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Blessing or curse? Evidence on the inheritance of employers for a developing country

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# Blessing or curse? Evidence on the inheritance of employers for a developing country

Martin Leites (\*) y Joan Vilá (\*)

#### Resumen

Esta investigación aporta evidencia sobre la relevancia empírica de la herencia de empleadores y las redes informales de los padres en el mercado de trabajo para explicar la transmisión intergeneracional de ventajas económicas. Se analizan estos mecanismos para Uruguay utilizando un conjunto de datos basado en registros administrativos de impuestos y seguridad social. Para ello se adapta un modelo teórico para considerar el contexto de un mercado de trabajo segmentado y se presenta evidencia empírica para identificar el efecto de las redes informales de los padres en los ingresos permanentes de los hijos. Los hallazgos indican que la incidencia de la herencia del empleo es económicamente significativa, está positivamente asociada con los ingresos de los padres y es especialmente alta en la parte superior de la distribución del ingreso de los padres. Además, se encuentra que la transmisión de empleadores tiene un peso significativo para explicar la movilidad intergeneracional de ingresos. Finalmente, se presenta evidencia causal sobre el efecto asimétrico de las redes informales de los padres en los ingresos permanentes de los hijos. Mientras que acceder a un trabajo en la empresa que emplea a los padres otorga una ventaja a los hijos de hogares con mayores ingresos, este mecanismo de transmisión restringe las oportunidades laborales de los hijos de familias con menores recursos y reduce sus ingresos permanentes.

Palabras clave: movilidad intergeneracional; redes informales; herencia de empleadores; no linealidades

Código JEL: J62, J64, J24, D31

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# Blessing or curse. Evidence on the inheritance of employers for a developing country

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#### Abstract

This paper provides evidence on the empirical relevance of the inheritance of employers and parental networks as a potential mechanisms of transmission of economic advantage across generations in a segmented labor market as the Uruguayan case. The large size and the high-quality dataset -based on matched administrative tax and social security records- allow us to analyze in detail these channels. The estimates are based on OLS and to identify the causal effect of parents' informal networks on children's permanent earnings we employed instrumental variable approach. Our main findings are that the incidence of employer inheritance is economically significant, is positively associated with parents' earnings, and is particularly high at the top of parental distribution. Furthermore, the transmission of the employer is one of the main drivers of intergenerational income mobility. Finally parental informal network has an asymmetric effect on children permanent earnings: it becomes an advantage when the parents are at the top of the distribution -via wage premium-, but it is a disadvantage for those children at the bottom of the distribution.

*Keywords*: Intergenerational mobility; informal networks; inheritance of employers; non-linearities. *JEL codes*: J62, J64, J24, D31

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# 1 Introduction

Recent literature has reached a consensus on the most adequate strategies to measure intergenerational income mobility and has provided robust evidence on some stylized facts mainly for the developed world. It is well established that the intergenerational income persistence is higher than the first studies suggested, differs significantly across countries and regions, and exhibits important non-linearities (Björklund et al.) 2012; Dahl and DeLeire, 2008; Mazumder, 2005; Mitnik et al. 2015; Nybom and Stuhler, 2017; Van der Weide et al. 2021). These findings open new questions of what mechanisms contribute to the intergenerational transmission of inequality, the higher persistence at the top of the distribution and the differences between countries. From a theoretical perspective, the income association between parents and children could be determined by genetic, demographic, behavioural, institutional, sociocultural, political and economic factors (Becker and Tomes, 1979; Bourguignon et al.) 2007a; Solon, 2002). However, there is scarce evidence on the empirical relevance of these channels and how they interact.

A natural candidate to explain intergenerational earnings persistence is the transmission of occupation, jobs and employers from parents to children. This association is expected to be more pronounced when labor markets are highly segmented, with significant wage inequality and limited job mobility for workers. In such context, the earnings of parents and children tend to move together in response to labor market dynamics, contributing to the intergenerational persistence of inequality. However, the origin of employer match between parents and children could be driven by different causes: the transmission of tastes and skills, specific human capital investment decisions of the parents, family credit constraints, the role of informal networks in the labor market, firm-specific attributes that are transmitted from parents to children or nepotism. These various origins have different consequences in terms of individuals' labor market performance, resource allocation efficiency, and social welfare, as well as on the most appropriate public policies aimed at addressing the potential problems. For example, the implications for aggregate welfare and the persistence of inequality vary significantly depending

<sup>&</sup>lt;sup>1</sup>There is a group of studies for developed countries which confirm the relevance of various channels, but find that they are not sufficient to fully explain the levels of intergenerational mobility found (Björklund and Jäntti, 2012; Bowles and Gintis, 2002; Chetty et al., 2020,1)

on whether employer matching arises from the transmission of innate abilities, the efficient use of parental informal networks, entry barriers for certain jobs, or family nepotism.

The diversity of mechanisms and their implications support the importance of understanding their empirical relevance. Among the mechanisms of persistence related to labor market dynamics, scholars emphasize the role of informal networks in children's job searches, employeeemployer matching, and their potential impact on wages. Both theoretical and empirical studies support the idea that formal and informal networks are key determinants in explaining access to first or new jobs. They can contribute to the hiring process through three main channels: (i) providing information about job vacancies within the firm, the hiring process and the conditions of employment; (ii) directly influencing the hiring process; (iii) offering information and recommendations about the workers (Topa, 2011). <sup>2</sup>

Informal networks could also impact workers' wages, but the direction of this effect is ambiguous and depends on the type of networks and the labour market. (Topa, 2011) distinguished between networking related with previous work experiences of the workers -their boss, manager or plant colleagues- and informal networks related to workers' family, friends, or other social ties. While the former provides valuable information about the productivity and skills of workers, the second does not necessarily offer valuable insights for the employers. In the first case, networks could yield wage premiums, while in the second does not yield a positive effect and could even result in wage penalties. However, the potential influence of family, friends, or other social ties on the job offer process could increase the likelihood of nepotism and affect positively the workers' wages [Corak et al.] (2016]. Beyond these arguments, evidence suggests that the timing of entry into the labor market and the characteristics of one's first job have long-term effects on income trajectories over the life cycle. This highlights the importance of the reach and quality of networks available to young people and their families when seeking employment. This factor is particularly relevant in segmented labor markets with low worker mobility, which can limit how effectively networks aid in the job search and hiring process. Young peo-

<sup>&</sup>lt;sup>2</sup>Previous evidence confirm the importance of labor market networks to obtain employment for young people in the United States and Sweden (Corak and Piraino, 2011; Kramarz and Skans, 2014; Loury, 2006). Other studies confirm the persistence of employers, type of employment, or professions between parents and children (Aina and Nicoletti, 2018; Bingley et al., 2011; Corak and Piraino, 2011; Laband and Lentz, 1992; Lentz and Laband, 1990; Scoppa, 2009). These matchs are correlated with parent's networks, specific human capital decisions, the transmission of assets from parents to children or nepotism.

ple with broader and higher-quality networks tend to have easier access to high-productivity, high-wage jobs. Conversely, those with more limited networks, connected to low-productivity segments, may struggle to access high-productivity roles, often leading them toward jobs in lower-productivity, lower-wage segments.

There is limited evidence for developing countries, and findings from developed countries cannot be easily generalized. These mechanisms of intergenerational income persistence—and particularly the role of parental informal networks in children's labor market outcomes—may be especially relevant in the developing world, given the greater labor market segmentation and higher levels of inequality (Aghion et al.) [1999; Alvaredo and Gasparini, 2015; Basu, 2016; Bourguignon et al., 2007b; Breen and García-Peñalosa, 2005). Gasparini et al. (2021) contributes related evidence on this issue. They use harmonized survey data for seven Latin American countries to explore intergenerational persistence of occupations. They identify a significant correlation between the occupations of parents and children, particularly in those occupations that are professional, rural, or related to services and sales. They also find that educational mobility is higher than occupational mobility. This disconnect between educational and occupational mobility could be related to inequalities in access to job opportunities and the barriers created by segmented labour markets. However, to the best of our knowledge, the validity of this hypothesis to explain intergenerational income persistence has not yet been tested.

This paper aims to address this gap by providing evidence on the role of employer inheritance in the intergenerational transmission of economic advantages within a segmented labor market, using Uruguay as a case study. Uruguay's concentration of wealth and the intergenerational income persistence at the top of the income distribution, along with its segmented labor markets and fluctuating growth levels, make it a unique and compelling case study (Amarante et al. 2013,1]; Araya, 2015; Burdín et al., 2022; Carrasco, 2012; De Rosa, 2012; Leites et al., 2022,2]. This study uses unique matched administrative tax and social security records for 2009-2016. More precisely, we first identify the inheritance of employers based on a representative sample of more than 300.000 pairs of parents/offspring aged 20 to 39 years. We used

<sup>&</sup>lt;sup>3</sup>Previous evidence suggests that parents' networks generally increase children wages and job tenure for children with high income parents Bingley et al. (2011); Corak and Piraino (2011); Staiger (2020). The occupational transmission, in turn, is generally associated with a significant wage premium for children who share occupations with their parents (Chen et al., 2017).

<sup>&</sup>lt;sup>4</sup>Urraburu (2019) provides preliminary evidence on this issue for Uruguay.

three alternative samples, which gradually concentrate on workers with more stable links to the formal labour market. The large size and the high-quality dataset allow us to describe in detail the intergenerational transmission of employers. Our setting allows us to address three main research questions in the context of a segmented labor market of a developing country: (i) how many and which ones, inherit employers in Uruguay?, and (ii) to what extent does the inheritance of employers contribute to the persistence of inequality across generations? (iii) what is the causal effect of parents' informal networks on their children's permanent income when labor markets are segmented?

The first part of the article describes the incidence of inheritance of employers. The availability of micro-data at the individual and firm levels allows us to describe in detail the incidence of inheritance of employers by parental background (parental income percentile), gender, economic industries, and firm characteristics. To provide evidence to answer the second research question, we adapt the specification suggested by Corak and Piraino (2011) to identify the contribution of the inheritance of employers to intergenerational earning persistence. However, the inheritance of employers may respond to a direct transmission of parent's advantage through the use of job connections and informal networks, but also could be associated with the transmission of tastes, skills or parental human capital investment (Corak et al., 2016). To address the third research question we advance on two step. Firstly, to understand the role of informal networks in this context, we adapt the job search model to a segmented market. Secondly, we follow the instrumental variables strategy suggested by Staiger (2020) in order to identify the causal effect of employer inheritance on the intergenerational income transmission. Unlike Staiger that focus on children first job in US, our empirical strategy considers the labor market segment in which parents are located, and we explore whether this changes the effect of parents' networks on their children's permanent income.

Our findings first confirm that the incidence of same-firm employment is positively associated with parents' earnings, which is consistent with the findings of Corak et al. (2016) for Canada. On average, it is two times larger at the top percentiles than at the bottom. The incidence is particularly high at the top of the parental distribution, where the incidence jumps to 32.5% when we consider our baseline sample with all the samples of workers with positive earnings. When we consider children and parents with a strong attachment to the formal labor market, the incidence at the top of the parental income distribution jumps to 50%. These results yield suggestive evidence that by gradually incorporating individuals with more attachment to the formal labor market, the incidence of the same firm's employment increases, suggesting that the role of parental networks is associated with the stability of formal employment of the parents. The incidence of the inheritance of employers shows differences by children gender and strong heterogeneities by industries.

Secondly, our results suggest that the transmission of the employer is one of the main drivers of intergenerational earning persistence. The IRA is 0.565 for children who work at the same firm as their parents, which is nearly 2.5 times the average IRA for the same cohort of children and 3.7 times the IRA for children who do not work at the same firm as their parents. Finally, a novel result is that employer inheritance becomes an advantage for the next generation only when the parents are at the top of the distribution, associated with a wage premium. The opposite situation is confirmed for children who inherit and whose parents are in the income distribution's middle and lower parts. Our results based on instrumental variable strategy confirm a significant and asymmetric causal effect of parents' networks on their children's permanent income. These findings are consistent with a differential role of parental networks in segmented labor markets. For parents in high-productivity, high-wage segments, networks generate a wage premium for their children. However, when parents are located in lower-productivity, lower-wage segments, networks tend to support children's persistence in low-paying jobs. These results hold even when controlling for various confounding factor.

This paper contributes to the scarce previous literature that studies the role of parental informal networks in the intergenerational persistence of inequality. Most previous studies provide correlational evidence for developed countries (Bingley et al.) 2011; Corak and Piraino, 2011; Corak et al., 2016). The exception is Staiger (2020), who provides causal evidence using concatenated administrative data for the United States. Our document is the first to explore this channel within a high segmented labor market, adapting a theoretical model and using a causal strategy to identify the causal effect of parental networks on children's permanent earnings. Additionally, this paper potentially contributes to the literature on intergenerational income transmission mechanisms. This paper adds to this literature because it is one of the first studies to explore the role of employer inheritance for a developing country using administrative

records. This work shows that this mechanism is one of the main drivers of intergenerational income persistence and could explain the presence of non-linearities on earnings persistence. These results could explain Gasparini et al. (2021)'s findings for Latin America regarding the dissonance between educational and occupational mobility. Our results suggest that the significant relevance of informal networks in segmented labor market contexts could become a barrier to intergenerational mobility. Finally, the findings of this paper is indirectly related to the literature about the role of informal networks on labour market performance. Our results confirm the relevance of parental networks on children's short-term and long-term earnings. It also suggests an asymmetric effect, associated with the segment in which parents work and the quality of their networks.

The rest of the paper proceeds as follows. Section 2 presents the conceptual framework and section 3 introduces the data, the definition of variables and our samples. Section describes the main patterns in the intergenerational transmission of employers. Section 5 summarizes the main hypotheses and the econometric model and section 6 presents the results. The last section concludes.

# 2 Conceptual Framework

This section presents a conceptual framework to describe the relationship between the parental transmission of employers and the intergenerational persistence of earnings. We model the influence of parental informal networks on the child's job search in a segmented labor market with high-productivity H and low-productivity L firms.<sup>5</sup>

The occurrence of a child being employed by their parent's employer depends on decisions made by both the worker (the child) and the firm.

**Networks and job search:** regarding the children's job search the model addresses a well-known stylised fact that most of the new jobs are filled through formal and informal networking. Previous literature suggests that informal networks can contribute to the hiring

<sup>&</sup>lt;sup>5</sup>The model is presented in detail in the Appendix A. It is built based on the proposal developed by Staiger (2020), but we include two types of firms: high-productivity H and low-productivity L. This assumption is in line with the duality of labor markets in developing countries, as is the case of Uruguay.

process through three channels (Topa, 2011): (i) providing information about job vacancies within the firm, the hiring process and the conditions of employment; (ii) directly influencing the hiring process; (iii) offering information and recommendations about the workers. There are two types of informal recommendations that affect the hiring process. On the one hand, when the information on applicants is not related with previous work experience of the worker and generally comes from the applicants' family, friends, or other social ties. On the other hand, when the recommendation of the applicants comes from individuals with direct experience of the productivity of the worker (their boss, manager or plant colleagues). While the first type of contact may not necessarily offer insights into the productivity and skills of workers, the second type provides valuable information for firms aiming to distinguish workers based on their productivity. These different channels explain why informal networks might have ambiguous effects on workers' wages.

**Firms decisions:** Firms in the high-productivity group pursue workers with higher human capital and reward such employees, while firms in the lower-productivity group are less inclined to differentiate among potential workers. Consequently, wages are higher in firms from the high-productivity sector. Furthermore, both sectors differ in the hiring process and the matching of workers and firms. On the one hand, firms in group H seek more productive workers with higher human capital and are willing to invest in it. The offer decision of a firm depends on the hiring costs, which depends on the human capital of the parents and their children, and their networking [f] Firms in group L, on the other hand, do not differentiate by the productivity of the workers and therefore do not allocate resources to employee search. As a result, the role of the parents and their informal networks may vary depending on the type of firm. Information about workers' productivity and ability for skilled positions is critical to the success of the match in the high-productivity sector, but it is not a relevant condicion for the L

**Intergenerational earnings association:** When we model the firms and the workers' family decisions, combining equations, we arrive at a single equation that relates the father's earnings to the son's earnings. It also incorporates the role of the inheritance of employers in a high-productivity firm or a low-productivity firm.

<sup>&</sup>lt;sup>6</sup>The human capital of the parents is associated with the position and the power of parents in the firms, but also their networking. While, the human capital of the children, is a signal of their ability and productivity.

$$y_i = \xi_0 + \xi'_0 I^H + \xi_1 y_p + \xi'_1 y_p I^H + \Pi^H D^H + \Pi^L D^L + \epsilon_i + \epsilon'_i$$
(1)

where D is an indicator equal to one if the worker *i* works for her parent's employer and zero otherwise. The parameter  $\xi_1$  represents the average intergenerational elasticity of earning (IGE), while the term  $\xi_1 + \xi'_1$  represents the intergenerational elasticity of earnings for children that work in high-productivity firms group. A higher  $\xi'_1$  indicates a greater IGE for children that works in the high-productivity group. This parameter will be higher, when higher are the wage premium associated with the workers' human capital and the marginal productivity of parental income on human capital investments. The magnitude of  $\xi_0$  depends on the average wage premium associated to the human capital accumulation and  $\xi'_0$  depends on the wage premium associated to human capital accumulation in high productivity firms. According to the model's assumptions, intergenerational elasticity is higher for children working in the high-productivity sector because they receive an additional reward in the remuneration of their human capital, which, in turn, depends on the parents' income.

