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IMF Working Paper

Youth Unemployment in Uruguay

by Jose Torres and Sidonia McKenzie

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Western Hemisphere Department

Youth Unemployment in Uruguay**Prepared by Jose Torres and Sidonia McKenzie¹**

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Abstract

Uruguay enjoys favorable social outcomes, and its labor indicators are comparable to other Latin American countries, but its youth unemployment is one of the highest in the world. To help understand this duality, we employ synthetic panels from repeated household surveys for LA6 countries from 1990-2018 to investigate the determinants of the youth-to-adult unemployment gap. We find that a large part of the Uruguayan gap cannot be explained by standard variables, which opens the possibility that other uncontrolled factors, including labor market institutions, might be at play.

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I. INTRODUCTION

The COVID-19 pandemic, the most devastating human, economic and social crisis of modern times, has disrupted the economic achievements from the past decade following the Global Financial Crisis. Worldwide, the pandemic has laid bare the extreme vulnerabilities and pre-existing inequalities in the labor market and has made them worse (ILOa, 2020). The most pervasive of these vulnerabilities is plausibly among young adults. In the typical emerging market and developing economy (EMDE), youths (aged 16 to 24, as defined by the ILO), account for roughly one-third of the working-age population and embody the human capital necessary to advance economic growth and development. Yet, young people were facing significant labor market challenges, even before the pandemic. Notably, in Latin America, about one in every five youths were unable to find a job, a rate which is three times higher than for adults (ILO, 2018). In Uruguay, the situation is even more dire. Youth unemployment, which usually occurs at the transition from the educational system into the labor market, was five times higher than for adults even before the health crisis. In fact, Uruguay is ranked in the 90th percentile of the global distributions of both the youth/adult unemployment ratio and youth unemployment.

Since the onset of the pandemic, youth labor market prospects have severely deteriorated worldwide. More than one in six young adults stopped working while those who remain employed have experienced a 23 percent reduction in working hours (ILOb, 2020). At the same time, the pandemic poses a serious threat to human capital development and lifetime job prospects. Education and training have been profoundly impacted by the lockdown measures implemented to mitigate the health crisis. A staggering 50 per cent of learners reported delays in finishing their courses, and 10 percent indicate they are uncertain about completing their studies. These statistics highlight the urgent need to re-examine the challenges faced by young people in the labor market.

In Uruguay, the impact of the pandemic on the unemployment rate, was mitigated by the government's policy for enhanced unemployment insurance (which allowed companies to temporarily suspend contracts to preserve valuable jobs).² However, the impact on youth unemployment is yet unknown as due to the pandemic the details of the traditional labor force survey are not yet published (by the time of the publication of this paper).

This paper explores the determinants of youth unemployment for six Latin American economies (Brazil, Chile, Colombia, Mexico, Peru and Uruguay), using a synthetic panel of household surveys from 1990–2018.³ We find that the unemployment rate decreases progressively with age, with the largest decline occurring for prime-aged adults (30–54), and that the age effects are the

² In fact, the unemployment rate has barely increased, also partly due to a fall in the labor participation rate, as discouraged workers stopped looking for jobs due to the pandemic. As the economy begins to reopen, the employment rate has started to gradually improve but remains well below its pre-pandemic level.

³ Similarly, (Calero, et al., 2018), build a synthetic panel for nine Latin American economies from 1990–2014 to explore labor market trajectories and earnings over the life cycle.

largest in Uruguay. We then use decomposition analysis to ascertain whether observable characteristics can explain the severity of the observed unemployment gap. The results reveal that socio-demographic features such as marital status, which affects youths' mobility, and geographical location, which affects youths' employment prospects, explain a significant portion of the observed youth unemployment differential in Uruguay. However, a large fraction of the Uruguayan youth-to-adult unemployment gap cannot be explained with traditional characteristics. This opens the possibility that other factors, including labor market institutions, might be at play.

This paper contributes to the literature on youth labor outcomes and challenges. Several studies adopt a macroeconomic perspective and document that youth unemployment is more sensitive to cyclical fluctuations in the aggregate economy than the rate of prime-age adults (Ahn, et al., 2019; Mitra & Xu, 2017; O'Higgins, 2012). Notably, Mitra and Xu (2017) find that youth unemployment rate tends to rise rapidly at the onset of a recession and has only a sluggish mean reversion.

Another strand of the literature, largely concentrated in Europe, has explored the effectiveness of active labor market policies (ALMP) and institutional reforms in addressing youth unemployment with varying degrees of success across and within different ALMP types.⁴ For example, in meta-analysis for European ALMP, Card et al. (2010) and Kluve (2010) find that programs that target the young, particularly those that involve training, appear less effective in promoting employment in the short-term compared to untargeted programs for unemployed persons. However, in the medium-term, training and job search programs yield more favorable outcomes.

The research on institutional reforms, mostly exploits the variation from regulatory changes across firms (within a country) or across countries. For instance, Hijzen et al. (2017) employ a regression discontinuity design using Italian firm-level data to exploit changes in employment protection provisions based on firm size. They find that firms facing stricter employment protection legislation utilize a greater proportion of workers on temporary contracts, which tend to be youths who are only marginally attached to the labor force. Similarly, Bassanini and Garnero (2013) use a difference-in-difference estimation for OECD countries to analyze the impact of cross-industry differences in dismissal regulations on gross worker flows. They find that more restrictive regulations reduce the rate of within-industry job-to-job transition towards permanent jobs.

Our work also contributes to the literature on the linkages between labor market policies, informality, and unemployment on youth labor market outcomes in Latin America (Kugler, 2019; Amarante & Dean, 2012 and Perry, et al., 2007). Notably, David et al. (2019) highlight the importance of reducing labor market rigidities in Latin America to improve the functioning of labor markets, which could in turn lead to better employment prospects for the young.

The rest of the paper is organized as follows. Section II outlines the characteristics of the labor market in Latin America, highlighting the challenges faced by youths. Section III describes the data and summary statistics while section IV discusses the empirical strategy and the nuances of

⁴ See Caliendo and Schmidl (2016) for a more recent and comprehensive overview of ALMP in Europe.

synthetic panels. In Section V, we discuss the results and outline the policy implications and we conclude in Section VI.

