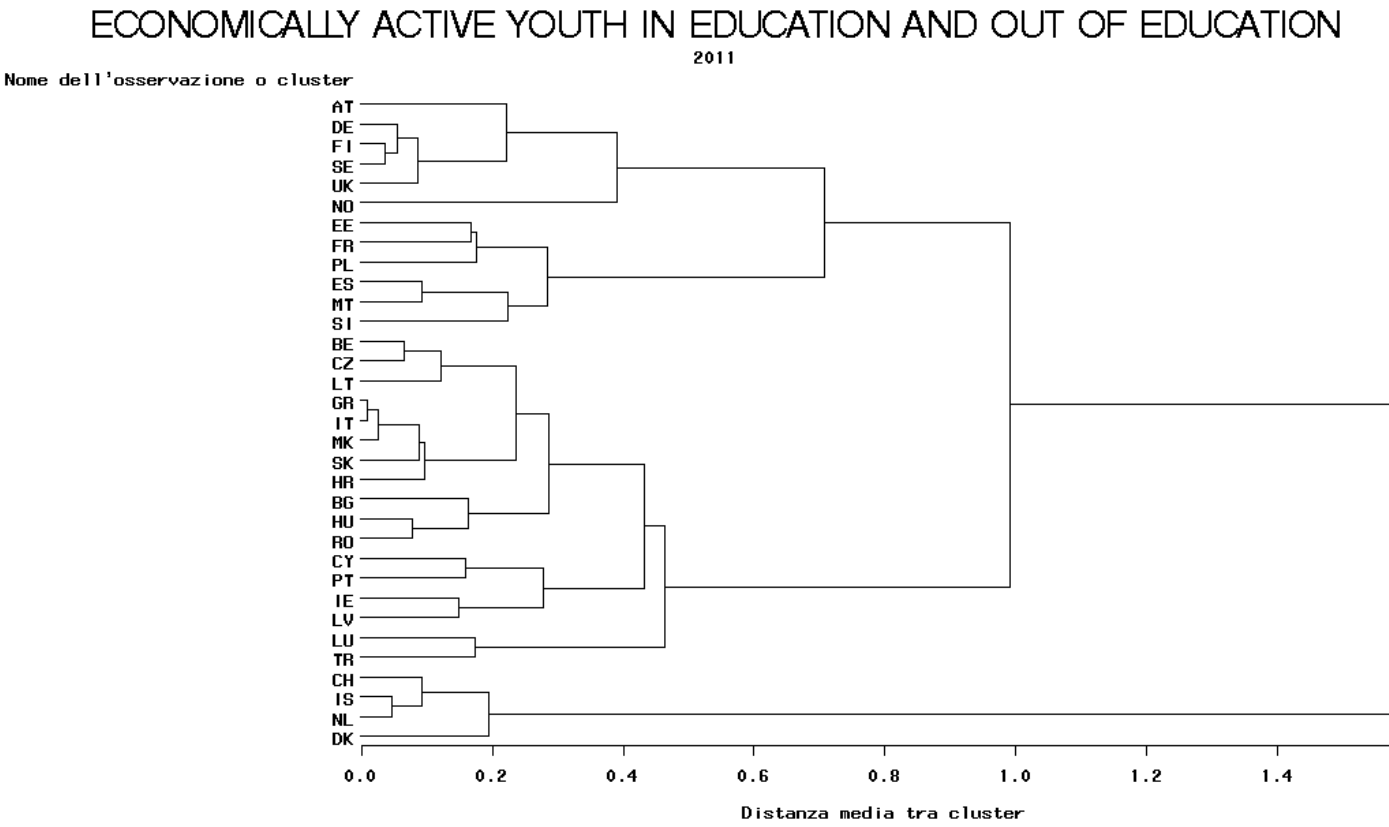
Distanza media tra cluster


ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2011
Nome dell'osservazione o cluster
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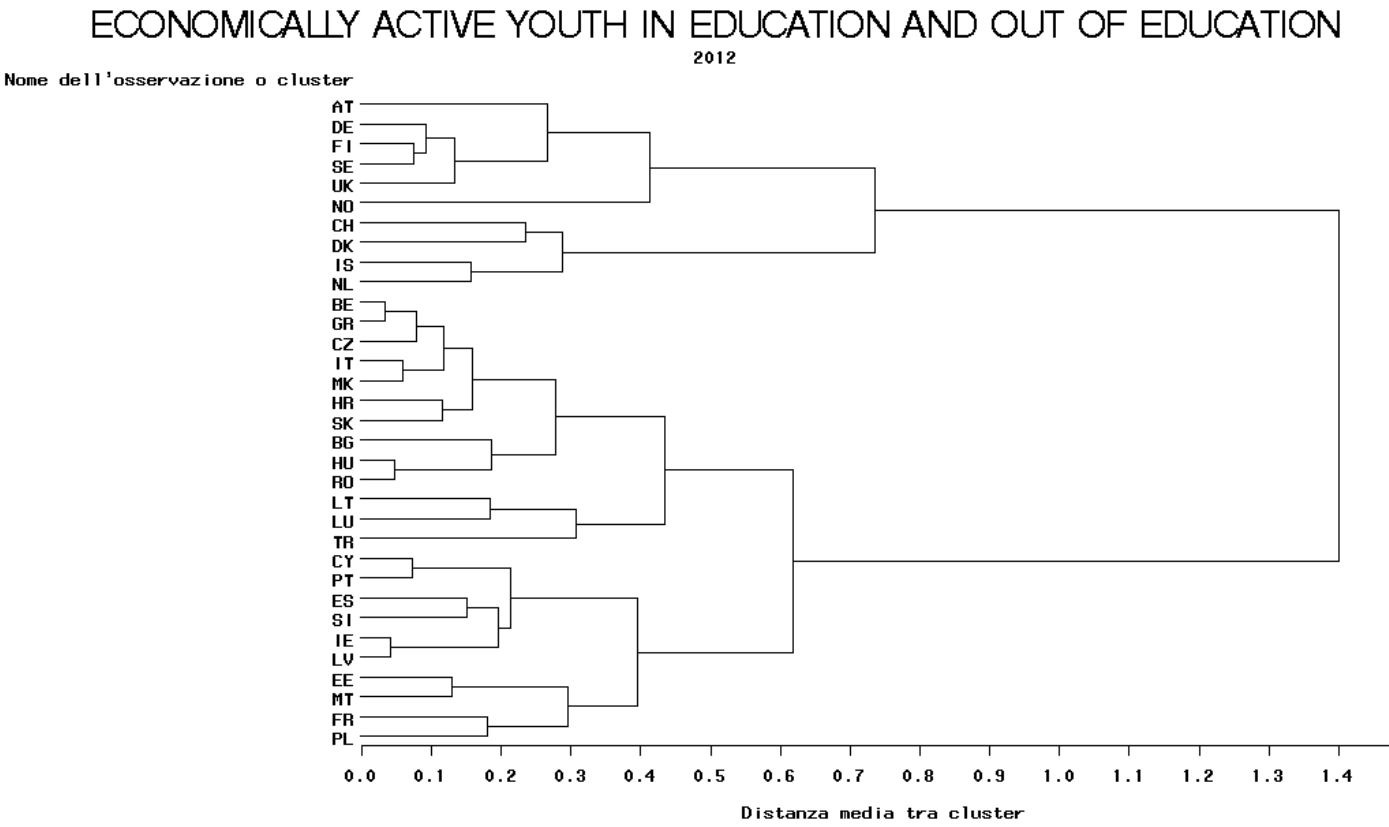
Distanza media tra cluster


ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2012
Nome dell'osservazione o cluster
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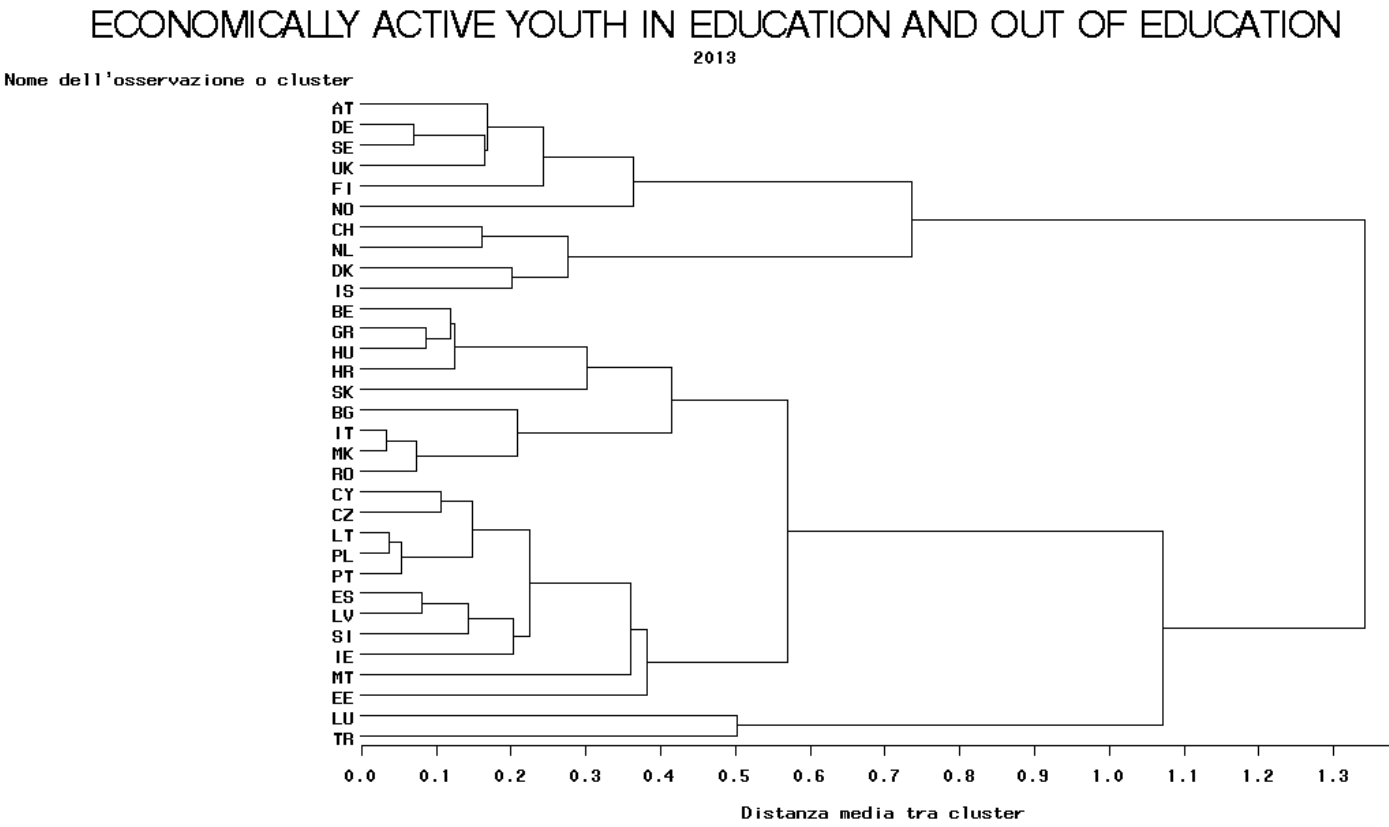
Distanza media tra cluster


ECONOMICALLY ACTIVE YOUTH IN EDUCATION AND OUT OF EDUCATION
2013
Nome dell'osservazione o cluster
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0.5
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0.7
0.8
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1.1
1.2
1.3
Distanza media tra cluster

SAS System

2007

CLUSTER Procedures
Cluster Analysis with average link

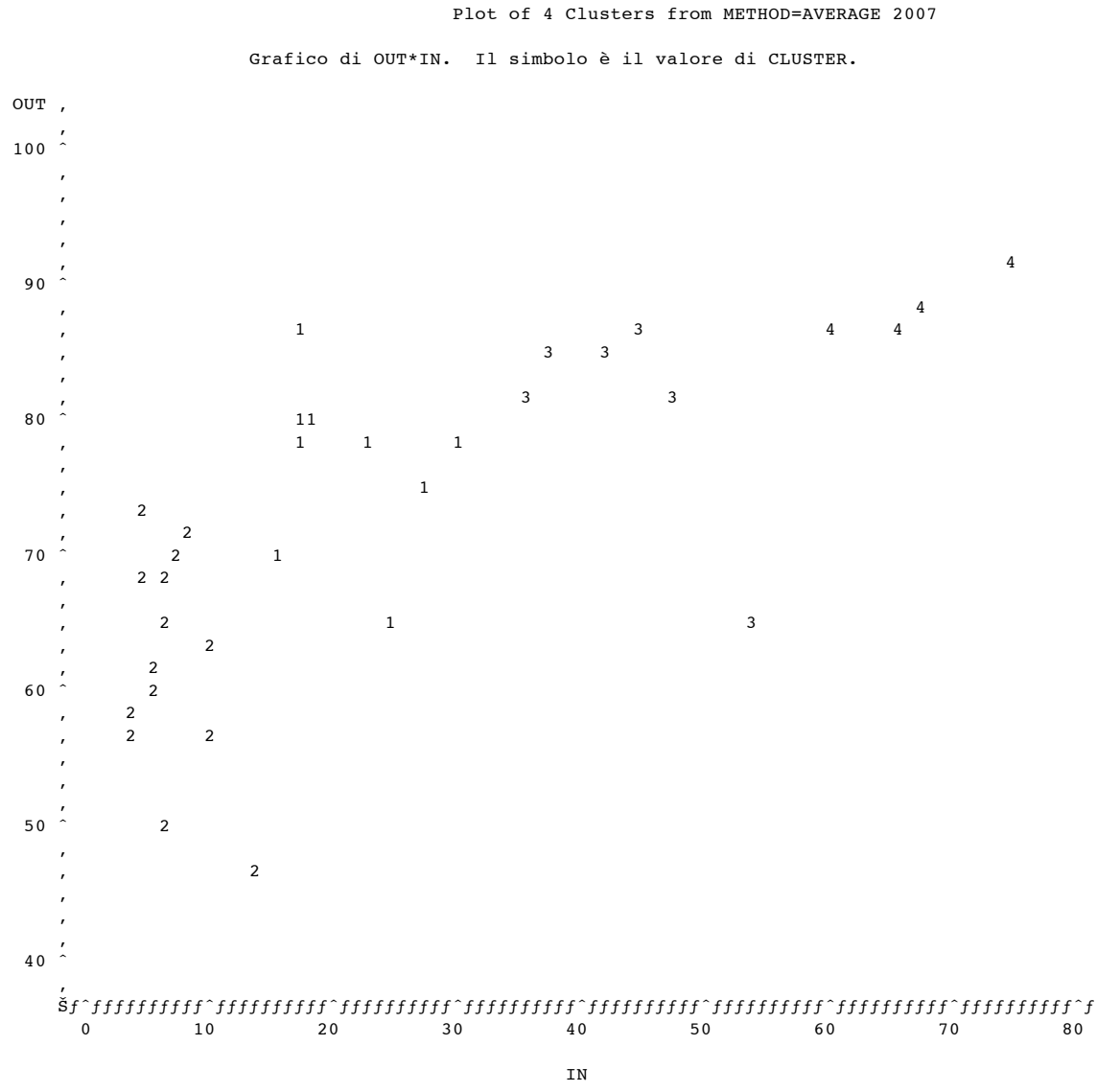
Eigenvalues of the Covariance Matrix

	Eigenvalues	Differences	Proportion	Cumulative
1	530.506082	471.681673	0.9002	0.9002
2	58.824410		0.0998	1.0000

