

The impact of *bonus at birth* on reproductive behaviour in a lowest-low fertility context: Friuli-Venezia Giulia (Italy) in 1993-2003

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1. Introduction

This paper handles an important question posed in the current research about policies: to what extent monetary policies can influence fertility? A previous paper showed that in Italy, from 1999 onward, some monetary allowances, focused on poor couples with 3+ children aged <18, has significantly increased the parity progression ratio 2→3 for poor women, decreasing also the abortion ration 2→3 for the same cluster of women¹.

Now, we consider the North-Eastern Italian region of Friuli-Venezia Giulia – FVG (1.213 thousand people at the beginning of 2007), where during the last 30 years fertility has been extremely low (TFR<1.5 from 1978 onward; TFR<1.2 in the interval 1982-2003), but where there are some signals of recovery (TFR=1.3 in 2006). Since FVG is one of the six Italian autonomous areas – i.e. with a wider level of political and fiscal autonomy – the regional Government has the possibility of developing a strong family policy, reinforcing the national one.

In this paper we evaluate if the *bonuses at birth* distributed by FVG Region in 1993-2003 gave a significant impact on fertility and abortion choices.

2. Regional monetary family policies in FVG 1993-2007

It is possible to distinguish four phases in the Region FVG monetary family policies (see also figure 1).

- **In a first phase (1.1.1993-31.12.1999)** the maternity bonus was specifically addressed to the unemployed women who did not already receive a maternity allowance from the State. The bonus (Regional Law (RL) n° 24 of 24.6.1993), was applied to children born since 1.7.1993. There was a bonus of €516.46 (one million former Italian lire) for every women

¹ F.C. Billari, G. Dalla Zuanna and M. Loghi, “Assessing the impact of family friendly monetary transfers in a lowest-low fertility setting”, paper presented at the PAA conference, Philadelphia, April 2005.

who had a child that: 1) have been residing in the region for at least three months before the birth, 2) had a very low personal income (less than €4,000 a year), 3) had no other maternity allowance. This bonus became of €774.69 for children born since 27.8.1996. However, it was now required to have been resident for at least five months in the region. The bonus was increased again to €1,549.37 for children born since 1.1.1999, and the residence requirement was raised to one year.

- **In a second phase (1.1.2000-31.12.2003)** the bonus was reorganized with an explicit demographic purpose. The RL n° 2 of 22.2.2000 stated that the aim of the bonus was to *boost population growth in the region*. The bonus was also differentiated between married and unmarried women. Starting with children born on 1.1.2000, the existing bonus of €1,549.37 was maintained for first order births. Mothers' requirements remained those mentioned above, but the income limit was fixed at €25,822.84. For second and higher order births the bonus was granted only to married couples, that have been residing in the region for at least one year, where at least one partner had Italian citizenship, and with an income lower than €46,481.12. The amount of this new bonus was €3,098.74. Moreover, a monthly allowance was also given to married couples for each child of second order or more, until age three, varying from €103 to €206 according to family income². For children born since 1.1.2001 the bonus for third order births and higher was raised to €4,648.11, while the bonus for first birth was restricted only to children that had at least one parent with Italian citizenship. As far as we know, although it is not comparable with measures of other European countries, this is the stronger birth-related monetary policy introduced in Italy after 1945.
- **In a third phase (1.1.2004-31.12.2006)** the access to regional maternity allowances was extended to all women residing in the region, whether they were married or not, Italian or not. RL n° 12 of 30.4.2003 stated that its aim was to *support and incentive maternity*. However, this extension is made up for a decreasing amount of money. The new bonuses were maintained at €1,550 for the first child and €3,100 for second order and higher births³. Mother's requisites were: 1) have been residing in the region for at least one year before the birth, 2) having Italian citizenship, or being legal immigrants who resided for at least five years in Italy, 3) having a low family income⁴. This new law was applied to births in the region from 1.1.2004 onward⁵. Moreover, the monthly allowance for children of second order or higher was suppressed. The low income threshold for having the birth bonus shows that these new measures are to be considered as a contribution for poverty rather than an incentive for having a baby.
- **Finally, in a fourth phase (from 1.1.2007 onwards)** all bonuses were suppressed, and a new system of monetary allowances dedicated to low income families with children under age 18 was established. The existing bonuses were restricted to mothers of children born until 31.12.2006. The new system was set by RL n° 6 of 31.3.2006 whose aim is to support *the educative and formative function of family*. The new system of allowances was supposed to begin on 1.1.2007, but it is still not effective.

² In case of multiple births the maternity bonus was of 5,164.57 € for each child. This applied to first order birth only for babies born since 1/1/2001.

³ In case of multiple births the maternity bonus was of 4,650 € for each child.

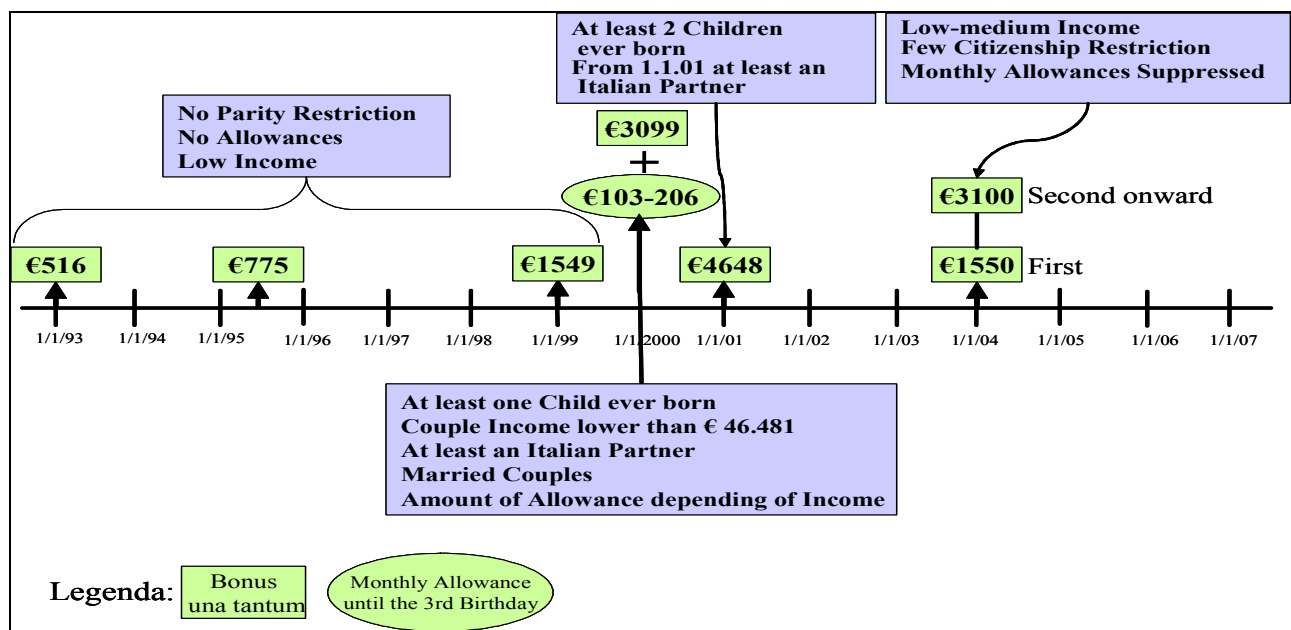
⁴ ISEE (Family income corrected with an equivalence scale) should be lower than 11,000 € for first child and 13,000 € for second and higher order birth.

