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Los Angeles

Inequality in São Paulo's Old Republic:

A Wage Perspective, 1891-1930

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in History

by

Molly Catherine Ball

2013

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ABSTRACT OF THE DISSERTATION

Inequality in São Paulo's Old Republic:

A Wage Perspective, 1891-1930

by

Molly Catherine Ball

Doctor of Philosophy in History

University of California, Los Angeles, 2013

Professor William R. Summerhill, Chair

Urbanization often follows on the heels of industrialization, and in Latin America, stark inequality has accompanied this growth. However, we know little about how and when this inequality became entrenched in the region. This dissertation looks at lived workers' experiences and inequality in the city of São Paulo, Brazil during the city's rapid Old Republic (1891-1930) growth. São Paulo is the ideal environment to study inequality. The city was one of the first in the region to experience rapid expansion, growing from 65,000 inhabitants in 1890 to over one million by 1933, and was also one of the most diverse, as immigrants and migrants flocked to the city. As the first comprehensive and systematic study of wage inequality in such an important city, my project contributes to the historiographical literature on labor, gender and development history in Latin America. Furthermore, the methodology of using firm-level data to measure inequality when official statistics are unreliable can be applied across regions and time periods.

My dissertation directly examines the national, racial and gender discrimination workers faced in São Paulo's formal labor market using a variety of archival and official sources. It finds evidence that Afro-Brazilian, Portuguese and women workers encountered significant labor market discrimination. To analyze this discrimination, the dissertation addresses three related topics. It provides the first analysis of incoming immigrant groups' relative skill levels for the city. Immigrant registries suggest employers may have hired Germans into skilled positions and Portuguese into unskilled positions based on the expectation that they would be more or less skilled, respectively. Second, using firm-level employment data, the dissertation provides a much-needed wage series and shows real wages steadily declined and that skilled and unskilled wages diverged slightly in the 1920's. Finally, using firm-level data and a unique set of employee interviews, the dissertation shows that despite heavy criticism and labor market discrimination, some working- and middle-class wives and mothers chose to remain in the labor market. The dissertation findings suggest gender inequality was prominent during the Old Republic, but racial inequality actually expanded in the Vargas-era and Second Republic.

The dissertation of Molly Catherine Ball is approved.

Naomi Lamoreaux

Leah Boustan

William R. Summerhill, Committee Chair

University of California, Los Angeles

2013

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Notes on Conventions

Paulista/Paulistano(a)

The city of São Paulo is the capital of the state of São Paulo. Residents of the state are known as Paulistas and residents of the state are known as Paulistanos. In this dissertation, 'São Paulo' refers to the city and references to the state are noted. When I discuss female residents of the city, I often refer to these women as Paulistanas.

Currency: Mil-réis

The *mil-réis* was the official currency for Brazil during the period and was written as 1\$000. One thousand *mil-réis* was a conto and was written as 1:000\$000. Thus, when \$750 appears, it should be interpreted as 750 *réis*.

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Chapter 1: Inequality in a Burgeoning Metropolis

Urbanization often follows on the heels of industrialization. In no other region of the world is this more apparent than in Latin America. While today over eighty percent of the region's population lives in cities, making it the world's most urbanized region, at the beginning of the twentieth century, Latin America was widely rural and dedicated to agricultural and primary resource production. Four Latin American cities—Mexico City; São Paulo, Brazil; Buenos Aires, Argentina; Bogotá, Colombia—are among the world's ten largest metropolitan areas, while the United States only registers two cities of comparable size, Los Angeles and New York City.¹ The lion's share of this urbanization occurred after the introduction of railroads and factories in the late-nineteenth and early-twentieth centuries. Subsequent urban growth in the mid-twentieth century accompanied import substitution industrialization and populist policies that often privileged urban residents. Individuals flocked to cities in hopes of more opportunities and better services and the landscape of the modern Latin American city was forged.

Although national GDP's have increased alongside urban growth, the reality of the region's rapid urbanization is a host of growing pains, including, but not limited to stark inequality. Although there will always be a certain degree of inequality in every society, in the Latin American context, these dramatic differences have often translated into limited social mobility, substandard housing, poor schools and increased violence. Preoccupied with either contemporary or colonial inequality, scholars have overlooked the nature of inequality in the region's early industrialization and mass-urbanization phase. This dissertation is an economic

¹ Of the largest countries in Latin America, Mexico registers the lowest urbanization at 78%. In 2010, almost 85% of Brazil's population lived in cities. Estimation by the World Urbanization Prospects, the 2011 Revision. Metropolitan and city proper populations available in the United Nations *Demographic Yearbook 2011*, table 8, available online, <http://unstats.un.org/unsd/products/dyb/dyb2011.htm>. (Accessed May 25, 2013).

history that investigates this early period by focusing on the lived experiences of workers in the city of São Paulo, Brazil during the Old Republic (1891-1930). My methodological approach offers important insight into the inequality that workers of different nationalities and races faced in they city's wage labor market. My research also highlights the female labor experience and the choices that women made in the midst of heavy discrimination. Although the dissertation is limited to the city of São Paulo, the daily experiences documented in the following chapters were probably not too different from those of workers throughout the region living in cities with high urbanization and inequality rates in the twentieth century.