Equation [1] (equation [21] in the appendix [A]) enables the role of parents and informal networks on children earnings to be different between firms depending on the industry group. The flexibility of the model allows us to consider the potential heterogeneity of search costs and the role of informal networks in wages (Ioannides and Datcher Loury) [2004; Loury] [2006). The parameter  $\Pi^H$  quantifies the wage differential for the child when working for his/her parents' employer compared to the exit option in the high-productivity sector. While  $\Pi^L$  measures the wage differential for the child when working for his/her parents' employer compared to the exit option in the high-productivity sector. While  $\Pi^L$  measures the wage differential for the child when working for his/her parents' employer compared to the exit option in the high-productivity. As a result, we expect a wage premium and  $\Pi^H \geq 0$ . Meanwhile, in the L-group's firm, the role of parents and informal networks would be associated with information that does not prioritize their levels of productivity. As a result, for children whose parents work at firms in the L-group, the effect of employer inheritance on children's earnings is indeterminate. In this context, the role of parental informal networks is likely driven by the facilitation of job searches rather than by signaling the children's productivity. A substantial reduction in search costs within the low-productivity segment could even

lead children to accept jobs at their parents' employers, even if these firms offer lower wages. This effect may be further amplified in low-income families with limited informal networks. Furthermore, these children may face greater income constraints, making it more costly to remain unemployed amid the uncertainty of securing a higher-paying job elsewhere.

The equation  $\square$  provides a theoretical benchmark to the estimate of IGE and to identify the differential role of the inheritance of employer by sector H and L ( $\Pi^H$  and  $\Pi^L$ ). Estimating these parameters consistently and achieving a causal interpretation faces some relevant challenges. We will return to this issue in section  $\square$ 

### 3 Data and Sample

#### 3.1 Data source

This paper uses micro-data from administrative records in Uruguay, which combines information from two main sources: (i) a sample of parental linkages (parents/offspring) from social security records and (ii) the universe of income records from the tax agency (*Dirección General Impositiva*). These two data sources were linked by means of a unique personal identifier (*Cédula de Identidad*).

The information to link parents and children comes from the set of social programs implemented by means of cash and in-kind benefits to families: health coverage, conditional cash transfers, and other social benefits. This database covers the period 1980-2018 and includes about 3 million individuals, with more than 55% of sons or daughters, and a larger presence of mothers than fathers.

On the other hand, the income records arise from a tax micro-database created by DGI specifically for research purposes, which includes all individuals taxed for income tax (*Impuesto* 

<sup>&</sup>lt;sup>7</sup>Benefits included are those provided by the *Banco de Previsión Social*, the main public institution that regulates social benefits. Until 2008, before a major health system reform, most of these policies were linked to formal employment.

<sup>&</sup>lt;sup>8</sup>The total population of Uruguay in the period was approximately 3,5 million people, so this sample includes a large share of the population. It includes all individuals who were beneficiaries of the programs managed by the BPS at least once in the covered period. However, it must be taken into account that part of these individuals may not have formal income.

a la Renta de las Personas Físicas -IRPF and Impuesto a la Seguridad Social -IASS). Because employers must act as withholding agents and declare the income of their workers, this database includes the universe of workers with formal income, regardless of whether they are effectively taxpayers of income tax. Additionally, it includes pension recipients and individuals who declare some capital income taxed (dividends, housing capital rents, interests). The database has information on formal monthly and annual income for the 2009-2016 period, gender, age, firms, industry and type of employment (salaried worker or self-employed). By providing the formal working universe with monthly information, it was possible to build information at the firm level. This made it possible to identify employer matches between fathers and sons. It also made it possible to construct aggregates at the firm level (hires rates, size) and to identify some characteristics (industry and legal status). This data set was used in Leites et al. (2020,2) to measure intergnerational income mobility. They show that the data set is representative of the formal sector and it provides reliable estimates o individuals' life-cycle incomes.

#### 3.2 How do we define employer inheritance?

To identify the transmission of employees we proceed as follows. First, we identify whether the child is employed by the same firm as her/his mother/father during the period 2009-2017. We include matches when sons/daughters aged 20 to 39 and mother/father aged 45 to 65 years. We only consider matches in firms where the parents were employed in any previous years or in the same year as their children. We define a dichotomy variable that values 1 if the children work for the parent employer. This variable is labeled "ever same firm" and it is a proxy of parental labor market networks.

We use alternative definitions in our descriptive analysis that contain information on children's employment. In this case, the variable takes values 1 if the matched firm accounting for the majority of earnings of the child during the 5 years used to define the permanent earnings. That variables is labeled the "children' main employer".

<sup>&</sup>lt;sup>9</sup>Some children match their parents in more than one employer. An alternative criteria considers those children in which the matched firms jointly accounting for the majority of their earnings during the same period used to define the permanent income. This third variable is labeled "children' main jointed employers".

#### 3.3 Definition of earnings variables

We use two concepts of income: Labour earnings and total income. Most of our empirical analysis is based on labour earnings data. This variables includes wages and self-employed income. Earnigns from different jobs are added up when workers hold multiple jobs within a year (or a month). While the second concept covers the set of formal personal income: labor, capital and pensions. Both concepts of income are before taxes and only incorporate taxable incomes, which excludes, for example, income from owner-occupied housing and noncontributory public transfers.

To measure the influence of employer inheritance in the labor market we explore the children performance both in current and in permanent terms. In the descriptive analysis we consider two alternative definitions of earning. First, we use the current annual earnings for each individual, which aggregates all the wages in the same year. With this information we constructed a panel data framework with the annual income of sons and daughters over time. We use this information to study the earnings trajectories of the children.

Second, we define the permanent earnings (and income) both for children and their parents. In this case, we averaged 5 yearly income/earnings to eliminate possible temporary short-term fluctuations.<sup>10</sup> Based on these definitions of income/earnings we define percentiles by ranking the child of our sample relative to other individuals in their birth cohort. We rank parents of these children based on their incomes/earnings relative to other individuals in their birth cohort. We rank parents cohorts that are included in the the whole sample of administrative records.

A key decision for the elaboration of the ranking for each cohort is to determine the income distribution to be used for the construction of percentiles. A first strategy to define the distribution is based on other individuals of the same birth cohort that are in the whole sample of administrative records. However, this benchmark income distribution considers only formal earnings/income. Given the presence of the informal sector in Uruguay, we define our baseline distribution adding the individuals with informal incomes to the income distribution of tax records. Following the strategy used in the top incomes literature (Atkinson (2007)), this in-

<sup>&</sup>lt;sup>10</sup>Chetty et al. (2014) suggest that the measures of permanent income/earnings tend to stabilise once 5 years of information are employed.

come distribution combines information from tax records and household surveys. Leites et al. (2021) illustrates the way we construct our reference income distribution. As a result, we rank each generation of our samples on our best approximation to the overall income distribution in Uruguay for each generation.

The use of ranking reduces the possible measurement errors in the income/earning, and the consequences of the non-filer problem, and provides a more accurate measure of permanent income/earnings and the position in society. Furthermore, permanent income/earnings measures based on ranking provide much more robust and stable measures of intergenerational mobility (Chetty et al., 2014). Finally, in our context, the use of ranking allows us to consider the informal income and ensure that the movements reflect changes in the status of individuals in the entire distribution

Finally, intergenerational income/earnings measures are sensitive to both life-cycle biases from heterogeneous age-income profiles (Haider and Solon, 2006; Nybom and Stuhler, 2017). Our samples consist of father-son pairs, with offspring' earnings measured from age 20 to age 39 and parents' earnings measured from 45 to age 65. Due to the reduced period of the tax income database, to reduce the potential effects of life cycle bias, in the case of the children, we average the income/earnings at the most recent 5 observed years (the most advanced age available in our data-set). In the case of the parents, we privilege the older data of earnings/income to the "core" of working age. The estimation of our intergenerational income/earnings measures are set for two different age groups of children: 20-29 and 30-39. Our estimates based on the sample of children between 30 to 39 years are our baseline results.<sup>[11]</sup>

#### 3.4 Samples

Some previous papers define the notion of permanent income among those individuals with five consecutive positive annual incomes. If we apply this criterion we obtain the strict sample, which includes those children and fathers or mothers, who have positive earnings in 5 consecutive years. Therefore, it reflects those individuals with a more established link to the formal

 $<sup>^{11}\</sup>mathrm{Previous}$  literature suggests that at age of 30 life-cycle intergenerational mobility measures become more stable.

sector and with a more favorable income profile. In a second sample called "extended", we require that individuals have at least 2 years with positive earnings in 5. Finally, the "baseline" sample requires that children and fathers or mothers have at least one positive earnings. Note that extended and baseline samples, gradually incorporate workers with less stable links to the formal labor market. This allows us to address the presence of individuals with less attachment to the formal labor market, typical of an economy with a significant presence of the informal sector. Table [] summarizes the samples and the criteria used for their construction

Table 1: Criteria for the construction of the three samples

Sample	Income condition	Other requirements	Ν
Strict Extended Baseline	2+ positive earnings	Offspring aged 20 - 39; Parents aged 40 - 65 Offspring aged 20 - 39; Parents aged 40 - 65 Offspring aged 20 - 39; Parents aged 40 - 65	251,221

The descriptive analysis considers the three samples to address potential differences in formal labor attachment. The econometric analysis focuses on the baseline sample, which offers several advantages. First, it is the largest sample and includes individuals with varying degrees of attachment to the labor market. Note that the criteria applied to define the samples requires that at least one of the parents and the children have positive earnings in 5 consecutive years. However, when identifying firms matches between parents and children in the strict and baseline samples, the match could be confirmed in a parent who does not meet the criteria to belong to the sample. For example, the case of a child and father who are in the strict sample (both have 5 positive earnings), and the former works in the same firm as the mother (has 4 positive earnings and does not meet the strict sample criteria). This difference does not exist in the case of the baseline sample.<sup>12</sup> Furthermore, estimates based on strict and extended samples will be used as robustness checks

<sup>&</sup>lt;sup>12</sup>Because we are interested in parents' labor market networks, we prefer to identify whether a child works for their father's or mother's employer. Our variable 'ever same firm' includes all matches, regardless of the mother's or father's attachment to the labor market. As a robustness check, we also explore matches that meet the construction criteria for each sample. Specifically, we simultaneously identify whether the child is employed by the same firm as their mother or father when the parent meets the criteria to belong to the sample. As robustness, we also explore those matches that meet the construction criteria for each sample. The results of the econometric analysis are robust to this decision. These results are not included due to space limitations and are available upon request.

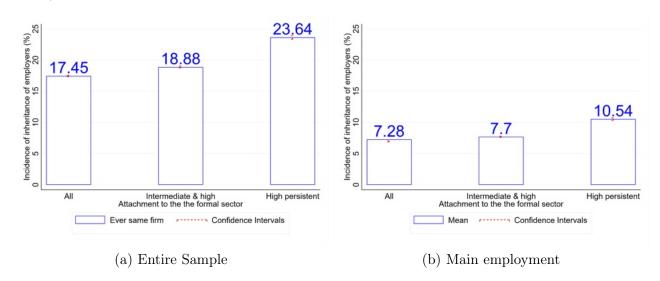
# 4 Patterns in the Intergenerational Transmission of Employers

This section describes the incidence of employer inheritance. First, we focus on the relationship between employer inheritance and worker and family characteristics (4.1). Second, we examine employer inheritance by industry within the context of a segmented labor market (4.2). Finally, we explore how employer inheritance is associated with the income trajectory of offspring (4.3).

# 4.1 Workers characteristics and the intergenerational transmission of employers

As a first approximation to the relevance of employer transmission in Uruguay, Figure 1 shows the average transmission of employers by sample including all jobs (panel A) or only the children's main job (panel B). On average, 17.45% of children in the universal sample were employed in the same firm as their parents and gradually increased between workers with a stronger attachment to the labor market (23.64% on the strict sample). When we only include the children's main employment, the incidence of coincidences between generations is reduced, but the pattern between samples is also present (from 7.25% in the universal sample to 10.54% for the sample with the largest attachment to the labor market).

Figure 1: Incidence of inheritance of employers by samples (different attachment to the formal sector)

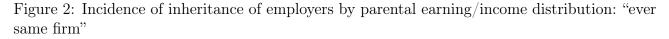


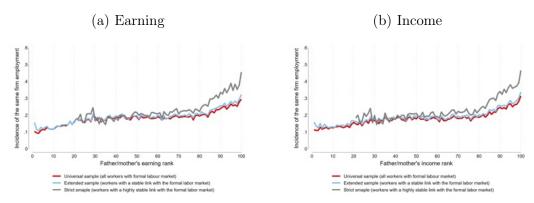
Notes. Children between 20-39 years old. Parents between 40-65 years old. Source.

Table A.1 in the appendix summarises the transmission of employers for a set of variables of interest. The first column includes the entire sample, and columns 2 and 3 present the results for the children without and with intergenerational coincidence of employer. The incidence is higher for sons than daughters, for younger children and larger firms (panel A from table A.1). In turn, a higher average coincidence is observed for children employed in the public sector, although this behavior may be related to the larger average size of firms in the industry.

Previous evidence indicates that the degree of intergenerational income transmission shows strong non-linearities, with higher levels of persistence in the upper tail of the distribution (see for example Björklund et al. (2009) and Leites et al. (2022) for Uruguay). In this sense, the parent's position in the income distribution may be relevant to explain the probability of transmission of employers between generations. Figure 2 presents the incidence of coincidence of firm for each percentile on parent's income distribution. Panel A include only earnings and Panel B shows the same exercise for total incomes. The incidence of same-firm employment is positively associated with parents' earnings in all samples, which is consistent with the findings of Corak et al. (2016) for Canada. The incidence is particularly high at the top 1% of the parental distribution, where the incidence reaches 50% in the strict sample (a discrete jump of 8 points at the top percentile).

The incorporation of the remaining sources of income (panel B of Figure 2) upholds the existing patterns, although resulting in a 1 to 2 percentage point increase in the average incidence of firm transmission. Finally, we find suggestive evidence that by gradually incorporating individuals (parents and children) with more permanent attachment to the formal labor market increases the transmission of employers. It suggests the role of parental networks is associated with the stability of the formal employment of the parents and offspring. Figure A2 in the appendix presents analogous results, but when the inheritance of employers is the main job of the offspring. The main results holds in this sub-sample, but shows weaker degrees of transmission at the top of the distribution of earnings.





Note: Percentiles based on parents' formal earning/income distribution in their own generations based on their 5 years average earning/income. Incidence of the same employer based on "ever same firm". Estimates are based on strict, extended, and baseline samples. In the case of the strict sample, the first 20 percentiles are not included because the number of observations is small and the incidence estimates are imprecise.

Table A.1 showed a higher incidence in the case of sons, which may be associated with the transmission of norms or preferences between generations, and possible differential investments in human and social capital between genders (for example Lundberg, 2005). In Figure 3 we described these gender patterns along the parent's distribution. Panel (a) of Figure 3 shows a larger incidence for sons than daughters along the parental earnings distribution, with larger differences in the middle of the distribution. Panel (b) in Figure 3 describes the persistence of employers according to the parent's gender, a dimension less explored in previous studies. The most notable aspect, in this case, is the increase in the transmission of employers in the last

two deciles in the case of mothers, exceeding the levels of transmission from fathers' employers in the upper tail of the distribution.<sup>13</sup>

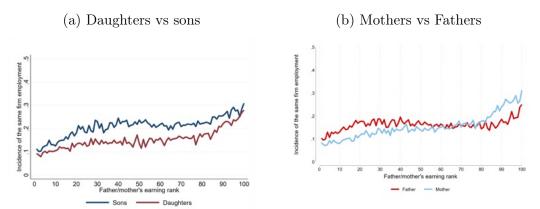


Figure 3: Incidence of inheritance of employers by children and parental earning distribution)

Note: Percentiles based on parents earning distribution. Incidence of the same employer based on "ever same firm". Estimates based on baseline samples.

Finally, Figure A6 combines the previous results, analysing the transmission of employers by gender of children and parents. The incidence of employer transmission is higher for fathers/sons throughout the distribution, with larger differences in the low and middle of the distribution. In turn, the incidence of mothers/daughters is higher than that of mothers/sons, which may indicate a segmentation of the labor market by gender or a role-model transmission between generations.