Deviazione std campione tot radice quadrata media= 17.16582
Distanza radice quadrata media tra osservazioni = 34.33163

Cluster history

NCL	---Cluster uniti---		Freq	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Dist RMS norm	T i e
15	CL16	CL20	6	0.0020	.990	.	.	126	4.2	0.1874	
14	CH	CL24	3	0.0015	.988	.	.	124	5.6	0.1962	
13	BG	TR	2	0.0015	.987	.	.	125	.	0.2163	
12	CL19	FR	5	0.0023	.985	.	.	122	5.4	0.2236	
11	CL17	CL23	5	0.0041	.981	.	.	111	7.9	0.2543	
10	CY	LV	2	0.0025	.978	.	.	114	.	0.2815	
9	CL15	CL18	12	0.0159	.962	.	.	76.3	24.0	0.3196	
8	CL12	CL21	7	0.0093	.953	.	.	72.2	11.8	0.3452	
7	CL14	IS	4	0.0052	.948	.	.	78.5	5.8	0.3468	
6	CL10	CL8	9	0.0108	.937	.931	0.57	80.2	4.8	0.4012	
5	CL9	CL13	14	0.0250	.912	.910	0.13	72.4	12.6	0.5246	
4	CL11	NO	6	0.0215	.890	.879	0.69	78.5	15.0	0.6562	
3	CL5	CL6	23	0.1211	.769	.825	-1.4	50.0	33.7	0.6757	
2	CL4	CL7	10	0.0775	.692	.693	-.03	69.6	18.1	0.7855	
1	CL2	CL3	33	0.6918	.000	.000	0.00	.	69.6	1.3797	


Plot of 4 Clusters from METHOD=AVERAGE 2007
Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.
OUT
100
90
80
70
60
50
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70
80
IN

SAS System
2008

La procedura CLUSTER
Analisi dei cluster con legame medio

Autovalori della matrice di covarianza

	Autovalore	Differenza	Proporzione	Cumulata
1	513.962318	468.519446	0.9188	0.9188
2	45.442872		0.0812	1.0000

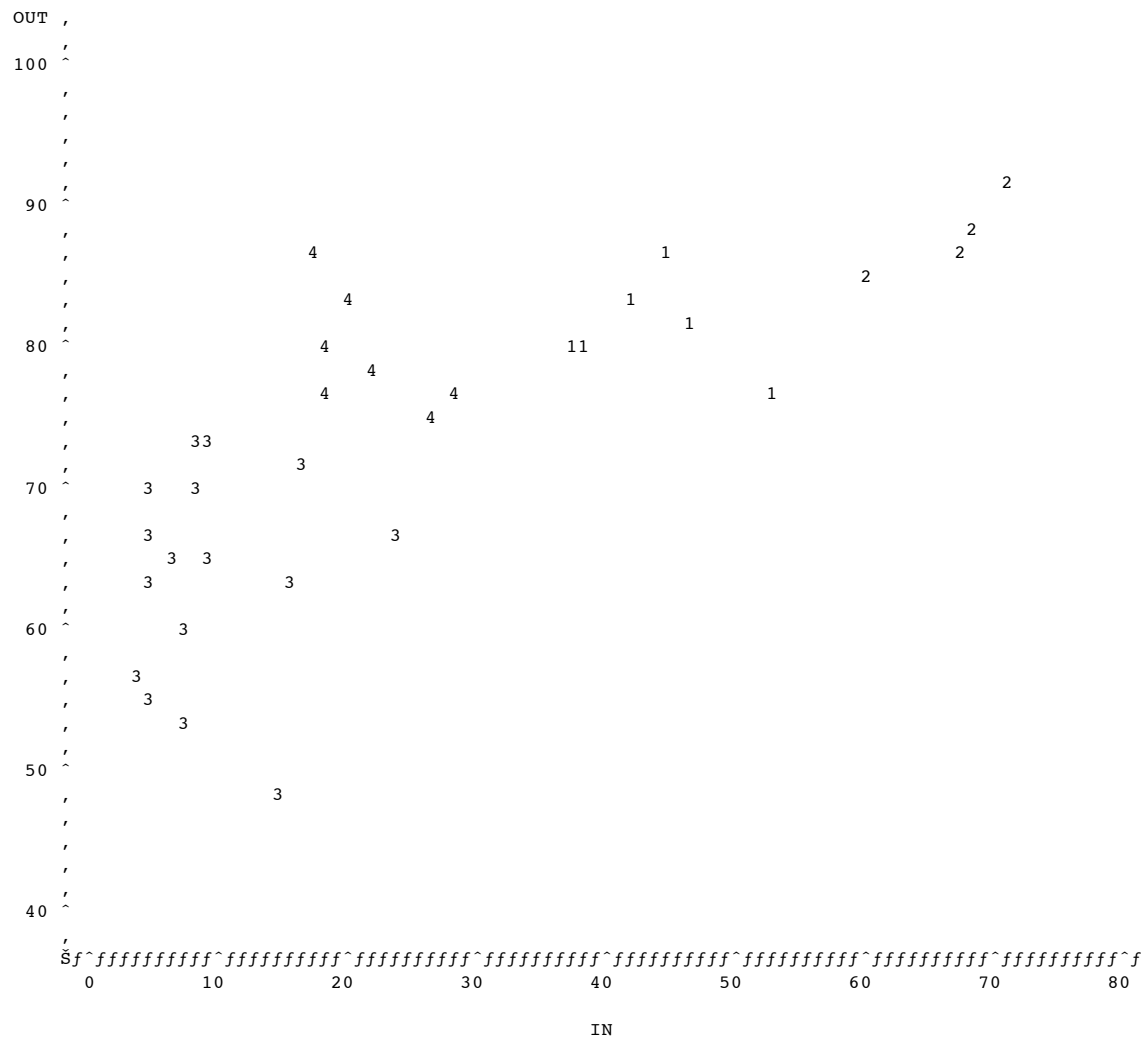
Deviazione std campione tot radice quadrata media= 16.72431
Distanza radice quadrata media tra osservazioni = 33.44862

Cronologia dei cluster

NCL	---Cluster uniti---		Freq	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Dist RMS norm	T i e
15	CL18	CZ	4	0.0009	.993	.	.	177	2.1	0.1547	
14	CL20	CL22	5	0.0027	.990	.	.	146	6.5	0.2107	
13	CL24	CL16	8	0.0056	.985	.	.	106	15.0	0.2309	
12	CL19	CL32	5	0.0037	.981	.	.	97.5	10.4	0.2354	
11	CY	LV	2	0.0020	.979	.	.	102	.	0.2513	
10	CL11	LT	3	0.0021	.977	.	.	107	1.1	0.2568	
9	CH	CL17	4	0.0038	.973	.	.	108	9.4	0.2907	
8	CL14	CL29	7	0.0078	.965	.	.	99.0	9.6	0.3172	
7	CL15	TR	5	0.0069	.958	.	.	99.5	11.7	0.3811	
6	CL12	NO	6	0.0072	.951	.937	1.56	105	6.0	0.3911	
5	CL13	CL10	11	0.0164	.935	.918	1.43	100	12.5	0.3967	
4	CL5	CL7	16	0.0367	.898	.890	0.53	85.1	13.9	0.4895	
3	CL4	CL8	23	0.1074	.791	.840	-1.3	56.6	26.4	0.6734	
2	CL6	CL9	10	0.0764	.714	.707	0.16	77.5	37.0	0.7482	
1	CL2	CL3	33	0.7142	.000	.000	0.00	.	77.5	1.3865	

SAS System
Plot of 4 Clusters from METHOD=AVERAGE 2008

Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.