II. LABOR MARKET CHARACTERISTICS

Following the 2002 financial crisis, Uruguay had a remarkable recovery in its social and economic indicators and now ranks quite favorably among its Latin American and emerging market peers.⁵ In fact, Uruguayans enjoy one of the highest living standards in Latin America, with relatively low levels of poverty and inequality and substantial social protection.⁶ As shown in Figure 1, a high proportion of Uruguayan workers contribute to social security and most old-age persons receive a pension. They have a relatively short workweek and receive wages with adequate purchasing power. Informal employment is relatively low, and workers have access to unemployment insurance after a relatively short period of contributions.

This strong social performance partially reflects the benefits from a substantial labor reform implemented in 2005, when the newly elected government reinstated the wage councils in the private sector and established new ones for other sectors.⁷ The reform placed wage councils at the center of the bargaining process, which fostered tripartite agreements among trade unions, business organizations and government. This led to a significant increase in collective bargaining coverage rates and strengthened the regulations on wage negotiations (Mazzuchi, 2009).⁸ Notably, the share of workers protected by collective bargaining more than tripled, from 28 percent in 2000 to over 97 percent in 2005. As a result, Uruguay now has the highest coverage of collective bargaining in the region with levels comparable to those of OECD countries and the second highest unionization rate (30 percent) in the region (Kugler, 2019). The revival of the wage councils also resulted in a more harmonious bargaining process and empirical evidence suggests the reform also had positive effects on employment and wages (David, Lambert, & Toscani, 2019; Amarante, Arim, & Yapor, 2016; Mitra & Xu, 2017). Similarly, IMF (2006) reported that the confluence of wage councils and macroeconomic recovery facilitated an environment conducive to moderating wages pressures and stabilized labor relations in the country.

In recent negotiations rounds, the government made important revisions to the wage council guidelines, incorporating productivity considerations and delinking wages from past inflation. In fact, in the 2020 negotiation, the newly appointed government was able to introduce a temporary real wage decline that is tied to the decline in GDP growth, in order to preserve employment during the pandemic. Overall, the Uruguayan evidence suggests that centralized collective bargaining had a positive impact on wages and employment. However, evidence from

⁵ During the 2002 crisis the labor market rapidly deteriorated and unemployment grew to a record of 19.8 percent. At the same time, real wages fell by nearly 11 percent, due to the higher inflation and the government's attempt to consolidate its fiscal position (Mazzuchi, 2009).

⁶ In the early 1960s Uruguay had already established a welfare state as in many OECD economies, including pensions, unemployment insurance and contributory health insurance (OECD, 2014).

⁷ Wage councils were implemented for the first time in the rural sector and for domestic workers in 2008.

⁸ Since wage councils had been suspended in 1992, firm-level dominated sector-level bargaining between 1992 and 2004. However, firm-level bargaining was not as effective in achieving consensus during collective bargaining, which led to a decline in negotiations.

other Latin American countries suggests it also tends to create “insider-outsider” problems for workers not formally employed (Kugler, 2019).

Uruguayan labor laws and regulations offer a high degree of protection to workers. At the same time, executive opinion surveys signal perceptions of low flexibility and elevated labor costs, relative to other countries in the region. Figure 2 indicates that entrepreneurs consider that employment practices are perceived to be less flexible, that taxes and contributions substantially increase labor costs, and that attracting and retaining talent are somewhat difficult. Moreover, labor laws (in addition to elevated real wages and contributions) grant a high premium for overtime work, substantial number of paid leave days, and generous severance payments. Finally, fixed-term contracts tend to be for relatively short duration. These high labor costs could discourage employers from creating stable jobs, which may generate high levels of informality or temporary positions and lead to ‘insider-outsider’ problems which can trap workers that are outside of the system in low-productivity jobs and with little social protection.

A. Labor Dynamics in Uruguay

Between 2004-2014, Uruguay experienced a significant economic boom. Labor markets flourished amid buoyant growth (which averaged 5.3 percent, well above the Latin American average of 2.3 percent). Similarly, over the same period, employment and labor force participation rose by 10 and 6 percentage points respectively, and real wage increases averaged 4.1 percent per year.

However, since 2015 labor market indicators have gradually deteriorated (particularly for the most vulnerable), in tandem with the decline in growth, averaging 1.4 percent since 2015. As shown in Figure 3, since 2015 until the period before the Covid-19 pandemic, employment and labor force participation had declined by 2.5 and 1.8 percentage points respectively, while annual real wage increases had slowed to 1.6 percent. Figure 4 shows that since 2012, the median duration of unemployment had increased to 8.5 weeks (from 6.8 in 2012), which implies a decline in monthly job finding rate of 5 percentage points. Over the same period, the median employment duration had fallen to 92 weeks (from 101 in 2012), which translates into a higher monthly job separation rate of 0.4 percentage points.

B. Youth Unemployment

Despite the steadfast deterioration in labor market indicators since 2014, at end 2018 Uruguay’s headline unemployment rate, of about 9 percent, remained comparable to regional peers and other emerging economies, averaging 7 percent and 8 percent, respectively.⁹ However, as illustrated in Figure 5, at end 2018 youth unemployment (nearly 27 percent) was three times higher than the headline number. In fact, Uruguay ranks in the 90th percentile of the global

⁹ Since the onset of the pandemic, the unemployment rate in Uruguay has increased to about 11 percent, although the full impact of the crisis is yet to be seen as it is not clear how many of the workers with a suspended contract under the enhanced unemployment insurance will ultimately lose their jobs.

distributions of both the youth/adult unemployment ratio and youth unemployment rate.¹⁰ This is alarming, especially if youths are unemployed or in low quality temporary for a prolonged period, as they may not acquire the necessary skills to transition into more productive jobs (Gracia-Rubiales, 2004). Structural shifts in the labor market trajectory may arise in the medium-to long-term if the challenge of skills mismatch is not addressed.¹¹

Globally, youths face several labor-market challenges. Indeed, high youth unemployment is not unique to Uruguay or the region. However, the issue is more concerning for low-and middle-income countries where the quality of employment available to youths and low-skilled workers is more precarious. In fact, O'Higgins (2017) reports that vulnerable and/or informal types of employment tend to dominate young people's labor market experiences in low-and middle-income countries, while temporary and non-standard work are customary for youths in high income countries.

