

**Institutional settings and adolescent paths out of school and into the labor force in  
Buenos Aires, Lima and Mexico City\***

**September 14, 2008  
(Preliminary Version)**

**Silvia E. Giorguli.** *El Colegio de México*  
**Patricio Solís.** *El Colegio de México*  
**Martín Benavides.** *Grupo de Análisis para el Desarrollo, Perú*  
**Georgina Binstock.** *Centro de Estudios de Población, Argentina*  
**Marcela Cerrutti.** *Centro de Estudios de Población, Argentina*

**ABSTRACT**

The patterns of inequality that prevail in the Latin American countries are linked to the different opportunities for young people and the timing of the transitions into adulthood, in this case from school-to-work. The institutional settings linked to the organization of the school system and to the labor market contribute to explain the route out of school and into the labor market as they define the structure of opportunities for the youth and as they play a role as mechanisms of social integration or segregation since early adolescence.

Using an institutional approach, the aim of this paper is to conduct a comparative analysis of the age at leaving school and entering the labor force in three Latin American metropolises: Buenos Aires, Lima and Mexico City. We explore the heterogeneous situations that young people face regarding these two transitions in three settings. We hypothesize that in contexts where the school system regulates more the life of the youth, we will find less heterogeneous paths in the process of leaving school during adolescence. Furthermore, we expect that in the same contexts, family characteristics will play less a role as determinants of the labor and enrollment status of adolescents.

*\* This paper constitutes a first stage of a larger research project aimed to understand, from a comparative perspective, how the mechanisms of social integration and segregation interact with the transition to adulthood in three metropolises: Buenos Aires, Lima and Mexico City. This specific project is part of a broader project on Marginalized Paths to Adulthood in the Developing World, coordinated by Marlis Buchman (Zurich University) and Suman Verma (Government Home Science College, India) and funded by Jacobs Foundation. We would like to thank Marlis Buchmann and Miguel Calderon for their comments and suggestions to prior versions of this paper. We would also like to thank the Center for the Advanced Study in Behavioral Sciences for providing the space for a rich discussion and reflection around the transitions to adulthood in Latin America and Anne Petersen for her continuous encouragement to our project. Direct any correspondence to Silvia E. Giorguli Saucedo, Centro de Estudios Demográficos, Urbanos y Ambientales, El Colegio de México, e-mail: sgiorguli@colmex.mx.*

**Institutional settings and adolescent paths out of school and into the labor force in  
Buenos Aires, Lima and Mexico City**

**Silvia E. Giorguli.** *El Colegio de México*

**Patricio Solís.** *El Colegio de México*

**Martín Benavides.** *Grupo de Análisis para el Desarrollo, Perú*

**Georgina Binstock.** *Centro de Estudios de Población, Argentina*

**Marcela Cerrutti.** *Centro de Estudios de Población, Argentina*

**Introduction**

Throughout the two last decades, Latin American countries have experienced profound socioeconomic transformations, which have had consequences for the social inclusion of diverse sectors of the population (Portes, Roberts and Grimson, 2005), specially for the youth. In spite of the common experience and the persistent social inequality across the region, the structure of opportunities for the youth varies, particularly regarding education and the entry into the labor market. Using an institutional approach, the aim of this paper is to describe and account for differences in the school-to-work transitions in three Latin American metropolises: Lima, Mexico City and Buenos Aires. For our particular case, comparing metropolises versus doing the analysis at the national level allows us to look at contexts that are similar in terms of the recent economic processes but also in the social processes linked to cities and globalization.<sup>1</sup> We purposely search to minimize the differences in the contexts to be compared in order to stress the role of the variations in the institutional settings that may explain different outcomes during adolescence.

We hypothesize that the historical and current differences in the interaction between the States and the patterns of social inequality that lead to the construction of different welfare regimes in Latin America influence the role that the institutions (educational system, labor market)

and the family play in the processes of leaving school and starting to work among the youth. The diversity of labor and educational trajectories in each metropolis will be, to a large extent, the result of the characteristics of the educational systems (access to different levels of education, duration of the cycles, flexibility of the educational systems), the labor market (regulation, availability of safety nets, informal sector, return rates to education) and the social programs for the whole population and for the youth.

### **Common paths and institutional variations in three metropolitan areas in Latin America: Buenos Aires, Lima and Mexico City**

Metropolitan cities in Latin-American societies have experienced significant societal changes especially throughout the nineties that clearly transformed the circumstances under which young people are growing up. In the first place, they all experienced intensive processes of structural adjustment after a decade of economic stagnation and setbacks. Such processes were linked to a liberalization of the economy, a change in fiscal policies targeted to reduce the public deficit and a reduction of the role of the State in the economy. They also implied a greater flexibilization of the labor markets--in a context characterized by weak implementation or definition of labor regulations-- and an expansion of an already large informal sector. By the end of the nineties, most of the Latin American metropolises faced a situation of persistent social inequality and increasing urban poverty (Portes and Roberts, 2005).

Although the economic processes shaped similarly our three cases, the interaction between state building, class structure and the level of economic development throughout the last century resulted in different institutional settings (Huber, 1995). Even though we cannot talk about a welfare state in Latin America as defined in the developed world (Esping-Andersen, 1990 and 1991), the system of social policies and social protection provided or regulated by

the state varies throughout the region (Filgueiras 2005; Filgueiras and Filgueiras 2002; Marcel and Rivera, 2008). Based on the differences in the resources invested in the building of a social infrastructure, the provision of basic social services, their more or less restricted accessibility and the gaps in the quality of the services, Filgueiras and Filgueiras (2002) grouped the welfare regimes in Latin America in three categories: (1) stratified universalism, (2) dual regimes and (3) exclusionary.<sup>ii</sup>

Argentina is defined as a “stratified universalistic” system where social security and health care are accessible for the majority of the population. The access to primary and secondary education expanded rapidly throughout the last century and led to a high coverage compared with other countries in the region. Although the provision of services is widely spread, the system is still defined as stratified given that the quality and access to the social services is largely differentiated between more and less privileged sectors of the population. In spite of this stratification, this type of regime led to a more egalitarian society compared to other Latin American experiences as “it cushioned rather than reinforced the prevailing pattern of social stratification” (Filgueiras and Filgueiras, 2002; Marcel and Rivera, 2008).

Mexico is defined as a country with “dual regimes”. In spite of the large investment and expansion of educational services, which meant an almost universal access to primary education as early as in Argentina, other social provisions—such as health and labor protection—were highly stratified since their original conception. The dual character of the welfare regime in Mexico is given by the different access to social services between those in the formal labor market—including State employees— and in urban settings, and an absence of benefits and limited access to social services for a large proportion of the population. In addition, social services were geographically distributed in a heterogeneous way; the construction of the social infrastructure and of social services developed more rapidly in

certain regions while other lagged behind in terms of the provision of basic educational and health services. This would explain the prevalent greater social inequality in Mexico compared to Argentina, Uruguay and Chile. This kind of welfare regime exacerbates the social stratification between the sectors incorporated into the modern framework of protection (usually linked to the formal labor market) and those excluded.

Peru is defined as a country with an “exclusionary regime”; that is, an elitist system, with low population coverage, limited options in services and large differences in their quality. The state in Peru was only able to develop a weak and restricted social protection system with modest attainments in urban infrastructure, housing and education. In the educational system, the welfare regime resulted in a limited supply of options for the majority of the population, a greater dependence in private education—even at the elementary level, but more clearly seen at the secondary and tertiary levels—and large differences in the quality of the educational options for the youth. The lack of solid schemes of labor protection and regulations are also reflected in the highest proportion of the working population in informal jobs among the three sites considered in this study.

Following the tradition of prior research that links the institutional context to the transition to adulthood<sup>iii</sup>, we assume that the differences in the three welfare regimes suggested by Filgueiras and Filgueiras (2002), along with the prevailing patterns of social inequality, will lead to variations in the structure of opportunities for the youth at the time of the transition to adulthood in the three metropolises under study. In the specific case of the school-to-work transition, the different welfare regimes would have resulted in a diverse organization of the educational system, the labor market and the compensatory policies targeted to the vulnerable or marginalized population. As a result, we could expect that the standardization and the

timing of these transitions would differ, as reflected by the age when most of the youth is leaving school, the level of education completed, the age at entry into the labor force and the prevalence of more or less heterogenous trajectories among the youth during the adolescent years in each metropolis.

### *Educational system*

Table 1 summarizes selected variables that depict some of the dimensions of the educational system and the labor market that differ between the three countries analyzed in this paper and that may explain some of the variations in the school-to-work transitions for adolescents.<sup>iv</sup>

The universalistic approach of the welfare policies in Argentina led to the consolidation of a more mature public educational system. In the 70s, Argentina had achieved an almost universal access to primary education, broadened to secondary education and consolidated a public educational system up to upper secondary available to a large proportion of the population (Filgueiras, 2005: 13; see also Padua, 1979). By the year 2000, Argentina was as one of the countries with the best educational indicators in Latin America; it has among the highest completion rates in secondary education and enrolment rates in tertiary education (Table 1, PRIE, 2005).

[Table 1. Selected socioeconomic indicators and institutional characteristics in Argentina, Peru and Mexico]

The maturity of the Argentinean educational system and the longer stay in school structure the life of adolescents and integrate into school a large proportion of the population during this stage of the life course. As the educational system also plays a role in cushioning the patterns

of social stratification, we would expect to find more homogeneous experiences among adolescents by social class and by sex compared to other settings in Latin America.