INTRO ESTE EFECTO Finally, to advance the understanding of this pattern in employer inheritance, we describe how it relates to two variables associated with parental influence in the hiring process: the parents' capital endowment or their position of authority within the firm. Corak and Piraino (2011) argue that the intergenerational transmission of employer dependency is partially contingent upon the parents' ability to directly influence the hiring decisions for their children. Moreover, parents with higher earnings, better positions, and greater influence within the workplace might increase the chance of their employers offering employment opportunities to their offspring. This suggests a positive relationship between the likelihood of children working for the same employer as their parents and a better parental position within the firm

<sup>&</sup>lt;sup>13</sup>Because women tend to be underrepresented in the highest positions we replicate our analysis but we define the mothers' and fathers' percentiles for each gender separately and we confirm the same increasing pattern and dismiss the gender differences (see Figure A5 in the Annex).

or the presence of income-generating capital. Figure A3 in the Appendix presents the incidence of employer inheritance (vertical axis) for each deciles of the earning/income distribution of the parents (horizontal axis) by the parent's position in the firm (graph A). 4 The vertical axis represents the incidence of the inheritance of employers for each group. The red lines represent the group of parents with authority positions in the firm, while the blue lines represent the rest of the parents. The graph shows that the incidence is 10 pp higher for the first group. The incidence is somewhat higher among parents who receive capital income (red lines, in Graph B), particularly for those at the upper end of the distribution. There are no differences in the middle and lower parts of the earnings distribution. The incidence of inheritance shows no difference between parents who receive capital (red lines, in graph B) and those who do not (blue line),

# 4.2 Segmented markets and intergenerational transmission of employers

The conceptual framework developed in section 2 derives the consequences for the transmission of employers of the existence of a segmented labour market. For the second generation, their parents' informal networks may represent an advantage or a last option, with consequences for their earnings paths. This section describes the pattern of employers coincidence by industry, to provide a first insight into the mechanisms behind this coincidence: tastes and preferences, family's capital accumulation, investment in industry-specific human capital or parental informal networks.

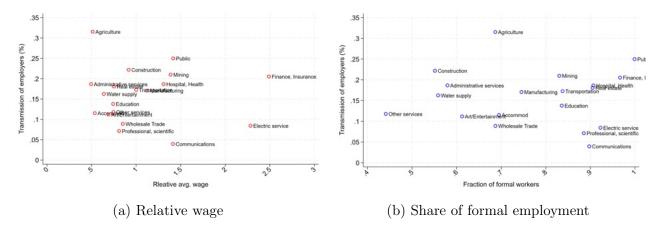
Table ?? shows the average employer transmission for the different industries (column 1), and this coincidence according to the position of parents in the earnings distribution (Bottom 50, Middle 40 or top incomes groups). The Table ?? suggests a strong heterogeneity between industries. A set of industries typically with low productivity and wage levels show transmission rates above the average: Agriculture (31.5%), Construction (22.2%) and Mining (21%). On the other hand, both the public sector and high-skilled service activities (for example, Finance 20.5).

 $<sup>^{14}\</sup>mathrm{We}$  chose to use deciles for these variables because their frequency is lower, and the estimates with percentiles were noisy.

and Real Estate 18.1%) also show above-average employer transmission rates. Columns 2 to 6 of Table ?? show the incidence of employer transmission for different parental income groups. In some sectors, such as Agriculture and Administrative Services, the employer coincidence is concentrated in the bottom 50 of the parents' earnings distribution. On the other hand, on the Public sector, and Financial and health services, the transmission is above average only in the upper tail of the distribution.

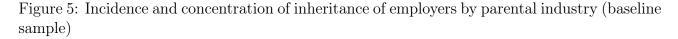
Hence, this first evidence suggests that dissimilar mechanisms may coexist between industries explaining the transmission of employers. Table A.3 shows the participation in formal employment and total firms in the economy, the average wage paid by the sector and the distribution of workers on the global income distribution. The last column, also reports the share of informal employment according to the household survey. If we rank the sectors according to average wages paid, or the incidence of informality, those with the highest employer transmission are found at both extremes (Agriculture and Administrative Services vs Finance). However, the pattern is not as clear, as shown in panels a and b of Figure 4.

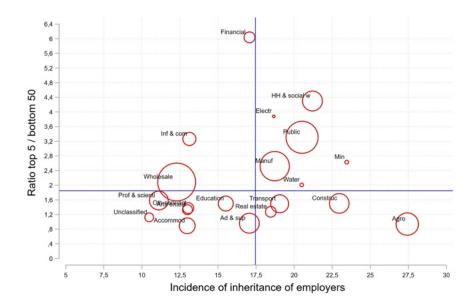
Figure 4: Transmission of employers by industry according to average salary and informality rate.



#### Notes:

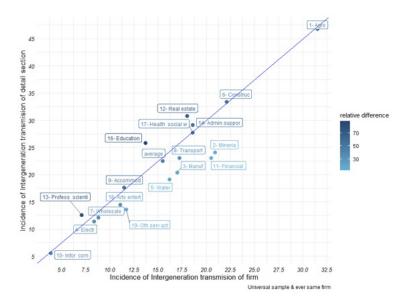
The descriptive evidence in this section shows how employer transmission occurs in very heterogeneous sectors and at different points in the income distribution. This limits the possibility of identifying segments of the labor market according to these industries and makes it necessary to incorporate information on the position of the income distribution of parents to derive the probability of employer transmission and the consequences on second-generation income.





Note: Vertical axis represents for each industry the ratio of the incidence of inheritance for the top 5 percentile vs the bottom 50 percentiles. Horizontal axis represents the average incidence of inheritance for each industry. The size of the bubbles represents the size of the industries in terms of employment. Percentiles based on parents income distribution. Incidence of same employer based on "ever same firm". Estimates based on baseline sample. The labels of the industries are described in ??] in the annex. Table ?? in the annex provides additional evidence. It describes the incidence of inheritance of employers by industry when parents are at the bottom 50%, the middle 40%, the top 10%, top 5% and the top 1% of the distribution of earnings (Columns 1, 2, 3, 4 and 5). Also, it presents alternative measures of concentration of inheritance: the ratio Top 10/Bottom 50, the ratio Top 5/Bottom 50, and the ratio Top 1/Bottom 50. Results are in agreement with the results commented above (Columns 7, 8, and 9).

Figure 6: Incidence of intergenerational transmission of employers by section.



# 4.3 Is employer inheritance associated with the short-term labor's earnings

Before proceeding with the econometric model results, this section reports the relationship between life cycle short-term offspring earnings and the inheritance of employers from the parents. Incorporating the life-cycle perspective is essential for understanding the role of networks and accurately measuring permanent income. Figure 7 shows the offspring's life cycle yearly earnings gap for a set of cohorts when employers are inherited versus when employers are not inherited. Panel (a) and (b) refer to "ever same firm" and "offspring' main employer" respectively. The incidence of the same employer across the generations is significantly and positively associated with the offspring's yearly earnings. When we consider "ever same firm", the relative gap is statistically significantly different from zero for the different cohorts and ages considered, indicating that employer inheritance is associated with higher earnings for the next generation. This gap increases with the age of the children. At age 35, children that inherit an employer from their parents on average have more than 20% higher earnings than the rest. These results support the hypothesis that employer inheritance is associated with a wage premium. When we consider the association when the inherited employer is the "offspring' main employer" (panel b) we confirm that children who inherit on average have more than the rest, but the differences are lower and relatively stable along the life cycle of the children. Note that in this case, the comparison group includes those children who inherited an employer but this is not the children's main employment. This tends to narrow the earnings gap. This second result could support the idea that the persistence in employment passed on by parents at older ages might imply stagnation, which reduces the wage premium.

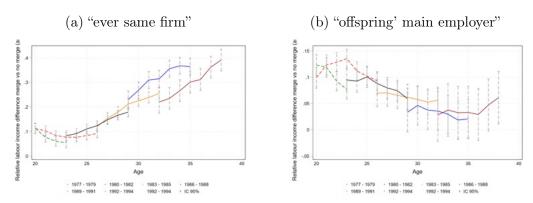
A former relevant issue to understand this association is the time in the life cycle when the child coincides with his or her parent's employer. Figure AI in the Appendix illustrates this issue for grouped cohorts, Panel (a) and (b) refer to "ever same firm" and "offspring' main employer" respectively<sup>[15]</sup> In each case, it describes for any given age of the children (horizontal axis) the proportion of employed children worked for any employer (or main employer) that at some point in the past also employed their mother/father. The incidence of inheritance of employers increases with the life cycle mainly until the age of 25 years old (until 20 %). The pattern is much lower and flat throughout the life cycle when we consider "offspring" main employer". In this case, the incidence is less than under 8% and the maximum is around the age of 25 (the average in Corak and Piraino (2011) is 0.056%). These results could be indicating that employer inheritance could be approximating the social capital endowments and networks in the labor market of families. These entitlements of the family seem to play a role in children's transition to the labor market and for obtaining their first jobs. Many of these jobs are possibly part-time or part-year jobs. Reading together these results suggest that this initial help from parents seems to become a persistent advantage in terms of the income of the next generation.

A second relevant issue is whether the association between employer inheritance and children's earnings depends on parents' position in the income distribution. It is expected that the mechanism of intergenerational transmission operates with different intensities along the parents' income distribution. Specifically, the role of parents' networking on children's earnings could vary depending on the income, firms, and industry of their parents. To make progress in this direction, we divide the children into two groups: those whose parents fall between percentiles P1 to P80 (middle and low income) and those whose fathers fall within percentiles

<sup>&</sup>lt;sup>15</sup>Unlike Corak et al. (2016), we cannot follow the same cohort along time, so to describe this linkage we work with a set of cohorts. The values in A1 in the Appendix are lower than those reported by Corak and Piraino (2011), although the reported analysis is not entirely comparable. Corak and Piraino (2011) deals with a single cohort, considers only parents, and in this case also restricts the matching employer to be the parents' main income.

P81 to 100 (high income). The gap is defined analogously to Figure 7 but considering the two comparison groups separately. Figure 8 presents the results of this exercise, Panel (a) for "ever same firm" and panel (b) for "offspring' main employer". It suggests that the association between employer inheritance and children's wage premium is strongly driven by the parent's position in the income distribution. The inheritance of employment appears to be an advantage for those children with high-income parents (solid lines), while it is a disadvantage for those children whose parents are in the middle and lower part of the distribution (dotted lines). The latter are located around zero, and even they register negative values. As robustness checks, we divided the children into two alternative groups: those whose fathers fell between the percentiles P1 to P90 and those whose fathers fell in the percentiles P90 to 100. This strategy allows us to focus on the presence of nonlinearities at the top of the distribution. Results are presented in Figure A10 in the Annex and confirm the previous results.

Figure 7: Children' earnings gap by inheritance of employers

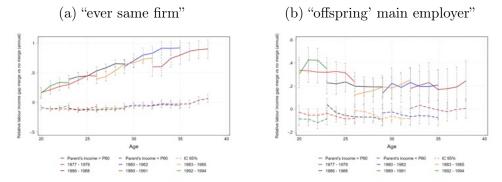


Note: Vertical axis represents the yearly earning/income gap in real terms. Incidence of the same employer based on "ever same firm" and "offspring' main employer". Estimates are based on baseline samples. Children aged from 20 to 39.

We replicate the analysis by offspring's gender. Figure A11 in the annex presents the average gap for each gender, while A12 in the annex describes the earning gap by offspring's gender and parents' position (it replicates the estimates presented in Figure 8 for sons (Panel (a) and (c)) and Daughters (Panel (b) and (d)). The results confirm the commented pattern and reject the presence of gender-based differences

A novel result is that employer inheritance becomes an advantage for the next generation only when the parents are at the top of the distribution. Employer inheritance increases offsprings' eranging by 20% to 100% depending on the criterion used. In this case, employer inheritance is associated with a wage premium. The opposite situation is found for children who inherit and whose parents are located in the middle and lower part of the distribution. The joint reading is that parental networks play a key role in the access to the first jobs for young individuals. However, it has an asymmetric impact on labor income, creating a reward for children with high-income parents and a wage penalty for those with lower-income parents. These results are in agreement with the role of parental informal networks in the transmission of earnings, but also they are consistent with other mechanisms of transmission. Among highincome workers the employer inheritance could be related to parents' investments in specific human capital or the position of the parents in the firms. While for the group of children with parents located in the middle and lower part of the distribution, the wage penalty could be associated with the transmission of tastes and the combination of a highly segmented labor market with family credit constraints and low human capital investment.

Figure 8: Children' earnings gap by inheritance of employers and parents position



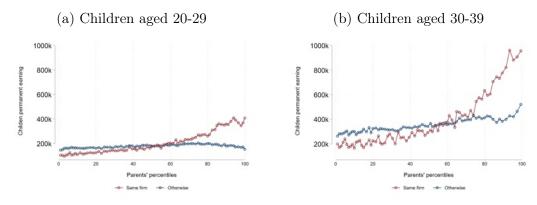
Note: Vertical axis represents the yearly earning/income gap in real terms. Incidence of the same employer based on "ever same firm" and "offspring' main employer". Estimates are based on baseline samples. Children aged from 20 to 39.

#### 4.3.1 It is employer inheritance associated with children's permanent earnings?

The previous section, provides preliminary evidence on the role of inheritance of employers on short-term offspring earnings. Panel C in Table ?? in the annex presents some descriptive statistics of parents' and offsprings' permanent earnings. It shows that children who inherit an employer, on average, have higher permanent earnings than the rest of the children (\$ 276.667 vs \$227.710) and are over-represented in the upper part of their generation's income distribution (7,8% and 1.68% of them are at the top 5% and top 1% of the distribution of offsprings' permanent earnings respectively, while for the rest of the offspring are 3,77% and 0,63%). In terms of permanent earnings, there are also differences between parents who share an employer with their children and those who do not. The former tend to present higher wages.

These results are based on averages. To advance, we explore whether the association between the children's permanent wages and employer inheritance varies based on the parents' position in the income distribution of their generation. Figure 9 describes the expected permanent earnings of the children by percentiles of parental earnings. Because the measure of permanent earning is sensitive to the age of the children, panel (a) report the results for children aged between 20 and 29, while panel b children aged between 30 and 39. For both cases, the red lines represent the children that work at the same firm as their parents, while the blue lines the other cases. The inheritance generates an earnings premium among the children of the highest earnings distribution. This provides preliminary evidence on the role of inheritance of employers on childrens' earnings based on non-parametric and unconditional estimations. These results are in agreement with our short-term analysis presented in the subsection 4.3 and with Corak's finding for Canada.

Figure 9: Offspring's earnings and inheritance of employers by parental earnings percentiles: baseline sample (non-parametric estimates)



While both graphs confirm the same trends, there are differences in the level of expected permanent earnings and in the magnitude of the gap, being smaller in the case of children between 20 and 29 years old.

## 5 Econometric model

This section presents the econometric model used to identify the empirical relevance of inheritance of employer on intergenerational persistence of earnings. In a second step, our strategy allows us to identify the role of parental informal networks on intergenerational earnings persistence.

First, as a benchmark, we use the equation  $\boxed{1}$  introduced in Section  $\boxed{2}$ . The variables of interest are the ranking of permanent income in both generations  $(P_i^{ch} \text{ and } P_i^p)$ . As a first approximation, the specification in equation  $\boxed{2}$  includes the average effect of employers' transmission (D), without distinguish between segment of labor market:

$$P_i^{ch} = \alpha + \beta P_i^p + \alpha' D + F(\gamma, X) + v_i \tag{2}$$

 $\beta$  measures the average intergenerational Rank Association (IRA), while the parameter  $\alpha'$ quantifies the effect of intergenerational transmission of employers in the expected permanent earnings of the second generation. The specification contains a set of standard control variables represented by  $F(\gamma, X)$ ), which are included in all estimates and are used in the intergenerational income literature: children and parental' sex, parental age and children's birth cohort. When indicated, additional controls are included such as firm and sector characteristics of the parents and children.

However, this specification assumes the existence of a unified labour market.<sup>16</sup> To approximate the consequences of a segmented labor market in the transmission of employers, in a second specification we include the parent position on earning distribution of as a proxy of the labor market segment:

$$P_i^{children} = \alpha + \beta' P_i^{parents} + \beta'' P_i^{parents} * D + \alpha' D + F(\gamma, X) + v_i$$
(3)

The parameter  $\beta'$  in equation 3 identifies the average transmission when children do not inherit the employer and therefore is a proxy for an IRA estimate for this sub-sample. Second,

<sup>&</sup>lt;sup>16</sup>In terms of equation 1 this implies that  $\beta = \xi_1 = \xi'_1, = \xi_0, \ \xi'_0 = 0$  and  $\alpha' = \Pi^L = \Pi^H$ .

the parameter  $\beta''$  identifies whether the inheritance of employers affects the degree of intergenerational earnings transmission. On the other hand, the parameter  $\alpha'$  summarises the direct effects that children could have experienced due to the role of the inheritance of employers. The total marginal effect of employer inheritance is given by:  $\beta'' P_i^{parents} + \alpha'$ . This incorporates the possibility that the relevance of inheritance of employers on children's earnings changes with the permanent income of the parents. It is plausible to assume that low-income parents are located in the low-productivity firm group and high-income parents are located in the high-productivity firm group. As a result, specification  $\underline{3}$  allows us to test the hypothesis that  $\Pi^L < \Pi^H$ . The model predictions are  $\beta'' > 0$  and  $\beta'' P_i^{parents,High} + \alpha' > 0$ , where  $P_i^{parents,High}$  identify the permanent earnings of parents that work in high-productivity sector ( $P_i^{parents,High} > \overline{P_i}^{parents}$ , where  $\overline{P_i}^{parents}$  establishes a threshold that allows for the identification of parents positioned within the high-productivity segment. However,  $\overline{P_i}^{parents}$  is unknown in our data. Therefore, to address this issue, we turn to the following specification, which is more flexible

$$P_{i}^{ch} = \sum_{s=S} [\beta_{s}' P_{i,s}^{parennts} + \beta_{s}'' P_{i,s}^{p} * D + \alpha_{s}' D + \alpha_{s}] + F(\gamma, X) + v_{i}$$
(4)

where  $s \in S = (25, 50, 75, 95)$  identifies the parental position in the distribution of earnings. We assume that parents located at the bottom 50% of the income distribution are associated with low-productivity jobs: segment L of labor market is captured when s=25 or 50. While parents at the upper part of the income distribution work in high-productivity jobs (segment H). This specification allows both the intergenerational transmission of average earnings ( $\beta'_s$ ) and the effect on earnings of employers' transmission ( $\beta''_s$  depend on the parents' position according to pre-defined knots, P25, P50, P75 and P90.