High youth unemployment is merely the proverbial "tip of the iceberg", as youths across the region also face more vulnerable employment conditions. This is illustrated in the type and nature of employment: mostly temporary, low-quality and unskilled jobs, such as machine operators in agriculture or sales and service representatives in the hotels and restaurants sector. Moreover, the prevalence of these jobs among youths is especially high in Uruguay and Mexico. For example, Figure 6 indicates that nearly 50 percent of youths in Uruguay are hired on temporary/seasonal contracts. In addition, their contracts are largely informal and concentrated in small and medium-sized firms, which commonly lack legal or social protection and employees' benefits.¹² Considering the current health crisis, this implies that youths are even more vulnerable to the economic impact of COVID-19 as relief and recovery policies (such as increasing unemployment benefits, insurance, reducing payroll and income taxes, and extending paid sick leave) are usually linked to formal employment (Loayza, 2020). As such, youths must bear the brunt of the impact of the pandemic without adequate social safety net support. Furthermore, since small and medium firms have higher failure rates (as they are less likely to overcome a negative shock), they typically experience higher job losses and labor turnover relative to larger firms (Edmiston, 2007). Moreover, (Brussevich, et al., 2020) find that the feasibility to work remotely is much less pronounced among workers who are young, in less secure work arrangements (such as temporary contracts or self-employed), and employed in small and medium enterprises (SMEs).

A puzzling aspect of youth unemployment in Uruguay pertains to the implied relationship between sectoral employment and job losses. Although, youth employment is mostly concentrated in sectors that are more sensitive to the business cycle such as commerce, hotels

¹⁰ Brazil, Spain and South Africa have higher youth unemployment than Uruguay, but this is partly explained by a higher overall unemployment. Whereas in Italy, Portugal and Argentina, as in Uruguay, youth unemployment is high although the headline number is relatively low.

¹¹ Skill mismatch could also occur as a result asymmetric information or other matching frictions in the labor market.

¹² Youths also lack the necessary skills and thus are also much less likely to work for the government where employee benefits are usually higher relative to private firms. These further limits their opportunity to receive employment protection, thereby leaving them more exposed to economic risks.

and restaurants and social services, job losses in these sectors were minimal relative to the agriculture, manufacturing and construction sectors, which have a lower proportion of young workers and have shed between 5 to 10 percent of workers since 2015 (see Figure 7).¹³ In fact, employment in the social services sector grew by nearly 9 percent within the same period. This might seem misleading. However, as noted above, the types of jobs available to youths in the commerce and social services sectors are mostly informal, which does not utilize their full productive potential. Therefore, youths are possibly underemployed despite the recorded job growth in these sectors. It is instructive to note that differentiated labor losses across sectors are not only the result of cyclical conditions but may also reflect technological shifts (as in agriculture) or competitiveness issues (as in manufacturing). More importantly, considering the economic fallout of the COVID-19 pandemic, these trends have surely been upended. As contact-intensive sectors account for a substantial share of employment in LAC and they have been the hardest hit in terms of job losses (IMF, 2020).

Interestingly, in Uruguay even the well-educated young experience high unemployment rates (Figure 8). The unemployment rate of the highly educated young is more than three times higher than the rate for adults with little education. This implies that for the young, a formal education is not enough to secure a job which suggests there might be a role for dual training systems that combine general education with apprenticeship or training in specialized skills such as programming.¹⁴ Indeed, general and job-related competencies are equally important aspects of human capital, along with education. The absence of these components is referred to as the “experience gap of young people”, which explain firms’ prevalence for hiring adults over youths (Pastore, 2015). As a result, Pastore (2015) notes that this leads to an “experience trap” because firms tend to search for workers with matching skills. Young people are thus disadvantaged, even with higher levels of education, because they need work experience to acquire the required job-related skills.

III. DATA AND EMPIRICAL METHODOLOGY

A. Data

For all countries in our sample, we utilize data from the National Statistical Institute (INE) household surveys from 1990–2018. These surveys are nationally representative high-quality cross-sectional data that offer a snapshot of living conditions at a specific time.¹⁵ Notably, every survey collects rich demographic and labor market information from respondents. In our main sample, we focus on the economically active population aged 15–64. An individual is classified as economically active if they reported: (i) looking for work during the survey week; and (ii) a

¹³ Data on sectoral job losses since the onset of the pandemic is unavailable for Uruguay. However, it is well-known that the retail, tourism and hospitality services remain greatly affected and the timeline for their reopening is still highly uncertain.

¹⁴ While there is evidence that vocational training lowers youth unemployment by around 0.3 percentage points in OECD countries (Banerji, et al., 2014), more recent studies show that conditional on education level, vocational training facilitates entry to more automatable jobs because the skills associated with this training become obsolete faster than general education skills (Hanushek et al., 2017; ILO, 2020).

¹⁵ In 2006 there was a dramatic change in the survey sampling procedure. Surveys were administered across all 19 departments in Uruguay instead of Montevideo only, which was done prior to 2006.

positive number of working hours during the previous survey period. We limit our sample to individuals in the labor force excluding those in school, retired or in the military/armed forces. The resulting sample therefore includes individuals in formal and informal work as well as those who are self-employed.

The starting point for our analysis is constructing synthetic (pseudo) panel data from time series of cross-sectional surveys (Deaton, 1985).¹⁶ The idea is that for each survey year, observations are averaged across some specific criteria (we use age, gender and education), which become the cross-section units (cohorts). These cohorts (group means) are followed over time as is customary with panel data. Based on this construction, we can observe trends in various labor market behavior, specifically (un)employment profiles, over an individual's working life and across generations, which could not be done using cross-sectional data. More importantly, synthetic panels reduce the measurement error problems inherent in individual cross-sectional regressions (Antman & McKenzie, 2007). In light of these advantages, several recent studies have used synthetic panels to examine labor market trajectories (Calero, et al., 2018); the association between schooling and informality (Levy & Székely, 2016) and the out of school and out of work youth transition in Latin America (Székely & Karver, 2015).

We construct cohorts based on age categories (seven), gender (two) and educational levels (four), which yields 56 (age-gender-education) cohorts. The seven age groups are defined by the following intervals: 15-17; 18-21; 22-24; 25-29; 30-54; 55-60 and over 61 while the customary four educational levels are used: primary, secondary, some tertiary and graduate or higher. The resulting sample size, with 29 survey years, is 1,624 observations for Uruguay.