Brazil, and the city of São Paulo in particular, is the ideal place to investigate inequality in the late-nineteenth and early-twentieth century period. Due to a lack of sources, scholars have traditionally understudied this era in the discussion of Brazil's high inequality. There is a large consensus that the coercive institution of slavery and geographical (and production) differences created stark racial and inter-regional inequality in Brazil throughout the colonial period. Similarly, scholars agree that increasing income inequality could be found from the 1960's through the 1980's in Brazil.² Although it is tempting to assume that the inequality documented in the colonial era persisted through the 1980's and into today, the period between 1850 and the 1960's in Brazilian history is too dynamic for such a presumption. Brazil in 1850 was a rural slave society lacking reliable overland transportation and credit institutions. By 1960, the country was an industrial economy whose federal capital was moving over seven hundred miles inland from Rio de Janeiro to Brasília. To travel between the two cities just a century

² See Orlando J. Sotomayor, "Education and Changes in Brazilian age Inequality, 1976-2001," *ILRReview*, 58.1 (2004): 95-6 for a discussion of studies of Brazilian inequality from the 1960's forward. <http://digitalcommons.ilr.cornell.edu/ilrreivw/vol58/iss1/5>

before would have taken over a month.³ This time span also saw the abolition of slavery and five distinct national political structures. The Old Republic was firmly established in 1891 after the fall of the Empire in 1889. An oligarchic regime run mostly by politicians from the states of São Paulo and Minas Gerais, the era is often referred to as the politics of *café com leite*, literally coffee (São Paulo) with milk (Minas Gerais).⁴ A coup ended the oligarchy and installed Getúlio Vargas as president in 1930. In 1937, Vargas instituted the Estado Novo, a de facto dictatorship that would persist through 1945, when redemocratization occurred and the Republic of '46 began. Millions of immigrants, including Italians, Japanese, Portuguese, Germans and Syrians, also moved to the country and by 1960, Brazil was the eighth most populous country in the world.

In no place were these changes more pronounced than in the city of São Paulo, which today is South America's most important and largest industrial city. The city had just over 31,000 inhabitants in 1872 and served as an entrepôt between the coffee-producing interior that relied on slave labor and the port city of Santos. By 1934, the city was the center of Brazil's industrial production and was home to over one million residents. Immigrants and first-generation Brazilians living alongside native-born Paulistanos and Brazilian migrants helped mold the city as it grew over thirty times in just sixty-two years.⁵

³ Matthew Barton estimates that the distance between Rio de Janeiro and Ouro Preto, Minas Gerais was 15-20 days. Although the terrain between Ouro Preto and Brasília was less difficult to traverse, the distance (over 500 miles) would have added at least an additional ten days. See Barton "State, society and the struggle for political authority in nineteenth-century Minas Gerais, Brazil," PhD dissertation (UChicago 2012), 12, note 13.

⁴ For a comprehensive discussion of the politics of *café com leite*, see chapter six of Joseph Love *São Paulo and the Brazilian Federation, 1889-1937*, (Stanford, CA: Stanford University Press, 1980).

⁵ The IBGE compiles historical statistics via SIDRA, table 1287 "População dos municípios das capitais e Percentual da população dos municípios das capitais em relação das unidades da federação nos Censos Demográficos." "Tabela 1 – Produto Interno Bruto a preços correntes e Produto Interno Bruto *per capita* Segundo as Grandes Regiões, as Unidades da Federação e os municípios – 2005-2009," an IBGE elaboration, showed that in 2008, the city of São Paulo comprised 11.8% of Brazilian GDP. The state's share in national GDP was 33.1%.

Given such drastic changes, there is no way to know how inequality behaved without a systematic study of the period.⁶ A systematic approach also provides valuable insight into the daily lives and experiences of the thousands of city laborers who struggled to put food on the table and improve their lives: for the first time we can see how far a worker's daily wage could be stretched and what position or rank he or she could hope to aspire to within the formal labor market. This approach is particularly important for our understanding of female workers and their motivations to remain in the labor market in early-industrializing and urbanizing areas.

The dissertation answers the primary question of how much discrimination workers of different ethnicities, genders and races faced in the city's labor market during this period of rapid industrialization and growth. By focusing on formal labor market inequality in the city of São Paulo during the Old Republic, this study provides both a much-needed measure of inequality for the period and a window into the Paulistano reality. In order to answer this question, it addresses three related questions that are also essential to understanding the city's history and growth. First, what were the relative skill levels of incoming immigrant groups to the city during the period? Second, what was the real wage for São Paulo workers? And third, what was the formal labor market experience like for working females, wives and mothers in particular? As the first comprehensive and systematic study of wage inequality in such an important city, this dissertation contributes significantly to the historiographical literature on labor, gender and development history in Latin America.

To contextualize these questions, this chapter first describes some important political, economic and structural changes associated with the state and city of São Paulo in the years

⁶ For a preliminary attempt, see Luis Bértola, Cecilia Castelnuovo and Henry Willebald, "Income Distribution in Brazil, 1870-1920" (paper presented at the Mini-conference: A Comparative Approach to Inequality and Development: Latin America and Europe, Madrid Spain, Universidad Carlos III, 8-9 May 2009).

leading up to the Old Republic. It then documents how our existing knowledge of conditions in the city based primarily on anecdotal observations can neither depict a complete picture of the average Paulistano experience nor provide an accurate measure of inequality. Next it highlights existing inequality studies and methodologies for Brazil and other countries and explains the process by which I will address formal labor market inequality. The chapter concludes with an outline of the dissertation and the contributions of the individual chapters to the existing scholarship.