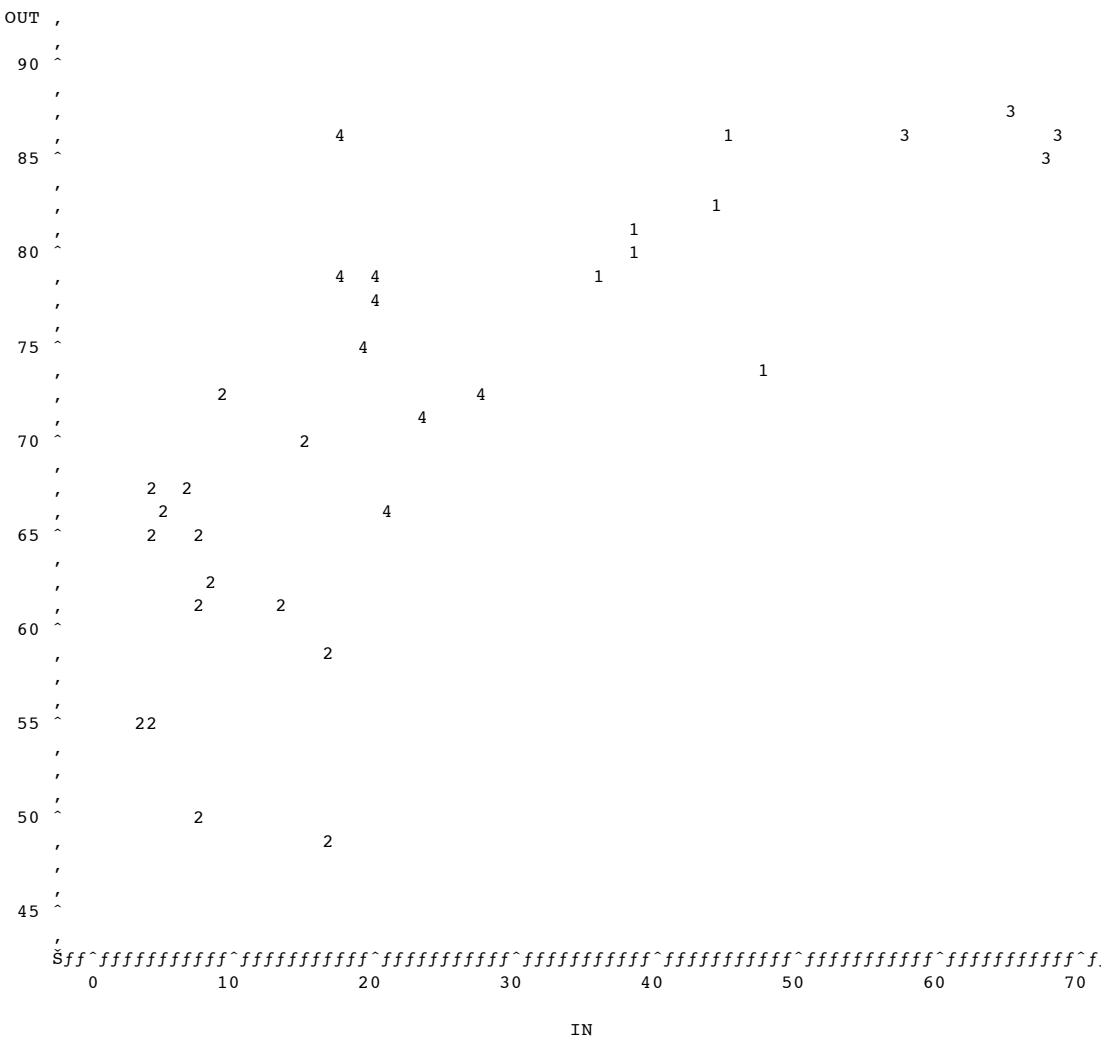


SAS System
2009

La procedura CLUSTER
Analisi dei cluster con legame medio

SAS System
Plot of 4 Clusters from METHOD=AVERAGE 2009

Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.



2010

La procedura CLUSTER
Analisi dei cluster con legame medio

Autovalori della matrice di covarianza

	Autovalore	Differenza	Proporzione	Cumulata
1	470.188777	421.416949	0.9060	0.9060
2	48.771829		0.0940	1.0000

Deviazione std campione tot radice quadrata media= 16.10839
Distanza radice quadrata media tra osservazioni = 32.21678