B. Empirical strategy for estimating youth unemployment

To estimate the association between age effects and the unemployment rate, we estimate a reduced-form unemployment equation using random effects estimator, expressed as:

$$u_{ct} = \alpha + \beta Y_t + \theta_c age_c + \gamma_c X_{ct} + \varepsilon_{ct} \quad (1)$$

where u_{ct} is the unemployment rate in cohort c in time t , Y_t is the log of real GDP in time t , age_c refers to the age intervals of cohort c , X_{ct} is a vector of cohort-specific effects such as marital status, education, region, gender and ε_{ct} is a zero-mean error. Particularly, we control for the business cycle effect using real GDP growth or the output gap and region fixed effect to account for broad geographic heterogeneity.¹⁷ The parameter of interest is θ , the coefficient on age, which shows the estimated magnitude of the age-specific effect on the unemployment rate. In

¹⁶ The methodology for constructing synthetic panels is predicated on strict comparability of the underlying cross-section surveys. That is, the underlying sample across survey years should be identical such that the time-invariant characteristics remain the same over time. We have checked the questionnaires and validated that they are largely comparable across survey years.

¹⁷ In the absence of group-specific fixed effects, variation across cohorts can lead to biased synthetic panel estimates.

our analysis, the average individual or reference group is female, unmarried, aged 15-17, with primary education and informally attached to the hotels and restaurants sector.

The descriptive analysis of the dataset shows that the unemployment rate varies dramatically with age, which is supported by our regression results (see Table 1). We find that the effect of age on unemployment is heterogeneous across countries. Notably, the unemployment rate decreases progressively with age (except in Mexico), with the largest decline occurring for prime-aged adults (30–54). However, the age effects are much larger in Uruguay. This is not surprising considering that the quality of jobs is poorer on average for the young. Although our data does not allow us to control for job quality, it is instructive to document that job quality could be an indication of the quality of the match between employee and firm such that newly formed matches have a higher probability of being dissolved because of poor quality and little to no skill requirement. In other words, job matches that have survived for a longer period are plausibly of better quality and may require specific or general skills, which older workers tend to possess. Due to youths' marginal attachment to the labor market, they are potentially more exposed to changes in the firm's hiring decisions and thus likely to be unemployed more often. Furthermore, given the Tax Reform of 2007, which eliminated incentives for firms that hire youths under certain conditions, skill/job quality mismatch could help explain the higher youth unemployment rates in Uruguay relative to the other countries. A natural avenue for future research is to extend our current analysis to address the impact of youths' skill/job match quality on their labor market outcomes, which would require better data.

In Uruguay, education has a significant impact on the aggregate unemployment rate, particularly at higher levels of education. Relative to the average cohort (with primary education) and conditional on other demographic factors, individuals with some tertiary and graduate level education have lower unemployment rates by 5 and 8 percentage points, respectively. Interestingly, when we control for education and other demographic characteristics, the effect of GDP is no longer significant or has the wrong sign.¹⁸

Regarding gender, the results show that males have significantly lower unemployment rates relative to females. This could suggest that the traditional division of household labor and care is dominated by women and this begins at an early age.

C. Oaxaca-Blinder (OB) Decomposition

We perform the decomposition analysis proposed by (Blinder, 1973) and (Oaxaca, 1973) to examine the contribution of observed characteristics and endowments to variation in the unemployment rates per age group (young and old) between Uruguay and a pooled sample of LA5 countries. The OB decomposition breaks down unemployment differentials into two components: (i) *a characteristic effect*, which is the (explained) portion that arises because the young and old have different qualifications or credentials (education, area of residence, marital status and gender) and (ii) *a coefficient effect*, which arises because one group receives more favorable treatment than the other given the same individual characteristics. The coefficient

¹⁸ This might imply that age is highly correlated with other characteristics which are not controlled in the single-equation estimates of Okun's Law. This result remains if we replace the GDP growth with the output gap (as in the Okun law estimates).

effect is often interpreted as a measure of labor discrimination (unexplained effect). (Fortin, et al., 2011) refer to this as the “structural component”.

Table 2 shows the results of the decomposition analysis. We focus on individuals aged 15-24 who are not in school. Panel A shows the difference in unemployment rate between youths in each country and youths across the LA5. For instance, youth unemployment in Uruguay is 18pp higher than would be expected if persons from this age group lived in the average LA5 country.¹⁹ Meanwhile in Mexico, youth unemployment is only one percentage point above the LA5 average.²⁰

The decomposition of mean differences in youth unemployment rates reveal that there is considerable heterogeneity in the contribution of both the endowment and structural components across countries. At first glance, close to one half of the difference in youth unemployment rates is explained by the endowment component. In fact, taken alone, changes in endowments contribute positively to cross-country youth unemployment differential, which range from five percent in Mexico to 11 percent in Uruguay. However, controlling for GDP (our proxy for the business cycle), education, industry, region of residence and marital status implies an estimated decline in youth unemployment differential to seven and three percent in Uruguay and Mexico, respectively. In other words, even after controlling for several observable individual fixed effects, much of the unemployment differential remains unexplained. In particular, about 40 percent of Uruguayan unemployment cannot be explained with these controls.

The results of the decomposition by gender and finer age groups are more striking.²¹ We find that the unexplained portion falls with age and thus a large fraction of the youth-to-adult gap in Uruguay remains unexplained. Notably, the unemployment rate of persons aged 15–17 is 30 percent higher than for those older than 25, of which 17 percent can be attributed to the difference in their characteristics and 13 percent remain unexplained (the unexplained portion falls to 9 and 6 percent for those aged 18–21 and 22–24, respectively). This opens the possibility that other factors, including labor market institutions, might be at play. Ideally, the statistical significance and robustness of this possibility should be analyzed by adding various labor-market indicators as covariates to the regression. However, due to data limitations (limited data points), this association cannot be formally tested.

Notwithstanding this, the decomposition lends itself to several interesting analysis that is worth highlighting here and exploring in future work. First, Panel B shows the magnitude of each covariates’ contribution to the reduction in the youth unemployment- the explained component. We employ the (Gelbach, 2016) decomposition methodology, which accounts for correlations among various sets of covariates when they are introduced sequentially to a base model. Sequential covariate addition affects the interpretation of the results because the order in which the covariates are added is important. However, the (Gelbach, 2016) decomposition is order-

¹⁹ The explained portion is the unemployment rate that would be expected given Uruguayan endowments per age group if the returns to those characteristics were the same as in the average LA5 country.

²⁰ In the second to fifth columns, the LA5 average includes Uruguay, which inflates the difference in youth unemployment rates. The decomposition results without Uruguay are qualitatively similar and are available upon request.

²¹ These results are not shown but are available upon request.

invariant. As such, we avoid the sequencing bias that are usually inherent in traditional decomposition methods.