Part I: São Paulo's extraordinary growth

When Dom Pedro, the heir to the Portuguese crown, decided to stay in Brazil and declare the country's independence from Portugal on September 7, 1822 by the Ipiranga River, he could have hardly imagined what the area would look like a century later. By 1920, factories, tenement houses and *bondes* were the norm in the Paulistano Ipiranga neighborhood and throughout the city of São Paulo.⁷ White European immigrants represented over one third of the city's population where just fifty years prior 90% of the population was native-born. In 1829, 21% of the area's residents had been slaves and almost 50% of the city's residents were of African descent (either *pardo*, mixed, or *preto*, black).⁸ Political, economic and social changes over the nineteenth and early-twentieth centuries led to dramatic changes throughout the country, and the state and city of São Paulo provide the best lenses to follow these changes.

⁷ For example, the city in 1920 included 78,580 occupied residences, over 1200 factories, 104 houses of worship. The Ipiranga neighborhood had over 12,000 residents, 1634 private residences, nine factories and six houses of worship. Brazil. Directoria Geral de Estatística, *Recenseamento realizado em 1 de setembro de 1920*, (Rio de Janeiro: Typ. Da Estatística, 1922-1930): 4.6, 664-5.

⁸ Based on Arquivo Público do Estado de São Paulo Table 5.2, "Listas Nominativas de Habitantes," Francisco Luna and Herbert Klein show that 21% of the 61,957 individuals living around the 'capital region' were slaves. *Slavery and the Economy of São Paulo, 1750-1850*, (Stanford: Stanford UP, 2003), 111. Table 7.7, 175, shows that in the state of São Paulo in 1829, 74% of the population was white. For shares of the foreign-born population in the city, see June E. Hahner, *Poverty and Politics: The Urban Poor in Brazil, 1870-1920*, (Albuquerque: New Mexico UP, 1986), 47. See George Reid Andrews *Blacks and Whites in São Paulo Brazil 1888-1988*, Madison: University of Wisconsin Press, 1991), 247, for racial breakdown in the state of São Paulo.

One of the more important changes leading to the growth of São Paulo was the introduction of coffee to the region. Although first introduced to the country in Maranhão in 1727, it was not until the crop was brought to the rich soils of Rio de Janeiro that the region's favorable soils allowed for mass production.⁹ The last decade of the eighteenth century marked the first time that coffee became a notable Brazilian export. Scholars disagree as to the exact formula that allowed for São Paulo's eventual rise to prominence in Brazil, but the root of most of the changes was the state's expansion of coffee production. The crop played a significant role in shaping the state's population and transportation networks and in improving the state's financial institutions.¹⁰

In purely territorial terms, coffee expansion drastically changed the landscape of the state of São Paulo. Much of the state is suitable for coffee cultivation, but early production concentrated in the state's zones that were closer to the coast and historically more developed. Some of the best soil for coffee production, however, lies further inland in the western plateau region of the state. The growth of municípios in these zones shows it was coffee that helped develop these areas.¹¹ Five of the state's seven coffee-growing zones experienced marked growth in the number of municípios after coffee was established in each respective area. The most modest growth was in the Mogiana zone, where the number of municípios almost doubled

⁹ Basílio Magalhães, *O Estado de São Paulo e o seu Progresso na Actualidade*, (Rio de Janeiro: Typ. Do Jornal do commercio, 1913), 29-30.

¹⁰ Furtado and Baer argue that with coffee's decline, industrialization occurred, but disagree as to whether Vargas or WWI, respectively, marked the decline of coffee. São Paulo School sociologists (Cardoso, Ianni, Costa) and Prado Júnior argue that abolition and immigration played important roles. Gail Triner, *Banking and Economic Development: Brazil, 1889-1930*, (New York: Palgrave, 2000) and Warren Dean, *The Industrialization of São Paulo, 1880-1945*, (Austin: Texas UP, 1969), point to capital markets. However, all of these changes link in some way back to coffee expansion, Chiara Vangelista, *Os Braços da Lavoura*, (São Paulo: Editora Hucitec, 1991).

¹¹ I choose to use the Portuguese term *município* instead of municipality, as Holloway does. Thomas Holloway, *Immigrants on the Land: Coffee and Society in São Paulo, 1886-1930*, (Chapel Hill: University of North Carolina Press, 1980), chap 2.

between 1881 and 1934. The greatest growth was in the Noroeste zone, where twenty municípios existed in 1934 in an area where none had been prior to 1887.¹²

Coffee production was labor-intensive and Paulista planters' need for a reliable labor force eventually spurred the mass immigration to São Paulo. In the early part of the coffee-era when most coffee production was in the Paraíba Valley, the labor problem was often solved by the importation of slaves from Africa. Although the slave trade had technically been abolished in March of 1830 (enacted in 1831), clandestine shipments of slaves from Africa, largely from Kongo and Angola, continued to arrive in Brazil through 1850.¹³ Concurrent with the effective end of the slave trade, the Paulista hinterlands became the primary coffee producing region in the country. Thus, a reallocation of slaves from other parts of Brazil to the coffee plantations provided a significant portion of the labor. Whereas most states in Brazil saw a decrease in the share of the enslaved population during the Empire, the share actually increased in São Paulo.¹⁴

Although coffee planters in the state continued to rely on slave labor, abolition was imminent in Brazil long before the Golden Law of 1888 officially abolished slavery. Brazil had never been able to sustain a slave population through natural increase and São Paulo was no different. Thus, the first step towards abolition was the effective end of the Atlantic slave trade

¹² I refer to zones as presented in *ibid.* Seven of eleven zones in the state of São Paulo are suitable for coffee production, and six lie in the western plateau. See *ibid.*, chap 2, for a detailed account on the expansion of these zones.