With the specification from equation (4) we could derive the theoretical parameters from equation 1 and their expected values.  $\beta'_s$  represents the intergenerational transmission of income for both groups (parameters  $\xi$  and  $\xi'$  for low-income and high-income groups). The wage premium associated with the transmission of employers ( $\Pi^L$  and  $\Pi^H$  on the theoretical model) is derived from  $\beta'_s$  and  $\alpha'_s$  for each income sub-group. In line with our theoretical framework, we expect the effect to be negative at the lower end of the distribution and a wage premium to exist only for higher income groups.<sup>17</sup> Table A.5 in the Appendix the relationship between the parameters of the theoretical model and those of the empirical model.

The specification from equation [] provides a measure of the direct contribution of the employer's inheritance to the IRA by labor market segments. These parameters do not necessarily have a causal interpretation of the effect of informal networks on intergenerational income transmission. To identify the effect of parents' informal networks on children's permanent income through employer inheritance, it is necessary that the error term of equation [] is not correlated with our variable of interest (D = 1). Employer matching may reflect the parents' social network but also the transmission of preferences, skills or abilities. If these latter unobservable variables affect both employer inheritance and the permanent income of the children, we face an endogeneity problem that leads to bias in the parameter estimation. This potential problem is reflected in its analytical form in the error terms of equation 21 and equations 6 and 7 of the theoretical model. To identify the causal effect of parental informal networks on the permanent earnings of the children we follow Staiger (2020) and use the instrumental variables strategy and the two-stage least squares model:

First Step : 
$$D_i = \alpha_1 + \zeta_1 Z_{j(p)}^{t-1} + \zeta_2 P_i^p + F_1(\gamma, X) + u_i$$
  
Second Step:  $P_i^{ch} = \alpha_2 + \beta'_2 P_i^p + \alpha_2 D + F_2(\gamma, X) + v_i$  (5)

The first equation models the probability of employers coincidences between generations (D = 1), with a set Z of instrumental variables. These instruments may affect the bargaining power of the parent but do not affect the child's permanent labor income (First Step). Under certain assumptions, the parameter  $\alpha_2$  in the second equation measures the direct causal effect of intergenerational transmission of employers on the permanent income of the children.

Staiger (2020) discuses the assumptions needed to interpret estimates of  $\gamma$  as a causal effect. The validity of the IV approach demands three requirements. First, the independence assumptions and the exclusion restriction implied by our instrumental variable model is that, conditional on the control variables included in our main regression, the instrumental variables have no effect on offspring's permanent earnings, other than their effect throughout the

<sup>&</sup>lt;sup>17</sup>In terms of empirical parameters this implies that  $\beta_{sL}^{\prime\prime}P_{i,L}^p + \alpha_{sL}^{\prime} < 0$  and  $\beta_{sH}^{\prime\prime}P_{i,H}^p + \alpha_{s,H}^{\prime} > 0$ .

inheritance of the employer. Second, our instruments must affect the probability of working for parent's employers. In practical terms, following ? implies rejecting the weakness of the instruments. Finally, it requires that the first-stage model is correctly specified and that the instruments affect the probability of working with the father in a monotonic manner

We select a set of potential instruments for the inheritance of employer variables. We include the hiring and turnover rates of the parents' firm, and the position of parents in the firm as a proxy of the parents' power to influence the hiring process. These variables are potentially correlated with the chance of children working in the same firm as their parents, but it is expected that will be exogenous to the offspring's permanent earnings. To evaluate instruments' weakness and potential biases problem, we carry out a joint significance test of the instruments in the two-stage method auxiliary equation Bound et al. (1995).<sup>18</sup>

## 6 Main Results

This section reports and discusses our main results of the estimated econometric models. Section 4.3.1 describes the association between children's permanent earnings and the inheritance of employers. Section ?? uses parametric strategies and alternative specifications to estimate IRA and identify the contribution of the inheritance of employers to inter-generational earnings persistence. Section 6.1.1 explores in more detail the mechanism of transmission associated to the inheritance of employers. All this analysis is carried out for the baseline samples. Finally, section 6.1.2 presents some additional and robustness analysis. First, it presents the previous estimates for the alternative samples presented ?? used in the section, which includes individuals with higher degrees of attachment to the formal labour market. Second, it replicates the estimates but when total incomes are used rather than labour earnings.

 $<sup>^{18}</sup>$ F-statistic values below 10 suggests the presence of weak and biased instruments Cameron and Trivedi (2005).

#### 6.1 Transmission of employers and intergenerational income mobility

In this section, we estimate the contribution of the employer's inheritance to the degree of earnings persistence between generations. Following prior research, we focus on the sample of children aged 30-39 and we used the Intergenerational Ranking Association (IRA) as a proxy of permanent income.<sup>19</sup>

Table 2 presents the estimates for our preferred specification. First, column (1) reports the average IRA on our sample based on equation 2 The average persistence of earnings between generations is 0.23, a magnitude that increases when restricting the analysis sample.<sup>20</sup> In column 2 we incorporate employer transmission to explain earnings persistence between generations (parameter  $\alpha'$  of equation 3). While parents' permanent income coefficient remains relatively stable, the coefficient associated with the inheritance of an employer is significant and positive. The presence of the intergenerational transmission of employers implies an increase of 3.7 positions in the ranking.

The previous result, however, assumes the existence of a unified labor market, with similar consequences of employer inheritance for all groups of workers. Columns (3) to (5) estimate the effect of inheriting an employer on the ranking of children in a segmented labor market. We approximate labor market segments as points in the distribution of earnings of the household of origin. However, it only captures the direct effect of employer inheritance on second-generation permanent earnings, allowing for different intercepts by quartiles (we relax equation 3 to include different  $\alpha'$  parameters by quartile). In all cases, the estimates include demographic controls, and in specifications (4) and (5) we additionally include sector controls and firm fixed effects in specifications.<sup>[21]</sup>

The results show a strong heterogeneity in the effect of labour market networks at different

<sup>&</sup>lt;sup>19</sup>We also report estimates for the younger group of children aged 20-29, for total income instead of labor income and the inheritance of the "main" employer of the children.

<sup>&</sup>lt;sup>20</sup>Given the objectives of this paper, we present our estimates using the baseline sample, providing a comprehensive perspective on the association between employer inheritance on children's earnings. In section 6.1.2, we present the same estimate for both the strict and extended samples. The former provides a sample that is more comparable to previous literature measuring intergenerational mobility. However, this sample focuses on workers with a more stable attachment to the formal sector.

<sup>&</sup>lt;sup>21</sup>Column 4 includes as additional controls: information about children's firms (size, Legal nature of the firm and industry) and parental industry. Column 5 includes children's firm fixed effect (note that the sample size decreases because fixed effects require the firm to have at least two workers in the sample).

points in the distribution. At the top of the earnings distribution, the inheritance of a firm is associated with an increase between 13 and 20 positions, while below the median, the association is negative and statistically significant. This result provides a first indication of potentially different mechanisms in employer transmission in the two segments of the labour market. While labour market networks imply a premium for individuals located in the top quartile, employer inheritance penalises the second generation when their household belongs to the lower tail of the earnings distribution. In terms of the theoretical framework presented in section 2 the effects are in line with the expected signs ( $\Pi_H > 0$  and ( $\Pi_L < 0$ ).

Table 2: Intergenerational earnings mobility by the transmission of employers. Children aged30-39. Least squares estimates of a linear regression model. Dependent variable childrenpermanent earning

	(1)	(2)	(3)	(4)	(5)
Parent's permanent earning	0.229***	0.220***	0.238***	0.170***	0.198***
	(0.003)	(0.003)	(0.013)	(0.013)	(0.030)
Same firm		$3.716^{***}$			
		(0.258)			
Same firm if $PPE \le P25$			-10.791***	-7.848***	-3.544***
			(0.506)	(0.534)	(1.291)
Same firm if $P25 \le PPE < P50$			-5.769***	-4.220***	-3.034***
			(0.544)	(0.527)	(1.105)
Same firm if $P50 \le PPE < P75$			4.848***	0.678	0.782
			(0.485)	(0.448)	(0.910)
Same firm if $P75 > PPE$			20.687***	14.319***	13.977***
			(0.425)	(0.411)	(0.834)
N	98,296	98,296	$98,\!296$	$79,\!130$	$21,\!052$
Controls demographic	Yes	Yes	Yes	Yes	Yes
Controls Cohorts	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles	No	No	Yes	Yes	Yes
Controls sectors/firms	No	No	No	Yes	Yes
Firm fixed effect	No	No	No	No	Yes

At least one match with parent's firm. Parents previously worked at the firm. Using universal sample. Workers between 20 and 39 years old. Robust standard errors.

Finally, we implement the more flexible model incorporating the possible effect of employer inheritance on income transmission (parameter  $\beta''$  of equation 4). Specifications in columns (1) to (3) of Table 3 include the average effect of employer inheritance and the interaction with parents' position on the distribution of earnings. In these specifications we sequentially incorporate sector controls (column 2) and firm fixed effects (column 3). First, the results show a larger persistence for the set of children who inherit an employer from their parents

(0.412 vs 0.153). However, the direct effect of employer transmission is negative and significant in the three specifications (between 11 and 18 positions in the ranking). These results again show this channel's asymmetric effect across the income distribution. Estimates in Columns 4 to 6 of Table 3 include a more flexible model with different intercepts and interaction terms with parental earnings by quartiles (see equation ??). Column (4) is a baseline specification, and columns (5) and (6) include additional controls. The average IRA for children who do not inherit employment is 0.22, a level similar to the benchmark. However, the inheritance of employers increases the persistence of the earnings transmission towards the right tail of the distribution. The coefficients imply an IRA of 0.486, 0.559 and 0.651 for the second, third and fourth quartile respectively.

Table 3: Intergenerational earnings mobility by the transmission of employer. Least squares estimates of a linear regression model. Dependent variable children permanent earning. Children aged 30-39

	(1)	(2)	(3)	(4)	(5)	(6)
Parent's permanent earning	0.153***	0.088***	0.094***	0.221***	0.196***	0.104
	(0.004)	(0.004)	(0.011)	(0.022)	(0.023)	(0.069)
Same firm	-18.189***	-13.972***	-11.018***	-10.296***	-7.739***	-1.606
	(0.496)	(0.513)	(1.177)	(0.899)	(0.963)	(2.363)
Same firm * Parent's permanent earning (PPE)	0.412***	0.293***	0.253***			
,	(0.008)	(0.008)	(0.018)			
Same firm * PPE if PPE $\leq$ P25				-0.042	-0.013	-0.156
				(0.066)	(0.069)	(0.166)
Same firm * PPE if $P25 \le PPE < P50$				0.265***	0.164**	0.107
				(0.076)	(0.074)	(0.152)
Same firm * PPE if $P50 \le PPE < P75$				0.369***	0.257***	0.202
				(0.067)	(0.061)	(0.126)
Same firm * PPE if $P75 > PPE$				0.430***	0.486***	0.382***
				(0.061)	(0.059)	(0.114)
Ν	98,296	$79,\!130$	$21,\!052$	98,296	79,130	$21,\!052$
Controls demographic	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles and interactions	No	No	No	Yes	Yes	Yes
Controls sectors/firms	No	Yes	Yes	No	Yes	Yes
Firm fixed effect	No	No	Yes	No	No	Yes

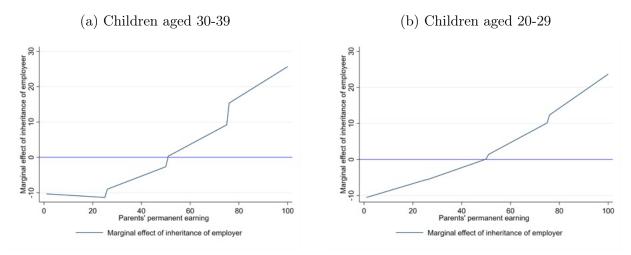
 $\overline{\mathrm{At}}$  least one match with parent's firm. Parents previously worked at the firm. Using universal sample. Workers

between 20 and 39 years old. Robust standard errors.

Figure 10 summarizes the marginal effect of the inheritance of employers by the parental position in the earnings distribution based on coefficients from Column 4 of Table 3. The evidence suggests opposite effects for different points in the distribution, in line with the presence of a segmented labour market. Below the median, employer transmission is associated with a

penalty in second-generation earnings. Only children from the top 50% of the distribution receive an earnings premium for using informal labour market networks, pointing to the possible existence of different mechanisms across the distribution.

Figure 10: Effect of inheritance of employers on children's permanent earnings by parental earnings quartiles: baseline sample



#### 6.1.1 Mechanisms associated with the inheritance of employers

The previous results show a strong non-linearity in the effect of employer inheritance on children's permanent earnings. Next, we explore whether power in the firm represents a possible channel to explain the effect of employer inheritance and derive the causal effect of this mechanism from an IV approach.

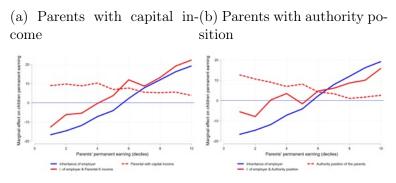
#### Parents power in the firm

First, we approximate the power of influence in the hiring process of parents using two alternative variables. First, we identify parents with hierarchical roles in the firm (owners, partners, managers). It is expected that the capacity of the parents to favour their children in firms' hiring process increases. On the other hand, the capacity to influence the hiring process could be associated with the accumulation of capital of the parents. This could indirectly indicate that the parents are business owners or have a network of contacts with business owners. To address this issue, we identify whether parents report capital income.

Table A.9 in the Appendix reports the results about the role of these variables. To assess the

stability of the coefficients, these variables are incorporated sequentially. Estimates on columns 1 and 2 include an interaction term between "authority position" and parental permanent earnings. Estimates on columns 2 and 4 include an interaction term between a dummy that identify if parents report capital income and the parental permanent earnings. Estimates on columns 2 and 4 include respectively the double interaction term between these variables and inheritance of employers. Finally, we incorporate the three variables together, saturating the model with all interactions (columns 5-7). Column 6 includes information about children's firms and parental industry as additional control and Column 5 includes children's firm fixed effect.<sup>22</sup>

Figure 11: The role of social networks. Marginal effects on Children's earnings (Baseline sample, children aged 30-39)



Note: These marginal effects are based on the estimation of the model presented in Column (5) of the Table A.9.

All specifications confirm the stability of the coefficients. The results are summarized in the Figure 11. The marginal effects of parents with capital income and parents with authority position in the firm are represented in Graphics (a) and (b) respectively. The red lines represent these variables' marginal effects, while the blue lines describe the marginal effect of the employer

<sup>&</sup>lt;sup>22</sup>An additional perspective is whether these parental characteristics are simultaneously present. Figure  $\overline{A15}$  in the Appendix shows the relative frequency of five groups by income decile: parents with authority position (red line); parents with capital incomes (green lines), the interception of parents with authority position and inheritance of employers (red dotted line); the interception of parents with capital income and inheritance of employers (green dotted line); and the triple interception of these groups (black dotted line). As a benchmark, we include the incidence of the inheritance of employers (blue line). The distributions of the incidence of inheritance of employers and parents with capital income show the same increasing shape, although it is much higher for the first group. For higher-income parents, these are two attributes that tend to be shared (green dotted line). The share of parents with authority position is much low and presents a shape of "U". The frequency of the triple intersection of these three groups is much lower for all deciles. This suggests that these parental attributes are not simultaneous conditions. All these results are confirmed both when distinguishing whether the parents work in the public or private sector.

inheritance as a benchmark. The dotted lines represent the individual effect of the variable of interest, while the represent its jointed effect with employer inheritance (the interaction term). The magnitude and shape of the employer inheritance effect remain consistent. The individual effects of capital and authority position is positive, smaller, and generates a constant level change throughout the parental distribution (solid lines). The interaction term between the inheritance of employer and parents with income increases the children's permanent earnings, even in the upper part of the distribution (solid red line). However, in the case of the interaction term between parents with authority position and inheritance of employer, this effect is only confirmed at the lower part of the distribution. The results suggest that the impact of parental labor market networks is more significant when parents have capital income, whereas having parents in positions of authority generates an additional advantage in the middle and lower segments of the distribution.<sup>23</sup>

Given the hypothesis that the role of informal networks may differ in the public and private sectors, Figure A13 presents the same results distinguishing whether the father's main employment is in the public or private sector. The previous results are confirmed for fathers working in the private sector. A considerable effect is found for the interaction between employer inheritance and parents with capital income. As expected, the interaction between parents' positions of authority and employer inheritance has a more diffuse effect among fathers whose main employment is in the public sector."