⁵ In 2004 maternity bonuses were retroactively given to unmarried mothers of children born in 2000-2003, but, of course, this extension *a posteriori* does not influence our analysis.

Summarising, during the last decade of '900 in FVG the family monetary policy specifically oriented towards births was practically lacking. On the contrary, since 1.1.2000 the Government of FVG has introduced some substantive bonuses at birth. These bonuses were differentiated by: marital status (only married women); citizenship (only Italian or EU women); birth order (the bonus grows for the second and mainly the third birth). Moreover, the income threshold for having bonus was not too low. Since 1.1.2004 the new Government has extended the bonuses to unmarried women and foreign people living in FVG from at least five years. Moreover, the amount of bonuses and the income threshold were substantially reduced.

If the measures of 1.1.2001 had impacted fertility, **during the four years 2001-04 in FVG the reproductive behaviour of Italian married women should have changed, and we should find differences by parity and income.** Our main expectation is to find a different behaviour for women without children (the bonus for first child is low), with one and 2+ children (the bonus for second and higher order child is high). Moreover, the fertility behaviour should be different in FVG and in other Italian regions, where these family policies were not implemented.

Figure 1. Diagram of Monetary Family Policies adopted in Friuli-Venezia Giulia (1993-2007)



3. Data and sources

Friuli Venezia Giulia regional laws were downloaded at Camera dei Deputati (Parliament) database of regional laws at <http://camera.mac.ancitel.it/lrec>. Other regional Friuli Venezia Giulia normative were downloaded at <http://www.regione.fvg.it> in the section «*Delibere della giunta regionale*».

Births classified by (a) mother education, (b) parity, (c) marital status, (d) citizenship were kindly made available by the Public Regional Health Administrations of the following Regions: Friuli-Venezia Giulia (years 1989-2005), Tuscany (years 2000-2005), Lazio (years 1995-2005) and Trento Autonomous Province (years 1996-2005). The data source for births is the certificate of delivery care (CEDAP), adopted at national level in 2002, but available for the previous years in the regions considered in this paper. CEDAP contains demographic and social variables about both parents, information about the pregnancy and the delivery, and the health of the newborn.

Legal abortions for years 1989-2005 classified by mother education, parity, marital status, citizenship were kindly made available by the National Institute of Statistics (ISTAT). The data

source for abortion is the anonymous informative form of induced abortion, filled in the hospital for every intervention and sent to ISTAT. The form requires demographic and social variables of the woman (age, education, marital and professional status, parity, citizenship), and some characteristics of the intervention.

Missing values in mother characteristics were redistributed according to known data distribution. Data were also checked for inconsistencies. In particular, birth data from Friuli-Venezia Giulia were compared to the corresponding data of population registers, showing only negligible differences.

4. Method

We have to measure if fertility changed in a different way in FVG during 2001-04 for women more touched by the new legislation, i.e., Italian married women with at least one or two children. We can also suppose that the impact of monetary measures were higher for less educated women, because (1) in Italy the relationship between income and education is very strong, (2) the bonus was practically the same in spite of income, and (3) the relative impact of the same amount of money should be stronger in a poorer family.

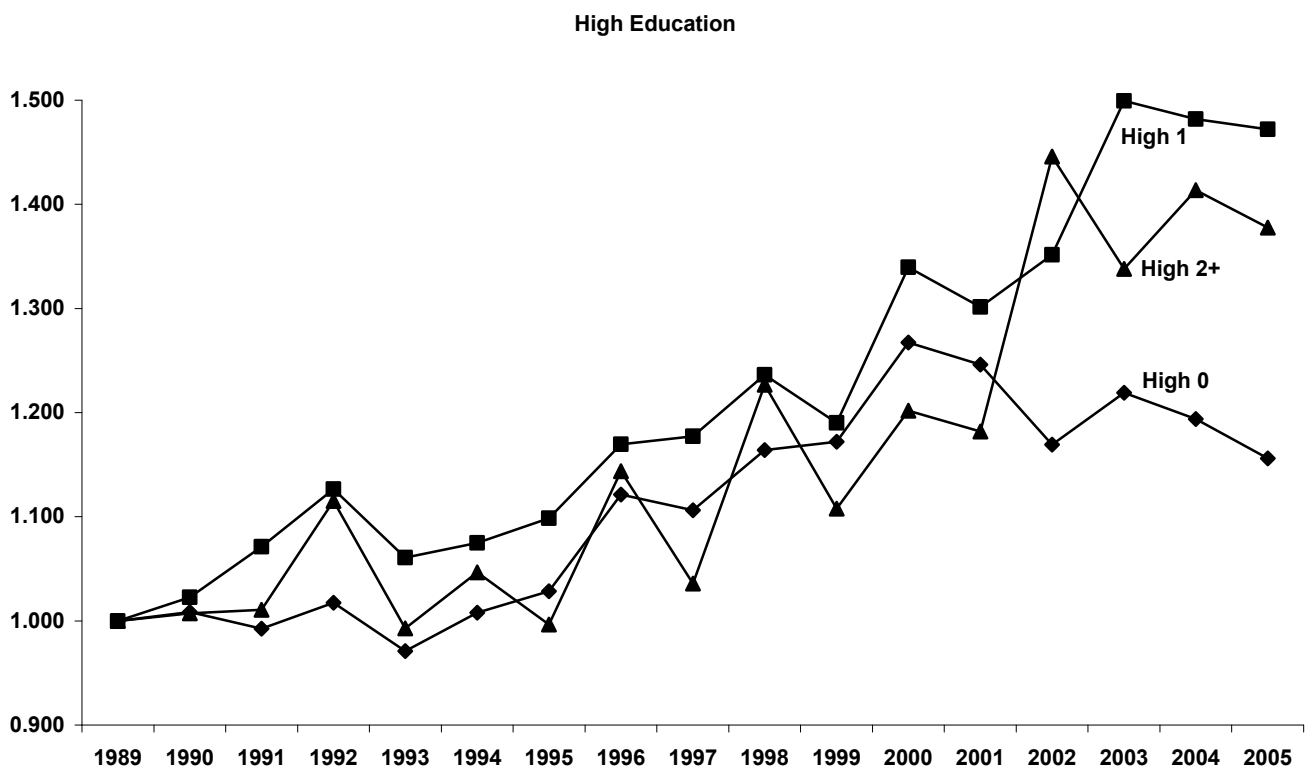
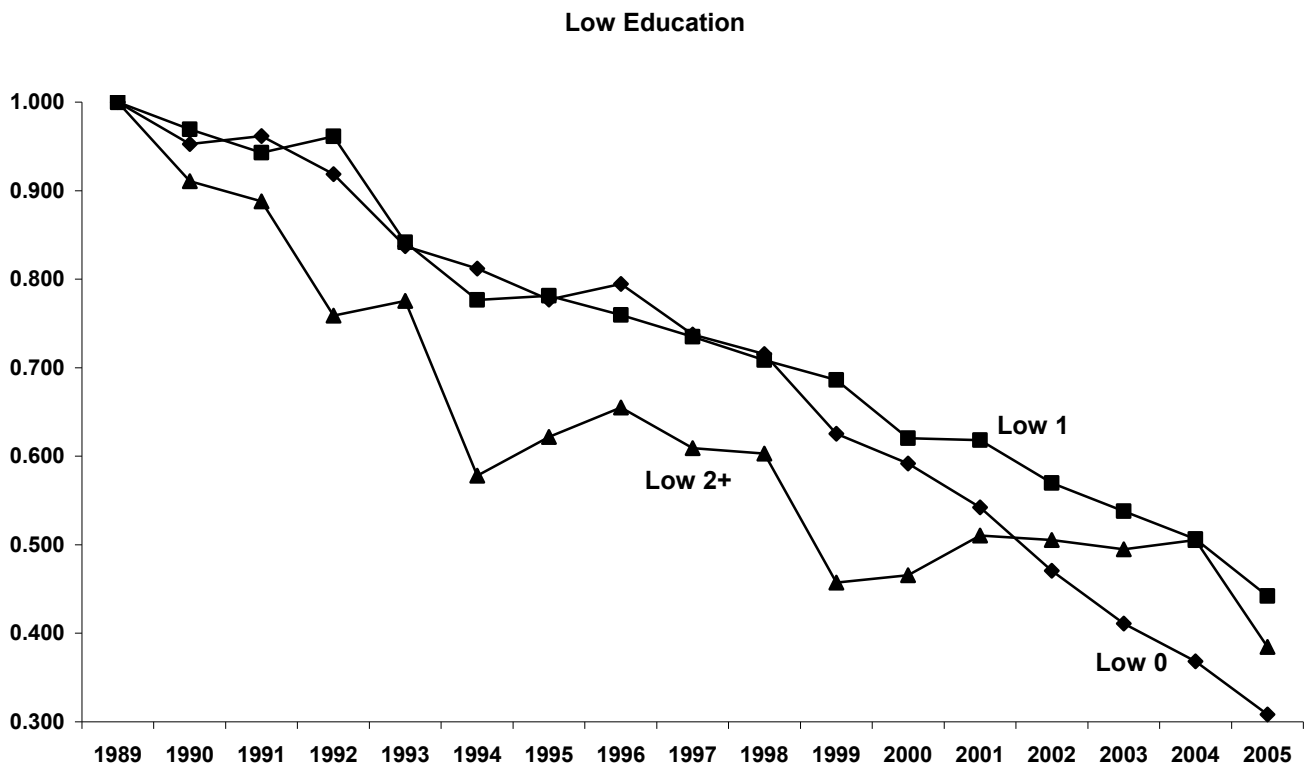
We will use two different method:

- First, following Billari et al. (2005, see note 1) we compare the graphics of trends of births and abortion ratios $\text{Abortions}/(\text{Abortions}+\text{Births})$ for the women touched or not touched by the monetary measures, looking at the differential changes during 2001-04;
- Second, using the appropriate log-linear models we measure if the interaction between parity, education, place of birth, and the years 2001-04 (i.e. when the measure was active) is statistically significant in the direction that follows our expectations.

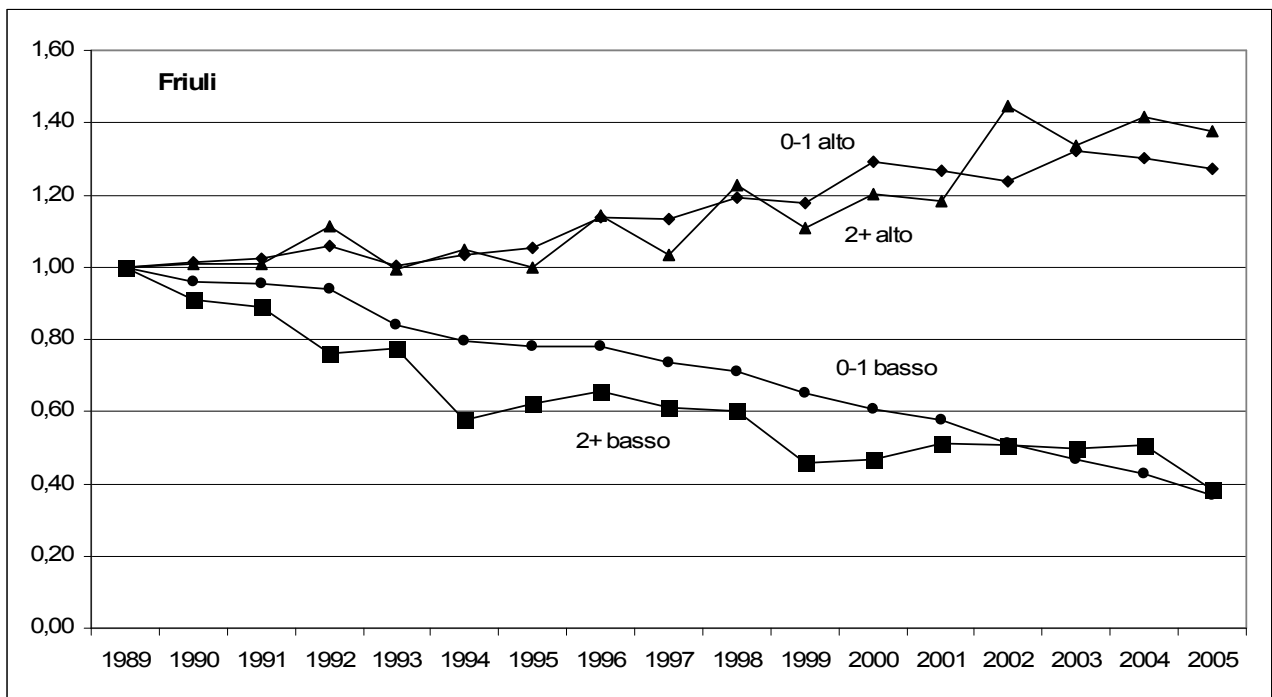
5. Preliminary results on trends of births

These preliminary results deal only with trends of births of married Italian women of FVG by parity, distinguishing by education (figure 2). The encouraging result is that for both educated and uneducated women with 1 or 2+ children, the trends changes after 1999-2000, whereas the trend of newborns without siblings does not change (for low educated women) or goes in the opposite direction (for high educated women).