In the case of Mexico, there was also a large investment in education that consolidated a nearly universal development of primary education by the 70s. Even during the years of economic setbacks in the 80s, the enrollment rates in primary and lower secondary increased. Public tertiary education expanded even at a faster rate (Padua, 1979). Contrary to the Argentinean experience, where the expansion of the educational system consolidated rapidly from below, the large growth of the spaces in public universities in Mexico favored the most economically advantaged population, reproducing the pattern of social inequality. Furthermore, the differences in the access and quality of education among the most disadvantaged sectors (mainly rural and indigeneous populations and poor urban families) led to a significant and prevalent gap in educational attainment. As a result, although some of the economic indicators for Mexico are better than in Argentina and Peru and there is a large supply of educational opportunities, the country fairs poorly in its educational indicators, especially at the secondary level and on attainment (Table 1, see also PRIE, 2005). Although there is a large supply of educational opportunities at a low cost and a flexible system that allows those who drop out from the formal schooling to return and complete their lower and upper secondary education, the country still faces the challenge of having low completion rates at both levels (lower and upper secondary).

In spite of the weak developmental State in Peru, the education of the country also expanded during the last fifty years. At a lower pace than in the other two settings, Peru reached almost universal coverage of the elementary education in the eighties. The educational system is highly stratified and the access differentiated between the rural and urban sector, between the

indigeneous and the non indigeneous population and also by sex. However, the completion rates are higher than in Mexico, leading even to greater enrollment rates in tertiary education (Table 1). Given the organization of the system, most of the young people will finish secondary school by age 16 (two years earlier than in the other two settings), and will have few options to continue their studies as the access to public universities is increasingly difficult and highly competitive.

One characteristic of the Peruvian case that we do not see in the other two sites is the prevalence of some differentials in the access to education for men and women. In the late 70s, Jorge Padua (1979) documented the prevalence of a large gap in the educational attainment and literacy rates for men and women in Peru and linked it to the cultural norms of a large indigeneous population, which invested less in women's than in men's education. Although the difference has decreased and is not visible today in the completion of elementary education, it can be seen in the enrollment and completion rates in secondary, the average years of education for the young generations and the enrollment to tertiary education (PRIE, 2005; Díaz, 2008; Murakami and Blom, 2008; IESALC, 2006).

In spite of the different degrees of educational gaps at the national level, for our particular case, the differences within each site will be smaller given that we are looking at metropolitan areas. The access to education is greater in the three capital cities compared to the national indicators. In fact, the years of education completed on average are higher than the national averages and the three metropolises concentrate many of the options of public education at the tertiary level. The completion of secondary and the entry into tertiary education are crucial turning points to understand the differences in the school-to-work transition in Buenos Aires, Mexico City and Lima. In Mexico City and Lima, the recent expansion of the secondary



education along with the high demographic growth of the school age populations at the national level have created a large increase in the demand for public tertiary education, demand that cannot be covered with the spaces currently available in the public universities. Thus, the process of entering into public universities has become increasingly competitive and selective. The admission rates to the public tertiary educational systems are low in both countries (18 per cent for Peru according to Díaz, 2008 and less than 30 per cent in two of the largest public universities in Mexico City<sup>v</sup>), suggesting that a growing number of adolescents (in absolute and relative terms) is truncating their educational careers given the limited spaces. The private system has expanded rapidly but is not regulated in terms of quality, and those options offering good quality tertiary education are usually not accessible for the majority of the youth not accepted in public universities.

In Buenos Aires, the public system absorbs most of the demand of tertiary education. Nonetheless, recent research suggest a stratification and separation between public and private universities linked to the different access to resources and to the preference for private education among some sectors of the middle class (Padua, ??? – other references).

### *Labor market*

Aside from the educational system, we hypothesize that the labor market will also explain the differences in the school-to-work transitions among the three settings. The prevalence of a large informal sector is a constant in most of the Latin American contexts and it is not the exception in the three sites covered in this study. However, the levels of protection (for example, through the regulation of labor conditions or the access to safety nets defined by law) and the size of the informal market vary in the three countries and among the three metropolises (see Table 1). In general, Peru has the lowest framework of protection with little

regulation of the labor conditions of the working population. In Mexico, there are regulatory frameworks of social security for a proportion of the population employed in the formal sector provide some sort of protection for those who lose their jobs (for example, under certain conditions the employer must pay a specific amount to the worker based on the time he/she has been working for him/her). Of the three settings, Argentina is the only country where unemployment benefits are available to the working age population.

These differences also influence the transition into the labor market in the three metropolises. In the first place, in regimes with less social protection (for example, when there is no unemployment benefits), we would expect that families will depend more on their resources in cases of economic setbacks. We know from prior literature that during the economic crises in the eighties in Latin America, adolescent work was often used as one of the strategies to compensate for the low income or the limited access to well-paid jobs in some of the countries in the region (REFERENCES). We would expect higher labour participation rates among the youth when the social security system is stratified (Mexico), weak (Peru) or inexistent.

Secondly, the labour market in cities has also been transformed by changes in the economic system driven by globalization (Castells, 2002; Sassen, 1994). On the one side, the continuous technological innovation and the changes in communications have generated a demand for a highly skilled labour force that can fill the high-level technical and administrative positions. However, parallel to this increase in the qualifications needed to participate in this kind of jobs, the growth in the financial and technology industries has also generated low-wage unskilled jobs. Saskia Sassen (1994) had defined this occupational polarization as one of the main sources of social inequality within and between cities.

In Latin America, the demand for low-wage unskilled jobs—which by nature tend to be more flexible, temporary and unregulated—have reinforced the process of an already thriving informal economy. What does this mean in terms of the school-to-work transitions for the youth in the three metropolises? It may explain the reproduction of social inequalities between those who obtain the educational credential necessary to incorporate into the global economy in well paid jobs and those who are marginalized from this type of jobs either because of their low educational attainment or because of the restricted number of well-paid or more stable jobs generated. While there may be an incentive to stay in school and invest on one's education, in the contexts with more pessimistic perspectives around the possibility of finding a good job, the youth may feel discourage to keep on studying as the returns to education may be blurred by other factors. In the case of Mexico, for example, the returns to education for any additional year of schooling between the completion of lower secondary and the completion of upper secondary are low (López Acevedo, 2001). It is until tertiary education where the premium to education increases dramatically. Thus, the combination of a demand for low skilled labor in an unregulated sector that may absorb adolescents looking for a job and the low expectations in terms of finding a better job when the educational career was truncated or because the limited options in the labour market may favour the early entrance into the labor force in the metropolises where the informal sector is more predominant (i.e. Lima and Mexico).

Finally, the labour experience of young men and women will vary depending on the patterns of female labour participation at the country level. When the participation of women tends to be lower, such as the case of Mexico, we would expect that young girls will tend to stay out of the labour market more often, even after leaving school (Table 1). In contrast, given the

more restricted access to tertiary education for young girls and the higher participation rates for women in Lima, we would expect to find a greater proportion of adolescent girls working in this metropolis.

**Hypothesis. Institutional settings and marginalized paths to adulthood among adolescents in the three settings**

From the prior description of the institutional arrangements in each setting, we can expect that there will be differences in the timing of the school-to-work transitions in Buenos Aires, Mexico City and Lima. Furthermore, such differences can be linked to the reproduction of the inequality patterns as the opportunities for the marginalized youth differ in the three settings.

In each of the three metropolises, the welfare regimes will play a more (Buenos Aires) or less (Lima) dominant role in expanding the educational opportunities for the disadvantaged youth. To a larger extent, we also expect to find that in the more exclusionary context, the institutions will be less successful in structuring the lives of adolescents. Under the more universalistic model, we could expect institutions to be more connected to the trajectories and decisions of the marginalized youth. Institutions in those settings are more influential in defining and assigning the status of children, adolescent and young adults to the individuals as they progress through the life course (Baker and Letendre, 2007). Under that kind of institutional development, institutions are working more closely to its modern script mandate: to compensate private differences between individuals.

In contexts where institutional markers are weak and the institutions are less influential than family resources and individual characteristics, the poor youth may face greater obstacles to remain attached to institutions such as the school. They have more problems to accomplish the regular and expected educational and labor transitions. On the contrary, in contexts where

institutional markers are strong and institutions more influential, youth paths are more homogenous and structured by different compensatory policies. This does not mean that they are exempt of patterns that reproduce the social inequality. It means that the trajectories of adolescents in marginalised contexts are more structured by institutional forms, while the reproduction of the unequal access to resources and opportunities may become evident later in the life course.