¹³ See Roquinaldo Ferreira, "The Suppression of the Slave Trade and Slave Departures from Angola, 1830's-1860's," in *Extending the Frontiers*, eds. David Eltis and David Richardson, (New Haven: Yale UP, 2008), 313. Even in Cuba, where slaves historically came from diverse ethnic origins, slaves from Portuguese Africa represented almost 69% of slave purchases after 1850. Oscar Grandío Moráquez "The African Origins of Slaves Arriving in Cuba" in *ibid.*, 184, (based on The Slave Trade Database 2).

¹⁴ Stein J. Stein, *Vassouras: a Brazilian Coffee Country, 1850-1900*, (New York: Antheneum, 1976), 296. Stein shows an increase from under 8% in 1823 of the state's population to over 17% by 1872.

in 1850.¹⁵ Even if the fertility rates of the state's enslaved population had somehow increased dramatically after 1850, the Free Womb Law, passed in 1871 that granted freedom to all children born of slaves, ensured the end of the institution. Thus, it is not remarkable that Paulista planters explored alternative labor supplies starting in the 1840's. What is surprising is that so many planters clung to the coercive and regressive institution of slavery and were reluctant to implement an alternative labor force. Only after a marked increase in slave uprisings and walk-offs in the 1880's did planters seem to truly consider European immigrants as the future labor supply of coffee plantations.¹⁶ While only a few thousand immigrants migrated each year to the entire country of Brazil prior to the 1880's, between 1881 and 1888, over 60,000 immigrants came to the state of São Paulo—an average of over 8,500 immigrants per year.¹⁷ The transition may have started off slowly, but by the end of the Old Republic, almost one million immigrants had come to the state through the port of Santos.¹⁸

Labor was just one element of coffee production. Planters also needed more reliable and efficient transportation than the time-consuming mule trains that planters had to rely on in the early period of coffee production. Prior to the 1850's and 1860's, the 134-kilometer trip from São Paulo to Jundiaí (a city 50 kilometers northwest of the city of São Paulo) could take as long

¹⁵ Brazil, like most of Latin America, never registered a self-producing slave population. In 1829, São Paulo registered under 75 slave children for every one hundred female slaves, Luna and Klein, *Slavery and the Economy*, 139. The authors also show how in 1836 the male to female ratio among slaves was large from age fifteen through fifty, 138.

¹⁶ Warren Dean, *Rio Claro: a Brazilian Plantation System, 1820-1920*, (Stanford: Stanford UP, 1976), provides the most complete study of the transition from slave to wage labor on the coffee hinterlands. Even after the Free Womb Law of 1871, planters still only voted to cover part of the transportation subsidy necessary to bring European immigrants to the *lavoura*. *Ibid.*, 124.

¹⁷ *Ibid.*, cites that only a few thousand immigrants a year settled in Brazil, a significantly smaller number than in the United States and Argentina, p123. Holloway, *Immigrants*, 179, for immigrant numbers.

¹⁸ This considers net immigration through the port of Santos, subtracting departures from arrivals for the Old Republic period. Thus, the one million figure is an underestimate as more immigrants would have arrived through the port of Rio or through overland transport. *Ibid.*

as seven days and restricted coffee cultivation to the state's zones close to the coast. Once railroads were introduced, the same trip could be completed in a day, and coffee production became profitable in several of the state's interior regions.¹⁹ While in some instances railroads followed coffee production and feeder lines increased the amount of land dedicated to coffee cultivation, in other instances, in the Noroeste and Alta Sorocabana zones it was railroad trunk lines that introduced coffee production.²⁰ It is no surprise that many Paulista investors in railroads were tied in some way to coffee production.²¹ And although by 1915, coffee shipments were no longer the primary good transported by railroads, in the early years of Brazilian railroads, coffee represented over 50% of the tons of goods shipped on some railways.²²

To help fund the population explosion and territorial expansion associated with coffee, capital market institutions had to expand as well. Prior to 1850, there were no banks in the state and the first money-lending institutions were dedicated to short-term lending. Planters, however, demanded long-term credit, needing to not only pay wage laborers, but also to invest in their plantations and to make infrastructural improvements. The goods and services workers demanded, such as clothes and food, also required capital to develop. Amidst such demand, Paulista capital markets, backed by the state's prominent coffee planters, grew.²³ Before 1850, Paulista planters had to rely on personal connections for financing, but after a tumultuous end of the nineteenth century, the Paulista banking industry in the early-twentieth century had matured

¹⁹ William Summerhill, *Order Against Progress: Government, Foreign Investment, and Railroads in Brazil, 1854-1913*, (Stanford: Stanford UP, 2003), 60. Holloway, *Immigrants*, 15-25.

²⁰ *Ibid.*, 20-23.

²¹ Summerhill, *Order*, 46.

²² *Ibid.*, 135-6. See table 6.4 where the share of coffee in tons of shipped goods was 57% in the Companhia Paulista in 1881. The São Paulo Railway registered a smaller share at 31% of tons transported in 1871.

