Comments on "Italians are Late: Does it Matter?"
(by Francesco Billari and Guido Tabellini)

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1. Introduction

I enjoyed reading this paper, if anything because it seems to talk about me and so many of my friends back in Italy! Leaving aside jokes, the topic is actually quite a serious one. Billari and Tabellini show that "lateness" may have important effects on people's economic success (as measured by earnings, for instance), and even on more macro variables (such as growth). The evidence in the latter case is circumstantial, and so I won't spend time discussing it.

The paper is part of a vast research agenda looking at the impact of demographic features on economic outcomes. For various examples, see Alesina and Giuliano (2007). The starting point of the paper is the observation that Italians exhibit "unusual" demographic features: They complete their education later than their counterparts in other industrialized countries, they enter the job market later, they leave parental home later, and they marry and have children later (if at all). Interestingly, they even die later! Life expectancy at birth for males is 78 in Italy, 77 in UK and France, 76 in Germany, and 75 in the US.[1] In human capital models a longer life horizon may change the incentives to invest in education, and this may have important consequences for growth, etc.

In a nutshell, the paper considers the impact of "late transition into adulthood" on income. It focuses on a sample of Italian males born in 1966-1970 surveyed in 2003-04. I should note that the sample is rather small, only about 500 observations. This is partially compensated by the richness of the data set, which includes a 5-interval measure of earnings, age of home leaving, age of first sex, exact date of birth, education, parents' education/occupation/marital status, etc. Billari and Tabellini regress the measure of earnings they have on "age of home leaving" and a number of other covariates, and interpret the effect of "age of home leaving" causally – using an Instrumental Variables (IV) interpretation.

Before commenting on the paper, it may be of some interest to quantify the extent and dynamics of the phenomenon. I used the 1986 and 2006 Survey of Household Income and Wealth (a representative survey of the Italian population conducted every other year by the Bank of Italy) to compute the proportion of males in various age groups who live with their parents (in the survey they are classified as "sons" of the head of the household). Figure 1 shows that between 1986 and 2006 the proportion of individuals living with their parent has increased for all ages. For example, in 1986 only 33% of 30-years-old lived with their parents; in 2006, 61% did.

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[1] The country with the longest life expectancy (80 years) is San Marino, admittedly a *de facto* Italian colony. More seriously, this reflects some heterogeneity in life expectancy between Northern and Southern Italy.
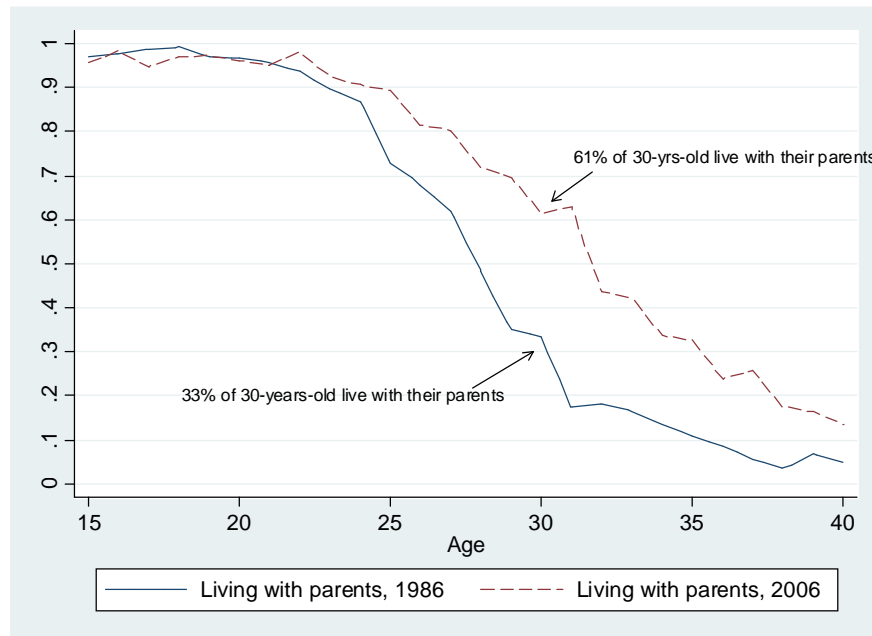
Figure 1: Proportions of males living with parents