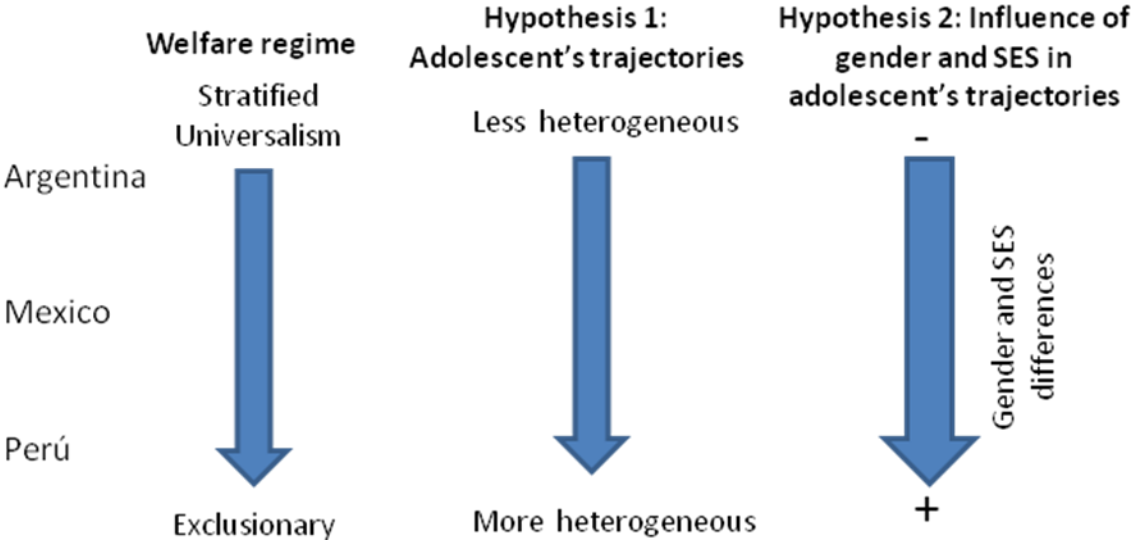
The reproduction of inequality patterns is not cushioned by the institutional setting and is more pronounced in highly stratified and in exclusionary regimes, while universalistic regimes will be more successful in compensating for private differences through compensatory policies or complex institutional developments. We can summarize these arguments in the two following hypothesis:

*Hypotheses 1: Influence of social institutions and heterogeneous educational and labor trajectories of adolescent and youth.* In contexts where the social institutions (educational system, labor market and safety nets) are less influential in defining the structure of opportunities for the youth, we would expect to find more heterogeneous patterns in the school and work statuses of adolescents. In other words, when social institutions have less influence in standardizing the life course of the youth, there may be more heterogeneous timings in the school-to-work transitions during adolescence.

*Hypotheses 2: The influence of gender and socioeconomic statuses on the life trajectories of the youth.* When social institutions play more a role as integrative mechanisms for the youth, we would expect that inequality cleavages such as gender and socioeconomic status will be less influential in determining the educational and labor trajectories of the youth.

In the case of the three metropolises under study, we expect to find more diverse paths in Lima, followed by Mexico, and less variation in the trajectories in Buenos Aires during adolescence compared to the other two settings. The hypotheses regarding the specific three settings under study for this paper are illustrated in Figure 1:

**Figure 1. Hypothesis regarding the diverse trajectories of adolescents in three institutional settings**



**Data and Methods**

We used data from household surveys conducted in Buenos Aires in 2003 (Encuesta Permanente de Hogares) and Lima in 2004 (Encuesta Nacional de Hogares). In the case of Mexico, we used the micro-data sample of the 2000 Census. The selection of these data sets was based on comparability and quality criteria. The three data sources include information on the current education and work status of individuals. However, they do not provide retrospective information of the labor and educational trajectories of young people. Therefore, our analysis is based on cross-sectional information. With this cross-sectional data we adopt a

synthetic cohort approach to obtain information on the age-pattern of the school-work transition in the three cities.

Our analysis focuses on the adolescent years (ages 14 to 19). The selection of this particular age group was based on both theoretical and practical reasons. As we explained in the introductory sections, we expect differences among cities to be higher during adolescence, due to the differences in the degree of institutionalization of the early life course associated to the operation of the educational system and the labor market. On the other hand, since we are interested in exploring the effects of SES and gender on the school-work transition. For SES, we must find a way to measure it for the family of origin. Given that the selected data sources do not provide direct information on the socioeconomic characteristics of the family of origin, we must estimate it through the household-level information available for those individuals who still live with their parents. By restricting our sample to the age group 14-19, we focus on a stage of the life course where most individuals still live with their parents, and therefore we can use the socioeconomic data of the household to obtain a reliable SES measure.<sup>vi</sup>

The school and work statuses are measured through two dichotomous variables, indicating whether the individual attended or not to school and whether the individual was working or not at the moment of the survey. The combination of these dichotomous variables produces a third variable, which we name “school-work status”. The advantage of using this combination is that it allows us to visualize certain intersections of statuses that illustrate the variations in the patterns of integration (or disintegration) of individuals into the educational system and the labor market. Thus, for example, the combination of “studying” and “working” may be used as an indicator of the flexibility of the educational system and the labor market to accommodate individuals with a dual integration (as well as a marker of the economic

urgencies of a fraction of young individuals who remain in the educational system), and the combination of “not studying” and “not working” may provide an idea of the extent of exclusion from school and work in the early life course.

The data analysis section is divided in two parts. In the first part we present descriptive measures of the variations among cities in the school and work statuses, both using the dichotomous variables and the school-work combination. Since we have relatively small data sets in Lima and Buenos Aires, in these cities we estimate the proportions of individuals in each status using moving averages for groups of three contiguous individual ages.<sup>vii</sup> In order to empirically test the first hypothesis (differences in heterogeneity of statuses), we calculate separate Theil’s entropy indexes by city and sex for the combined school-work status variable in each age. The entropy index has been proposed as an indicator of heterogeneity in discrete life-course statuses at specific ages (Fussell 2005). The index is obtained through the application of the classical Theil’s entropy measure for discrete variables. In our particular case, individuals can be assigned to four different states ( $s$ ), and the entropy index can be calculated as:

$$E = \sum_{i=1}^4 p_s \log \left( \frac{1}{p_s} \right)$$

where  $p_s$  is the proportion of the population in state  $s$ . To facilitate its interpretation, the obtained value of the index was transformed into a proportion of its maximum possible value (1.3863 in this case), so it indicates the extent in which individuals concentrate in a particular state, being (close to) 0 the maximum concentration (or minimum heterogeneity) and 1 the minimum concentration (or maximum heterogeneity).



In the second part of the data analysis section we focus on our second hypothesis (differences in the effects of gender and SES on the school-work transition). We adjust multinomial logistic regression models using as dependent variable the school-work status combined variable, and as independent variables the individuals' age, sex, and SES. As we mentioned before, we used household data to measure the SES of the family of origin. We estimated a SES index using the available information at the household level in three dimensions: education (per capita age group-standardized average of educational attainment for individuals over age 20); income (per capita income in the household) and possession of assets (with a different list of assets in each city depending on the availability of information).<sup>viii</sup> The resulting index is then interpreted as a standardized measure of the SES of the family of origin, which can be used to contrast the effects of SES on the school-work status across cities.

### **Heterogeneous paths out of school and into the labor force**

Figure 2 shows the percentage of adolescents not in school by age and by sex in the three metropolises. Leaving school during adolescence occurs more often in Mexico and in Lima than in Buenos Aires. Nonetheless, even for Buenos Aires, around one in every five adolescents will no longer be enrolled before the completion of secondary school (by age 17). In Lima, most of the adolescents will leave school between ages 16 and 18. After that, enrollment changes more gradually (ages 19 to 21). In contrast, in Mexico the process of leaving school occurs in a more disperse way along the adolescent years.

[Figure 2. Percent not in school by age, city and sex. BuenosAires, Mexico City and Lima]

The organization of the educational system partially explains the differences in the rate of change in the enrollment during adolescence in Lima and Mexico City. The ages under analysis cover two terminal options (lower secondary and upper secondary) for Mexico City, while for Lima, leaving school concentrates at the expected ages for finishing the secondary education and obtaining a diploma (around 16 years of age). In Lima there is a clear moment for finishing secondary school that represents a turning point in the life of Peruvian adolescents. In contrast, in Mexico there is a less clear standard age for leaving school. Furthermore, in spite of the earlier dropout from school in Lima compared to Mexico City, the graduation rates from secondary are larger which suggest that the educational system in Lima is more efficient in graduating in time the students that finish secondary while in Mexico City the retention rates and the dropout before getting the secondary diploma are higher. According to the data used for this paper, 82.4% of the population between 19 and 21 years of age living in Lima would have finished secondary (equivalent to 11 years of education), while the same proportion for Mexico City was below forty percent (37.9%).<sup>1</sup>

From figure 2 it is also possible to infer the sex differentials in enrollment in the three settings. There is a large gender differential in school attendance in Lima after age 16 that consistently grows afterward. By age 18, the gender gap in school enrollment is above ten percent points. This pattern largely contrasts with Mexico City and Buenos Aires, where the differentials by sex are smaller or negligible.

In the two contexts where the timing for leaving school are more clearly defined (Buenos Aires and Lima), there is a large coincidence with the timing of entering into the labor force

---

<sup>1</sup>. The educational system in Mexico is divided in lower secondary (nine years of education) and upper secondary (twelve years of education). The 37.9% refers to those in the age range (19 to 21) who have twelve years of education or more. The percentage of those 19 to 21 who finished lower secondary was 78.7%, which is closer to—but still below—the completion rates for Lima.

(Figure 3). In the case of Lima, the participation rates of the youth are already high before the legal age to work. By age 14, one in five and close to one in four male and female adolescents respectively will be working. However, the participation rates for women increase sharply between ages 16 and 18, which coincide with the end of their secondary education. In the case of Buenos Aires, the percent of adolescent working is particularly low until around age 18 where there is a rapid increase. In Mexico, we find again the pattern of a more gradual increase in participation rates along the period analyzed, especially for young men.

[Figure 3. Percent working by age, city and sex. Buenos Aires, Mexico City and Lima]

There are also differences in the labor participation among adolescent women in the three settings. Following the national pattern of low female participation rates, in Mexico it is more common for girls to stay out of the labor force, even when they have already left school (Table 2). The proportion of young women working in Mexico City remains lower than the same figure for Buenos Aires and Lima even beyond the school years (data not shown). The labor market still plays a weaker role in structuring the life of young women in Mexico, while it may be more relevant in Lima and Buenos Aires.