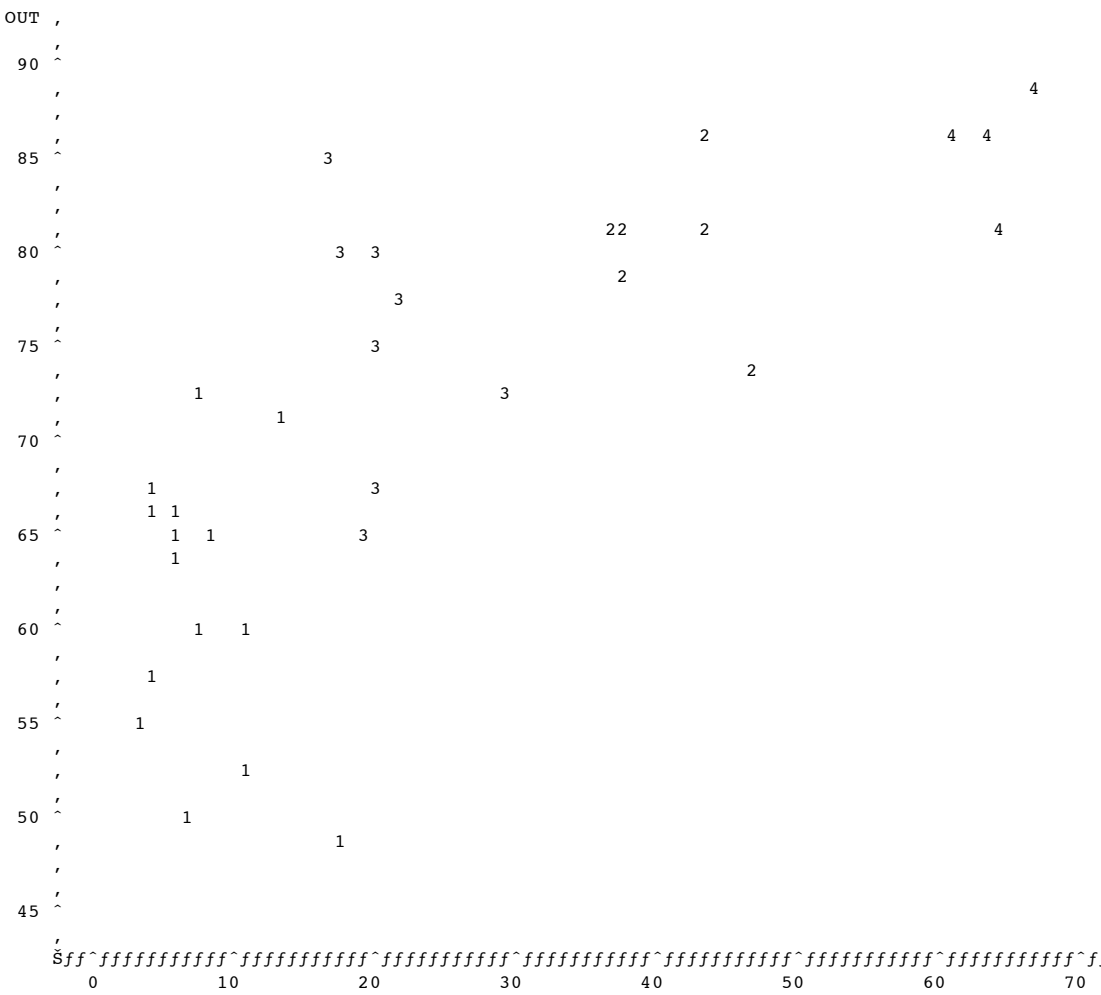
Cronologia dei cluster

NCL	---Cluster uniti---		Freq	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Dist RMS norm	T i e
15	CY	PT	2	0.0011	.992	.	.	170	.	0.1906	
14	CL17	DK	4	0.0016	.991	.	.	159	2.5	0.2012	
13	CL20	CL21	8	0.0039	.987	.	.	126	14.9	0.2199	
12	CL19	CL27	5	0.0033	.984	.	.	115	11.7	0.2245	
11	CL16	CL28	4	0.0031	.981	.	.	111	6.9	0.2384	
10	CL18	FR	5	0.0025	.978	.	.	114	5.0	0.2386	
9	CL13	CL15	10	0.0073	.971	.	.	99.6	8.7	0.3045	
8	CL23	SI	3	0.0051	.966	.	.	100	21.7	0.3513	
7	CL12	NO	6	0.0062	.960	.	.	103	5.9	0.3628	
6	CL11	TR	5	0.0072	.952	.933	2.15	108	5.4	0.4003	
5	CL10	CL8	8	0.0148	.937	.913	2.15	105	9.5	0.4099	
4	CL9	CL6	15	0.0345	.903	.882	1.31	89.9	17.9	0.4731	
3	CL4	CL5	23	0.1140	.789	.830	-1.1	56.1	28.5	0.6795	
2	CL7	CL14	10	0.0790	.710	.697	0.26	75.9	47.9	0.752	
1	CL2	CL3	33	0.7099	.000	.000	0.00	.	75.9	1.3838	

SAS System

Plot of 4 Clusters from METHOD=AVERAGE 2010

Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.



SAS System

2011

La procedura CLUSTER
Analisi dei cluster con legame medio

Autovalori della matrice di covarianza

	Autovalore	Differenza	Proporzione	Cumulata
1	467.867724	419.132853	0.9057	0.9057
2	48.734871		0.0943	1.0000

Deviazione std campione tot radice quadrata media= 16.07175
Distanza radice quadrata media tra osservazioni = 32.14351

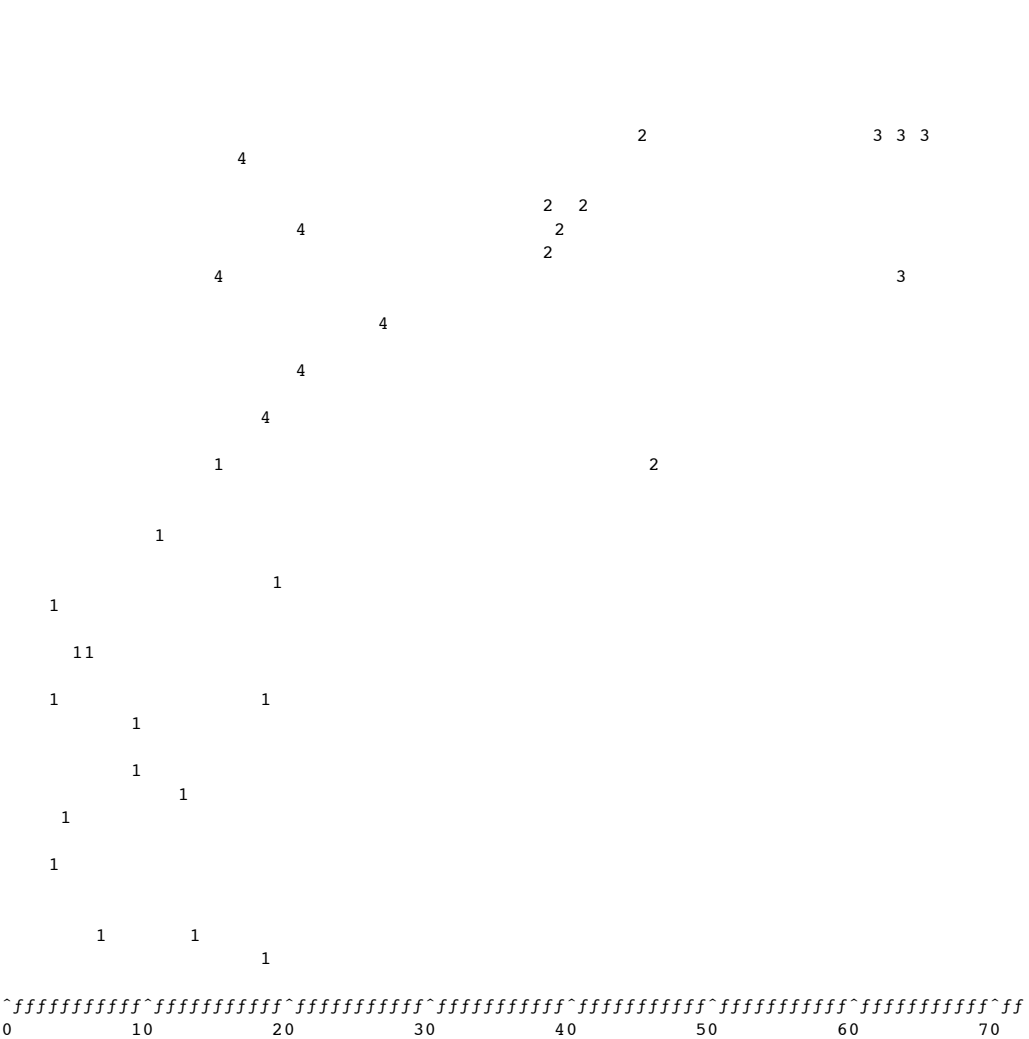
Cronologia dei cluster

NCL	---Cluster uniti---		Freq	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Dist RMS norm	T i e
15	LU	TR	2	0.0010	.993	.	.	179	.	0.1745	
14	CL16	PL	3	0.0010	.992	.	.	178	1.1	0.1754	
13	CL23	DK	4	0.0017	.990	.	.	169	8.4	0.1941	
12	AT	CL25	5	0.0024	.988	.	.	155	15.4	0.221	
11	CL22	SI	3	0.0020	.986	.	.	153	7.4	0.2235	
10	CL20	CL21	8	0.0058	.980	.	.	126	23.5	0.236	
9	CL18	CL19	4	0.0041	.976	.	.	122	5.6	0.2775	
8	CL14	CL11	6	0.0055	.971	.	.	118	5.3	0.2834	
7	CL10	CL17	11	0.0084	.962	.	.	110	8.8	0.2871	
6	CL12	NO	6	0.0075	.955	.933	2.48	114	10.7	0.3907	
5	CL7	CL9	15	0.0256	.929	.912	1.35	91.7	14.9	0.4319	
4	CL5	CL15	17	0.0171	.912	.882	1.97	100	5.2	0.4628	
3	CL6	CL8	12	0.0838	.828	.830	-.04	72.3	42.2	0.7072	
2	CL3	CL4	29	0.3429	.485	.697	-3.3	29.2	54.5	0.9902	
1	CL2	CL13	33	0.4852	.000	.000	0.00	.	29.2	1.581	

SAS System

Plot of 4 Clusters from METHOD=AVERAGE 2011

Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.



NOTE: 1 osservazioni nascoste.