²³ Anne Hanley, *Native Capital: Financial Institutions and Economic development in São Paulo, Brazil, 1850-1920*, (Stanford: Stanford UP, 2005), chap 2.

into what Anne Hanley describes as the “impersonal institutions, so critical for economic development.”²⁴ Similar development occurred in the equity market. Joint stock companies were first made legal in 1849, and by 1917 there were 159 companies from a variety of sectors trading shares in São Paulo’s growing *Bolsa* stock exchange.²⁵

Amidst a booming export sector, an influx of immigrant labor and growing credit, the city of São Paulo, situated between the coffee hinterlands and the state’s port of Santos, benefited disproportionately from the spillovers associated with the crop’s success. Registering just 47,697 inhabitants in 1886, there were over one million Paulistanos by 1934. Entrepreneurs and coffee planters diversifying their activities took advantage of the available labor and expanded credit and started industrial enterprises around the city. At first, many industries were related to coffee. For example, jute factories were set up to produce coffee sacks; however, over the period unrelated enterprises also found success. As industrialists established factories in the city, they often tried to do so alongside the existing train lines that had been established to transport coffee. Most of the time it was immigrants (supposedly destined for the *lavoura*) and migrants, alongside former Paulista slaves, working as unskilled laborers in these factories. By the end of the Old Republic, it was evident that industry, not coffee, held the key to the city of São Paulo’s future.

Part II: Paulistano Life in the Old Republic

Contemporary reports and memoirs provide evocative depictions of what daily life was like in the early-twentieth century during a period of such dramatic changes and industrial

²⁴ *Ibid.*, 186. In chapter 5 Hanley describes the rise of universal banks during the Empire. In chapter 6 she highlights the extraordinary number of interconnected, paternalistic banks that arose during the 1890’s. Following the Bank Crisis of 1900, those domestic banks that did survive had the “impersonal” characteristics necessary for success.

²⁵ Hanley shows that banks, railroads, textiles, public services and other industrial firms all traded on São Paulo’s *Bolsa*. *Ibid.*, 100, 102.

growth. Alfredo Moreira Pinto describes the churches, factories and the city's municipal districts in 1900, highlighting the city's impressive growth. If size and number are good measures of modernity: São Paulo at the turn of the century was modern by Latin American standards.²⁶ Constant complaints about the city's urban transportation show that the city's expansion was not without growing pains. São Paulo's steep topography (which in many ways resembles San Francisco, California) and areas prone to flooding made not only transportation difficult, but also complicated drainage and sanitation efforts. It is hard to believe that there was no plumbing on the side of the street where a hospital in the affluent *Higienópolis* neighborhood of the city.²⁷ Penteadó's *Belénzinho, 1910* brings the city's personality to life with animated stories of knife fights at soccer games and petty fights between immigrant groups that sometimes escalated into violence. Although Penteadó's memories of how supervisors often abused child laborers in factories are difficult to forget, charming stories of Paulistano samba and the popular lottery, *jogo do bicho*, depict a lively city amidst the drudgery of factory employment and the crowded and unhygienic conditions of popular housing.²⁸ Petitions to the municipal government confirm that despite living conditions, residents found entertainment in festivals, movie houses and the like.²⁹

²⁶ See Alfredo Moreira Pinto, *Cidade de São Paulo em 1900*, (São Paulo: Governo do Estado de São Paulo, 1979). For a study of the state's industrial capacity at the turn of the century, see Antonio Francisco Bandeira Junior, *A Indústria no Estado de São Paulo em 1901*, (São Paulo: Typ. Do Diário Oficial, 1901).

²⁷ Gerald Greenfield, "The Challenge of Growth: The Growth of Urban Public Services in São Paulo, 1885-1913," PhD diss., Indiana University, 1975, 278. See chapter 4 for water and sewer, chapter 2 for transportation and chapter 3 for lighting and street cleaning.

²⁸ Jacob Penteadó, *Belénzinho, 1910: retrato de uma época*, 2nd edition (São Paulo: Carrenho Editorial, 2003). Another memoir is Jorge Americano *São Paulo Nesse Tempo: 1915-1935*, (Edições Melhoramentos, 1962). For an oral history of the era, see Dona Cinta Ramos Amanteo, interview for "Projeto Vila Maria Zélia," *Museu da Cidade de São Paulo*, tape recording, 18 January 1997.

²⁹ Arquivo Municipal Washington Luís (AMWL), Polícia Administrativa e Higiene – 1906 a 1921 (PAH) 81 (1912), Serie: Alvara Licença Sub-serie: Propaganda, anuncio e letreiros; bailes, eventos e espetaculos.

In terms of understanding the labor market dynamics, several scholarly studies complement these contemporary images of the Paulistano Old Republic. Many follow the importance of workers' movements, labor organization and strikes. This scholarship demonstrates that poor working conditions and miserable salaries did motivate workers to organize, but the distance between anarchist labor leaders and the typical laborer along with "violent state intervention" hindered labor unions from uniting across sectors during the Old Republic.³⁰

Although contemporary images are evocative and labor market studies inform us of worker concerns, a statistical investigation of the formal labor market is more useful in determining how the population as a whole lived. For example, what could the average resident hope to earn for a day's labor and how much could his or her daily wage buy? Furthermore, were there certain subgroups of the population who received higher wages or had more labor opportunities due to favoritism? Were there groups who were discriminated against? Finally, what was the city like for working Paulistana females, particularly for wives and mothers? We do not know the answers to these questions because there are few reliable data for wages and labor market opportunities during the period. Answering these questions is integral to understanding the Old Republic period and those periods that followed. Knowing what the quality of life for a laborer in São Paulo was like also deepens our understanding of the international wage labor market and helps explain why some individuals chose to migrate to Brazil instead of Argentina and the United States. Although an in depth analysis of São Paulo's role in the international wage labor market lies beyond the scope of this dissertation, such