Surprisingly, the covariates that explain a significant part of the observed youth unemployment differential are marital status and geographical region. The apparent link between these covariates and youth unemployment is striking. Taken together they generate an unemployment gap that is 12 percent higher for youths in Uruguay relative to youths in LA5. Meanwhile in other countries they contribute between four to six percent of the youth unemployment gap.²² The positive coefficient on marital status implies that married young adults appear to be more affected by unemployment than young single adults, possibly due to their mobility (Isengard, 2003). Married young adults might be less mobile than their single counterparts or the unemployment status of one's partner might impose a negative effect on employment prospects. Geographical location also affects youth unemployment. In particular, young Uruguayans located in urban areas are more vulnerable to unemployment. They face an unemployment rate that is four percent higher than observationally equivalent youths in rural areas and LA5. This is somewhat surprising as urban areas, despite being more densely populated, are typically the main source of employment for most countries. As such, the unemployment rates tend to be lower in urban areas. This is the case in Colombia, Mexico and Peru. Notably, youths located in the urban areas of these countries face lower unemployment rates within the range of two to five percent in comparison to their counterparts living in rural areas and LA5. However, in Uruguay it appears that fierce competition among youths, given their limited occupational choice, outweighs the increased employment prospects associated with locating in urban areas.

Overall, the results of the decomposition analysis illustrate that certain characteristics impose a higher degree of vulnerability to unemployment among youths. More importantly, the findings suggest that potentially two mechanisms are at play in explaining the severity of youth unemployment in Uruguay: structural factors and socio-demographic features such as marital status, which affects youths' mobility, and geographical location, which affects youths' employment prospects.

As governments and stakeholders search for empirical and policy-oriented responses to mitigate the effects of the pandemic, the socio-economic and welfare impacts on youths should not be overlooked. Youth unemployment is an externality with negative long-term spillovers that not only affects the individuals' later labor market outcomes but also the wider economy.²³

IV. CONCLUSIONS

The pandemic has added to the slowdown in economic growth and employment since 2015, reversing the economic and social gains achieved over the preceding decade. Nonetheless, it has reinforced the need for a multi-faceted approach to rebuilding better and stronger, especially in critically affected areas such as youth unemployment. Due to their marginal attachment to the

²² Except in Chile where marital status and region of residence account for nearly 11 percent of the unemployment gap.

²³ This "scarring" effect of unemployment has been widely documented in the literature, see (Kahn, 2010), (Bell & Blanchflower, 2011), (Oreopoulos, et al., 2012) and (Amarante, et al., 2012).

labor market, youths are extremely vulnerable to macroeconomic changes and external conditions. As such, their position in the labor market deserves further attention and must be frequently reassessed to gain a better understanding of the challenges they face and create targeted policy solutions, particularly those that facilitate a faster transition into the labor market such as specialized skills training and apprenticeships. Social costs of youth unemployment should be ascertained and form part of the policy response to the pandemic, as failure to explicitly address youth unemployment would lead to worse macroeconomic and social outcomes in the long-term.

This paper adds to the literature by exploring the severity of youth unemployment in Latin America, a region characterized by varying degrees of labor market rigidities. We find that severity of unemployment is linked to certain characteristics. Demographic features such as mobility and geographic location play a role in determining the severity of youth unemployment. The most distinctive case from the sample of countries is Uruguay. Youth unemployment is exceptionally high in Uruguay and much higher among those with lower education levels. Their position in the labor market is exacerbated by the types of jobs available to them. Young Uruguayans are especially concentrated in temporary, low-quality and mostly informal jobs that are usually not tele-workable (cannot be performed remotely). Furthermore, we find that the Uruguayan labor market has special characteristics that cannot be explained with standard human capital variables, which only explain a fraction of the youth unemployment gap. Much of the gap remains unexplained, which we attribute to structural factors. Further work is needed using microlevel administrative data to better understand the youth unemployment gap.

Table 1. Determinants of Youth Unemployment

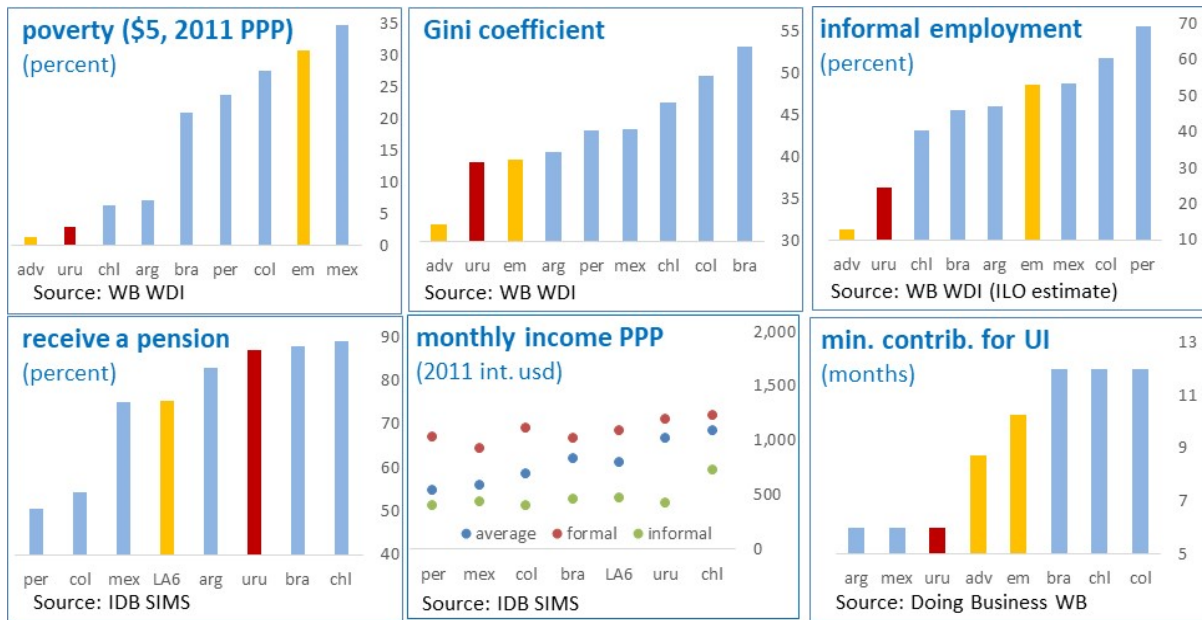
	URY	BRA	CHL	COL	MEX	PER
<i>Age effects:</i>						
18-21	-1.43**	-0.07***		0.036*	0.01	-0.03*
22-24	-0.99*	-0.14***	-0.06***	-0.02	0.00	-0.06***
25-29	-1.13**	-0.20***	-0.12***	-0.07*	-0.01	-0.08***
30-54	-1.57***	-0.26***	-0.18***	-0.11**	-0.02	-0.12***
55-60	-1.53***	-0.27***	-0.19***	-0.12**	-0.02	-0.11***
61+	-1.73***	-0.27***	-0.20***	-0.14**	-0.03**	-0.12***
<i>Education:</i>						
secondary	-0.02	-0.02	-0.01	0.03	0.017*	0.01
some tertiary	-0.05**	-0.04	-0.02	0.03	0.02	0.04*
graduate	-0.08***	-0.06	-0.04	0.03	0.05***	0.02
<i>Other controls:</i>						
GDP	-0.10***	-0.003***	-0.004***	-0.01***	-0.01***	-0.03***
male	-0.05***	-0.04***	-0.03**	-0.03**	0.028*	-0.01
urban	0.12**	0.10	0.14***	-0.23*	-0.08*	0.12***
married	-0.05	0.12***	0.04	-0.05	-0.08***	0.00
constant	1.55***	0.14***	0.11***	0.45***	0.12***	0.38***
<i>N</i>	1,530	1,169	620	723	740	620
<i>R-sq</i>	0.66	0.74	0.61	0.60	0.36	0.61