La procedura CLUSTER
Analisi dei cluster con legame medio

Autovalori della matrice di covarianza

	Autovalore	Differenza	Proporzione	Cumulata
1	466.475881	423.352066	0.9154	0.9154
2	43.123816		0.0846	1.0000

Deviazione std campione tot radice quadrata media= 15.96245
Distanza radice quadrata media tra osservazioni = 31.9249

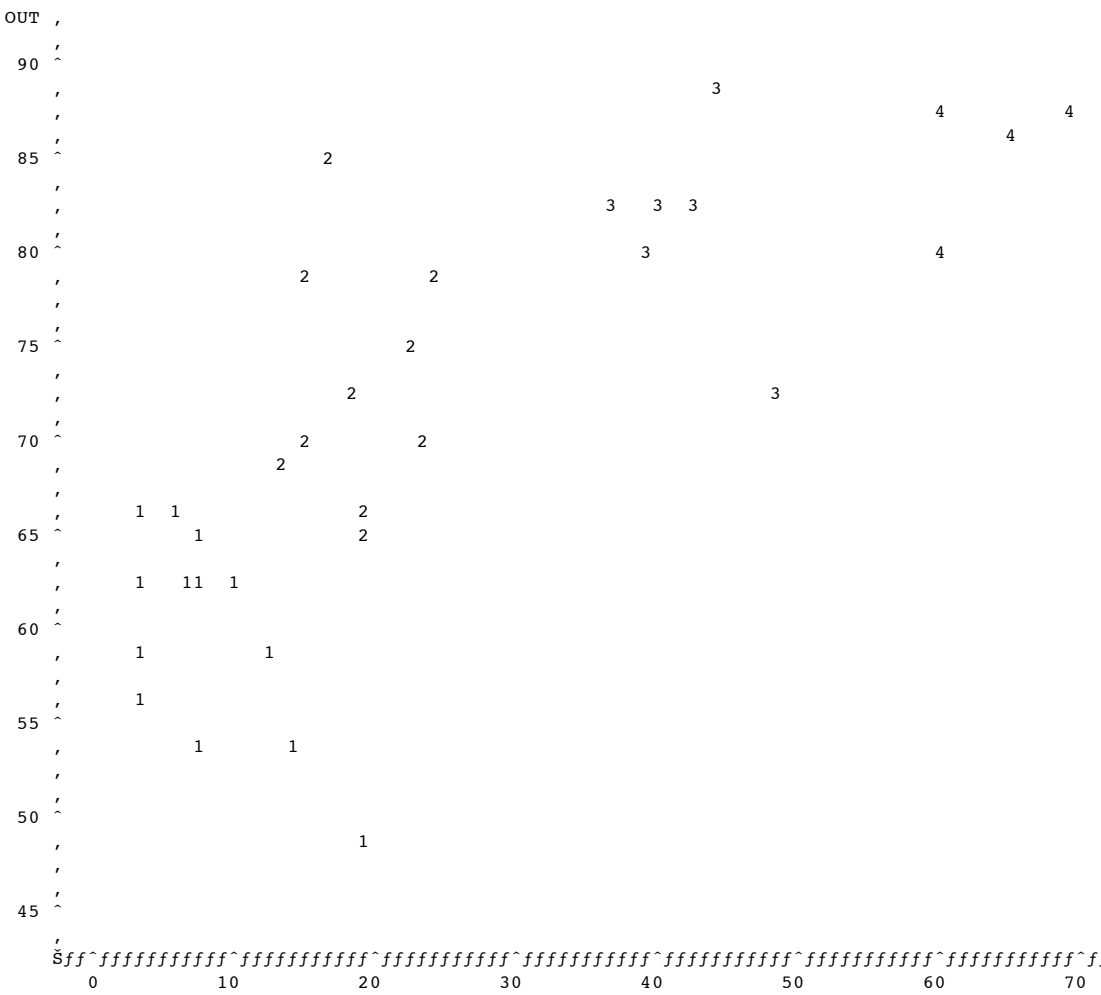
Cronologia dei cluster

NCL	---Cluster uniti---		Freq	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Dist RMS norm	T i e
15	BG	CL30	3	0.0014	.990	.	.	124	19.6	0.1854	
14	CL20	CL31	4	0.0020	.988	.	.	118	5.3	0.1953	
13	CL28	CL14	6	0.0028	.985	.	.	109	3.8	0.2141	
12	CH	DK	2	0.0017	.983	.	.	112	.	0.2354	
11	AT	CL21	5	0.0033	.980	.	.	107	8.3	0.2658	
10	CL18	CL15	10	0.0082	.972	.	.	88.0	13.7	0.2786	
9	CL12	CL19	4	0.0039	.968	.	.	90.3	3.1	0.2874	
8	CL22	CL17	4	0.0047	.963	.	.	93.3	6.2	0.2964	
7	CL16	TR	3	0.0036	.960	.	.	103	3.4	0.307	
6	CL13	CL8	10	0.0174	.942	.936	0.64	88.0	11.6	0.3953	
5	CL11	NO	6	0.0082	.934	.917	1.48	99.0	7.3	0.4139	
4	CL10	CL7	13	0.0207	.913	.887	1.73	102	13.0	0.4345	
3	CL4	CL6	23	0.1022	.811	.837	-.75	64.4	31.7	0.6191	
2	CL5	CL9	10	0.0721	.739	.704	0.77	87.8	30.2	0.7349	
1	CL2	CL3	33	0.7390	.000	.000	0.00	.	87.8	1.4002	

SAS System

Plot of 4 Clusters from METHOD=AVERAGE 2012

Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.



La procedura CLUSTER
Analisi dei cluster con legame medio

Autovalori della matrice di covarianza

	Autovalore	Differenza	Proporzione	Cumulata
1	399.370267	305.475101	0.8096	0.8096
2	93.895166		0.1904	1.0000

Deviazione std campione tot radice quadrata media= 15.70454
Distanza radice quadrata media tra osservazioni = 31.40909