To explore the coordination of the timing in leaving school and entering the labor force and the combination of statuses (in this case the student and worker roles), table 2 shows the distribution of adolescents using four possible statuses that combine school enrollment and labor participation. During the early adolescence (14 to 16 years of age) the most frequent status is that of full time student (studying and not working), although with large differences in the percentages that correspond to the differences in the enrollment rates all ready

described (table 1). In Argentina is clear the little combination or overlap of statuses (school and work) and Lima is the context which allows, at this age, a larger combination of statuses (more heterogeneous trajectories). In contrast, in Mexico most of those working are no longer in school in the case of male adolescents, while females who are not full time students fall mainly in the category “not working and not studying”.

[Table 2. Percent distribution of the school enrollment and working statuses by age, city and sex. Buenos Aires, Mexico City and Lima]

For those between 17 and 19 years of age, being a full time student concentrates the majority of cases in Buenos Aires (55.6% for females and 53.8% for males). In the other two settings, most of the youth has moved into other statuses. In Lima, adolescents are more dispersed along the different work and school combinations. The combination of work and school remains as an important category. Around 17 percent of the young males 17 to 19 were studying and working in Lima. In contrast, only around one in ten male adolescents were in school and working in Buenos Aires and in Mexico City. In Lima, the combination of work and school is equally common in early and late adolescence for males and it also remains high for women.

Another interesting hint into the understanding of what adolescents are doing in each site is the comparison of the percent not studying not working. For women, it can be largely identified—but not exclusively—with the participation in domestic work, especially for the case of Mexican women. For men, it can be read as idleness. The city differentials for men are wide. In Lima, 23.2 percent of adolescent males 17 to 19 are not working nor studying. The same percentage decreases to 11.0 in Mexico and 6.1 in Buenos Aires. Interestingly, the

concentration in the status of not working and not studying is very similar for male and female adolescents in Lima. While we can expect that a large proportion of those females not working nor studying in this age group are participating in housework and childcare, it is less plausible that this explanation applies to understand the large proportion of young males in Lima who are idle. In any case, the data suggest that for a large proportion of the adolescents in this city, the social institutions that regulate the transitions to adulthood (in this case, the school and the labor market) have a weaker role in determining the paths of the youth.

Our first hypotheses suggested that the greater coupling of the social institutions with adolescents' lives would result in lower heterogeneity in Buenos Aires and higher in Lima, with Mexico in an intermediate position. Figures 5 and 6 show the entropy measures of heterogeneity for school and work statuses for males and females between 14 and 21 years of age in the three settings. The age pattern depicted in both figures supports the hypotheses of greater heterogeneity in the life trajectories of the youth in Lima and the lowest in Buenos Aires. The low levels of heterogeneity in the latter since early adolescence are explained by the low combination of statuses (school and work) and the high enrollment during the ages analyzed for this paper.

[Figures 4. Theil's Entropy Index for School-Work Status by age and by sex]

In Lima, the heterogeneity keeps rising steadily after age 14 and reaches its maximum peak—close to one—by age 17, a turning point in the life of the Peruvian youth given that it coincides with the completion of secondary education. The paradox in the case of Lima is that while the educational system is more efficient in terms of standardizing the timing for leaving school, the trajectories of the youth differ more given the combination of roles and the

large proportion of idleness. In Buenos Aires, the entropy index rises rapidly between age 16 and 18 and it peaks during the expected age for finishing secondary school and starting tertiary studies. In Mexico, differently from the other two contexts, it is not so easy to define a transitional time for leaving school that may raise the entropy index at first given the prolonged stay of the youth in the school system.

### **Individual attributes institutional settings and school-to-work transitions**

Our second hypothesis refers to the influence of individual attributes as sources of different trajectories among adolescents in the three settings. According to this hypothesis, we would expect that in Lima and Mexico City, the sex and the socioeconomic backgrounds of the youth will be more important in differentiating the school-to-work statuses, while in Argentina these variables will be less influential. To test the hypothesis, table 4 and tables 5 and 6 summarize the effects of sex and the socioeconomic background on school enrollment and work statuses respectively. The tables included the estimated probability of working and/or studying at three different ages (14, 16.5 and 19) for young men and women (table 4) and for individuals in the twentieth (low SES) and the eightieth (high SES) percentiles of the socioeconomic index. Along with the estimated probabilities, we present the differences between the two scenarios (low and high SES). The lower the gap in the estimated probabilities, the lower the influence of sex or SES will be in defining diverse paths for adolescents in terms of their working and school enrollment statuses. In addition, we would expect that the effect of sex and of SES will be weaker during the early adolescent years, especially in Buenos Aires where most of the children were only studying. As age increases, we can expect that the influence of SES will be also more relevant in explaining the enrollment and working outcomes for the youth.

We first analyze the differences in the probabilities of studying and not working, that is, the probabilities of delaying the entry into the labor market and the transition out of school. In this specific case, the evidence supports in general our hypotheses of weaker effects in Buenos Aires and larger in Lima and Mexico City during the early adolescent years. In the three settings, the differentials between the estimated probabilities for low and high SES scenarios are the largest in this category and increase—in general terms—with age. For male adolescents, in the scenarios for ages 14 and 16.5, Lima has the largest differentials, followed by Mexico City, and all the differences are significant. However, by age 19 Lima shows another trend. While in Mexico and Buenos Aires the differential by SES remains high, for Lima it is notoriously reduced (from 0.378 for the estimated probability at age 16.5 to 0.151 at age 19). The reverse in the trend for Lima may be linked to the timing for completing the secondary education in that city. Although the probabilities of attending school and being only a student are small in the low SES scenario, they are also small—the smallest by far for the three settings—in the high SES context.

[Tables 4a and 4b about here]

For women, the evidence for Lima is even more contradictory. In none of the cases and categories, the differences in the probabilities for the high and low SES scenarios were significant, suggesting a very weak effect of socioeconomic background on the school and work statuses. We had seen before that the enrollment rates are notoriously low for women in Lima compared to the other settings and that there is a large gender gap between male and female adolescents in this metropolis. This result suggest that a personal attribute—gender—is more important in defining the opportunities to stay in school and delay the entry into the labor force than SES in the Peruvian case. It also points to the importance of considering

other individual attributes to understand the sources of inequality in the structure of opportunities of the youth and, thus, in the school and labor outcomes during adolescence.

In contrast with the results for Lima, the comparison of the results for females between Mexico City and Buenos Aires do support our hypothesis. The differentials by SES for female adolescents are larger in Mexico City than in Buenos Aires in the three age scenarios included in table 4b for the estimated probabilities of “only studying”.

The estimated probabilities in tables 4a and 4b also suggest how SES influences the different paths after leaving the role of “only student” in the three metropolises. The results again vary by gender. For male adolescents in Lima, it is clear that SES has a strong influence in starting to work since early ages (scenario for age 14). When adolescents are not full time students, a low SES is largely linked to greater probabilities of working and studying and, increasingly, with only working as age augments. In the descriptive statistics we saw that the percentage of not working and not studying (idle) is high in Lima. Our results suggest that SES is not linked to the probability of being not working nor studying among the male adolescents in this city.

For Mexico, it is clear that the probabilities of combining statuses (work and school) are low regardless of the SES and that the differences in the paths are defined by the entry into the labor force linked to leaving school. Although the probabilities of combining statuses are low, the results from the multinomial models suggest that they are positively associated with a higher SES. Finally, in Buenos Aires, even when moving into the labor force, the paths vary by SES. According to the scenario by age 19, the probabilities of working and studying are higher in the high SES simulation and the differentials are the largest for the category “only



working” where the probabilities are notoriously higher for the low SES simulation. The positive significant differential in the probabilities of combining statuses that we see for the Mexican and Argentinean case suggest that for higher SES adolescents, the possibility of combining work and school may represent an option to stay longer in school.

For women in Buenos Aires, the pattern is similar to the one observed for men. By age 19, the estimated probabilities suggest that the highest the SES, the more frequent combination of statuses. In contrast, in the low SES scenario the probabilities of only working or of being out of the labor force are significantly higher. For Mexico City, it is interesting to note that the differentials in the probabilities of working are small between the two SES scenarios estimated in table 4b. The difference in the paths of female adolescents lays in the greater probabilities of staying longer in school in a high SES scenario versus staying out of school and out of the labor market in low SES contexts.

In summary, the analysis of the differences in the estimated probabilities by SES suggests the need to reformulate and be more specific regarding the second hypothesis so that we consider the timing of the transitions or the turning points in the three experiences under analysis. We do find some evidence that during the early adolescent years, the weight of the socioeconomic background is more important in Mexico City and Lima than in Buenos Aires, where the trajectories of the youth are more standardize. The reproduction of the patterns of social inequality can be traced since early adolescence in Mexico City and Lima, where the resources and opportunities for the low SES youth are notoriously more constrained compared to those in a more favorable socioeconomic contexts. However, linked to the timing in leaving school and entering the labor force, SES will play a greater role in defining the paths of the youth in Buenos Aires later in their lives (probably in the late teen years and early

twenties). The influence of SES in defining the probabilities of staying in school and out of the labor force weakens as age increases for those settings where the timing of the transitions occur early (Lima and, to a less extent, Mexico City) mainly because even some of the high SES youth will have experienced one or both transitions. Secondly, the results for women in Lima suggest that there are other dimensions—in this case gender—which may be more important as sources of inequality in the access to resources and opportunities defining greater heterogeneity in the experiences of the youth during the adolescent years.