#### Causal effect

To deal with potential endogeneity concerns, we use the identification strategy based on the estimations of the 2SLS approach suggested by (Staiger, 2020). This allows us to identify the causal effect of parental social networks on offspring's permanent earnings. The validity of the IV approach to provide results with causal interpretation demands three requirements discussed in Section ??. The instruments chosen attempt to capture factors that affect the probability of children's hiring in parents' firms, but that are not part of the income transmission between generations. We use as instruments the hiring and turnover rates of the firms before the

<sup>&</sup>lt;sup>23</sup>The marginal effect of the triple interaction is not reported in Figure 11 to facilitate clarity. It is noisily estimated and only relevant in the upper part of the distribution, but it does not appear to generate and additional effect than the effect of employer inheritance.

children's entry (and their interaction), and the hierarchical position of the father in the form. Given the previous evidence of heterogeneous effects across the distribution of parents' earnings, in the IV strategy we also allow the effects to differ at different points in the distribution.

Table 4 presents the results of our preferred specification estimated through the instrumental variables approach. It replicates the OLS model presented in Tables 2 and 3 In the specifications we sequentially include additional industry and firm controls; and interactions between employer transmission and parents' permanent income (columns 3 and 4); and in columns (5) and (6) we allow for heterogeneous effects at selected points in the distribution (p25, p50 and p75). Table ?? in the appendix reports the coefficients of the first-stage regression model and its F-statistics, showing that these are not weak instruments.<sup>24</sup>

With this strategy, the average effect is not significant (or only at 10% when including firm controls, column 2). This result is partly explained by the fact that this average summarizes asymmetric effects that offset each other. The specifications in columns 3 and 4 show how employer inheritance affects income transmission, increasing intergenerational persistence for children who work in the same firm as their parents. Finally, in columns 5 and 6 estimate the equation ?? based on 2SLS estimator.

<sup>&</sup>lt;sup>24</sup>To evaluate the weakness of the instruments and the potential bias, we follow Bound et al. (1995) and carry out a joint significance test of the instruments in the two-stage method ancillary equation.

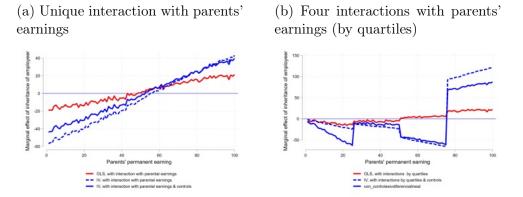
	(1)	(2)	(3)	(4)	(5)	(6)
Parent's permanent earning	0.247***	0.182***	0.063	0.029		
	(0.011)	(0.012)	(0.045)	(0.040)		
Same firm	2.874	-7.689*	-28.013***	-39.904***		
	(4.331)	(4.450)	(8.101)	(8.498)		
Same firm * Parent's permanent earning (PPE)			0.835***	0.733***		
, ,			(0.196)	(0.177)		
PPE if $PPE \le P25$					$0.356^{***}$	0.527***
_					(0.075)	(0.109)
PPE if $P25 < PPE < P50$					0.270***	0.137**
—					(0.054)	(0.055)
PPE if $P50 < PPE < P75$					0.562***	0.458**
					(0.091)	(0.073)
PPE if $P75 > PPE$					-0.858**	-0.562
					(0.380)	(0.356)
Same firm if $PPE \le P25$					-0.973*	-2.431**
					(0.552)	(0.778)
Same firm if $P25 < PPE < P50$					-0.463**	-0.279
					(0.234)	(0.233)
Same firm if $P50 < PPE < P75$					-0.876***	-0.870**
					(0.293)	(0.227)
Same firm if P75 > PPE					1.212***	0.818**
					(0.317)	(0.291)
Ν	79,484	71,296	79,484	71,296	79,484	71,296
Controls demographic	Yes	Yes	Yes	Yes	Yes	Yes
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles and interactions	No	No	No	Yes	Yes	Yes
Parental Industry Control	No	Yes	No	Yes	No	Yes
Children industry/firm Control	No	Yes	No	Yes	No	Yes

 Table 4: Intergenerational earnings mobility by the transmission of employer. Children aged

 30-39. Instrumental variables estimates

. Using universal sample. Workers between 20 and 39 years old. Robust standard errors.

Figure 12 presents the marginal effect of the inheritance of the employer on the permanent earnings of children based on previous estimations. Panel (a) includes the average effect of employer transmission for the OLS and IV models (column 1 3 and columns 3 and 4 of Table 4). Panel (b) includes the most flexible model allowing for heterogeneous effects across the distribution (columns 5 and 6 of Table 4 for IV, and column 4 of Table 3 for OLS). This analysis confirm that inheriting an employer has a significant and asymmetric effect on children's permanent earnings The direction of the network effect is consistent across the three models, although the OLS estimates may be underestimating its magnitude. This effect is positive when their parents are at the middle and top position of the earnings distribution, while is negative when their parents are at the bottom of the distribution of income of the parent's generation. Note that the average impact of inheriting an employer diminishes due to the asymmetrical effect found at the extremes of the parental income distribution. The effect of inheriting an employer is positive and increasing as parents ascend to the upper quartiles of the distribution. The magnitudes are similar to those derived from ordinary least squares estimates. Figure 12: The causal effect of employer inheritance on children's permanent earnings. OLS vs 2SLS



#### 6.1.2 Additional analyses

## The role of inheritance when we consider samples with different attachments to the formal sector

Previous results consider employer inheritance in the baseline sample. As discussed previously, This sample includes workers with strong differences in their attachment to the formal labour market. Therefore, it is of interest to explore whether the above results hold when we consider alternative definitions of employer inheritance. Figures A16 in the Annex summarize the estimates of Tables ?? and A.8. The results hold for all three samples.

The role of inheritance when we consider total formal incomes Previous estimates consider labour earning. It is of interest to explore whether the results hold when considering total income mobility. Tables A.10 and A.11 in the Appendix replicate the estimates in Tables ?? and ?? , but for permanent income and the 30-39 and 20-29 age groups, respectively. The results are substantially unchanged and the previous conclusions are supported by this exercise.

### 7 Final comments

Employers inheritance incidence is between 17.45% and 23.64% depending on the the attachment to the formal labor market and it is higher when we incorporate individuals with more stable links with the formal sector. Our results yields suggestive evidence that by gradually incorporating individuals with more attachment to the formal labour market, the incidence of same firm employment increases, which suggests that the role of parental networks is associated with the stability of the formal employment of the parents.

The inheritance of employers is associated with top incomes parents and a strong attachment to the formal labour market. On average transmission is two times larger at the top percentiles than at the bottom. The chance of inheriting an employer is higher for sons than for daughters.

We found strong heterogeneity between industries and we identify at least three groups of industries: (i) a group with relatively high incidence; a group in which inheritance of employers concentrates among high-income parents (iii) a group in which the inheritance is concentrated among low-income parents. The high incidence rate of the first group is likely related related to the size and geographical concentration of the industry or specific human capital requirements. In the second group, the chance of inheriting an employer is concentrated among higher-income parents. These children also obtain wage premium. The inheritance of employers could be related to the role of family's capital accumulation, parental networks and investment in industry-specific human capital . Finally, the inheritance of the third group is concentrated among low-income parents. In this case, the the transmission of tastes or the combination of a highly segmented labor market with family credit constraints could be explaining the inheritance of employer.

Finally, the employer inheritance contributes to income persistence and the non-linearity of intergenerational income/earnings mobility. The employer inheritance is "good news" for children with high-income parents but "bad news" for children from low-income backgrounds.

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## A Theoretical model

Here, we present a simple model that offers a framework for interpreting the role of informal networks and employer matching between parents and children in a segmented labor market.<sup>25</sup>

#### A segmented labor market

We assume there is a segmented labor market with two types of firms. There is a highproductivity segment (identified by the superscript H) and a low-productivity segment (L). This assumption aligns with the presence of a dual labour market in developing countries, as is the case in Uruguay. Firms in the higher-productivity segment seek workers with higher human capital levels and reward such employees. In contrast, firms in the lower-productivity sector are less inclined to differentiate among potential workers and their human capital accumulation.

We define the earnings of the worker i who works at the firm j in the sector H or L as:

$$y_{i,j}^{H} = \rho^{H} h_{i} + f_{j}^{H} + u_{i} \tag{6}$$

$$y_{i,j}^L = \rho^L h_i + f_j^L + u_i \tag{7}$$

where  $y_{i,j}^X$  represents the log earning of a worker *i* employed at the firm *j* in the sector  $X = H, L, f_j$  represents a firm's differential payment to that worker (with  $f_j^L < f_j^H$ ), and  $u_i$  is an idiosyncratic shock. The parameter  $\rho$  represents the returns to human capital and we expect that  $\rho^L < \rho^H$ . Namely, wages are higher in *H* firms due to the firm's differential payment  $(f_j)$ , and the higher reward to the level of human capital  $(\rho)$ .

Consequently, both sectors differ in the hiring process and the matching of workers and firms. Firms in sector H seek more productive workers with higher human capital and are willing to invest in it. Firms in sector L do not differentiate by the workers' productivity and therefore do not allocate resources to employee search. Finally, the model assumes that for once a worker enters a segment of the labor market, they cannot shift to another. However, the next generation can switch sectors relative to their parents. These assumptions are consistent with a notion of permanent income where the sector associated with each worker is the one that represents their main income along the active life in the labor market.

#### Firms decisions

Each type of firm j pays a premium or wage penalty to the outside option in its sector:

$$f_i^H = f_0^H + \Pi_i^H D_i, \tag{8}$$

<sup>&</sup>lt;sup>25</sup>This model extends the model developed by Staiger (2020) by incorporating the assumption of segmented labor markets.

$$f_j^L = f_0^L + \Pi_i^L D_i, \tag{9}$$

where j(0) identifies the outside option, while D identifies whether the worker *i* matches the firm with his father. Parameters  $\Pi^H$  and  $\Pi^L$  identify the individual direct effect of working for a parent's employer. The evidence is ambiguous regarding the role of informal networks in wages (Ioannides and Datcher Loury, 2004; Loury, 2006). Theoretically, the presence of worker heterogeneity and segmented markets could explain these contradictory findings (Horvath, 2014; Tumen, 2016). Unlike Staiger (2020), this model enables the role of parents and informal networks on children's earnings to differ according to labor market segment.

*H*-sector firms value information from workers that can confirm their level of productivity. In particular, firms reward the information that parents provide about their children's productivity level, which implies a wage premium in the case where parents and children work in the same firm ( $\Pi_i^H > 0$ ). As is assumed by Staiger (2020), in the high-productivity sector, there is alignment between workers' human capital level and employers offering a higher wage premium. Sorting between workers and firms in the high-productivity segment is characterized by:

$$f_{j(0)}^{H} = w_{j}^{H} + \lambda_{i}h_{i} + v_{i}$$
(10)

where  $\lambda$  captures the idea that workers with higher levels of human capital receive a higher wage premium,  $w_j^H$  captures the differential wage between firm j and the best alternative firm option, and  $v_i$  is an idiosyncratic error term.

In the case of the low-productivity sector, L the firms do not consider the human capital accumulation of the workers. Therefore they do not value the information they can obtain about the productivity levels of potential workers. The matching between workers and firms in this segment is characterized by:

$$f_{j(0)}^{L} = w_{j}^{L} + v_{i} \tag{11}$$

Note that  $w_j^L$  and  $w_j^H$  allow the baseline wage of the firm j to pay a wage penalty ( $w_j < 0$ ) or a premium ( $w_j > 0$ ), compared to the outside option. This base wage differential is at the firm level and can be explained by differences in productivity or institutional factors. When j is the father's employer in the sector X, and  $w_j^X + \Pi^X > 0$ , the children always receive a wage premium for working at that firm compared to the outside option.

As Staiger (2020) points out, the occurrence of a child being employed by their parent's employer depends on decisions made by both the worker and the firm. The offer decision of a firm depends on hiring costs, which are  $\underline{z_i}$  and  $\overline{z_i}$  for high and low-productivity sector firms respectively, with  $z_{min} < \underline{z_i} < \overline{z_i} < z_{max}$ . We assume that the search cost for firms in sector H is higher than that of firms in the L sector.

The hiring cost also depends on the human capital of the parents and their children. The parents' human capital,  $h_p$  is associated with the position and power of parents in the firms, and their network. While, the children's human capital,  $h_c$  is a signal of their ability and pro-

ductivity. For high-productivity and low-productivity firms, the offer decisions are respectively modelled as:

$$O_i^H = \mathbf{I} \left\{ \phi^H h_{pi} + \gamma^H h_{ci} > \overline{z_i} \right\}$$
(12)

$$O_i^L = \mathbf{I} \left\{ \phi^L h_{pi} + \gamma^L h_{ci} > \underline{z_i} \right\}$$
(13)

where  $\phi$  represents the role of human capital on parental control over the firm hiring process (through their position, information access and networking) and  $\gamma$  the role of children's signal and their own informal networking.

These assumptions agree with the well-known stylised fact that most new jobs are filled through formal and informal networks. Previous literature suggests that informal networks can contribute to the hiring process through three channels (Topa, 2011): providing information about job vacancies within the company, the hiring process and the conditions of employment <sup>26</sup>, directly influencing the hiring process; offering information and recommendations about the workers. Two types of informal recommendations affect the hiring process. First, the information on applicants could come from the applicants' family, friends, or other social ties. On the other hand, the recommendation of the applicants could come from individuals with direct experience of the productivity of the worker (their boss, manager or plant colleagues). While the first type of contact may not necessarily offer insights into the productivity and skills of workers, the second type provides valuable information for firms aiming to distinguish workers based on their productivity. These arguments have been used to explain why informal networks might have ambiguous effects on workers' wages. Information about workers' productivity and ability for skilled positions is critical to the success of the match in the high-productivity sector.

Therefore, the coincidence of employers between parents and children in the high productivity segment implies a reward in the wages of the second generation for two reasons: on the one hand, as a reward for the information provided on the potential level of productivity of the worker; secondly, it may be due to a direct influence of the father in the hiring process, indicating some degree of nepotism. The low-productivity sector, on the other hand, offers low-skilled jobs and therefore does not differentiate its workers according to their potential productivity. Based on these discussion we expect  $\phi^H > 0$  and  $\phi^H > \phi^L$ . Note that  $\phi^L$  could be negative if the hiring process of these firms uses informal networks more intensively and parents with low levels of human capital use more intensive informal contacts in the job search of children.

#### Workers

As is standard, there is a positive relationship between the levels of human capital of the children and their parental earnings:

$$h_i = x + \theta y_p + \eta_i \tag{14}$$

<sup>&</sup>lt;sup>26</sup>Job-seekers access to information through formal sources -as employment agencies and newspaper- advertisements, and informal networking -social connections, family, co-workers- (Ioannides and Datcher Loury, 2004).

where  $y_p$  is the parental earning,  $\theta$  is positive -reflecting that human capital is increasing in parental earning- and  $\eta$  is an idiosyncratic term.

Workers face a job search cost C, which differs between the high and low-productivity sector  $C^H > C^L$ . However, job search costs are affected by parental informal networks. We assume that job seeker i face lower cost for her parents firms:  $c_i^{H^p} < c_i^{H^o}$  or  $c_i^{L^p} < c_i^{L^o}$ .

Workers choose the same employer as their parents as long as the wage premium of this firm compensates the difference in search costs compared to their outside option (-j). For the H segment of the labor market, this implies that:

$$A_{i,j}^{H} = \mathbf{I} \left\{ w_{j}^{H} + \Pi^{H} > \Delta c_{i}^{H} \right\}$$

$$\tag{15}$$

where  $\Delta c_{i,j}^H = c_{i,j}^{H^p} - c_{i,-j}^{H^o}$ . In another case, the children will prefer to work in another high-productivity firm.

In the case of children of parents employed in the L sector, there is an additional alternative, which is to work in a firm in the high-productivity sector. Workers prefer to work in a H firm when the pay exceeds the search cost differential:  $f_{-j}^H - c_i^H > f_j^L - c_i^L$ . This condition will be met for workers with higher levels of education and will increase with the return on human capital. Therefore, children with parents in the low-productivity sector will choose to work for the employer of their parents when two conditions are simultaneously satisfied:

$$\begin{cases} A_i^L = \mathbf{I} \left\{ \Pi^L + w_j^L > \Delta c_i^L \right\}, \\ f_{-j}^H - f_j^L > C_i^H - C_{j,i}^L \quad \text{(Intersectoral preference condition)} \end{cases}$$
(16)

Both for the firms of sectors H and L the incentives to prefer the parents' employer depend on the magnitude of the premium  $\Pi^X + w_j^X$  and the differential searching cost ( $\Delta c_i^X < 0$ ). Note that in the case of workers with parents in the low productivity sector an additional condition must be met: the *intersectoral preference condition*. This condition implies that workers prefer to remain in sector L and not switch to the higher productivity segment of the labor market. Worker who faces very high-cost differential for changing sectors may tend to maintain in L-segment firms.

The children's preferences to work at the same firm as their parents could be explained because children receive a wage premium  $(\Pi^X + w_j^X > 0)$  or reduce their job-seeking cost  $(\Delta c_i^X < 0)$ . When the decision is based primarily on lower search costs, workers may choose a firm that involves a wage penalty  $(\Pi^L + w_j^X < 0)$ . This provides flexibility to the model and is consistent with previous empirical findings that suggest that in the case of unskilled children access to jobs through personal contact could reduce wages.