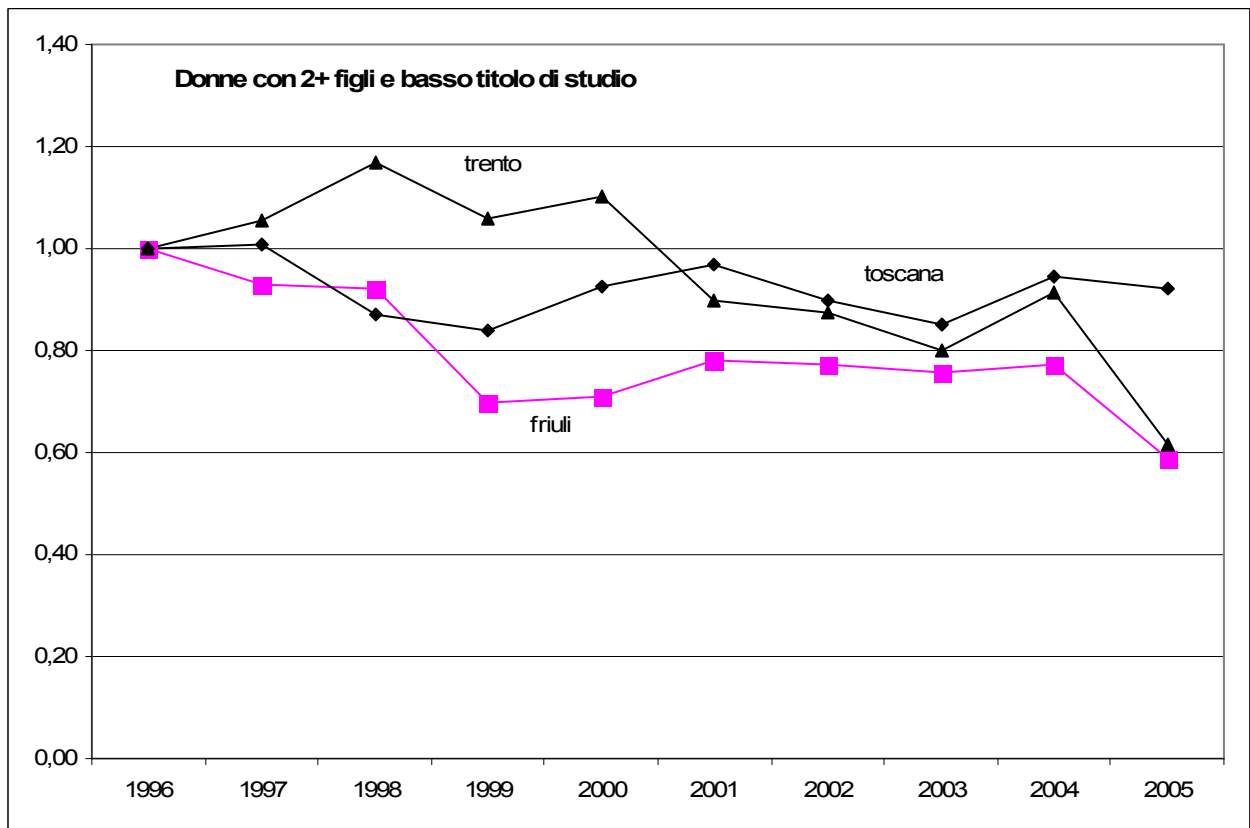
Figure 2. Births in Friuli-Venezia Giulia by number of children ever born and education. Italian married Women, 1989-2005. Index (1989 = 1.000)



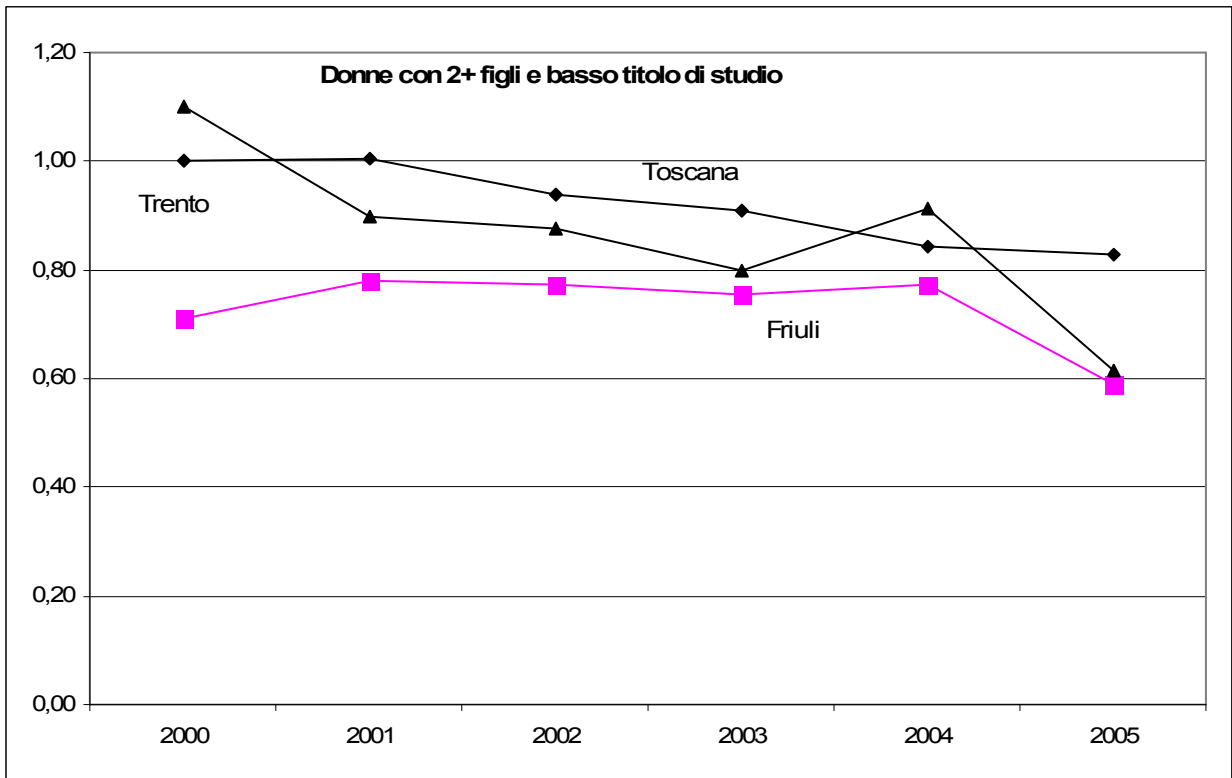
Tutti i grafici sono riferiti alle **coniugate comunitarie**