**Conclusions. Social inequality, institutional settings and school-to-work transitions in Latin American metropolises**

(TO BE DEVELOPED)

What we have illustrated so far is that the pattern for leaving school in the three settings is different. Although there are variations in magnitude, in the three settings there is a group of adolescents with constrained opportunities to continue their education, which will mark a clear difference in terms of their future options and paths. In Lima, the educational system is more efficient in graduating a large proportion of the youth during the adolescent years. However, after completing their secondary education, they face limited options to continue their tertiary studies and most of them are driven out of the school system—and most probably into the labor market—earlier than in the two other contexts. In Mexico City, the low graduation rates from lower and upper secondary school suggest that, although the time for leaving school is delayed, there is a large problem of in-grade retention. However, the variety of options to continue their secondary education (academic track, vocational options, long distance education, among others) allows adolescents to remain somehow connected to the educational system. In Buenos Aires, the school system structures the life of individuals during most of their adolescent years. Around age 19, more than half of the youth will still be at school. In these terms, Buenos Aires shows a more mature educational system that will

also absorb a larger proportion of those finishing secondary school into tertiary education. Although the timing for leaving school may be delayed beyond the adolescent years for most of the young people in Buenos Aires, the data also suggest very different paths for a half of them who are able to stay beyond their years of secondary school

.....

Guidelines for the discussion:

1. Institutional differences and educational and labor outcomes for the youth in the three settings: summary of results linked to our initial hypotheses.
2. More references to specific aspects of the institutional settings in each metropolis that may be linked to the outcomes. F.e. access (supply) and opportunities to continue in tertiary education; flexibility of the systems; efficiency of the educational systems.
3. Some references to the labor market and differences among the three settings.
4. Differences by sex: not explored, but for future reference. As Katzman and Filgueira set it, the family realm seems to be more important in grading the transitions for women. But it is interesting to explore how the trajectories are gendered in different degrees in each context (Reformulate the hypotheses of individual attributes—specifically re. gender—vs. institutional influences)
5. General conclusion—institutional arrangements and the school and work transitions in LA metropolises.

## REFERENCES

- Abdalá, Ernesto. 2002. Jóvenes, educación y empleo en América Latina, Organización Internacional del Trabajo (OIT).
- Baker, David y Gérald LeTendre (2005). National Differences, Global Similarities. World Culture and the Future of Schooling. California: Stanford University Press.

- Balán, Jorge, Harley L. Browning y Elizabeth Jelin. 1977. El hombre en una sociedad en desarrollo. México: Fondo de Cultura Económica.
- Binstock, Georgina and Marcela Cerruti. 2005. Carreras truncadas. El abandon escolar en el nivel medio en la Argentina, Buenos Aires: UNICEF-Oficina Argentina, 143 pp.
- Buchmann, Marlis. 1989. The Script of Life in Modern Society. Entry into Adulthood in a Changing World, Chicago: The University of Chicago Press.
- Breen, Richard and Marlis Buchmann. 2002. "Institutional Variations and the Position of the Young People: A Comparative Perspective" in *The ANNALS of the American Academy of Political and Social Science*, 580; 288-305.
- Castells, Manuel. 2002. La Era de la Información. La Sociedad Red, volume I, México: Siglo Veintiuno Editores, 590 pp.
- CEPAL, 2004. Panorama Social para América Latina 2004. Santiago de Chile: Comisión Económica para América Latina y el Caribe. <http://www.eclac.org/publicaciones/xml/0/13520/L575.pdf>
- \_\_\_\_\_. 2003. Juventud, pobreza y desarrollo en América Latina y El Caribe. Comisión Económica para América Latina y el Caribe, CEPAL.
- Chacaltana, J. 2004. Empleo para los Jóvenes. Cedep, GTZ, Cepal.
- Duncan, Otis Dudley y Beverly Duncan. 1955. "A Methodological Analysis of Segregation Indexes", American Sociological Review 20-2 (April 1955) pp. 210-217.
- Esping-Andersen, Gosta. 1990. The Three Worlds of Welfare Capitalism, New Jersey: Princeton University Press.
- \_\_\_\_\_. 1999. Social Foundations of Postindustrial Economies, Oxford: Oxford University Press.
- Filgueira, Carlos y Fernando Filgueira. 2002. "Models of Welfare and Models of Capitalism: The Limits of Transferability" in: Models of Capitalism. Lessons for Latin America, Evelyne Huber (editor), Pennsylvania: The Pennsylvania State University Press, pp. 127-157.
- Filgueira, Carlos, Fernando Filgueira and Alvaro Fuentes. 2001. "Critical choices at a critical age: youth emancipation paths and school attainment in Latin America", Washington DC: Inter-American Development Bank, 49 pp.
- Filgueira, Fernando. 2005. "Welfare and Democracy in Latin America: The Development, Crises and Aftermath of Universal, Dual and Exclusionary Social States", United Nations Research Institute for Social Development, 58 pp.
- Filmus, Daniel (2001), "La educación media frente al mercado de trabajo: cada vez más necesaria, cada vez más insuficiente", in Cecilia Braslavsky (org.), La educación secundaria. Cambio o inmutabilidad. Buenos Aires: UNESCO-Santillana.

- Fussell, Elizabeth, Anne H. Gauthier and Ann Evans. 2007. "Heterogeneity in the Transition to Adulthood: The Cases of Australia, Canada, and the United States" in European Journal of Population, 23: 389-414.
- Fussell, Elizabeth. 2005. "Measuring the Early Adult Life Course in Mexico: An Application of the Entropy Index" in Advances in Life Course Research, 9: 91-122.
- \_\_\_\_\_. 2006. "Structuring the transition to adulthood: An entropy analysis of the early life course in the United States, 1880 to 2000". Population Association of America Meeting, March 29-April 1, Los Angeles, California.
- Gallart, María Antonia, coord. 2000. Formación, pobreza y exclusión: los programas para jóvenes: trabajos del Seminario. Montevideo: CINTERFOR - OIT.
- Gauthier, Anne H. 2007. "Becoming a Young Adult: An International Perspective on the Transitions to Adulthood" in European Journal of Population, 23: 217-223.
- Grant, Monica J. and Frank Fustenberg Jr. 2007. "Changes in the Transition to Adulthood in Less Developed Countries" in European Journal of Population, 23: 415-428.
- Hafner-Burton, Emilie, and Kiyoteru Tsutsui. 2005. "Human Rights in a Globalizing World: The Paradox of Empty Promises." American Journal of Sociology 110, 5: 1373-1411
- Huber, Evelyn. 1995. Options for Social Policy in Latin America. Neo liberal versus Social Democratic Models. Discussion Paper 66. United Nations Research Institute for Social Development.
- IESALC. 2006.
- Kent, Rollin and Rosalba Ramirez. 1998. "La educación superior en el umbral del siglo XXI" in in Un siglo de educación en México, Pablo Latapí Sarre (coordinator), México: Consejo Nacional para la cultura y las Artes and Fondo de Cultura Económica, vol. 2, 298-323.
- Kaztman, Ruben and Fernando Filgueira. 2006. "Las normas como bien público y como bien privado: reflexiones en las fronteras del enfoque AVEO", Documento de Trabajo del IPES. Aportes Conceptuales. Uruguay: Universidad Católica, 31 p.
- Kaztman, Ruben. 2002. "Convergencias y divergencias: exploración sobre los efectos de las nuevas modalidades de crecimiento sobre la estructura social de cuatro áreas metropolitanas en América Latina" en Trabajo y ciudadanía: los cambiantes rostros de la integración y exclusión social en cuatro áreas metropolitanas de América Latina, Ruben Kaztman and Guillermo Wormad (coordinators), CEBRA.
- Marukami, Yuki and Andreas Blom. 2008. "Accessibility and Affordability of Tertiary Education in Brazil, Colombia, Mexico and Peru within a Global Context", Policy Research Working Paper 4517, The World Bank, Latin America and Caribbean Region Human Development Sector.
- Meyer, J. and Rowan, B. (1977). "Institutionalized Organizations: Formal Structure as Myth and Ceremony ", The American Journal of Sociology 83(2): 340-363.

- Meyer, J., Boli, J., et al. (1997). "World Society and the Nation-State". American Sociological Review ,103(1): 144-181.
- Mendoza, Javier. 1998. "La educación superior privada" in Un siglo de educación en México, Pablo Latapí Sarre (coordinator), México: Consejo Nacional para la cultura y las Artes and Fondo de Cultura Económica, vol. 2, 325-352.
- Modell, John. 1989. Into one's own: from youth to adulthood in the United States, 1920-1975, California: University of California Press.
- Muñoz Izquierdo, Carlos. 1998. "Efectos de la escolaridad en la fuerza de trabajo" in Un siglo de educación en México, Pablo Latapí Sarre (coordinator), México: Consejo Nacional para la cultura y las Artes and Fondo de Cultura Económica, vol. 1, 175-199.
- Padua, Jorge. 1979. El Analfabetismo en América Latina, Jornadas 84, México: El Colegio de México, 192 p.
- Padua, Jorge. 1998. "La educación en las transformaciones sociales" in Un siglo de educación en México, Pablo Latapí Sarre (coordinator), México: Consejo Nacional para la cultura y las Artes and Fondo de Cultura Económica, vol. 1, 84-149.
- Padua, Jorge. 2004. "Situación actual y algunos escenarios prospectivos de la educación superior en México" in CIENCIA ergo sum, Universidad Autónoma del Estado de México, 11(2): xxvi-xxxviii.
- Portes, Alejandro and Bryan R. Roberts. 2005. "La ciudad bajo el libre mercado. La urbanización en América Latina durante los años del experimento neoliberal" en Ciudades Latinoamericanas: Un Análisis Comparativo, Alejandro Portes, Bryan R. Roberts and Alejandro Grimson [editors], Buenos Aires: Prometeo Editores, p. 19-74.
- Sassen, Saskia. 1994. Cities in a World Economy, California: Pine Forge Press, 157 p.
- Shanahan, Michael J. 2000. "Pathways to Adulthood in Changing Societies: Variability and Mechanisms in Life Course Perspective", Annual Review of Sociology, 26: 667-692.
- Sidicaro, Ricardo y Emilio Tenti Fanfani. 1998. "Introducción", en Ricardo Sidicaro y Emilio Tenti Fanfani (comps.), La Argentina de los jóvenes: entre la indiferencia y la indignación. Buenos Aires: UNICEF - Losada.
- SITEAL (no date). "Ingreso y abandono de la educación secundaria en América Latina", Boletín Num. 2. Sistema de Información de Tendencias Educativas en América Latina, IPE-UNESCO, OEI. [http://www.siteal.iipe-oei.org/boletin/pdf/SITEAL\\_Boletin-02.pdf](http://www.siteal.iipe-oei.org/boletin/pdf/SITEAL_Boletin-02.pdf).
- Theil, Henry. 1972. Statistical decomposition analysis. Amsterdam: North-Holland Publishing Company.
- Tienda, Marta. 2002. "Comparative Perspectives of Urban Youth. Challenges for Normative Development" in Youth in Cities. A Cross-National Perspective, Cambridge: Cambridge University Press, p. 3-18.