Within the predictions of the model, therefore, the search cost could cause low-skilled workers to be employed in firms with a wage penalty. Workers' search costs are influenced by their preferences, such as risk aversion, time preferences, and tastes for certain jobs. Search costs are expected to be lower when parental networks are more extensive and of higher quality. Household circumstances can also affect search costs through other mechanisms as well. For instance, in low-income households with workers at low-productivity sectors, remaining unemployed might represent an excessively high cost, leading children to prefer lower wages over the uncertainty of obtaining a higher-paying job in the future. In this case, the recommendation based on family contacts could reveal a weak negotiation position or a higher exposure to the risk of unemployment Antoninis (2006).

#### The role of the inheritance of employers

A child will work with her parent employer  $(D_i^X = 1)$  if she receives a job offer and it is the best possible option:

$$D_i^H = \mathbf{I}\left\{\phi^H h_{pi} + \gamma^H h_{ci} > \overline{z}\right\} \times \mathbf{I}\left\{\Pi^H + w^H > \Delta c_i^H\right\}$$
(17)

$$D_i^L = \mathbf{I} \left\{ \phi^L h_{pi} + \gamma^L h_{ci} > \overline{z} \right\} \times \mathbf{I} \left\{ \Pi^L + w^L > \Delta c_i^L \right\}$$
(18)

Under the model assumptions, the equations 17 and 18 demonstrate that the event that an individual works for their parent's employer depends on the choices of multiple agents. Combining previous equations arrive at the labor earning for children from low and highproductivity firms.

$$y_i^H = \rho^H (\theta y_{pi} + x + \eta_i) + \lambda (\theta y_{pi} + x + \eta_i +) + w^H + v_i + \Pi^H D^H + u_i$$
(19)

$$y_i^L = \rho^L(\theta y_{pi} + x + \eta_i) + w_j^L + v_i + \Pi^L D^L + u_i$$
(20)

To simplify we assume  $\rho^H = \rho^L = \rho$ . Let  $I^H$  and  $I^L$  are indicator variables equal one if the individual works in the high-productivity sector firm or the low-productivity firm respectively. Reorganizing terms, we arrive at a single equation that relates the father's and children's earnings.

$$y_i = \xi_0 + \xi'_0 I^H + \xi_1 y_p + \xi'_1 y_p I^H + \Pi^H D^H + \Pi^L D^L + \epsilon_i + \epsilon'_i$$
(21)

where  $\xi_0 = w_j^L + \rho^L x$ ,  $\xi'_0 = \lambda x + w_j^H - w_j^L$ ,  $\xi_1 = \rho \theta$ ,  $\xi'_1 = \lambda \theta$ , and finally  $\epsilon_i = \lambda v_i + u_i + \theta \eta$  and  $\epsilon'_i = \lambda \eta$  are unobserved error terms. The parameter  $\xi_1$  represents the average intergenerational elasticity of earning (IGE), while the term  $\xi_1 + \xi'_1$  represents the intergenerational IGE for children that work in high-productivity firms. According to the model's assumptions,  $\xi'_1 > 0$  because these children receive an additional reward in the remuneration of their human capital, which, in turn, depends on the parent's income. The parameter  $\Pi^H$  quantifies the wage premium for the child when working for his/her parents' employer compared to the exit option in the high-productivity sector. We expect  $\Pi^H > 0$ . While  $\Pi^L$  measures the wage differential for the child when working for his/her parents' employer compared to the exit option in the low-productivity sector.

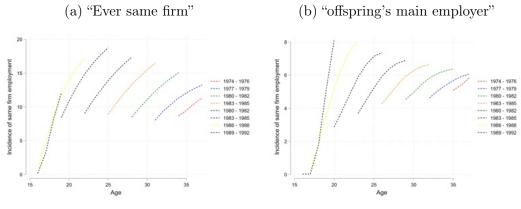
Specification 21 allows an estimate of IGE and to identify the differential role of the inheri-

tance of employer by sector ( $\Pi^H$  and  $\Pi^L$ ). To derive a causal interpretation of these parameters we follow the instrumental variables strategy of Staiger (2020), using the average hiring and turnover rates at the parent's employer. We also include controls for the industry and parent's wage quartiles to approximates the segment of the labor market (see section 5 for details). c

## A Appendix of Figures and Tables

#### Figures

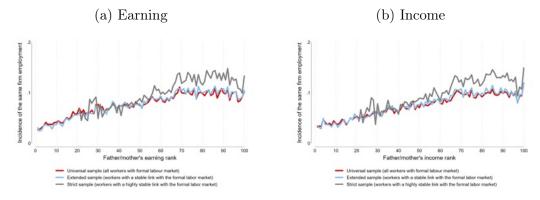
Figure A1: Incidence of inheritance of employers and children life cycle (baseline sample)



Note:

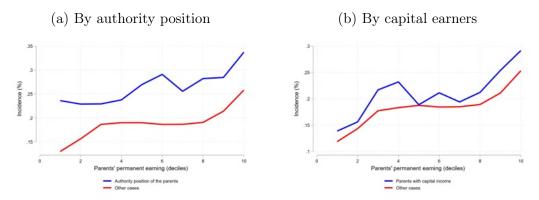
The cohorts group three consecutive generations. Incidence of the same employer based on "ever same firm" and "offspring's main employer" respectively. Estimates are based on baseline sample.

Figure A2: Incidence of inheritance of employers by parental earning/income distribution: "offspring' main employer"



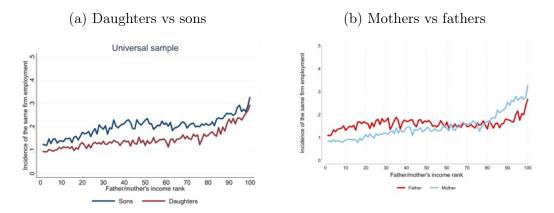
Note: Percentiles based on parents earning/income distribution. Incidence of same employer based on "offspring' main employer". Estimates based on strict, extended and baseline samples.

Figure A3: Incidence of inheritance of employers by parents position in their main employment and capital incomes



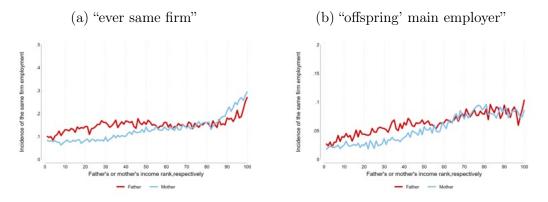
Note: Deciles based on parents earnings distribution. Incidence of same employer based on "ever same firm". Estimates based on baseline sample. Children aged 30 to 39 and mother/father aged 45 to 65 years.

Figure A4: Incidence of inheritance of employers by children and parental income distribution



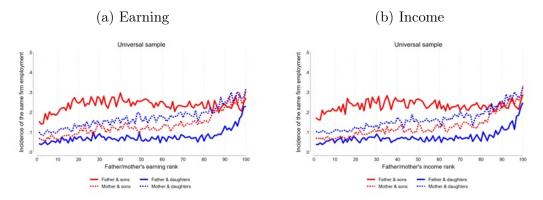
Note: Percentiles based on parents income distribution. Incidence of the same employer based on "ever same firm". Estimates based on baseline samples.

Figure A5: Incidence of inheritance of employers for "ever same firm" and "offspring' main employer" by parents gender and parental income distribution. Percentiles defined for each gender



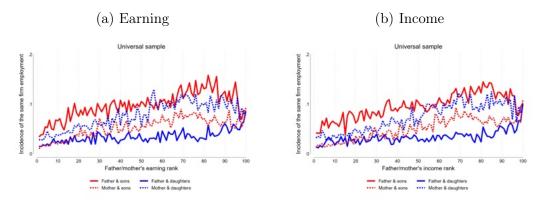
Note: Percentiles based on father's income distribution and mother's income distribution separately. Incidence of same employer based on 'offspring' main employer". Estimates based on baseline samples.

Figure A6: Incidence of inheritance of employers by gender of parents and children



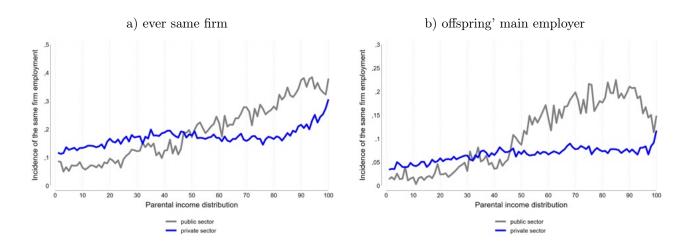
Note: Percentiles based on parents earning/income distribution. Incidence of same employer based on "ever same firm". Estimates based on baseline samples. Sons/daughters aged 20 to 39 and mother/father aged 45 to 65 years.

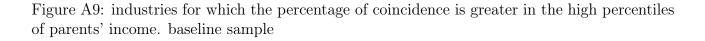
Figure A7: Incidence of inheritance of employers for "offspring' main employer" by gender of parents and children



Note: Percentiles based on parents earning/income distribution. Incidence of same employer based on "offspring' main employer". Estimates based on baseline samples. Sons/daughters aged 20 to 39 and mother/father aged 45 to 65 years.

Figure A8: Incidence of inheritance of employers: public vs private sector. baseline sample





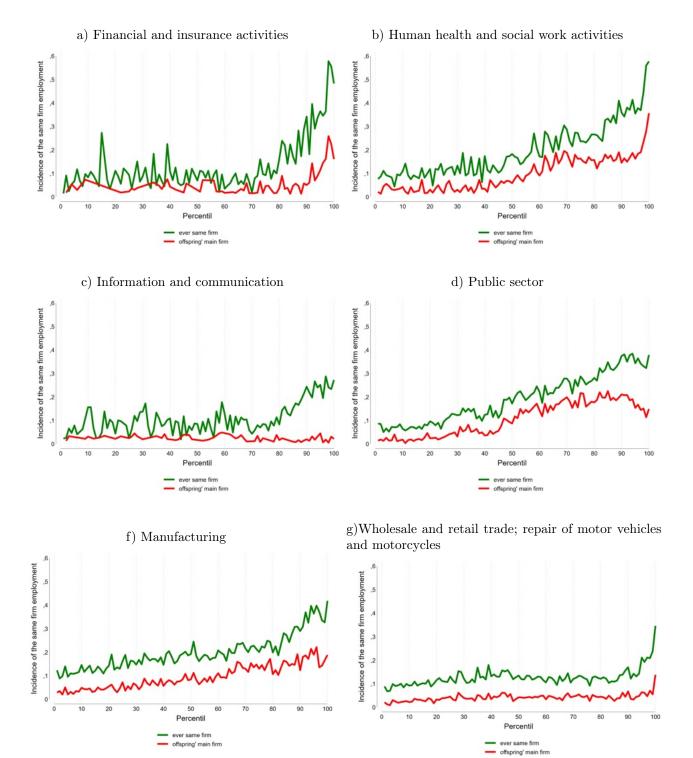
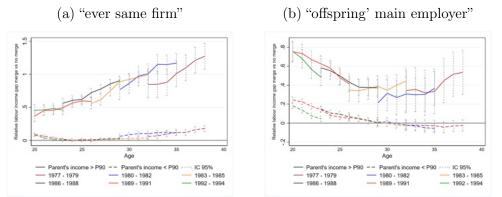
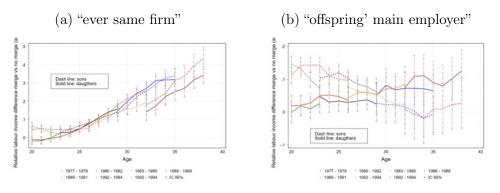


Figure A10: Children'earnings gap by inheritance of employers and parents position (Top 10% vs the rest)



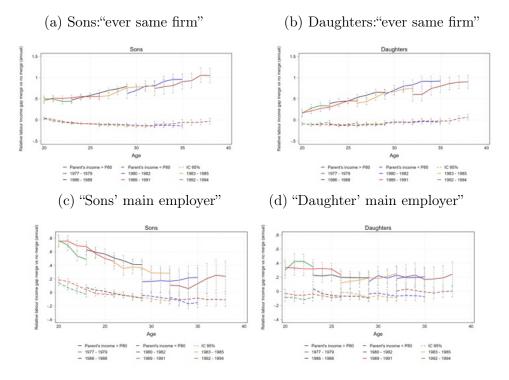
Note Percentiles based on parents earning/income distribution (horizontal axis); offspring' earnings gap by inheritance of employers (vertical axis). The sample is divided into two groups: children whose parents are located between P1 and P90 percentiles, and whose parents are located between P90 and P90 percentiles children. The gaps are defined for each of these groups separately. Incidence of same employer based on "offspring' main employer". Estimates based on baseline samples. Sons/daughters aged 20 to 39 and mother/father aged 45 to 65 years.

Figure A11: Offspring' earnings gap by inheritance of employers and gender: daughters vs sons

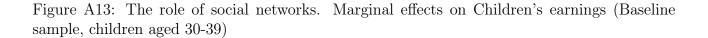


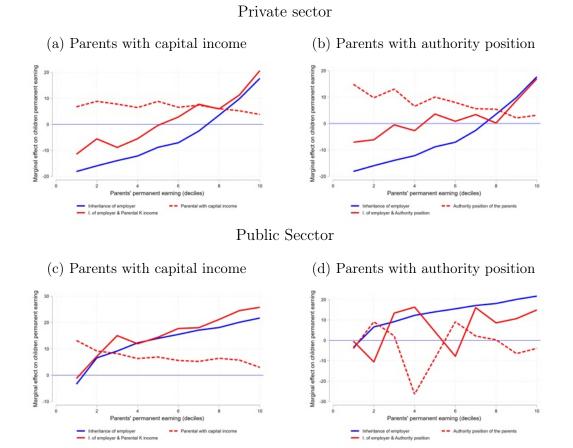
Note: Percentiles based on parents earning/income distribution (horizontal axis); offspring' earnings gap by inheritance of employers (vertical axis). Incidence of same employer based on "offspring' main employer". Estimates based on baseline samples. Sons/daughters aged 20 to 39 and mother/father aged 45 to 65 years.

Figure A12: Offspring' earnings gap by inheritance of employers, by offspring' gender and parents position (Top 20% vs the rest)



Note: Percentiles based on parents earning/income distribution (horizontal axis); offspring' earnings gap by inheritance of employers (vertical axis). The sample is divided into two groups: children whose parents are located between P1 and P80 percentiles, and whose parents are located between P80 and P90 percentiles children. The gaps are defined for each of these groups separately. Panel a and b: incidence based on "ever same firm". Panel c and d incidence based on "offspring' main employer". Estimates based on baseline samples. Sons/daughters aged 20 to 39 and mother/father aged 45 to 65 years.





Note: These marginal effects are based on the estimation of the model presented in Column (5) of the Table A.9.

Figure A14: Parents with authority position and capital incomes. Frequencies by parents' income deciles (Children aged 30 - 39, Baseline sample

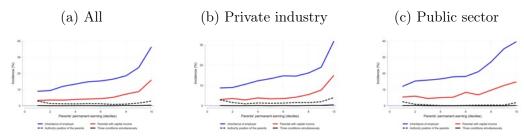
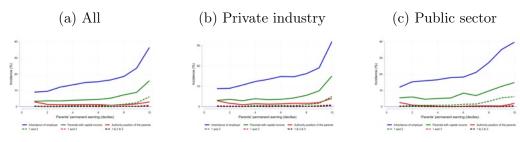
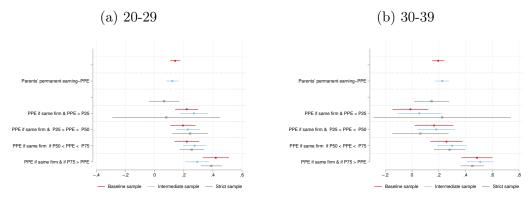


Figure A15: Parents with authority position and capital incomes. Frequencies by parents' income deciles (Children aged 30 - 39, Baseline sample



Note: Vertical axis identifies the frequencies of the variable of interest. Horizontal axis represents the parental earnings' deciles.

Figure A16: IRA estimates by samples. Average and Interaction of inheritance, PPE and quartiles



Note: Vertical axis identifies the variable of interest. Horizontal axis represents represents the magnitude of the estimated coefficient. Percentiles based on parents income distribution. Estimates based on baseline, extended and strict samples and specification of columns 3 and 4 of Table ??.