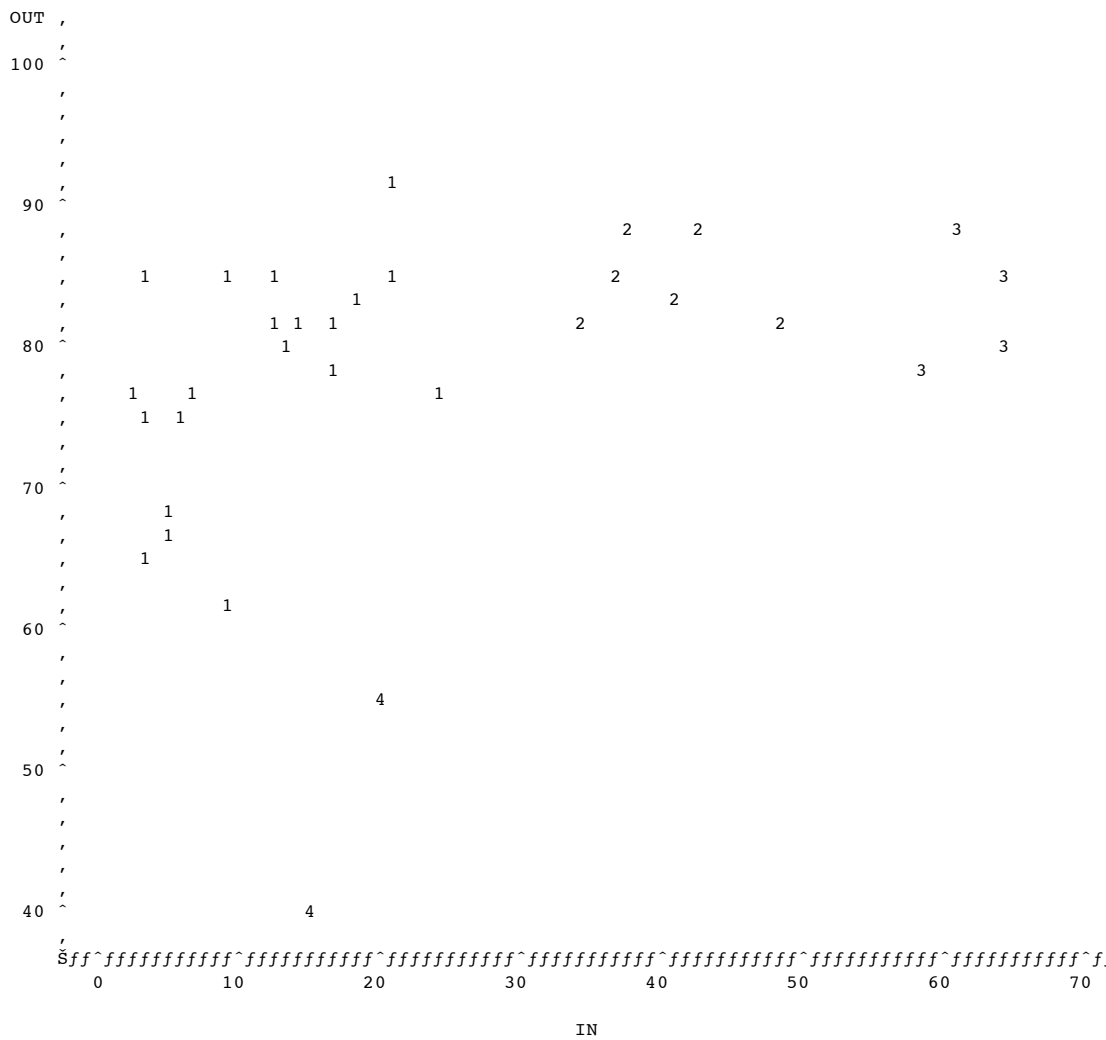
Cronologia dei cluster

NCL	---Cluster uniti---		Freq	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Dist RMS norm	Tie
15	CL21	IE	4	0.0017	.989	.	.	112	3.4	0.2025	
14	BG	CL27	4	0.0020	.987	.	.	107	15.9	0.2089	
13	CL20	CL15	9	0.0048	.982	.	.	88.5	7.2	0.2241	
12	CL17	FI	5	0.0026	.980	.	.	88.3	3.4	0.2438	
11	CL19	CL16	4	0.0039	.976	.	.	85.2	3.6	0.2765	
10	CL22	SK	5	0.0044	.972	.	.	83.4	9.9	0.301	
9	CL13	MT	10	0.0066	.965	.	.	79.1	5.5	0.3603	
8	CL12	NO	6	0.0063	.959	.	.	79.5	5.1	0.3634	
7	CL9	EE	11	0.0071	.952	.	.	81.9	4.0	0.3814	
6	CL10	CL14	9	0.0209	.931	.910	1.65	69.9	18.1	0.415	
5	LU	TR	2	0.0081	.923	.883	2.72	80.5	.	0.5016	
4	CL6	CL7	20	0.0770	.846	.841	0.19	51.1	26.6	0.5689	
3	CL8	CL11	10	0.0758	.770	.771	-.05	48.5	35.3	0.7359	
2	CL4	CL5	22	0.1154	.654	.629	0.49	56.8	16.8	1.071	
1	CL3	CL2	32	0.6544	.000	.000	0.00	.	56.8	1.3407	

SAS System

Plot of 4 Clusters from METHOD=AVERAGE 2013

Grafico di OUT*IN. Il simbolo è il valore di CLUSTER.



LOGIT MODEL OF EMPLOYED 2010 WITH WORKING STUDENTS IN THE 2009 AGED 16-24

La procedura FREQ

Frequenza Percentuale Pct riga Pct col	

Tabella di POS_091 per OCCU_101

POS_091	OCCU_101		Totale
	Non Employed	Employed	
OTHER	4529	1553	6082
	73.74	25.28	99.02
	74.47	25.53	
	99.25	98.35	
STUDY AND WORK SIMULTANIUSLY	34	26	60
	0.55	0.42	0.98
	56.67	43.33	
	0.75	1.65	
Totale	4563	1579	6142
	74.29	25.71	100

model not correceted from autoselection bias

La procedura LOGISTIC

Informazioni sul modello	
Data set	DATI.RCFL_LONG_20091_20101_NEW
Variabile di risposta	OCCU_101
Numero di livelli di risposta	2
Modello	logit generalizzato
Tecnica di ottimizzazione	Scoring di Fisher

Numero di osservazioni lett	5504
Numero di osservazioni usat	5504

Profilo di risposta		
Valore ordinato	OCCU_101	Frequenza totale
1	Employed	1274
2	Non Employed	4230

Logit del modello usano OCCU_101='Non Employed' come categoria di riferimento.

Informazioni sui livelli di classificazione		
Classe	Valore	Variabili di disegno
POS_091	OTHER	-1
	STUDY AND WORK SIMULTANIUSLY	1

Stato della convergenza del modello

Criterio di convergenza (GCONV=1E-8) soddisfatto.

Statistiche di adattamento del modello		
Criterio	Solo intercetta	Intercetta e covariate
AIC	5957.813	5947.163
SC	5964.427	5960.39
-2 LOG L	5955.813	5943.163

Test dell'ipotesti nulla globale: BETA=0			
Test	Chi-quadrato	DF	Pr > ChiQuadr
Rapp. verosim.	12.6501	1	0.0004
Score	14.6958	1	0.0001
Wald	13.5956	1	0.0002

Analisi di effetti di tipo 3			
Effetto	DF	Chi-quadrato Wald	Pr > ChiQuadr
POS_091	1	13.5956	0.0002

Analisi delle stime di massima verosimiglianza							
Parametro		OCCU_101	DF	Stima	Errore standard	Chi-quadrato Wald	Pr > ChiQuadr
Intercept		Employed	1	-0.7134	0.1354	27.7763	<.0001
POS_091	STUDY AND WORK SIMULTANIUSLY	Employed	1	0.4991	0.1354	13.5956	0.0002

Stime dei rapporti di quote				
Effetto	OCCU_101	Stima puntuale	95% - Limiti di di Wald	
POS_091 STUDY AND WORK SIMULTANIUSLY vs OTHER	Employed	2.713	1.596	4.613

Associazione di probabilità previste e risposte osservate			
Percentuale concordante	1.9	D di Somers	0.012
Percentuale discordante	0.7	Gamma	0.461
Percentuale legato	97.3	Tau-a	0.004
Coppie	5389020	c	0.506

model correceted by autoselection bias with educ:diploma
05 - Diploma di scuola superiore di 4-5 anni che permette l'iscrizione all'Università

La procedura LOGISTIC

Informazioni sul modello	
Data set	DATI.RCFL_LONG_20091_20101_NEW
Variabile di risposta	OCCU_101
Numero di livelli di risposta	2
Modello	logit generalizzato
Tecnica di ottimizzazione	Scoring di Fisher

Numero di osservazioni lett	2474
Numero di osservazioni usat	2474

Profilo di risposta		
Valore ordinato	**OCCU_101**	**Frequenza totale**
1	Employed	690
2	Non Employed	1784

Logit del modello usano OCCU_101='Non Employed' come categoria di riferimento.

Informazioni sui livelli di classificazione		
Classe	**Valore**	**Variabili di disegno**
POS_091	**OTHER**	-1
	STUDY AND WORK SIMULTANIUSLY	1

Stato della convergenza del modello
Criterio di convergenza (GCONV=1E-8) soddisfatto.