UAM. 2005. “Informe del Rector General, 2005. Anuario Estadístico”, Universidad Autónoma Metropolitana, México, 455 p.

Vogel, Joachim. 2002. “European Welfare Regimes and the Transition to Adulthood: A Comparative and Longitudinal Perspective” in Social Indicators Research, 59: 275-299.

**Table 1. Selected socioeconomic and institutional characteristics in Argentina, Peru and Mexico**

	Argentina	Peru	Mexico
<i>National indicators</i>			
Gross National Income per capita (US dollars) (2003-5) <sup>a</sup>	5,150	2,920	7,870
Population living below \$2 a day (2003-4) <sup>a</sup>	17.4%	30.6%	11.6%
Urban population (2003-5) <sup>a</sup>	89.9%	72.4%	75.7%
<i>Organization of the educational system and selected indicators:</i>			
Grade 9 completion rate (2001-2) <sup>b</sup>	78.0%	56.0%	47.0%
Expected age at finishing secondary	18	16	18 (15 for lower secondary and 18 for upper secondary)
Alternatives to formal academic trajectories at the secondary education	??	Available but not widely used	Variety of alternatives to complete lower and upper secondary (vocational, technical training, long-distance education)
Gross enrollment rates to tertiary education (2005) <sup>d</sup>	65.0	33.4	24.0
Demand/supply for tertiary public education and selection process	Almost universal admission to public universities	Increasing competition for available spaces in public universities.	Increasing competition for available spaces in public universities.  Admission exam conducted by the universities. A significant proportion enters directly from the public upper secondary system.



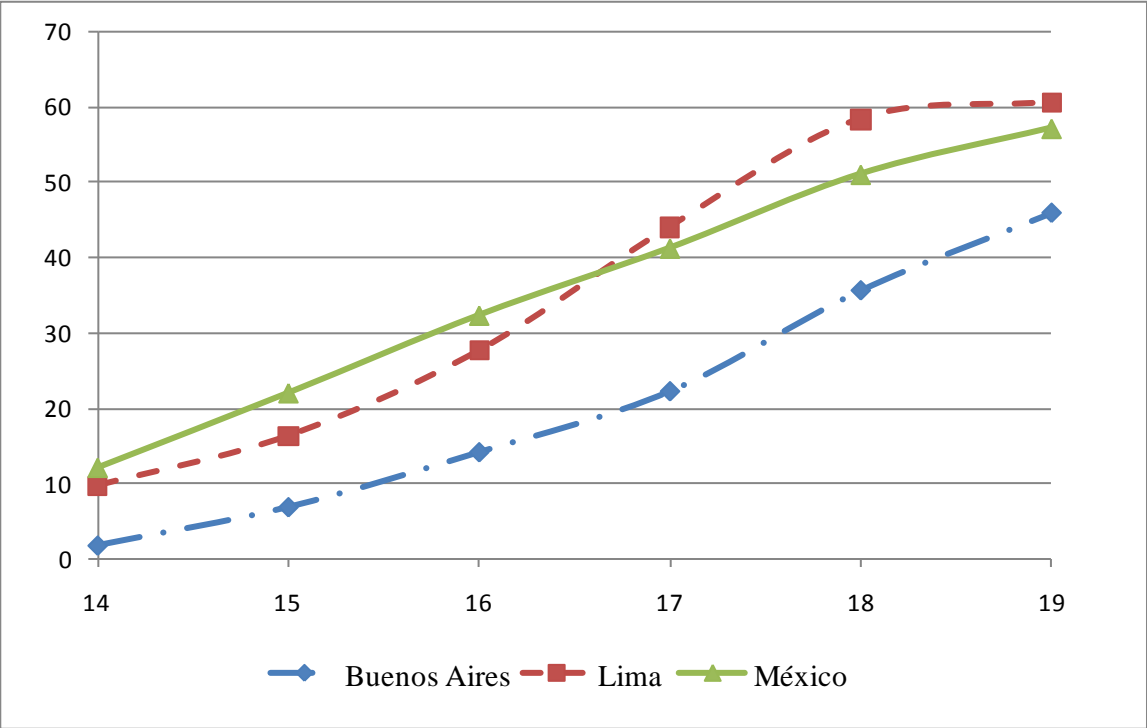
(Table 1 continues...)

Availability of other compensatory policies to support secondary and tertiary education <sup>f</sup>	Available and relevant for school retention, specially at tertiary level	Inexistent	Some programs available but with limited coverage
<b><i>Labor market regulations and selected characteristics:</i></b>			
Unemployment benefits	Available	Inexistent	Inexistent (short term protection for those in the formal sector)
Youth Unemployment rate (15-24) (2003) <sup>f</sup>	33.9%	19.2%	5.3%
Working population in the informal sector (2000) <sup>g</sup>			
National	45.0%	60.3%	35.4%
Metropolises	33.8%	53.1%	37.1%
Urban female participation rates (2000) <sup>f</sup>	49.7%	54.9%	47.5%

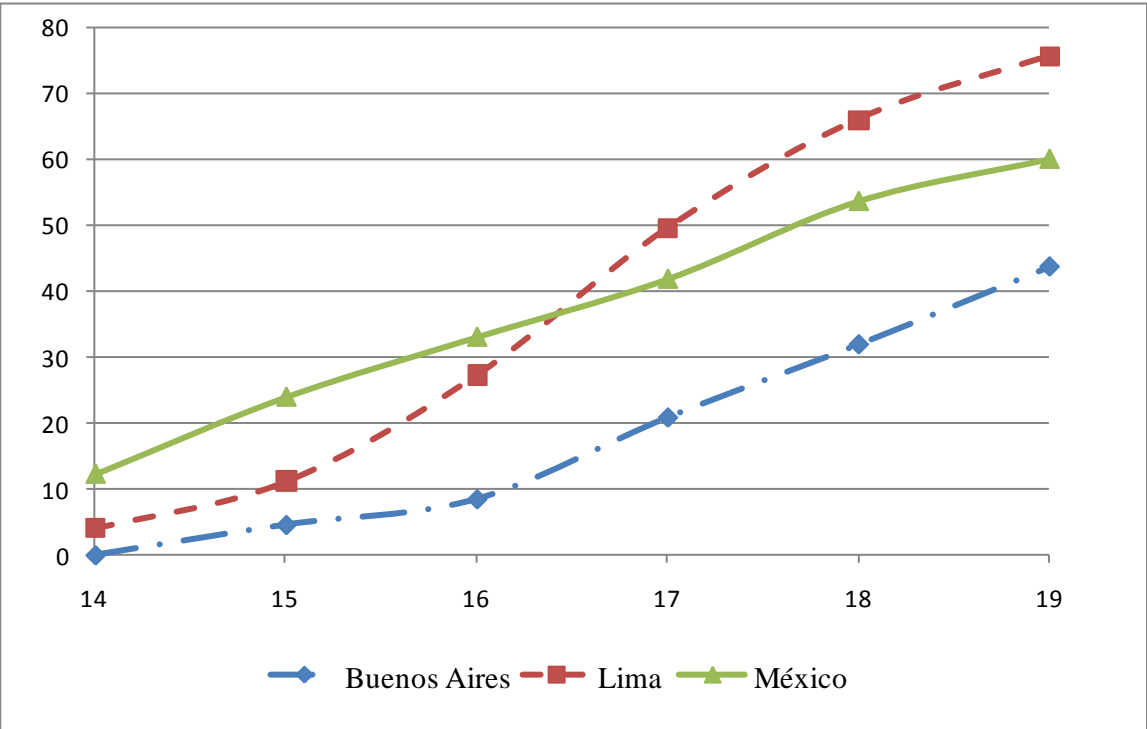
<sup>a</sup> World Bank, 2008; <sup>b</sup> World Bank, 2007; <sup>c</sup> Díaz, 2008; <sup>d</sup> UNESCO, 2007; <sup>e</sup> For Mexico and Lima, see Murakami and Blom, 2008; <sup>f</sup> ECLAC, 2006; <sup>g</sup> Portes and Roberts, 2005; the measure on poverty is based on the per capita income; <sup>h</sup> IESALC, 2006.