## Tables

	Total	No merge	Ever same firm	Children's main employer							
	(1)	(2)	(3)	(4)							
All	100,00	82,55	$17,\!45$	7,25							
	Panel A. Demographic characteristics										
Age 20 29	69,62	81,58	18,42	7,62							
Age 30 39	$30,\!38$	84,76	$15,\!24$	$6,\!42$							
Female	47,73	$85,\!33$	$14,\!67$	6,42							
Male	$52,\!27$	80,01	19,99	8,01							
Fathers	$47,\!36$	80,29	19,71	8,21							
Mothers	$52,\!64$	84,58	15,42	6,39							
Average age parents	$53,\!23$	53,37	$52,\!60$	52,59							
	Panel B. Children's Employment										
Public sector	15,03	79,48	20,52	11,52							
Private sector	83,87	83,01	16,99	$6,\!55$							
Missing sector	1,10	89,48	10,52	2,74							
Less than 5 workers	$5,\!49$	88,04	11,96	4,67							
5 to 19 workers	14,78	$83,\!45$	$16,\!55$	7,15							
20 to $49$ workers	$13,\!15$	$83,\!45$	$16,\!55$	6,25							
50 to $100$ workers	9,74	$83,\!98$	16,02	5,33							
100 workers or more	$56,\!68$	$81,\!33$	$18,\!67$	8,10							
Missing workers	0,16	$81,\!47$	18,53	5,41							
Panel C. Inheritan	ce of er	nployers by	y the parental	position in the earning distribution							
at the bottom 50 $\%$	$54,\!17$	83,85	16,15	6,60							
at the middle 40 $\%$	$36,\!50$	82,75	$17,\!25$	7,95							
at the top 10 $\%$	9,33	74,23	25,77	8,33							
at the top 5 $\%$	4,57	70,19	29,81	7,59							
at the top 1 $\%$	0,81	63,73	36,27	5,99							

 Table A.1: Incidence of intergenerational transmission of employers by a set of variables of interest. Universal sample

The columns present the proportion of children for each variable of interest in the universal sample (col 1) and the proportion of offspring who do not work in the same firm as their parents conditional on the variable of interest (col 2). Columns 3 and 4 describe the incidence of inheritance of employers for the two alternative definitions of inheritance of employer: ("ever same firm", Col 3) and ("children' main employers", Col 4).

		Trans	mission of e	mployers			Wor	kers
Industry	Average	Bottom 50	Middle 40	Top 10	Top 5	Top 1	Ν	Share
Agriculture	31.5%	33.1%	27.7%	21.9%	21.1%	28.6%	24343	7.7%
Public	25.0%	6.6%	31.4%	53.6%	55.3%	63.1%	51542	16.4%
Construction	22.2%	19.6%	26.9%	22.1%	23.6%	23.4%	17031	5.4%
Mining	21.0%	17.4%	25.1%	42.1%	30.0%	33.3%	577	0.2%
Finance, Insurance	20.5%	17.6%	14.0%	39.9%	49.5%	43.3%	6002	1.9%
Administrative services	18.7%	22.8%	13.5%	7.9%	9.3%	18.9%	18237	5.8%
Hospital, Health	18.6%	9.1%	22.7%	37.1%	44.5%	56.9%	18434	5.9%
Real estate	18.1%	18.0%	19.1%	13.1%	14.4%	30.6%	5035	1.6%
Transportation	17.2%	13.8%	21.6%	16.9%	16.3%	25.0%	14673	4.7%
Manufacturing	17.1%	13.0%	21.2%	28.6%	28.5%	35.4%	40118	12.7%
Water supply	16.2%	15.5%	19.3%	-	-	-	517	0.2%
Education	13.8%	11.8%	14.5%	16.3%	14.6%	10.2%	10059	3.2%
Other services	11.8%	13.6%	10.5%	6.6%	6.0%	6.3%	5290	1.7%
Accommodation act.	11.5%	12.9%	10.4%	6.4%	6.7%	4.6%	11030	3.5%
$\operatorname{Art}/\operatorname{Entertainment}$	11.2%	12.6%	10.1%	10.2%	11.1%	9.5%	4206	1.3%
Wholesale Trade	8.9%	8.2%	9.3%	11.6%	15.3%	23.5%	64999	20.6%
Electric service	8.4%	5.1%	12.0%	15.0%	18.2%	-	249	0.1%
Professional, scientific	7.1%	8.9%	6.7%	4.3%	3.6%	4.0%	15310	4.9%
Communications	3.9%	4.4%	2.9%	5.8%	5.6%	5.5%	7320	2.3%
Total	17.5%	14.9%	18.8%	26.2%	27.5%	31.3%	314972	100.0%

Table A.2: Intergenerational transmission of employers by industry and position in the distribution of parents.

Table A.3: Distribution of employment and wages by sector, average salary levels and informality rate (2013).

	Worl	kers	Fii	rms	W	age		
Industry	N	Share	Ν	Share	Average (UY\$)	Relative to avg.	Bottom	
Administrative services	123182	6,1%	2773	2,3%	142.683	49,5%	68,9%	
Agriculture	181742	$9,\!0\%$	21426	11,8%	147.777	$51,\!2\%$	68,0%	
Accommodation act.	62064	$3,\!1\%$	3955	$6,\!4\%$	154.758	$53,\!6\%$	$67,\!3\%$	
Water supply	3424	$0,\!2\%$	111	3,2%	184.117	63,8%	61,5%	
Art/Entertainment	29703	1,5%	1246	$4,\!2\%$	199.141	69,0%	62,4%	
Education	71792	$3,\!6\%$	1940	2,7%	214.097	74,2%	56,99	
Other services	29945	1,5%	3447	11,5%	214.982	74,5%	55,4%	
Real estate	37142	1,8%	4294	$11,\!6\%$	216.820	$75,\!1\%$	54,9%	
Professional, scientific	75884	3,8%	10318	$13,\!6\%$	233.324	80,9%	$60,3^{\circ}$	
Wholesale Trade	332375	16,5%	25411	$7{,}6\%$	245.366	85,0%	$51,3^{\circ}$	
Construction	119022	$5{,}9\%$	7815	$6,\!6\%$	264.326	$91,\!6\%$	49,0%	
Transportation	105804	$5{,}3\%$	9063	$8,\!6\%$	288.820	100,1%	48,9%	
Manufacturing	229978	$11,\!4\%$	8792	3,8%	324.930	$112,\!6\%$	44,2%	
Hospital, Health	156847	7,8%	5578	$3,\!6\%$	377.567	130,9%	38,3%	
Mining	3937	$0,\!2\%$	177	4,5%	399.975	$138,\!6\%$	37,8%	
Communications	27990	$1,\!4\%$	1636	5,8%	407.749	$141,\!3\%$	43,2%	
Public	391683	19,5%	235	$0,\!1\%$	408.562	$141,\!6\%$	33,4%	
Electric service	1524	$0,\!1\%$	68	4,5%	658.616	$228,\!3\%$	23,4%	
Finance, Insurance	29728	1,5%	1088	3,7%	718.271	248,9%	39,1%	

	Bottom 50	Middle 40	Top 10	Top 5	Top 1	Total	(3)/(1)	(4)/(1)	(5)/(1)
	(1)	(2)	(3)	(4)	(5)	10000	(0)/(1)	(1)/(1)	(0)/(1)
Agriculture	28,44	24,61	25,80	26,69	39,06	27,43	0,91	0,94	1,37
Mining	19,02	27,54	59,09	50,00	50,00	$23,\!45$	$3,\!11$	$2,\!63$	$2,\!63$
Manufacturing	14,70	$21,\!67$	36,00	$37,\!05$	41,84	18,72	$2,\!45$	2,52	2,85
Electricity gas	10,74	24,55	40,00	$41,\!67$	$66,\!67$	$18,\!66$	3,72	3,88	6,21
Water supply	18,11	25,15	27,78	36, 36		$20,\!49$	1,53	2,01	
Construction	20,14	27,36	29,02	30,26	32,94	22,96	$1,\!44$	1,50	$1,\!64$
Wholesale retail trade	11,41	12,29	$18,\!90$	$23,\!83$	$34,\!62$	$12,\!28$	$1,\!66$	2,09	3,03
Transportation storage	$15,\!53$	$22,\!66$	$23,\!18$	$23,\!18$	$29,\!17$	19,05	$1,\!49$	$1,\!49$	$1,\!88$
Accommodation food	13,95	11,93	10,79	$12,\!44$	9,88	$12,\!97$	0,77	0,89	0,71
Information & communic	$7,\!58$	$11,\!44$	24,20	24,72	27,23	13, 12	3, 19	3,26	$3,\!60$
Financial insurance	$7,\!90$	13,13	41,09	$47,\!68$	48,29	$17,\!07$	5,20	6,04	6,12
Real estate activities	17,30	19,88	20,22	22,03	31,11	$18,\!46$	$1,\!17$	1,27	1,80
Prof & scientific	9,85	10,37	$15,\!27$	$15,\!59$	$14,\!53$	$11,\!11$	$1,\!55$	$1,\!58$	$1,\!47$
Administrative support	18,83	14,71	$14,\!64$	18,12	27,10	17,06	0,78	0,96	$1,\!44$
Education	12,26	16,56	19,77	$18,\!38$	$14,\!61$	15,51	$1,\!61$	1,50	1,19
Healt & social work	$11,\!11$	24,88	$42,\!56$	47,76	57,72	$21,\!20$	3,83	4,30	$^{5,20}$
Arts entertainment	12,27	12,26	$16,\!98$	16,34	$22,\!67$	$12,\!99$	1,38	1,33	$1,\!85$
Other service act	$12,\!65$	13, 13	14,92	$17,\!37$	16,33	$13,\!05$	1,18	1,37	1,29
Act of households	$27,\!37$	19,23	0,00	$0,\!00$		$24,\!32$	0,00	0,00	
Average priv	$15,\!52$	17,20	$24,\!05$	26, 15	30,49	$16,\!91$	1,55	$1,\!68$	1,96
Public sector	10,50	26,19	35,91	34,73	$37,\!92$	20,52	$3,\!42$	3,31	$3,\!61$
Unclassified	$10,\!69$	9,38	13,70	12,00	16,00	10,48	1,28	1,12	1,50
Global average	14,89	18,77	26,16	$27,\!49$	$31,\!33$	$17,\!45$	1,76	1,85	$2,\!10$

Table A.4: Incidence of inheritance of employers by groups of parental distribution: ever same firm permanent income

Marginal effect	Estimated parameter		Theoretical parameter and s
$IRA_{Low}$ with $D = 0$ and $s = (25, 50)$	$\beta'_{s,Low}$	=	$\xi_1 > 0$
$IRA_{High}$ with $D = 0$ and $s = (50, 90)$	$\beta'_{s,High}$	=	$\xi_1' > 0$
$Premium_{Low}$ with $D = 1$ and $s = (25, 50)$	$\beta_{sLow}^{\prime\prime} P_{i,Low}^{parents} + \alpha_{sLow}^{\prime}$	—	$\Pi^L?$
$Premium_{High}$ with $D = 1$ and $s = (50, 90)$	$\beta_{s^{High}}'' P_{i,High}^{parents} + \alpha_{s,High}'$	=	$\Pi^H > 0$
$IRA_{Low}$ with $D = 1$ and $s = (25, 50)$	$\beta_{s^{Low}}' + \beta_{s^{Low}}''$	=	$\xi_1',?$
$IRA_{High}$ with $D = 1$ and $s = (50, 90)$	$\beta_{s^{High}}' + \beta_{z^{High}}''$	=	$\xi_1 + i_1 > 0$

Table A.5: Summary of the relationship between the parameters of the theoretical model and those of the empirical model

## Table A.6: Intergenerational earnings mobility and the role of inheritance of employer. Least squares estimates of a linear regression model. Dependent variable children permanent earnings (Offspring aged 30-39)

	(1)	(2)	(3)	(4)	(5)	(6)
Parent's permanent earning	0.244***	0.235***	0.170***	0.231***	0.146***	0.130***
	(0.003)	(0.003)	(0.004)	(0.013)	(0.012)	(0.012)
Same firm		$3.661^{***}$	$-17.174^{***}$	-10.284***	-6.283***	-6.312***
		(0.251)	(0.485)	(0.810)	(0.737)	(0.739)
Same firm * Parent's permanent earnings (PPE)			$0.392^{***}$			
			(0.008)			
Same firm * PPE if $PPE < P25$				-0.002	-0.004	0.021
				(0.060)	(0.055)	(0.055)
Same firm * PPE if P25 <ppe< p50<="" td=""><td></td><td></td><td></td><td><math>0.124^{***}</math></td><td><math>0.076^{***}</math></td><td><math>0.075^{***}</math></td></ppe<>				$0.124^{***}$	$0.076^{***}$	$0.075^{***}$
				(0.025)	(0.022)	(0.022)
Same firm * PPE if P50 <ppe< p75<="" td=""><td></td><td></td><td></td><td><math>0.240^{***}</math></td><td><math>0.134^{***}</math></td><td><math>0.112^{***}</math></td></ppe<>				$0.240^{***}$	$0.134^{***}$	$0.112^{***}$
				(0.015)	(0.013)	(0.013)
Same firm * PPE if P75 <ppe< td=""><td></td><td></td><td></td><td>0.342***</td><td>0.233***</td><td><math>0.214^{***}</math></td></ppe<>				0.342***	0.233***	$0.214^{***}$
				(0.010)	(0.010)	(0.009)
Ν	$98,\!295$	$98,\!295$	98,295	$98,\!295$	$97,\!094$	93,836
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes
Cohorts controls	Yes	Yes	Yes	Yes	Yes	Yes
Sectors controls	No	No	No	No	Yes	Yes
Firms controls	No	No	No	No	No	Yes

Inheritance of employers is defined as at least one match with father's firm or mother's firm. Estimated based on the universal sample. Workers between 30 and 39 years old. Robust standard errors.

# Table A.7: Intergenerational earnings mobility and the role of inheritance of employer. Least squares estimates of a linear regression model. Dependent variable children permanent earnings (Offspring aged 20-29)

	(1)	(2)	(3)	(4)	(5)
Parent's permanent earning	0.119*** (0.002)	$0.117^{***}$ (0.002)	$0.100^{***}$ (0.009)	$0.071^{***}$ (0.009)	$0.062^{***}$ (0.014)
Same firm		$3.578^{***}$ (0.163)			
Same firm if PPE $\leq$ P25			-8.284*** (0.297)	$-6.630^{***}$ (0.319)	$-3.262^{***}$ (0.531)
Same firm if P25 $\leq$ PPE $<$ P50			-2.629*** (0.309)	-1.478*** (0.319)	0.398 (0.463)
Same firm if $P50 \le PPE < P75$			$5.690^{***}$ (0.320)	3.840*** (0.316)	$4.640^{***}$ (0.402)
Same firm if $P75 > PPE$			$18.015^{***}$ (0.337)	$13.379^{***}$ (0.333)	$12.972^{***}$ (0.387)
N	$225,\!287$	$225,\!287$	$225,\!287$	$196,\!850$	123,992
Controls demographic	Yes	Yes	Yes	Yes	Yes
Controls Cohorts	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles	No	No	Yes	Yes	Yes
Controls sectors/firms	No	No	No	Yes	Yes
Firm fixed effect	No	No	No	No	Yes

At least one match with parent's firm. Parents previously worked at the firm. Using universal sample. Workers between 20 and 39 years old. Robust standard errors. Table A.8: Intergenerational income mobility and the role of inheritance of employer. Least squares estimates of a linear regression model. Dependent variable children permanent income (Offspring aged 20-29)

	(1)	(2)	(3)	(4)	(5)	(6)
Parent's permanent earning	0.059***	0.048***	0.043***	0.147***	0.141***	0.091***
	(0.002)	(0.003)	(0.005)	(0.017)	(0.018)	(0.033)
Same firm	-13.614***	-10.578***	-7.362***	-10.729***	-9.350***	-5.183***
	(0.300)	(0.320)	(0.496)	(0.527)	(0.567)	(0.977)
Same firm * Parent's permanent earning (PPE)	0.336***	0.255***	$0.216^{***}$			
	(0.005)	(0.006)	(0.008)			
Same firm * PPE if PPE $\leq$ P25				0.202***	0.220***	$0.151^{**}$
				(0.038)	(0.040)	(0.067)
Same firm * PPE if $P25 \le PPE < P50$				0.237***	$0.194^{***}$	$0.145^{**}$
				(0.043)	(0.044)	(0.064)
Same firm * PPE if $P50 \le PPE < P75$				$0.364^{***}$	0.220***	0.204***
				(0.044)	(0.043)	(0.055)
Same firm * PPE if $P75 > PPE$				$0.471^{***}$	$0.419^{***}$	$0.341^{***}$
				(0.047)	(0.046)	(0.051)
Ν	$225,\!287$	$196,\!850$	$123,\!992$	$225,\!287$	$196,\!850$	123,992
Controls demographic	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles and interactions	No	NO	No	Yes	Yes	Yes
Controls sectors/firms	No	Yes	Yes	No	Yes	Yes
Firm fixed effect	No	No	Yes	No	No	Yes

At least one match with parent's firm. Parents previously worked at the firm. Using universal sample.