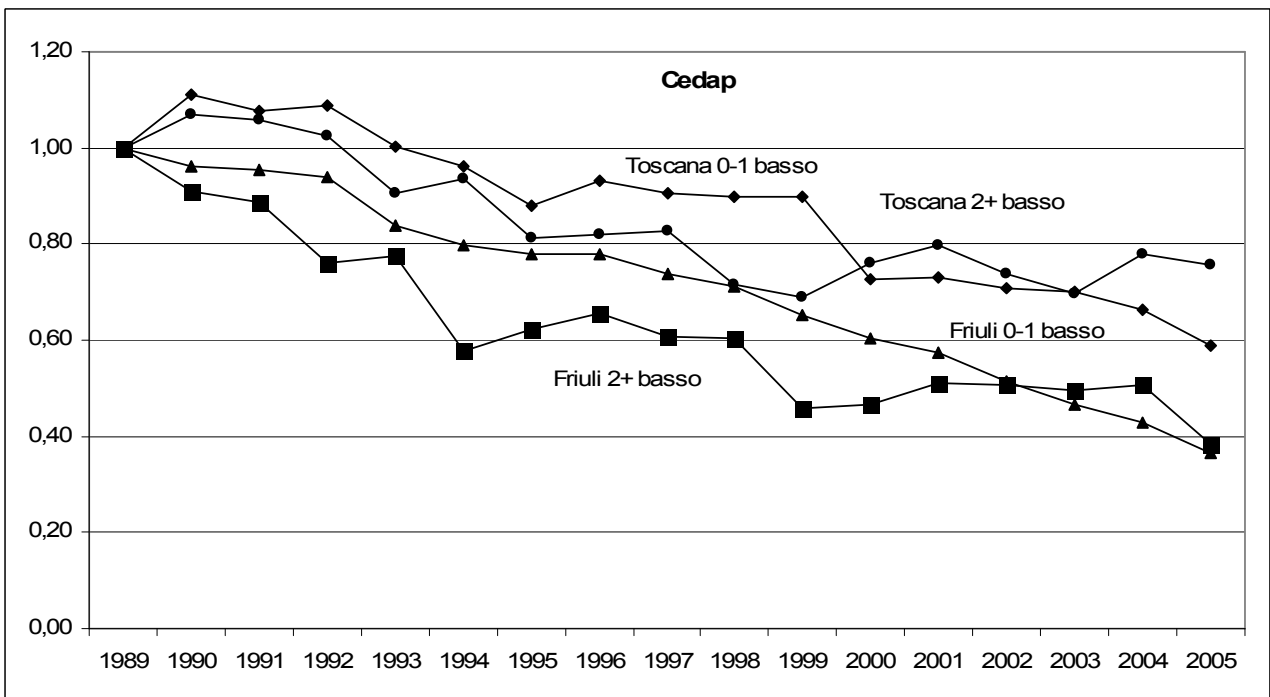
Numeri indice cedap Friuli 1989=100



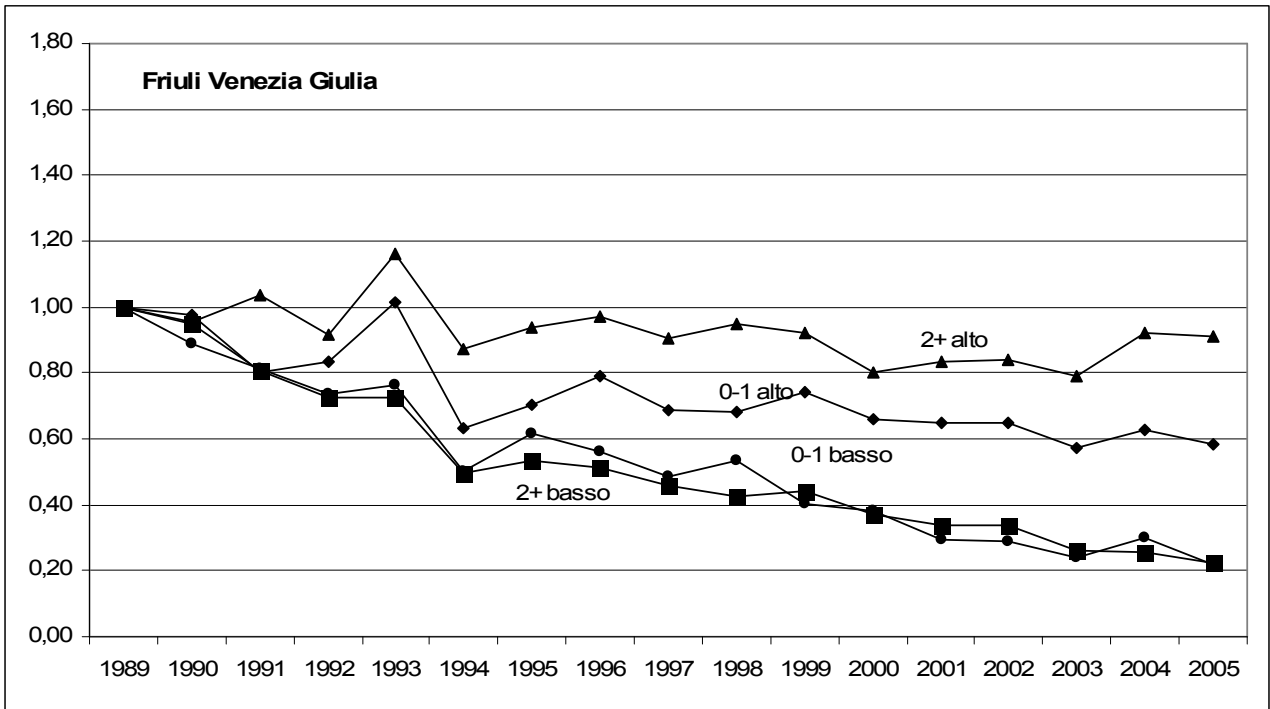
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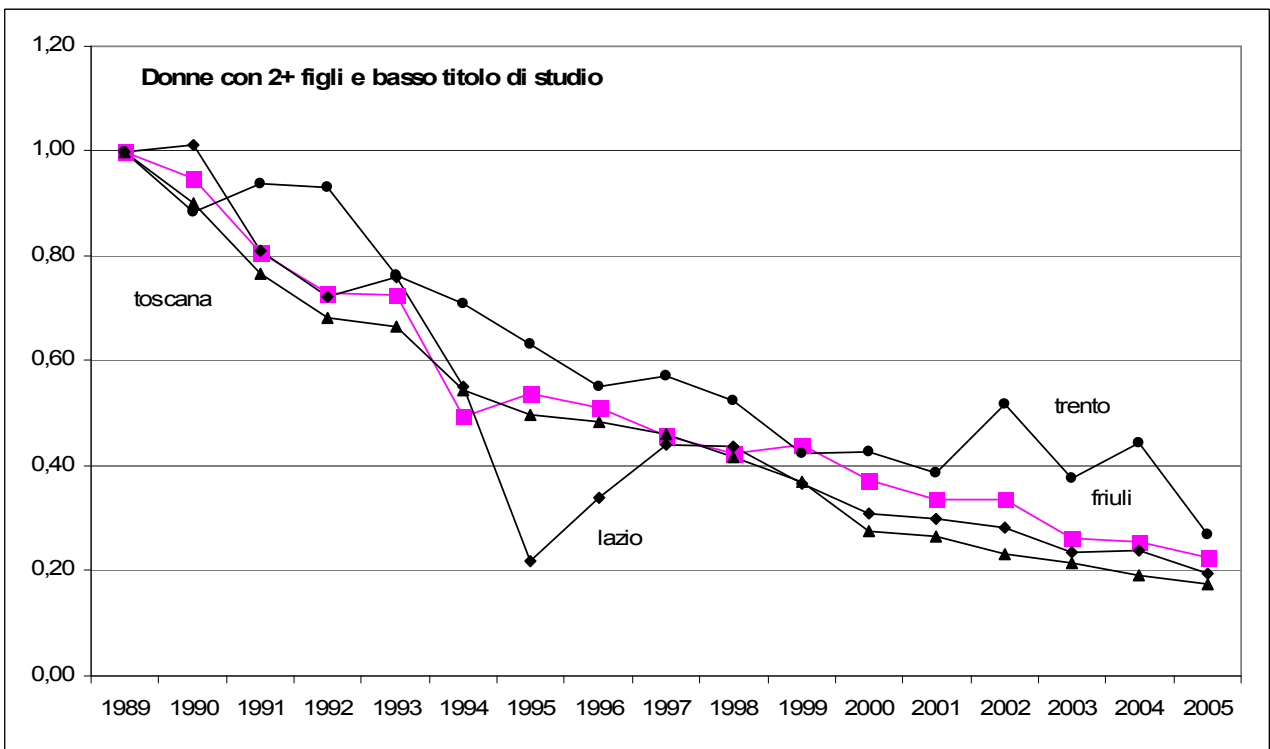