Notes: The statistics presented in the table are the results from a reduced-form unemployment regression. The results are weighted using person weights. ***, **, * indicates significance at 1%, 5% and 10% level, respectively.

Table 2. Decomposition of Changes in Youth Unemployment Rates, 1990–2018

	URY	BRA	CHL	COL	MEX	PER
<i>Panel A</i>						
Difference	0.179 (0.022)	0.103 (0.002)	0.110 (0.016)	0.138 (0.007)	0.012 (0.005)	0.030 (0.006)
Endowment (explained)	0.110 (0.019)	0.066 (0.003)	0.101 (0.014)	0.595 (0.007)	0.046 (0.005)	0.062 (0.005)
Structural (unexplained)	0.070 (0.013)	0.037 (0.003)	0.010 (0.009)	0.079 (0.005)	-0.034 (0.004)	-0.032 (0.004)
<i>Panel B</i>						
Fraction explained by:						
GDP	-0.009 (0.005)	-0.008 (0.001)	0.018 (0.003)	0.019 (0.002)	0.009 (0.001)	-0.010 (0.001)
education	-0.003 (0.017)	0.008 (0.002)	-0.013 (0.013)	-0.013 (0.006)	0.003 (0.004)	-0.008 (0.005)
industry	0.005 (0.011)	0.002 (0.002)	-0.005 (0.008)	-0.004 (0.004)	-0.005 (0.003)	0.015 (0.003)
region	0.036 (0.018)	0.007 (0.002)	0.019 (0.013)	-0.015 (0.006)	-0.049 (0.004)	-0.036 (0.005)
married	0.082 (0.018)	0.057 (0.002)	0.086 (0.013)	0.072 (0.006)	0.092 (0.004)	0.100 (0.005)

Notes: The statistics presented in the table are the results from a reduced-form unemployment regression with controls for survey year, gender, GDP, educational attainment, industry, region of residence (urban or rural), and marital status. The results are weighted using person weights. *Difference* refers to the unemployment gap between youths in each country relative to youths in the other countries (LA5). This difference can be explained by the covariates in Panel B, which are introduced as vectors of fixed effects. Each covariate in Panel B shows the fraction of its contribution to the *Explained* portion (Gelbach, 2016). What remains is the *Unexplained* portion. Standard errors are shown parentheses.

Figure 1. Cross-country Social and Economic Indicators

Sources: World Bank World Development Indicators (WB WDI); Inter-American Development Bank Labor Markets and Social Security Information System Information (IDB SIMS); World Bank Doing Business Report and authors' calculations.

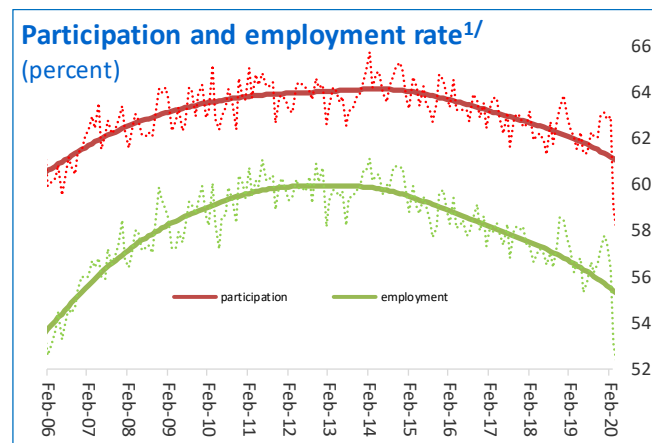
Note: Country codes are as follows: Advanced economies (adv), Argentina (arg), Brazil (bra), Chile (chl), Colombia (col), Emerging-market economies (em), Mexico (mex), Peru (per), and Uruguay (ury).

Figure 2. Indicators of Labor Market Rigidities across Countries and Regions, 2018

Sources: World Economic Forum Competitiveness Report and World Bank Doing Business Report.

Note: Country codes are as follows: Advanced economies (ADV), Argentina (ARG), Brazil (BRA), Chile (CHL), Colombia (COL), Emerging-market economies (EM), Mexico (MEX), Peru (PER), and Uruguay (URY). The arrows indicate the direction of rigidity.

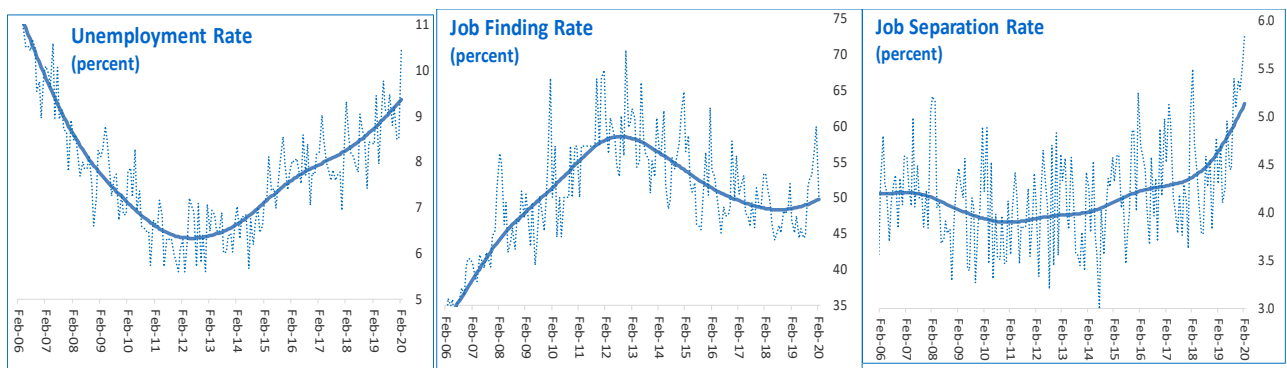
Figure 3. Labor Force Participation and Employment Rates for Uruguay, 2006–20