Workers between 20 and 39 years old. Robust standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PPE	0.149***	0.089***	0.140***	0.087***	0.088***	0.195***	0.039
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.024)	(0.071)
if CEO=1	9.519***	10.397***			9.458***	9.778***	14.093***
	(1.420)	(1.615)			(1.761)	(1.760)	(4.505)
PPE if CEO=1	-0.090***	-0.089***			-0.098***	-0.105***	-0.180***
	(0.024)	(0.028)			(0.032)	(0.032)	(0.064)
Inherits an employer		-14.845***		-14.028***	-14.786***	-14.631***	-11.144***
		(0.553)		(0.526)	(0.565)	(0.572)	(1.285)
PPE		0.307***		0.293***	0.305***	0.300***	0.247***
		(0.008)		(0.008)	(0.009)	(0.009)	(0.020)
Inherits an employer if CEO=1		0.817			0.999	1.085	1.119
1 0		(3.243)			(3.587)	(3.590)	(8.516)
PPE if Inherits an employer & CEO=1		-0.077			-0.053	-0.054	0.015
r J		(0.052)			(0.060)	(0.060)	(0.116)
if KI==1		· · ·	6.819***	7.904***	7.068***	7.309***	5.009
			(0.909)	(0.998)	(1.151)	(1.155)	(3.081)
PPE if KI==1			-0.023*	-0.046***	-0.038**	-0.044**	-0.021
			(0.013)	(0.015)	(0.017)	(0.017)	(0.041)
Inherits an employerif KI==1			· /	-0.384	-1.204	-1.078	-0.954
				(2.454)	(2.912)	(2.905)	(6.885)
Inherits an employer PPE if KI==1				-0.003	0.012	0.010	0.022
				(0.032)	(0.037)	(0.037)	(0.084)
Ν	71,845	71,845	79,130	79,130	71,845	71,845	19,766
Controls demographic	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls children' sectors	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Parents' sectors/firms	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles & interactions	No	No	No	No	No	Yes	Yes
Firm fixed effect	No	No	No	No	No	No	Yes
Triple interaction	No	No	No	No	Yes	Yes	Yes

Table A.9: Intergenerational income mobility and the role of parental position. Least squares estimates of a linear regression model. Dependent variable children permanent income

Table A.10: Intergenerational income mobility and the role of inheritance of employer on total income. Least squares estimates of a linear regression model. Dependent variable children total permanent income (Offspring aged 30-29)

	(1)	(2)	(3)	(4)	(5)
Parent's permanent income	0.267***	0.259***	0.273***	0.205***	0.214***
	(0.003)	(0.003)	(0.008)	(0.008)	(0.021)
Same firm		3.470***			
		(0.252)			
Same firm if $PPE \le P25$			-12.411***	-8.913***	-3.778***
			(0.534)	(0.584)	(1.460)
Same firm if $P25 \le PPE < P50$			-8.105***	-5.453***	-3.726***
			(0.499)	(0.506)	(1.065)
Same firm if $P50 \le PPE < P75$			4.215***	0.419	0.953
			(0.455)	(0.422)	(0.865)
Same firm if $P75 > PPE$			$19.118^{***}$	13.038***	13.001***
			(0.400)	(0.388)	(0.795)
Ν	98,296	98,296	98,296	$79,\!130$	$21,\!052$
Controls demographic	Yes	Yes	Yes	Yes	Yes
Controls Cohorts	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles	No	No	Yes	Yes	Yes
Controls sectors/firms	No	No	No	Yes	Yes
Firm fixed effect	No	No	No	No	Yes

At least one match with parent's firm. Parents previously worked at the firm. Using universal sample. Workers between 20 and 39 years old. Robust standard errors.

Table A.11: Intergenerational income mobility and the role of inheritance of employer. Least squares estimates of a linear regression model. Dependent variable children permanent income

	(1)	(2)	(3)	(4)	(5)	(6)
Parent's permanent income	0.189***	0.127***	0.139***	0.244***	0.216***	0.179***
	(0.004)	(0.004)	(0.012)	(0.022)	(0.024)	(0.069)
Same firm	-21.793***	-16.242***	-12.805***	-13.137***	-10.619***	-1.279
	(0.520)	(0.552)	(1.284)	(1.089)	(1.179)	(2.951)
Same firm * Parent's permanent earning (PPE)	0.442*** (0.008)	$0.311^{***}$ (0.008)	$0.269^{***}$ (0.019)			
Same firm * PPE if PPE $\leq P25$				0.025	0.097	-0.208
				(0.071)	(0.076)	(0.187)
Same firm * PPE if $P25 \le PPE < P50$				0.210***	0.045	-0.046
				(0.066)	(0.068)	(0.142)
Same firm * PPE if $P50 \le PPE < P75$				0.453***	0.239***	$0.224^{*}$
				(0.058)	(0.054)	(0.115)
Same firm * PPE if $P75 > PPE$				0.465***	0.492***	0.575***
				(0.048)	(0.047)	(0.097)
Ν	98,296	79,130	$21,\!052$	98,296	$79,\!130$	$21,\!052$
Controls demographic	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles and interactions	No	NO	No	Yes	Yes	Yes
Controls sectors/firms	No	Yes	Yes	No	Yes	Yes
Firm fixed effect	No	No	Yes	No	No	Yes

At least one match with parent's firm. Parents previously worked at the firm. Using universal sample.

Workers between 20 and 39 years old. Robust standard errors.

## Table A.12: Intergenerational income mobility and the role of parental position. Least squares estimates of a linear regression model. Dependent variable children permanent income. Baseline sample -all

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
percentil Parent's labour $income_U$	0.149***	0.089***	0.140***	0.087***	0.088***	0.195***	0.039	
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.024)	(0.071)	
1.ceo <sub>y</sub> mas	$9.519^{***}$	$10.397^{***}$			$9.458^{***}$	$9.778^{***}$	$14.093^{***}$	
	(1.420)	(1.615)			(1.761)	(1.760)	(4.505)	
$1.ceo_y mas # c.hq 100_r e f_y ambos_l a b_U$	-0.090***	-0.089***			-0.098***	$-0.105^{***}$	$-0.180^{***}$	
	(0.024)	(0.028)			(0.032)	(0.032)	(0.064)	
$1.merge_antes_ok$		$-14.845^{***}$		$-14.028^{***}$	$-14.786^{***}$	$-14.631^{***}$	-11.144***	
		(0.553)		(0.526)	(0.565)	(0.572)	(1.285)	
$1.merge_antes_ok # c.hq100_ref_yambos_lab_U$		$0.307^{***}$		$0.293^{***}$	$0.305^{***}$	$0.300^{***}$	$0.247^{***}$	
		(0.008)		(0.008)	(0.009)	(0.009)	(0.020)	
1.merge <sub>a</sub> ntes <sub>o</sub> k#1.ceo <sub>y</sub> mas		0.817			0.999	1.085	1.119	
		(3.243)			(3.587)	(3.590)	(8.516)	
$1.merge_antes_ok # 1.ceo_ymas # c.hq 100_ref_yambos_lab_U$		-0.077			-0.053	-0.054	0.015	
		(0.052)			(0.060)	(0.060)	(0.116)	
$1.d_y prop_k$			$6.819^{***}$	7.904***	7.068***	7.309***	5.009	
			(0.909)	(0.998)	(1.151)	(1.155)	(3.081)	
$1.d_u prop_k # c.hq 100_r ef_u ambos_l ab_U$			-0.023*	-0.046***	-0.038**	-0.044**	-0.021	
			(0.013)	(0.015)	(0.017)	(0.017)	(0.041)	
$1.merge_antes_ok # 1.d_y prop_k$				-0.384	-1.204	-1.078	-0.954	
•				(2.454)	(2.912)	(2.905)	(6.885)	
1.merge <sub>a</sub> ntes <sub>o</sub> k#1.d <sub>y</sub> prop <sub>k</sub> #c.hq100 <sub>r</sub> ef <sub>y</sub> ambos <sub>l</sub> ab <sub>U</sub>				-0.003	0.012	0.010	0.022	
				(0.032)	(0.037)	(0.037)	(0.084)	
$1.ceo_y mas # 1.d_y prop_k$					2.434	2.321	-4.338	
					(4.328)	(4.340)	(9.285)	
$1.merge_antes_ok # 1.ceo_umas # 1.d_uprop_k$					-4.195	-4.582	-14.927	
					(8.522)	(8.555)	(22.492)	
$1.ceo_u mas # 1.d_u prop_k # c.hq 100_r e f_u ambos_lab_U$					0.028	0.031	0.142	
					(0.066)	(0.066)	(0.127)	
1.mergeantesok#1.ceoumas#1.dupropk#c.hq100refuamboslabu					-0.055	-0.049	-0.138	
					(0.127)	(0.127)	(0.284)	
N	71,845	71,845	79,130	79,130	71,845	71,845	19,766	
Controls demographic	Yes	Yes	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls children' sectors	Yes	Yes	Yes	Yes	Yes	Yes	No	
Controls Parents' sectors/firms	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Dummies by quartiles & interactions	No	No	No	No	No	Yes	Yes	
Firm fixed effect	No	No	No	No	No	No	Yes	

#### Table A.13: Intergenerational income mobility and the role of parental position. Least squares estimates of a linear regression model. Dependent variable children permanent income. Baseline sample- Public sector

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
percentil Parent's labour $income_U$	0.131***	0.036***	0.135***	0.061***	0.040***	0.213**		
	(0.009)	(0.010)	(0.008)	(0.009)	(0.010)	(0.097)		
1.ceo <sub>y</sub> mas	$10.777^{***}$	$7.606^{*}$			5.771	5.025		
	(4.051)	(4.508)			(5.133)	(5.223)		
$1.ceo_y mas # c.hq 100_r ef_y ambos_l ab_U$	$-0.163^{***}$	-0.130*			-0.111	-0.112		
	(0.063)	(0.074)			(0.081)	(0.082)		
$1.merge_antes_ok$		$-16.411^{***}$		-13.228***	$-15.357^{***}$	$-14.613^{***}$		
		(1.579)		(1.534)	(1.625)	(1.631)		
$1.merge_antes_ok # c.hq 100_r ef_y ambos_lab_U$		$0.343^{***}$		$0.301^{***}$	$0.330^{***}$	$0.316^{***}$		
		(0.021)		(0.020)	(0.022)	(0.022)		
1.merge <sub>a</sub> ntes <sub>o</sub> k#1.ceo <sub>y</sub> mas		10.425			11.365	11.400		
		(9.950)			(11.855)	(11.707)		
1.mergeantesok#1.ceoymas#c.hq100refyamboslabu		-0.144			-0.159	-0.154		
		(0.145)			(0.168)	(0.167)		
$1.d_y prop_k$			$12.085^{***}$	$14.489^{***}$	$12.983^{***}$	$13.053^{***}$		
			(2.199)	(2.410)	(2.585)	(2.587)		
$1.d_y prop_k # c.hq 100_r e f_y ambos_l a b_U$			-0.080***	$-0.119^{***}$	-0.098***	$-0.103^{***}$		
			(0.029)	(0.033)	(0.036)	(0.036)		
$1.merge_antes_ok#1.d_uprop_k$				-10.610	-12.747*	-11.726*		
				(6.667)	(7.083)	(7.023)		
$1.merge_antes_ok # 1.d_y prop_k # c.hq 100_r ef_y ambos_lab_U$				0.122	$0.142^{*}$	0.131		
				(0.081)	(0.086)	(0.085)		
$1.ceo_y mas # 1.d_y prop_k$					-0.703	0.258		
					(9.557)	(9.600)		
1.mergeantesok#1.ceoymas#1.dypropk					0.573	-1.026		
					(22.124)	(21.810)		
$1.ceo_y mas # 1.d_y prop_k # c.hq 100_r e f_y ambos_lab_U$					0.026	0.026		
					(0.192)	(0.193)		
1.mergeantesok#1.ceoumas#1.dupropk#c.hq100refuamboslabu					0.009	0.023		
					(0.336)	(0.333)		
N	20,551	20,551	21,342	21,342	20,551	20,551		
Controls demographic	Yes	Yes	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls children' sectors	Yes	Yes	Yes	Yes	Yes	Yes	No	
Controls Parents' sectors/firms	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Dummies by quartiles & interactions	No	No	No	No	No	Yes	Yes	
Firm fixed effect	No	No	No	No	No	No	Yes	

#### Table A.14: Intergenerational income mobility and the role of parental position. Least squares estimates of a linear regression model. Dependent variable children permanent income. Baseline sample- Private sector

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
percentil Parent's labour $income_U$	$0.155^{***}$	0.104***	$0.144^{***}$	0.098***	0.102***	0.191***	0.026	
	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)	(0.025)	(0.075)	
1.ceo <sub>y</sub> mas	$9.300^{***}$	$10.620^{***}$			9.748***	$10.072^{***}$	$11.974^{**}$	
	(1.516)	(1.725)			(1.874)	(1.873)	(5.700)	
$1.ceo_y mas # c.hq 100_r ef_y ambos_lab_U$	$-0.076^{***}$	-0.082***			$-0.092^{***}$	-0.100***	-0.143*	
	(0.026)	(0.030)			(0.034)	(0.034)	(0.081)	
$1.merge_antes_ok$		$-14.452^{***}$		$-13.898^{***}$	$-14.531^{***}$	$-14.383^{***}$	-10.808***	
		(0.596)		(0.566)	(0.609)	(0.616)	(1.375)	
$1.merge_antes_ok # c.hq100_ref_yambos_lab_U$		$0.295^{***}$		$0.285^{***}$	$0.294^{***}$	$0.289^{***}$	$0.247^{***}$	
		(0.010)		(0.010)	(0.010)	(0.011)	(0.022)	
1.merge <sub>a</sub> ntes <sub>o</sub> k#1.ceo <sub>y</sub> mas		-0.352			-0.146	-0.073	5.733	
		(3.421)			(3.779)	(3.787)	(9.793)	
$1.merge_antes_ok#1.ceo_ymas#c.hq100_ref_yambos_lab_U$		-0.063			-0.033	-0.033	-0.032	
		(0.056)			(0.065)	(0.065)	(0.133)	
$1.d_y prop_k$			$5.856^{***}$	$6.617^{***}$	$5.431^{***}$	$5.728^{***}$	4.931	
			(0.998)	(1.097)	(1.286)	(1.291)	(3.451)	
$1.d_y prop_k # c.hq 100_r ef_y ambos_l ab_U$			-0.019	-0.037**	-0.028	-0.036*	-0.042	
			(0.016)	(0.018)	(0.021)	(0.021)	(0.046)	
$1.merge_antes_ok#1.d_yprop_k$				1.507	1.506	1.575	-7.302	
				(2.640)	(3.193)	(3.186)	(7.454)	
$1.merge_antes_ok#1.d_yprop_k#c.hq100_ref_yambos_lab_U$				-0.027	-0.017	-0.018	0.088	
				(0.037)	(0.042)	(0.042)	(0.092)	
$1.ceo_y mas # 1.d_y prop_k$					3.955	3.766	-6.652	
					(4.804)	(4.818)	(10.933)	
$1.merge_antes_ok#1.ceo_ymas#1.d_yprop_k$					-6.840	-7.174	-3.543	
					(9.184)	(9.219)	(23.917)	
$1.ceo_y mas # 1.d_y prop_k # c.hq 100_r e f_y ambos_l ab_U$					0.011	0.014	0.186	
					(0.073)	(0.073)	(0.146)	
$-1. merge_antes_ok \# 1. ceo_ymas \# 1. d_yprop_k \# c.hq100_ref_yambos_lab_U$					-0.038	-0.032	-0.243	
					(0.137)	(0.138)	(0.299)	
N	51,294	51,294	57,788	57,788	51,294	51,294	15,926	
Controls demographic	Yes	Yes	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls children' sectors	Yes	Yes	Yes	Yes	Yes	Yes	No	
Controls Parents' sectors/firms	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Dummies by quartiles & interactions	No	No	No	No	No	Yes	Yes	
Firm fixed effect	No	No	No	No	No	No	Yes	

Table A.15: Intergenerational earnings mobility by the transmission of employer. Childrenaged20-29. Instrumental variables estimates

	(1)	(2)	(3)	(4)	(5)	(6)
Parent's permanent earning	0.145***	0.122***	-0.119***	-0.091***		
	(0.002)	(0.004)	(0.025)	(0.025)		
Same firm	$-11.660^{***}$	$-7.713^{***}$	$-59.666^{***}$	$-54.986^{***}$		
	(2.412)	(2.165)	(5.039)	(5.753)		
Same firm * Parent's permanent earning (PPE)			$1.350^{***}$	$1.069^{***}$		
			(0.127)	(0.121)		
PPE if PPE $\leq$ P25					$0.596^{***}$	$0.560^{***}$
					(0.049)	(0.062)
PPE if $P25 \le PPE < P50$					$0.259^{***}$	$0.218^{***}$
					(0.029)	(0.029)
PPE if $P50 \le PPE < P75$					0.177***	0.151***
					(0.029)	(0.029)
PPE if $P75 > PPE$					-0.143***	-0.149***
					(0.050)	(0.043)
Same firm if $PPE \le P25$					-2.105***	-1.841***
					(0.241)	(0.287)
Same firm if $P25 \le PPE < P50$					-0.360*** (0.115)	-0.290**
					( /	(0.117)
Same firm if $P50 \le PPE < P75$					0.171 (0.133)	0.110 (0.125)
Same firm if $P75 > PPE$					0.163	0.095
Same infinine $173 > FFE$					(0.103)	(0.095) (0.086)
Ν	198,481	181,108	198,481	181,108	216,672	195.017
	150,401	101,100	150,401	101,100	210,072	155,017
Controls demographic	Yes	Yes	Yes	Yes		
Controls Cohorts	Yes	Yes	Yes	Yes	Yes	Yes
Dummies by quartiles and interactions	No	No	No	Yes	Yes	Yes
Parental Indistry Control	No	No	No	Yes No	Yes	Yes Yes
Children industry/firm Control	No	Yes	Yes	INO	Yes	res