2. The Story and the Findings

The paper's main claim is that individuals who become "adult" later suffer a number of disadvantages relative to those who do not. In particular, they have less incentive to work, less motivation, they are less independent-minded, and less ability to learn. According to Billari and Tabellini, the economic consequences of such late transition into adulthood could be substantial. The OLS estimates say that leaving home one year earlier would increase income by about as much as five additional months of education. The IV estimate is much larger, suggesting that leaving home one year earlier would increase income by about as much as 1.5 additional years of education. This is quite a large effect. Public policies to push people out of parental home would be more effective than keeping the same people in school, as far as measures of economic success are concerned.

As an aside, the paper finds that people born in the first quarter of the year earn way less than people born in other quarters. To put things in perspective, a 3-year University degree has the same return of *not* being born in the first quarter. One possible explanation is that people born in the first quarter are those most likely to be drafted for compulsory military service.[2] Military service involves loss of 1 (or more) years of civilian labor market experience, not to mention psychic costs, and so the first quarter of birth variable may be possibly picking up some of these adverse effects.

3. Validity of Instruments

Billari and Tabellini use two instruments (age of first sex and housing availability at age 16) to correct for the endogeneity of the "age of home leaving" variable. In this section I play the role of the devil's advocate and discuss reasons why one should doubt

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[2] Military service in Italy is no longer compulsory, but it was for people born in 1966-1970, the cohort used in the paper.

the validity of their instruments. Since an exclusion restriction is untestable, a reader will have to weight appropriately defense and criticism of instruments.

The authors correctly argue that "age of first sex" is a suspicious instrument. As suggested (and showed) by Hamermesh and Biddle (1994), beauty can enter the earnings equation; at the same time, beauty may be correlated with age of first sex – beautiful people do it earlier. I can add two further arguments. First, smarter individuals may leave home earlier and may also sexually emancipate earlier (or *vice versa*, i.e., in the case of "nerds"). Second, there is the possibility of correlated measurement error – especially if leaving home is a "milestone" event.

Speaking of measurement error, I should note at this point that measurement error in "age of home leaving" seems to be rather large. Take the simple model in which age of home leaving, measured with error, is the only covariate:

$$y_i = \beta_0 + \beta_1 x_i^* + (a_i - \beta_1 e_i + v_i)$$

Here y is earnings, x is "true" age of home leaving, x^* is its measured counterpart, e the measurement error (so that $x^*=x+e$), a is unobserved ability and v a random disturbance. It's easy to prove that the OLS bias is partly measurement error bias and partly ability bias, i.e.

$$p \lim \hat{\beta}_1 = \beta_1 + \frac{\sigma_{x^*a}}{\sigma_{x^*}^2} - \beta_1 \frac{\sigma_e^2}{\sigma_{x^*}^2}$$

Using the OLS and IV estimates it's easy to show that (after some manipulation) that

$$\frac{\sigma_x^2}{\sigma_{x^*}^2} \le 0.27$$

and hence the noise-to-signal ratio must be quite high (73% or more) to be consistent with the estimates reported in the paper. This casts some doubts on the extent of accuracy of the data (which are primarily of the "recall" type).

Billari and Tabellini seem to put more faith in their second instrument (housing supply). But could this also be an invalid instrument? A possible argument is as follows. Assume that people leave parental home only when they find an acceptable job and suitable housing. This means that there is a trade-off between the offered wage and the cost of housing (individuals may accept a low-paid job if they find cheap housing; or may be willing to pay more for housing if they are offered a high wage). Hence marginal individuals who face lower cost of housing accept lower offered wages. But in the data wages are very persistent, hence the housing market conditions when entering the labor market (and leaving parental home) may still be correlated with wages today, which invalidates the instruments.

As a parallel argument, I should note that housing market reforms have not reduced the stock of stay-at-home children, which would suggest that the instrument has little power. Consider the case of the *Equo canone* (rent control) legislation. Introduced in 1978, it regulated criteria for establishing rent levels, yearly increases, the duration of contracts, and repossession procedures. It ended up protecting the "insider" and restricted severely the supply of rental units. Rent controls were finally abolished in 1992. Yet, as Figure 1 shows, the proportion of youth living with their parents has increased, not declined. The paper uses cross-sectional variability rather than the time-series variability

I am describing here, which may have more to do with provincial differences in wages, rather than heterogeneity in the supply of housing.