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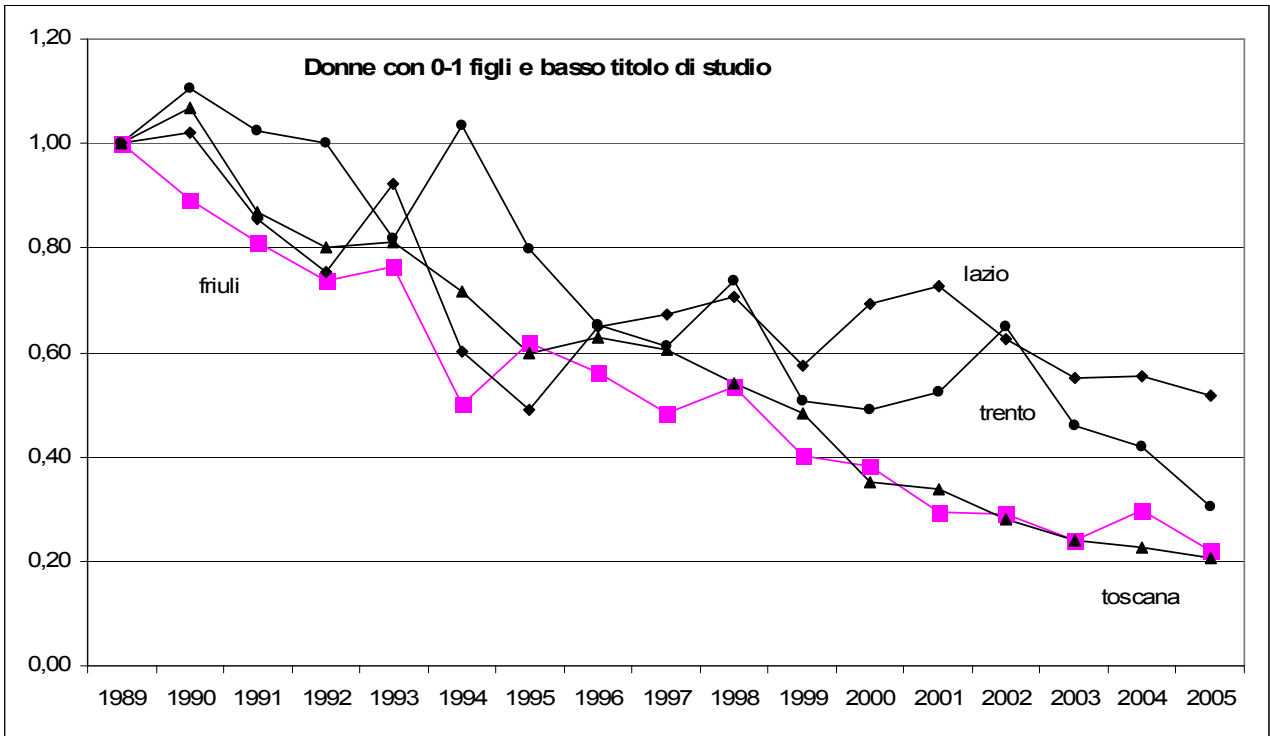
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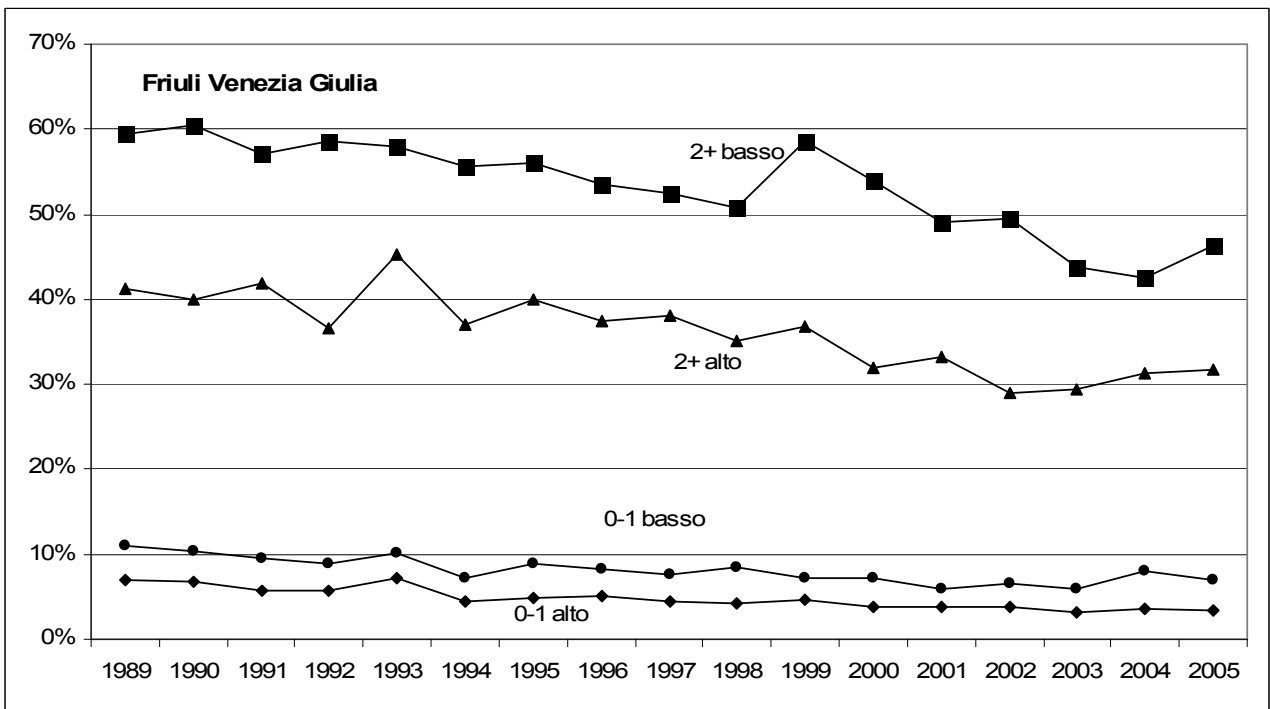
Numeri indice ivg Friuli 1989=100