Statistiche di adattamento del modello		
Criterio	Solo intercetta	Intercetta e covariate
AIC	2930.78	2927.806
SC	2936.594	2939.433
-2 LOG L	2928.780	2923.806

Test dell'ipotesti nulla globale: BETA=0			
Test	Chi-quadrato	DF	Pr > ChiQuadr
Rapp. verosim.	4.9741	1	0.0257
Score	5.4462	1	0.0196
Wald	5.2134	1	0.0224

Analisi di effetti di tipo 3			
Effetto	DF	Chi-quadrato Wald	Pr > ChiQuadr
POS_091	1	5.2134	0.0224

Analisi delle stime di massima verosimiglianza							
Parametro		OCCU_101	DF	Stima	Errore standard	Chi-quadrato Wald	Pr > Chi Quadr
Intercept		Employed	1	-0.587	0.1647	12.7036	0.0004
POS_091	STUDY AND WORK SIMULTANIUSLY	Employed	1	0.376	0.1647	5.2134	0.0224

v

Stime dei rapporti di quote				
Effetto	OCCU_101	Stima puntuale	95% - Limiti di di Wald	
POS_091 STUDY AND WORK SIMULTANIUSLY vs OTHER	Employed	2.121	1.112	4.046

Associazione di probabilità previste e risposte osservate			
Percentuale concordante	2.4	D di Somers	0.013
Percentuale discordante	1.1	Gamma	0.359
Percentuale legato	96.4	Tau-a	0.005
Coppie	1230960	c	0.506

LOGIT MODEL OF EMPLOYED 2011 WITH WORKING STUDENTS IN THE 2010 AGED 16-24

La procedura FREQ

Frequenza Percentuale Pct riga Pct col	

Tabella di POS_101 per OCCU_111

POS_101	OCCU_111		Totale
	Non Employed	Employed	
OTHER	4668	1520	6188
	74.62	24.3	98.91
	75.44	24.56	
	99.19	98.06	
STUDY AND WORK SIMULTANIUSLY	38	30	68
	0.61	0.48	1.09
	55.88	44.12	
	0.81	1.94	
Totale	4706	1550	6256
	75.22	24.78	100

model not correceted from
autoselection bias

La procedura LOGISTIC

Informazioni sul modello	
Data set	DATI.RCFL_LONG_20101_20111_NEW
Variabile di risposta	OCCU_111
Numero di livelli di risposta	2
Modello	logit generalizzato
Tecnica di ottimizzazione	Scoring di Fisher

Numero di osservazioni lett	5630
Numero di osservazioni usate	5630

Profilo di risposta		
Valore ordinato	OCCU_111	Frequenza totale
1	Employed	1236
2	Non Employed	4394

Logit del modello usano OCCU_111='Non Employed' come categoria di riferimento.

Informazioni sui livelli di classificazione		
Classe	Valore	Variabili di disegno
POS_101	OTHER	-1
	STUDY AND WORK SIMULTANIUSLY	1

Stato della convergenza del modello
Criterio di convergenza (GCONV=1E-8) soddisfatto.

Statistiche di adattamento del modello		
Criterio	Solo intercetta	Intercetta e covariate
AIC	5928.395	5918.821
SC	5935.031	5932.093
-2 LOG L	5926.395	5914.821

Test dell'ipotesti nulla globale: BETA=0			
Test	Chi-quadrato	DF	Pr > ChiQuadr
Rapp. verosim.	11.5744	1	0.0007
Score	13.5546	1	0.0002
Wald	12.547	1	0.0004

Analisi di effetti di tipo 3			
Effetto	**DF**	**Chi-quadrato Wald**	**Pr > Chi Quadr**
POS_101	1	12.547	0.0004

Analisi delle stime di massima verosimiglianza							
Parametro		**OCCU_111**	**DF**	**Stima**	**Errore standard**	**Chi-quadrato Wald**	**Pr > ChiQuadr**
Intercept		**Employed**	1	-0.7893	0.1386	32.4501	<.0001
POS_101	**STUDY AND WORK SIMULTANIUSLY**	**Employed**	1	0.4908	0.1386	12.547	0.0004

Stime dei rapporti di quote				
Effetto	**OCCU_111**	**Stima puntuale**	**95% - Limiti di di Wald**	
POS_101 STUDY AND WORK SIMULTANIUSLY vs OTHER	**Employed**	2.669	1.55	4.594

Associazione di probabilità previste e risposte osservate			
Percentuale concordante	1.8	**D di Somers**	0.012
Percentuale discordante	0.7	**Gamma**	0.455
Percentuale legato	97.5	**Tau-a**	0.004
Coppie	5430984	**c**	0.506

LOGIT MODEL OF EMPLOYED 2012 WITH WORKING STUDENTS IN THE 2011 AGED 16-24

La procedura FREQ

Frequenza Percentuale Pct riga Pct col	

Tabella di POS_111 per OCCU_121

POS_111	OCCU_121		Totale
	Non Employed	Employed	
OTHER	4049	1248	5297
	75.81	23.37	99.18
	76.44	23.56	
	99.46	98.27	
STUDY AND WORK SIMULTANIUSLY	22	22	44
	0.41	0.41	0.82
	50	50	
	0.54	1.73	
Totale	4071	1270	5341
	76.22	23.78	100

model not correceted from autoselection bias

La procedura LOGISTIC

Informazioni sul modello	
Data set	DATI.RCFL_LONG_20111_20121_NEW
Variabile di risposta	OCCU_121
Numero di livelli di risposta	2
Modello	logit generalizzato
Tecnica di ottimizzazione	Scoring di Fisher

Numero di osservazioni lett	4781
Numero di osservazioni usat	4781

Profilo di risposta		
Valore ordinato	OCCU_121	Frequenza totale
1	Employed	1016
2	Non Employed	3765

Logit del modello usano OCCU_121='Non Employed' come categoria di riferimento.

Informazioni sui livelli di classificazione		
Classe	Valore	Variabili di disegno
POS_111	OTHER	-1
	STUDY AND WORK SIMULTANIUSLY	1

Stato della convergenza del modello
Criterio di convergenza (GCONV=1E-8) soddisfatto.

Statistiche di adattamento del modello		
Criterio	Solo intercetta	Intercetta e covariate
AIC	4948.045	4936.37
SC	4954.517	4949.315
-2 LOG L	4946.045	4932.37

Test dell'ipotesti nulla globale: BETA=0			
Test	Chi-quadrato	DF	Pr > ChiQuadr
Rapp. verosim.	13.675	1	0.0002
Score	16.6081	1	<.0001
Wald	14.7351	1	0.0001

Analisi di effetti di tipo 3			
Effetto	DF	Chi-quadrato Wald	Pr > ChiQuadr
POS_111	1	14.7351	0.0001

Analisi delle stime di massima verosimiglianza							
Parametro		OCCU_121	DF	Stima	Errore standard	Chi-quadrato Wald	Pr > ChiQuadr
Intercept		Employed	1	-0.7116	0.1593	19.9528	<.0001
POS_111	STUDY AND WORK SIMULTANIUSLY	Employed	1	0.6115	0.1593	14.7351	0.0001

Stime dei rapporti di quote				
Effetto	OCCU_121	Stima puntuale	95% - Limiti di di Wald	
POS_111 STUDY AND WORK SIMULTANIUSLY vs	Employed	3.398	1.82	6.344

Associazione di probabilità previste e risposte osservate			
Percentuale concordante	1.9	D di Somers	0.013
Percentuale discordante	0.5	Gamma	0.545
Percentuale legato	97.6	Tau-a	0.004
Coppie	3825240	c	0.507