**Figure 2. Percent who dropped out from school by age, city and sex. Buenos Aires, Mexico City and Lima\***

(a) Men



(b) Women

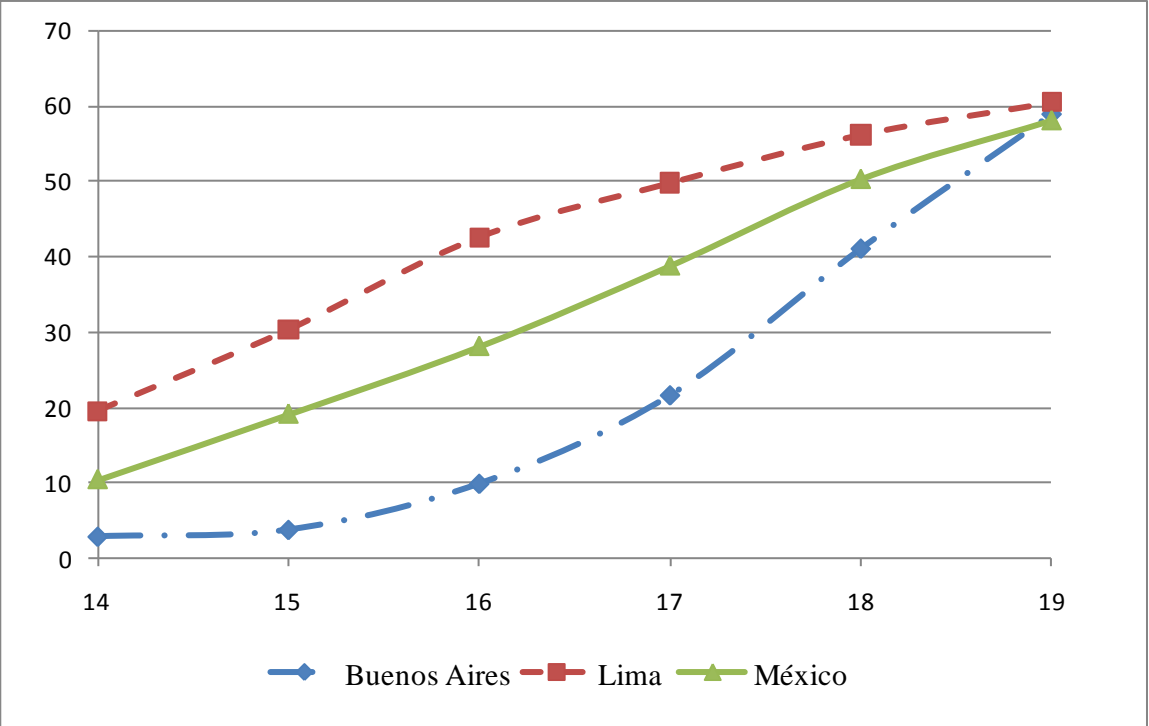


\* For Lima and Buenos Aires, the percents were calculated using moving averages.

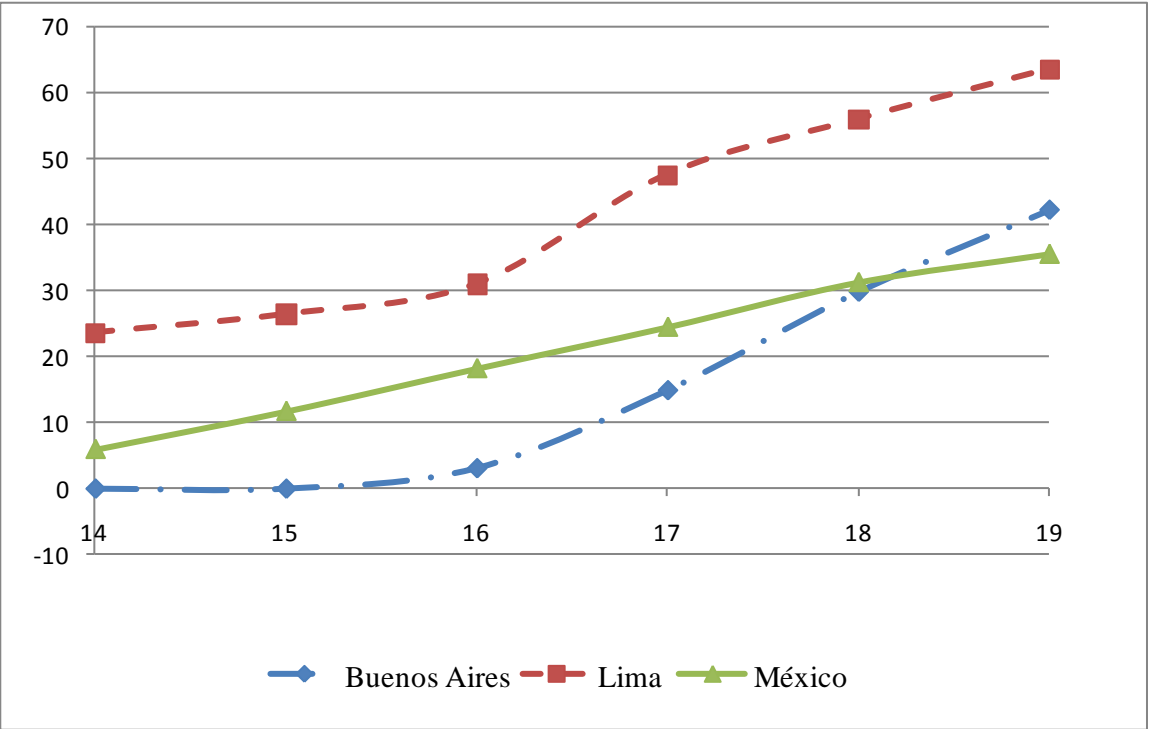
Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

**Figure 3. Percent working by age, city and sex. Buenos Aires, Mexico City and Lima\***

(a) Men



(a) Women



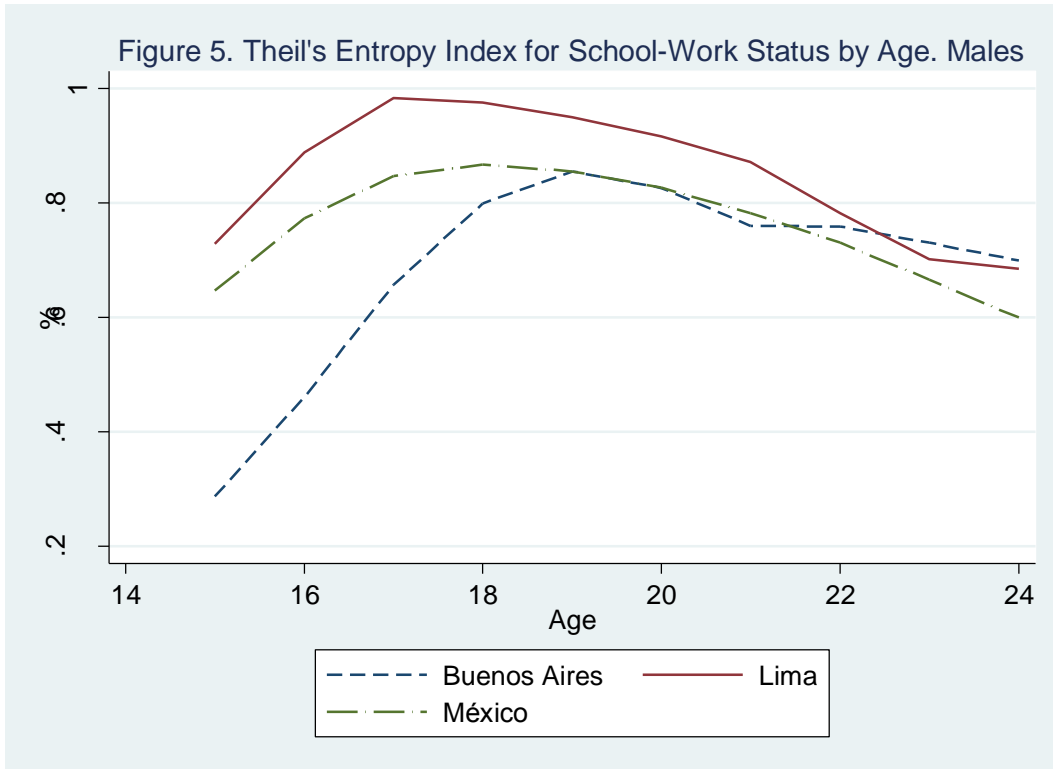
\* For Lima and Buenos Aires, the percents were calculated using moving averages.

Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

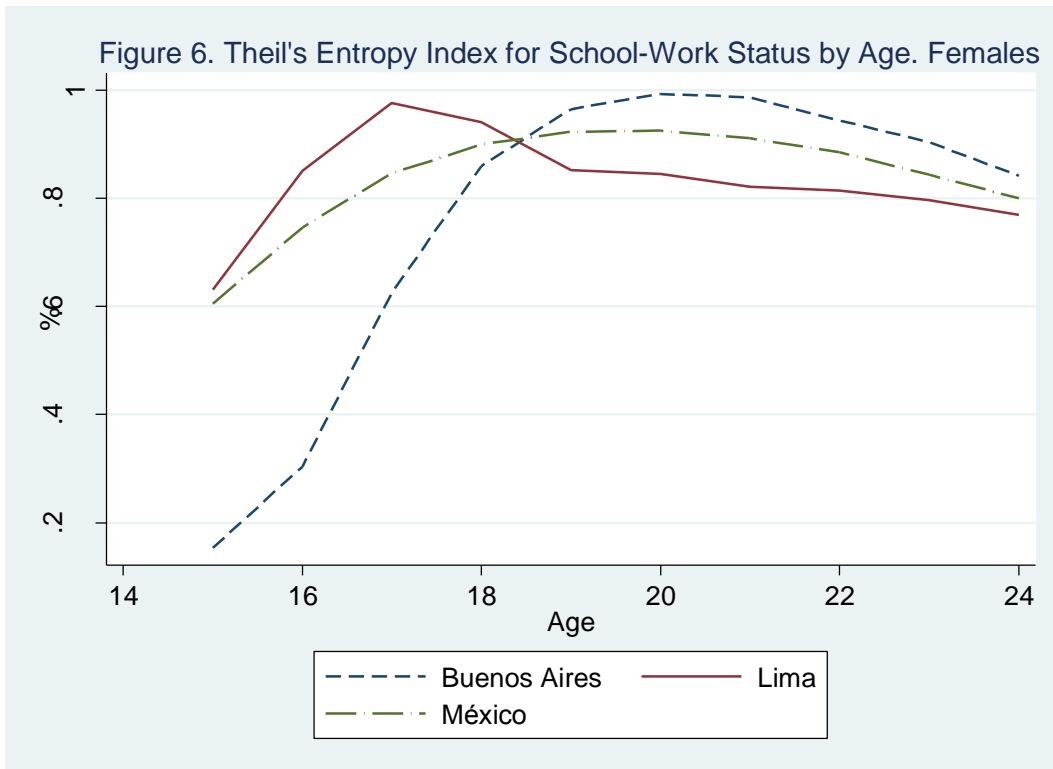
**Table 2. Percent distribution of the school enrollment and working statuses by age, city and sex. Buenos Aires, Mexico City and Lima**

	Males		Females	
	Age 14-16	Age 17-19	Age 14-16	Age 17-19
<b>Buenos Aires</b>				
Studying - Not working	90.8	53.8	95.7	55.6
Studying - Working	2.4	11.4	0.0	13.6
No studying - Working	1.4	28.8	0.0	17.7
No studying - Not working	5.5	6.1	4.3	13.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Lima</b>				
Studying - Not working	64.2	24.4	70.8	18.9
Studying - Working	19.2	17.0	18.0	14.8
No studying - Working	6.1	35.5	5.4	42.3
No studying - Not working	10.5	23.2	5.8	24.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>México City</b>				
Studying - Not working	71.9	41.9	74.9	46.1
Studying - Working	6.4	10.2	3.7	7.5
No studying - Working	12.6	36.9	7.8	23.8
No studying - Not working	9.2	11.0	13.6	22.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.



Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.



Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

**Table 4. Effects of Socioeconomic Status on School Enrollment and Working Status, Males, Buenos Aires, Lima and Mexico City**

<b>Age 14</b>												
<b>Status</b>	Estimated probability, SES=20 pctlile			Estimated probability, SES=80 pctlile			Estimated difference					
	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Buenos Aires	Lima	México			
Studying - Not Working	0.942	0.695	0.725	0.984	0.918	0.905	0.042	*	0.223	*	0.180	*
Studying – Working	0.010	0.174	0.052	0.008	0.031	0.045	-0.002		-0.142	*	-0.008	*
No Studying - Working	0.006	0.048	0.115	0.001	0.008	0.025	-0.005		-0.040		-0.090	*
No Studying - Not Working	0.042	0.084	0.108	0.007	0.042	0.026	-0.035	*	-0.042		-0.082	*

<b>Age 16.5</b>												
<b>Status</b>	Estimated probability, SES=20 pctlile			Estimated probability, SES=80 pctlile			Estimated difference					
	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Buenos Aires	Lima	México			
Studying - Not Working	0.709	0.265	0.418	0.899	0.642	0.743	0.190	*	0.378	*	0.325	*
Studying - Working	0.055	0.278	0.079	0.055	0.092	0.097	-0.001		-0.186	*	0.017	*
No Studying - Working	0.124	0.262	0.347	0.025	0.084	0.107	-0.100	*	-0.178	*	-0.240	*
No Studying - Not Working	0.112	0.196	0.156	0.022	0.182	0.053	-0.090	*	-0.014		-0.103	*

<b>Age 19</b>												
<b>Status</b>	Estimated probability, SES=20 pctlile			Estimated probability, SES=80 pctlile			Estimated difference					
	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Buenos Aires	Lima	México			
Studying - Not Working	0.147	0.042	0.148	0.440	0.192	0.440	0.293	*	0.151	*	0.293	*
Studying - Working	0.085	0.183	0.074	0.200	0.116	0.150	0.114	*	-0.068		0.077	*
No Studying - Working	0.686	0.586	0.640	0.324	0.357	0.331	-0.362	*	-0.229	*	-0.310	*
No Studying - Not Working	0.082	0.190	0.138	0.038	0.335	0.079	-0.045		0.145		-0.059	*

\* The difference in the estimated probabilities for the low and high SES is significant ( $p \leq 0.01$ )

Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

**Table 5. Effects of Socioeconomic Status on School Enrollment and Working Status, Females, Buenos Aires, Lima and Mexico City**

<b>Age 14</b>										
<b>Status</b>	<u>Estimated probability, SES=20 pctl</u>			<u>Estimated probability, SES=80 pctl</u>			<u>Estimated difference</u>			
	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Buenos Aires			
							Aires	Lima	México	
Studying - Not Working	0.982	0.778	0.770	0.995	0.843	0.901	0.013	0.065	0.131	*
Studying - Working	0.000	0.141	0.026	0.001	0.089	0.029	0.001	-0.052	0.003	*
No Studying - Working	0.001	0.029	0.055	0.000	0.027	0.036	-0.001	-0.002	-0.020	*
No Studying - Not Working	0.016	0.052	0.149	0.003	0.041	0.035	-0.013	-0.011	-0.114	*

<b>Age 16.5</b>											
<b>Status</b>	<u>Estimated probability, SES=20 pctl</u>			<u>Estimated probability, SES=80 pctl</u>			<u>Estimated difference</u>				
	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Buenos Aires				
							Aires	Lima	México		
Studying - Not Working	0.837	0.417	0.502	0.928	0.497	0.724	0.092	*	0.080	0.222	*
Studying - Working	0.011	0.208	0.048	0.031	0.145	0.065	0.020		-0.063	0.017	*
No Studying - Working	0.039	0.217	0.160	0.015	0.221	0.127	-0.024	*	0.005	-0.032	*
No Studying - Not Working	0.114	0.157	0.290	0.026	0.136	0.084	-0.088	*	-0.021	-0.207	*

<b>Age 19</b>											
<b>Status</b>	<u>Estimated probability, SES=20 pctl</u>			<u>Estimated probability, SES=80 pctl</u>			<u>Estimated difference</u>				
	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Buenos Aires				
							Aires	Lima	México		
Studying - Not Working	0.235	0.085	0.227	0.360	0.104	0.421	0.125	*	0.019	0.194	*
Studying - Working	0.083	0.116	0.062	0.337	0.084	0.107	0.254	*	-0.033	0.045	*
No Studying - Working	0.417	0.621	0.319	0.220	0.654	0.327	-0.197	*	0.033	0.008	
No Studying - Not Working	0.266	0.178	0.392	0.084	0.159	0.145	-0.182	*	-0.019	-0.247	*

\* The difference in the estimated probabilities for the low and high SES is significant ( $p \leq 0.01$ )

Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.





## End notes

---

<sup>i</sup> . The national differences in the educational and labor outcomes for the youth among Argentina, Mexico and Peru can be explained to a large extent by the differences in the rural-urban composition in each country and the presence of a largest indigeneous communities mainly in Peru but also in Mexico compared to Argentina.

<sup>ii</sup> . Marcel and Rivera (2008) propose a more empirically grounded typology of welfare regimes in Latin America. Although the typology differs from that of Filgueira and Filgueira (2002), the three settings analyzed in this paper fall in categories substantially similar. Marcel and Rivera (2008) define Argentina as a potential welfare state, Mexico as a conservative state and Peru as an informal country with a weak State.

<sup>iii</sup> . Prior research on the transitions to adulthood in the developed world has suggested a close link between the institutional context and the standardization and timing of the transitions to adulthood (Breen and Buchman, 2002; Buchman, 1989; Fussell, 2006; Fussell, Gauthier and Evans, 2007; Model, 1989; Vogel, 2002, among others). We argue that the institutional framework is useful to understand the timing and heterogeneity in the transitions to adulthood in developing countries, although the dimensions and characteristics to be considered to explain the differences may vary from those used for the developed world. An example is the prevalence of a large informal sector in many of the developing countries, which to a large extent defines the opportunities of entering into the labor market for young people, the expected returns to education and the patterns of social exclusion and vulnerability.

<sup>iv</sup> . There are more dimensions relevant in the explanation of the school-to-work transitions (see Buchman, 1989). However, in this table we only stress those that may be relevant to understand the differences in the three Latin American metropolises under study.

<sup>v</sup> . The statistics refer to the admission rates from the exams to enter the Universidad Nacional Autónoma de México (**REFERENCIA**) and the Universidad Autónoma Metropolitana (UAM, 2005) in the 2005-2006 academic year.

<sup>vi</sup> . The proportion of individuals within the 14-19 age group who declared themselves to be the household head or his/her spouse was only 1.7% in Buenos Aires, 1% in Lima, and 4.4% in Mexico City. These individuals were excluded from the sample when SES was included as an independent variable in the analysis.

<sup>vii</sup> . For example, the proportion of individuals not attending school at age 20 is estimated using the proportion for the individual ages 19, 20 and 21.

<sup>viii</sup> . In the three settings, the factor analysis produced a one-factor solution. We do not present the results of the factor analysis, but they are available from the authors upon request.