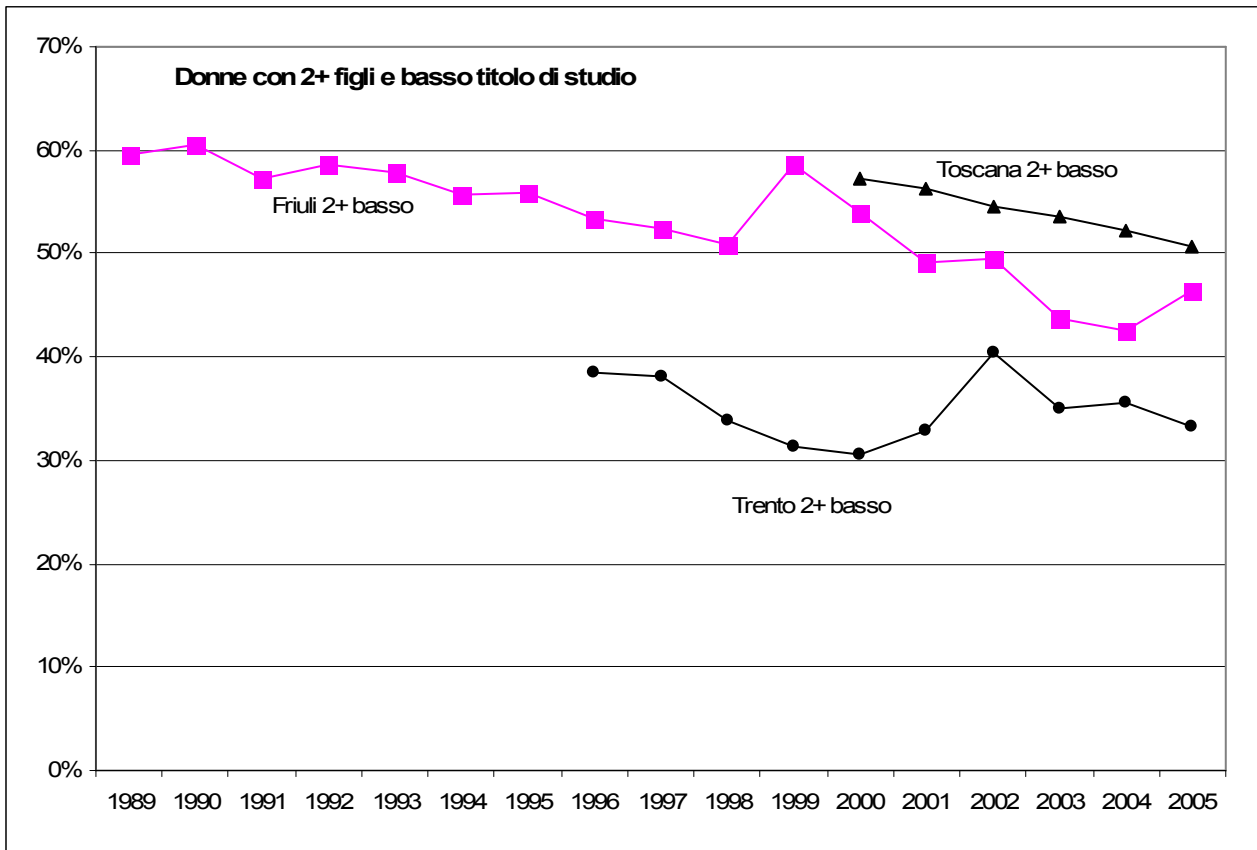
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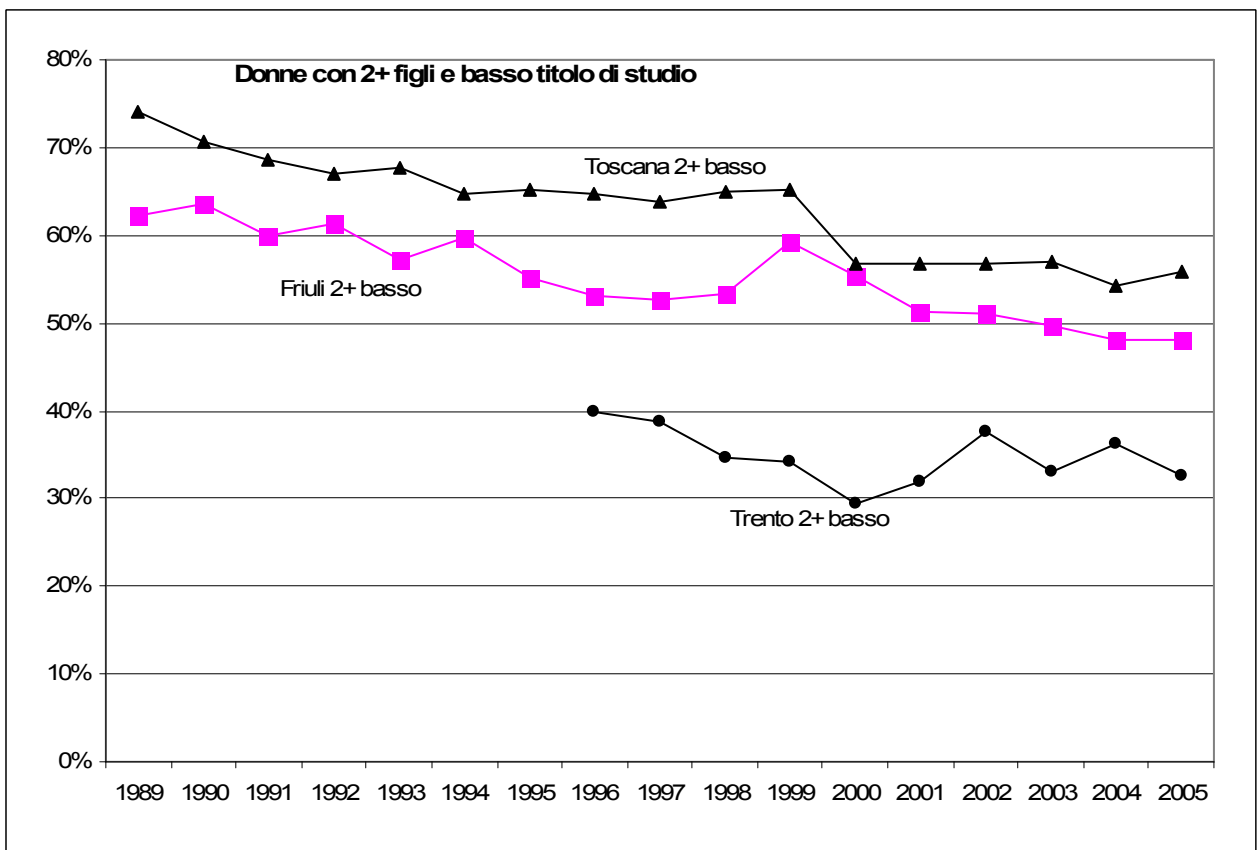
confronto numeri indice ivg con base 1989=100