³⁰ Joel Wolfe, *Working Women, Working Men: São Paulo and the Rise of Brazil's Industrial Working Class, 1900-1955*, (Durham: Duke UP, 1993); 49.

knowledge will be critical in understanding the migration of immigrants between the Southern Cone countries (Argentina, Uruguay and Brazil).³¹

Relative to discrimination, Brazilian historiography debates whether Brazilians were discriminated against in the formal labor market during the Old Republic. An implied component of this discussion is that native-born Brazilians, specifically black Brazilians, had a more difficult time getting ahead and becoming successful. Given the extraordinary influx of immigrants to the city of São Paulo and the official policy of ‘whitening,’ the question is well founded. There are convincing arguments for both sides of the argument; however, a statistical approach is one of the best ways to resolve the debate. Guided by secondary and qualitative sources to analyze the data and enrich our understanding of the statistical results, this methodology will provide conclusive evidence to support or refute the presence of discrimination in the formal labor market. Also, is the well-documented Brazilian inequality of the 1960’s and beyond a continuation of or a departure from an earlier period? The implications of this answer will contribute to the debate as to whether import substitution industrialization (ISI) implemented after 1930 was beneficial or detrimental to Brazilian development.³²

As for the female experience in the labor market, there are a number of serious and important studies that look at working women in the city during the Old Republic, but there is no measure of the discrimination they faced. Long overshadowed by a debate over racial inequality,

³¹ See Timothy Hatton and Jeffrey Williamson, “What Fundamentals Drive World Migration?” (NBER Working Paper 9159, September 2002). Brazil’s wages are not included, although observations for Rio do appear in Jeffrey Williamson, “Real Wages and Relative Factor Prices in the Third World 1820-1940: Latin America” (HIER Paper 1853, November 1998).

³² Studies on this period highlight the benefit that ISI had on labor legislation and growth, but neglect to consider the effects of Vargas policies on quality of life. Preliminary research by Daniel Franken suggests that improvements in quality of life during the Old Republic tapered out during the Vargas era. Daniel Franken “Economic Development and the Biological Standard of Living in Brazil, 1830-1960,” (paper presented at the UCLA Brazilian history research workshop, April 1, 2013).

it was women who faced the most consistent and dramatic discrimination in the labor market. Understanding the gravity of gender wage and labor opportunities is fundamental to fully appreciate the sacrifices that working women made in the early-twentieth century. Furthermore, this evidence helps us to understand choices regarding schooling and advancement that these women would have made for themselves and for their children, the next generation of Paulistano workers.

The relevance of this economic history of Old Republic São Paulo extends beyond São Paulo and Brazil. One of the larger contributions of this dissertation is providing a perspective of women working during the late-nineteenth and early-twentieth centuries. Scholars of the Old Republic have often neglected these women, opting to study either honor, women in labor movements or to concentrate on a later period for which there is more available information. This is unfortunate because the lack of binding labor legislation in São Paulo, Brazil provided women with a greater degree of freedom in the labor force than in later periods. Thus, looking at these women's work patterns and at how they got paid and could spend their earnings can provide valuable insight into their motivations to work. This key perspective of female motivation in the labor force is often lacking in the historiography of early industrial societies.

In this dissertation, I use an approach more commonly found in economic histories of the United States and Europe to look at wage and labor market inequality and at the conditions in the city of São Paulo. In the absence of reliable data, my methodology reveals truths and insights about the era that other approaches cannot. I use employment evidence for individual workers at the *Companhia Paulista de Estrados de Ferro* railway (Paulista), the *Fiação, Tecelagem e Estamparia Ypiranga Jafet* (Jafet) textile factory, the *São Paulo Tramway, Light and Power Company* (Light) public works firm and the *Loja Mappin* (Mappin) department store to study the

formal labor market for the period. I also use immigrant registrations at the *Hospedaria de Imigrantes* to evaluate the relative skills of different immigrant groups in the city. I contribute to existing studies on São Paulo, to inequality literature in history and economics, to late-nineteenth and early-twentieth century studies of industrial cities and to women working in those cities. I also provide a viable and practical approach to measure inequality in regions where official statistics are either inexistent or unreliable. Below I discuss what we know from existing inequality studies of Brazil, concentrating on those studies that highlight the Old Republic. Then I look at several inequality studies in countries other than Brazil and discuss how the methodology in those studies can be modified to provide the first measure of labor market inequality for Brazil prior to 1945.

Part III: Inequality Studies

Although Brazil suffers from chronic inequality, there is little empirical work that focuses on the country's historical inequality. The fact that more studies do not exist is not a result of scholars being uninterested in the question, but rather because the data needed to scrutinize and measure historical inequality are largely inexistent or unreliable for Brazil prior to 1940. Thus, most arguments regarding Brazil's historical inequality are just portions of larger studies concerned with understanding the country's relatively slow development. In these studies, there is a tendency to explain Brazilian development patterns, and Latin American patterns in general, by looking to the region's colonial origins. One line of reasoning emphasizes how initial factor endowments (semi-settled indigenous groups, soil and climate) encouraged export products, coercive institutions, less-democratic governments and higher inequality. Engerman and Sokoloff argue that with independence, these patterns actually became further entrenched in the

region.³³ Caio Prado Junior's 1945 *História Econômica do Brasil* contends that slavery led to slower economic growth and that it was because Brazil was colonized during the mercantilist era and not the capitalist one that slavery was such a persistent institution in the country's history.