Are there any remedies to possible failure of instrument validity? The ideal way to get at the "causal" effect would be to neutralize the effect of (permanent) unobserved ability. Here panel data is of little help, because leaving parental home is an irreversible decision. One could think however of using within family variability, i.e., twins or siblings experience. While there are no data of this kind for Italy (as far as I know), in the US, the PSID tracks individuals after they have left home and formed their own household. This could allow identifying siblings leaving home at different ages.

4. Causality and All That

Perhaps a more fundamental issue is to establish whether "age of home leaving" is truly causally (rather than spuriously) affecting earnings. Billari and Tabellini cite three different reasons why a true causal effect may be expected. First, youths who don't live with parents are pushed to work more, and this affect their career profile. Second, they are younger and hence have a higher ability to learn on the job. Third, they are more independent-minded, and this may affect their productivity (a "taste heterogeneity" explanation).

Note that the first two reasons cited point to an "indirect" mechanism (through labor market experience), rather than a direct one. This means that if one had a reliable measure of full-time labor market experience, "age of home leaving" would be redundant (and hence, *not* causal). Puzzlingly enough, the variable that is best associated with labor market experience (age of first job) explains nothing, perhaps because, as Billari and Tabellini note, "this variable refers to menial or temporary jobs that do not correspond to a milestone event in the transition to adulthood."

What the paper leaves a bit hanging is a convincing discussion of the mechanism(s) that is behind the effect of "age of home leaving" on earnings. A possible story is as follows. Take two equally smart individuals (so that ability differences are neutralized) – and assume that for exogenous reasons one is living at home with his parents, and the other on his own. Why would these two individual be differently productive on the job? For individuals living with their parents, the cost of consumed goods is lower (they get public goods for free – rent, electricity, etc.). They also spend less time in non-work, non-leisure activities (laundry, ironing, cooking, etc.). Hence (most of) their consumption of goods and time is effectively insured and a moral hazard problem arises – they may put less effort on their job, and hence get lower wages. Individuals who have left parental home cannot afford this, particularly if the decision to leave parental home is irreversible.

5. Conclusions

I want to conclude with two observations, one on the possible benefits of "lateness" and another on the policy implications of the analysis.

The paper is all focused on stressing the costs of being late. But what about the benefits? A broader welfare analysis would consider also the benefits of leaving home later, such as increased leisure, economies of scale, etc. Staying with the parents may signals that children care about their parents. Parents could reciprocate later in life (after kids have left) by supplying a variety of goods and services: Insurance (i.e., help if

income shocks strike and insurance markets are absent), liquidity (i.e., informal credit if financial markets are imperfect), and time (i.e., child care that would be too expensive to buy on the market). This means that the income loss due to a late transition into adulthood could be partially balanced by informal insurance, liquidity, time. In other words, the extra years spent with parents may be a form of investment. Young Italians may well be utility maximizers given the constraints faced.

The paper provides a number of policy recommendations, such as shortening the duration of college degree, discouraging students from over-staying in college, reducing the cost of housing, increasing its supply, and introducing policies aimed at easing young people's entry in the labor market. But knowing the mechanism behind the "causal" effect of "leaving home later" on earnings is key for any policy recommendation to be effective. Suppose individuals stay with their parents because that's the only way to get help to buy a house, or because they need to save in anticipation of that event (Loan-to-value ratios in Italy were around 50% before recent financial market liberalization). Then, what would change the incentives to leave are credit market reforms, rather than housing (or labor) market reforms.

To sum up, I applaud Billari and Tabellini for writing this extremely interesting paper on "lateness" and measures of economic success. Future research should try to come up with a convincing story regarding what's the mechanism behind the causal effect that is being uncovered.

References

Alesina, A.and P. Giuliano. 2007. "The Power of the Family." in *NBER Working Papers*. Cambridge, MA: National Bureau of Economic Research.

Hamermesh, Daniel and Jeff Biddle (1994), "Beauty and the Labor Market", *American Economic Review*, 84(5), 1174-94.