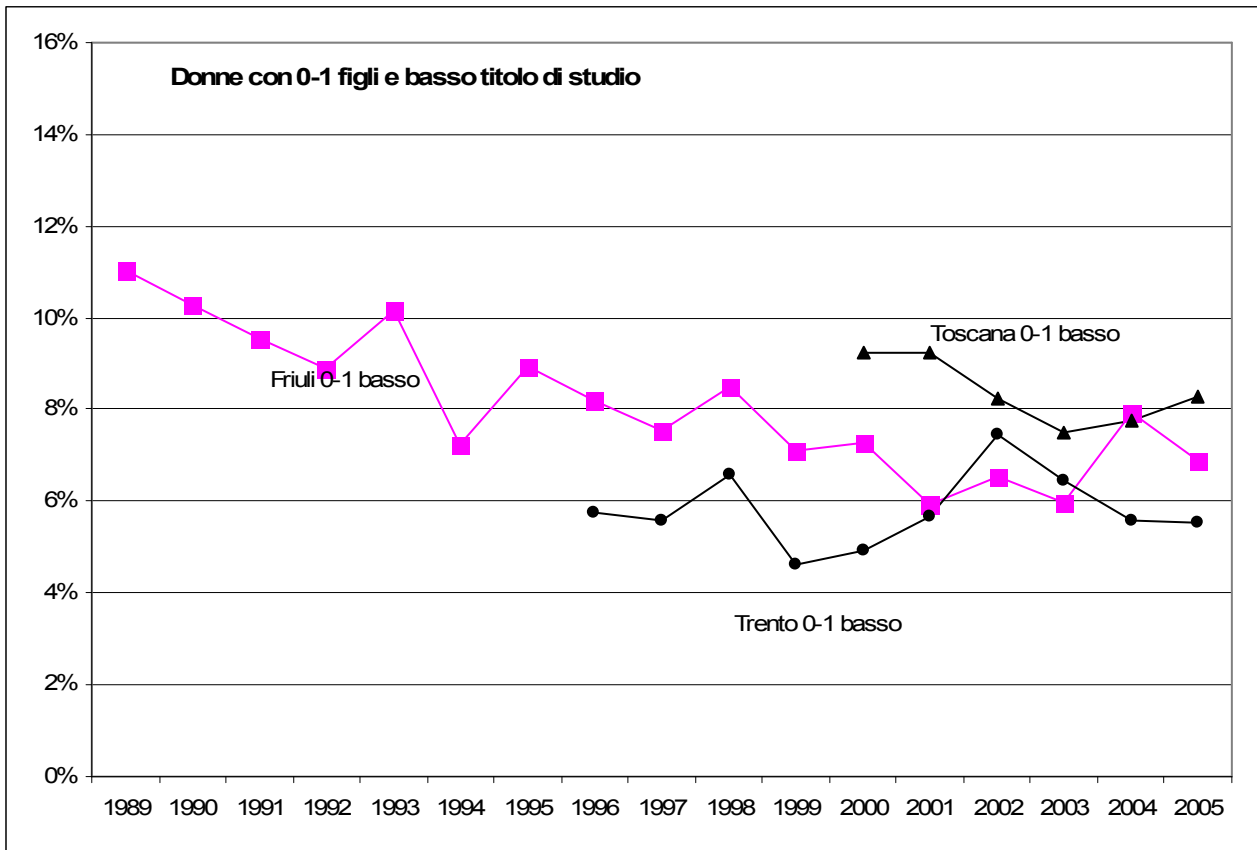
Numeri indice rapporto di abortività Friuli 1989=100



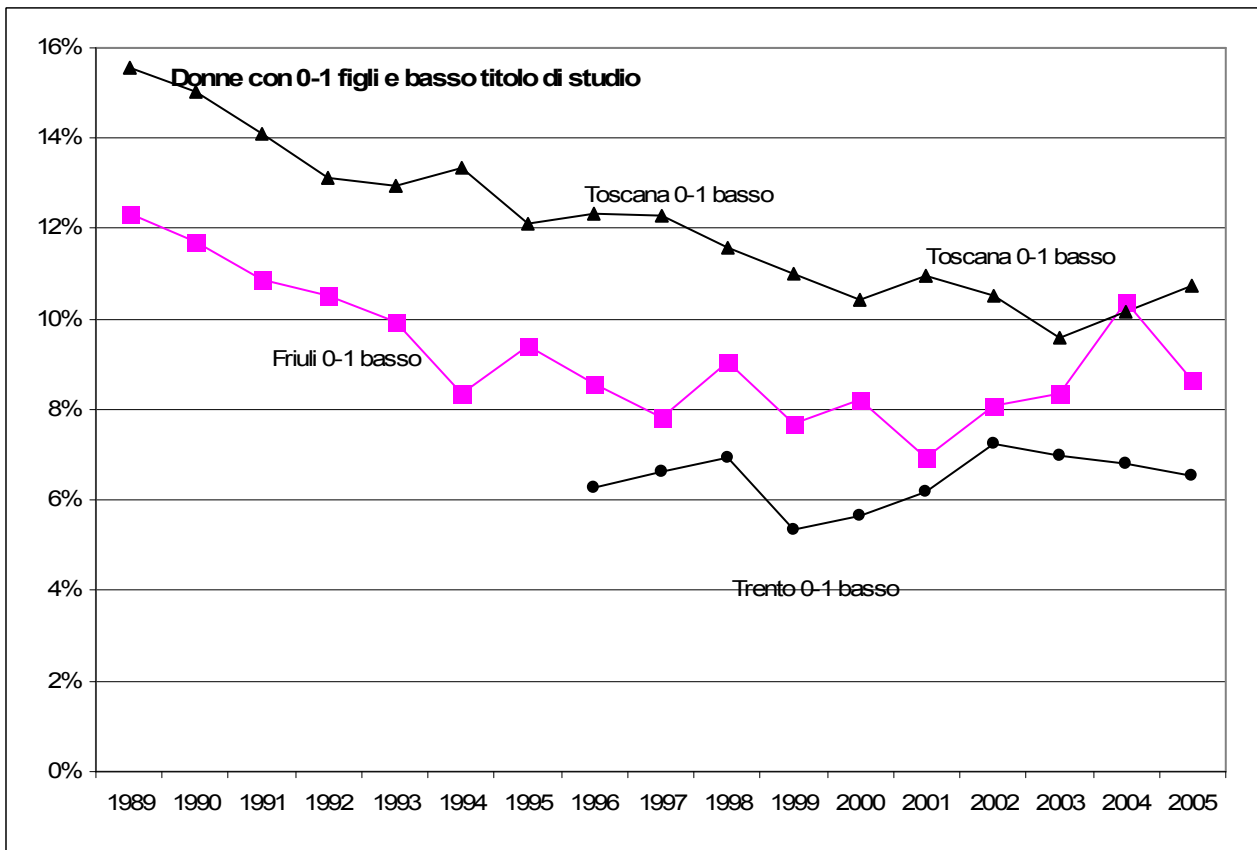
confronto rapporto di abortività



confronto rapporto di abortività (coniugate anche extracomunitarie)



confronto rapporto di abortività



confronto rapporto di abortività (coniugate anche extracomunitarie)