Recent macro approaches have raised considerable concerns about the colonial origins argument. Most recently, Jeffrey Williamson directly challenges Engerman and Sokoloff by demonstrating that colonial Latin American institutions were no more unequal than their European or Asian counterparts until the latter half of the nineteenth century. In the case of Brazil, Williamson's income inequality estimates show dramatic inequality increases between Brazil's 1872 and 1920 census.³⁴ Coatsworth also points to the post-colonial period as the defining moment for modern Latin American inequality.³⁵ The macro approach of these studies are valuable in that they allow for cross-country inequality comparisons, but they fail to capture variation within countries and cannot address the impact inequality had on individual Brazilians.³⁶

³³ Engerman, Stanley L., and Kenneth L. Sokoloff, "History Lessons: Institutions, Factor Endowments, and Paths of Development in the New World" *Journal of Economic Perspectives*, 14.3 (Summer 2000): 217-232.

³⁴ Jeffrey Williamson, "Five Centuries of Latin American Inequality" (NBER Working Paper 15305, August 2009) compares pre-Industrial Gini-coefficients and extraction ratios for a series of European countries and colonies. Based on Bértola *et al* (2008, table 4) and Prados (2007, table 12.1), Williamson shows an increase from 1872 to 1920 in the Gini (.392 to .597) and the Pseudo-gini (.329 to .472). Gini-coefficients for Brazil (1872), England and Wales (1688), France (1788) and Japan (1886) are found to be 43.3, 45, 55.9, and 39.5, respectively. Extraction ratios reveal greater variance in inequality. For the same countries ratios are 74.2%, 57.1%, 76.1% and 58.5%.

³⁵ John Coatsworth, "Inequality, Institutions and Economic Growth in Latin America," *JLAS*, 40.3 (Aug 2008): 545-569. He suggests that it was the speed at which countries in Latin America modernized their institutions in the post-Independence era that defined their modern growth rates. Colonial inequality indirectly impacted this transition because countries with stronger colonial elites (more inequality) resisted institutional modernization more.

³⁶ For example, when Brazil is classified as a 'slave society' it is important to note that even when the slave population peaked in São Paulo in the 1800, just 28% of the state's population was enslaved and the average slaveowner held just seven slaves. Compared to the southern United States (a non-slave society for Engerman and Sokoloff) where the slave population could be as much as 50% of the population, slavery in São Paulo was far from firmly established, large-scale plantation agriculture. See Luna and Klein, *Slavery and the Economy*, tables 5.2 and 5.8. US 1850 Census data reveal that 41.07% of South Carolina's population was white and only 1.34% freed colored

Beyond these wide-scale, cross-country comparisons, there are only a few studies that approach historical Brazilian inequality and development from an interregional perspective. Martínez-Fritscher, Musaccio and Viarengo undertake explaining the interregional differences in education and literacy and Franken scrutinizes interregional height variations to evaluate differences in standards of living. Scholars who focus their attention on this question are predominantly trying to determine why most of the country's wealth today concentrates in the southern and southeastern regions of the country.³⁷ Understanding why certain regions are more prosperous is important, but still cannot illuminate our understanding of the reality that individual Brazilians faced on a day-to-day basis in the Old Republic. Macro approaches and interregional studies cannot show how an individual's physical characteristics and skills impacted his or her educational opportunities or living situation, much less the wage the individual earned or the labor market opportunities available to him or her. Understanding how important these characteristics were is tantamount to understanding daily life and how a worker interpreted his or her reality. If nationality, race and gender impacted a worker's opportunities more than literacy or work experience, then, even if discrimination were minimal, early-twentieth century São Paulo would have seemed like a very unfair place to live.

This dissertation provides the worker perspective of inequality that accompanied early urbanization in the city of São Paulo, complementing existing studies of the era. For example, June Hahner uses some official and union observations and worker newspapers to show that working families struggled to put food on the table during the Old Republic in Rio de Janeiro. I

³⁷ André Martínez-Fritscher, Aldo Musacchio and Martina Viarengo, "The Great Leap Forward: The Political Economy of Education in Brazil, 1889-1930," Harvard Business School Working Paper 10-075 (2010). Frankey, "The Economy." The current national performance statistics scholars use to measure development are not uniform across Brazil. In 2005, regional differences explained between 7.8 and 9.6% of the country's income inequality. Francisco H.G. Ferreira, *et al*, "Ascensão e Queda da Desigualdade de Renda no Brasil: uma atualização para 2005" in *Desigualdade de Renda no Brasil: uma análise da queda recente*, v.1. Ed. Ricardo Paes de Barros, *et al*. IPEA: Brasil, 2006. The above estimates derive from a Theil-L and Theil-T test, respectively.

expand upon her findings and use thousands of company observations on individual worker wages to show just how many members of a family had to work to keep up with changes in the cost-of-living over the period.³⁸ George Reid Andrews' study of blacks in São Paulo is based on solid research and gives an appreciation for the discrimination that blacks felt in the city. However, by restricting his study to a question of race, Andrews overemphasizes the role that race had on labor market dynamics.³⁹ I am able to quantify the relative importance nationality, race and gender played in the formal labor market of a rapidly urbanizing city.