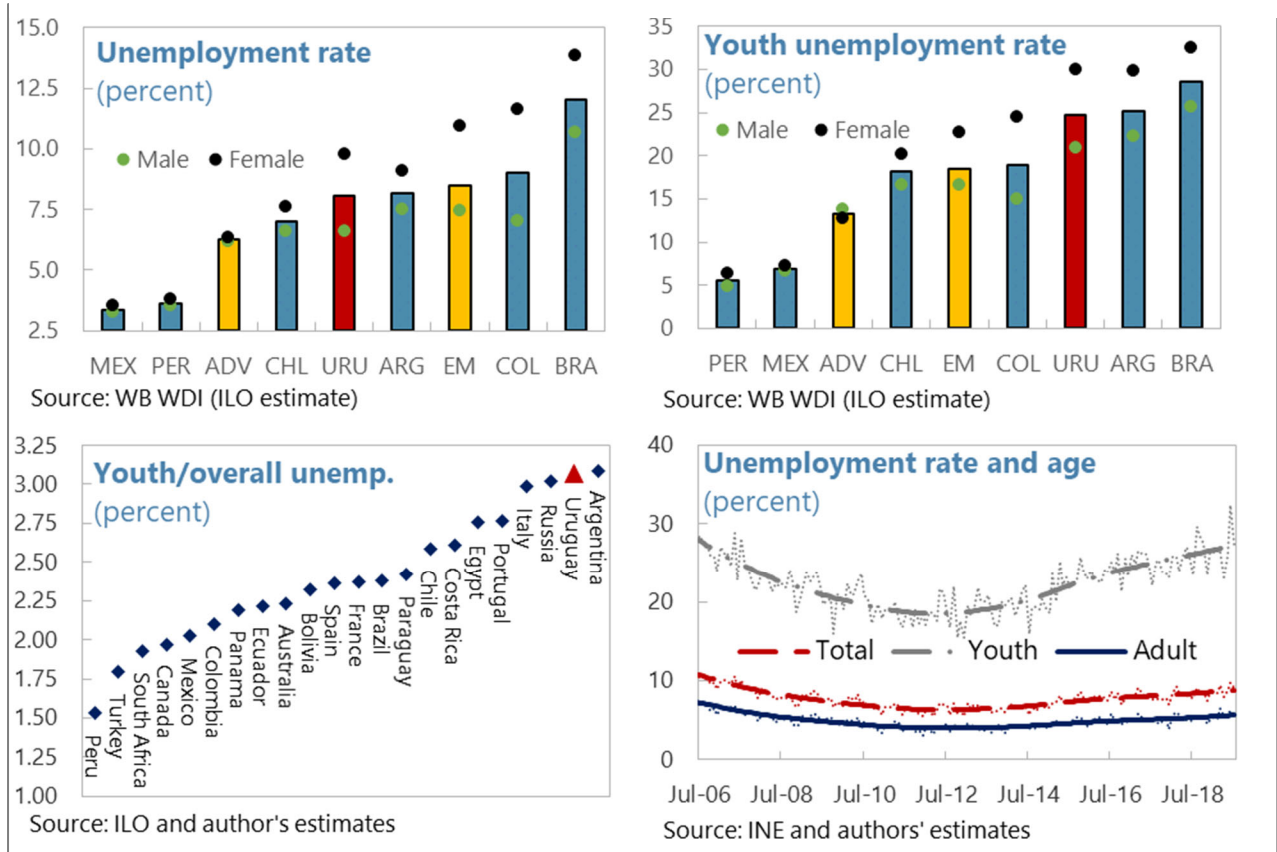
Sources: National Institute of Statistics (Instituto Nacional de Estadística – INE) and authors' estimates.

Note: ^{1/}Solid line Hodrick-Prescott (HP) trend.

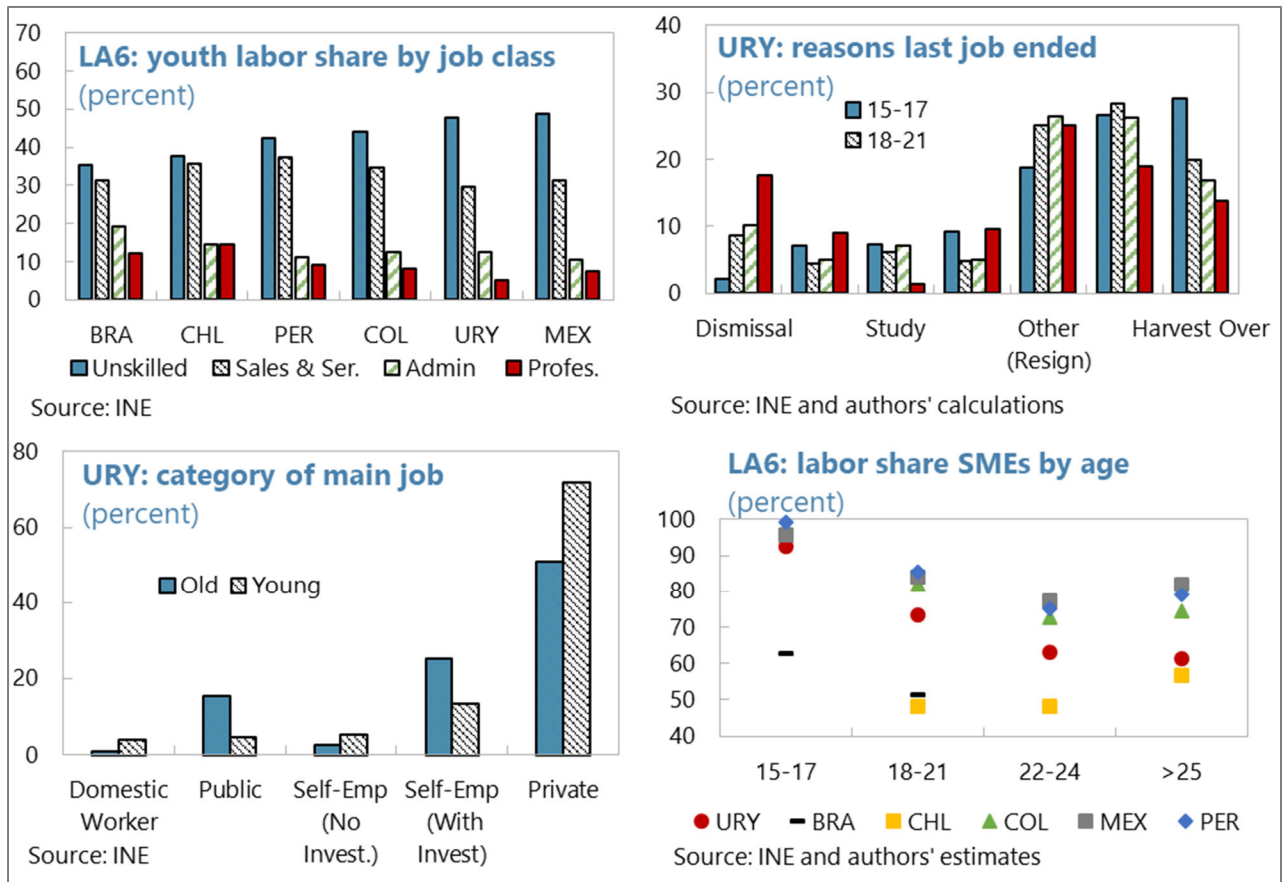
Figure 4. Unemployment, Job Finding and Job Separation Rates, 2006–20



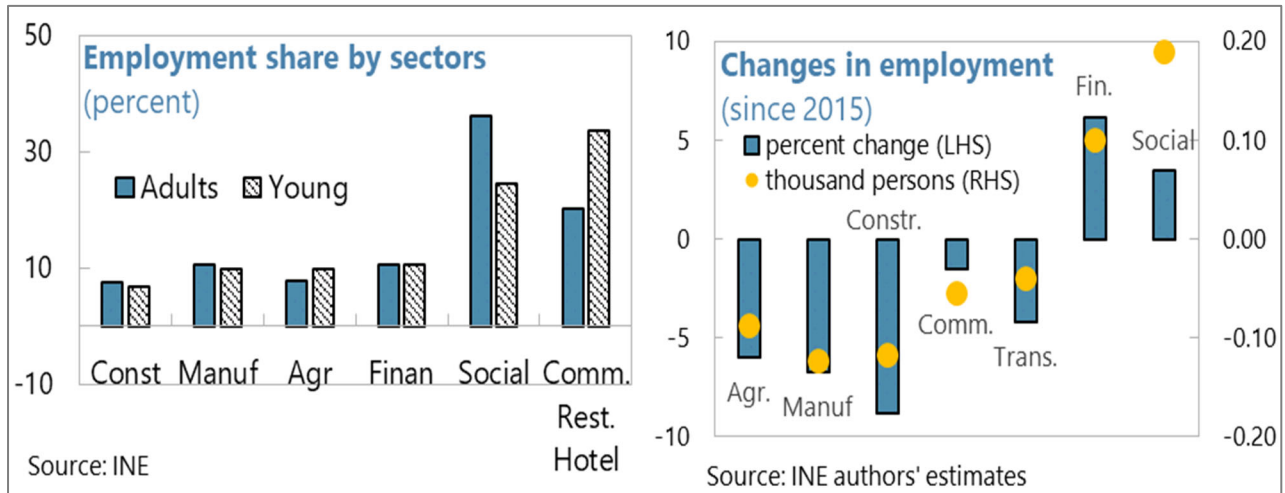
Sources: National Institute of Statistics (Instituto Nacional de Estadística – INE) and authors' estimates.

Figure 5. Unemployment Rates Decomposed by Age, 2018

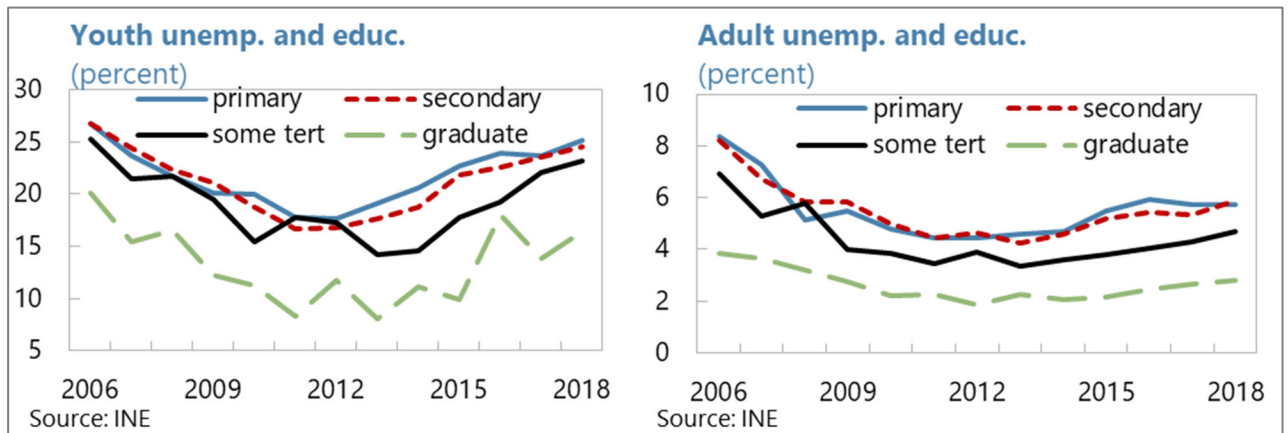
Sources: World Bank World Development Indicators (WB WDI); International Labor Office (ILO); National Institute of Statistics (Instituto Nacional de Estadística – INE and authors' calculations).

Figure 6. Forms of Employment, 2018

Sources: National Institute of Statistics (Instituto Nacional de Estadística – INE) and authors' estimates.

Figure 7. Sectoral Employment in Uruguay, 2018

Sources: National Institute of Statistics (Instituto Nacional de Estadística – INE) and authors' estimates.

Figure 8. Youth and Adult Unemployment Rates by Educational Levels, 2005–18

Sources: National Institute of Statistics (Instituto Nacional de Estadística – INE) and authors' estimates.

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