Clearly, an individual-level approach offers a variety of advantages and unique insights. Using a series of statistical tests it is possible to determine just how much an individual's nationality, gender, race and schooling added or subtracted from his or her wage or labor opportunities. Social scholars of the United States, Europe and, more recently, China, Japan and India, have employed such methods to look at historical standards of living and inequality in these regions.⁴⁰ Latin America is one region that is largely missing in these wage inequality studies.⁴¹ Given the region's relatively high inequality, it is tantamount to expand our understanding of historical inequality in the region. Only one other study provides a similar,

³⁸ Hahner, *Poverty and Politics*, 205.

³⁹ Andrews, *Blacks and Whites*.

⁴⁰ See Robert Margo, *Wages and Labor Markets in the United States, 1820-1860*, (Chicago: University of Chicago Press, 2000) for the United States. Se Yan "Real Wages and Skill Pemia in China, 1858-1936," Social Science Research Network Paper, (2011), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1785230 for China. See R.C. Allen, "The Great Divergence: Wages and Prices from the Middle Ages to the First World War." *Explorations in Economic History*, 38(4): 411-47 for a comprehensive series for Europe from 1500 through WWI. (Wage and price sources in appendix.) Also see *ibid.* "Real Wages in Europe and Asia" in *Living Standards in the Past*, Ed. Robert C. Allen, Tommy Bengtsson and Martin Dribe, (Oxford University Press, 2013), available online www.oxfordscholarshiponline.com.

⁴¹ There have been few studies on Latin American real wages relative to Europe, but Mexico registers the highest number of studies for the region. Jeffrey Bortz and Marcos Aguila survey these in "A History of Real Wage Studies in Mexico in Twentieth-Century Mexico," *LARR*, 41.2 (2006): 112-138. For a Colonial study see Leticia Arroyo Abad, Elwin Davies and Jan Luiten van Zanden "Between Conquest and Independence: Real Wages and Demographic Changes in Spanish America, 1530-1820," *Explorations in Economic History* (January 2011), available <http://www.journals.elsevier.com/explorations-in-economic-history>.

systematic approach for Brazil, in which the authors, Melo, Araujo and Marques, focus on employee salaries at the Brahma beer factor in the city of Rio de Janeiro from 1900 to 1947 with 81% of the 567 individuals in the sample were hired between 1920 and 1935. In their study, the only national consideration with respect to wages that the authors analyze concerns Portuguese employees. Given the importance of Italians, Spanish and Germans in São Paulo⁴² I will apply a similar methodology to understand labor market inequality in the city of São Paulo during the Old Republic. I will not only look in particular at how a worker's nationality, gender, race and schooling impacted the wages he or she received; but will also look at discrimination at the hiring level and how the aforementioned characteristics impacted a worker's initial labor opportunities. Furthermore, I will determine how existing prejudices may have impacted the wages and labor opportunities given to employees. Interpreting this new evidence on labor market inequality alongside new evidence on the city's immigrant population, contemporary accounts and interviews, provides a more complex understanding of life in one of Latin America's most important, burgeoning metropolises.

Part IV: Dissertation Outline

I address the nature of inequality in the city in the five chapters that follow. Chapter two follows immigrants who came to reside in the city of São Paulo. Systematically analyzing these individuals contextualizes the Paulistano labor market by showing the relative skill levels of incoming immigrant groups (and Brazilians) to the city. A unique database with information on immigrants passing through the city's immigrant receiving station, the *Hospedaria do Immigrantes*, allows me to look at those individuals who bypassed the *lavoura* and settled in the

⁴² Hildete Pereira de Melo, et al. "Raça e Nacionalidade no Mercado de Trabalho Carioca na Primeira República: O Caso da Cervejaria Brahma," *Revista Brasileira de Economia*. v57.3 (July/Sep., 2003): 535-568. The study does find statistical discrimination against Brazilians, however. George Reid Andrews' study *Blacks and Whites in São Paulo* is noteworthy in that it provides concrete employment shares by racial group; however, it is restricted to the study of racial inequality.

city. Information on an individual's nationality, literacy and profession help establish how employers' expectations of skill levels may have influenced the jobs offered to immigrants of certain nationalities? The impact immigrants had on the United States labor market varied by their skill levels, and there is no reason to think that early-twentieth century São Paulo was any different.⁴³ However, since most official data of the period recorded individuals as just 'foreign' or 'native' this is the first opportunity to analyze the skill level of workers migrating to the city by nationality.

Chapters three and four take up the question of labor market inequality and discrimination. Chapter three describes the construction of a much-needed wage series for the period using employee-level data for four firms in the city. As Robert Margo has argued "the construction of historical time series is one of the central tasks of economic history."⁴⁴ The Paulistano wage series is the first to show what workers actually earned during the city's early industrialization. Knowing the value of the mil-réis in any given year during the dynamic Old Republic finally gives us an idea of the hardships that urban dwellers could expect in a rapidly urbanizing and industrializing environment. Chapter three also uses the wages to show whether earnings between unskilled and other employees diverged over the period. The question answered in chapter four is the heart of the dissertation: what did labor market discrimination look like in the formal Paulistano labor market? I look for evidence of national, racial and gender discrimination at three specific points in time during the labor process: getting hired, the position an individual was hired into and the opportunities for advancement that an individual had at a firm. A corollary question looks at how important literacy was in determining a worker's labor

⁴³ George Borjas, "The Economics of Immigration," *Journal of Economic Literature* 32 (December 1994): 1667-1717. Borjas compares the differences in skill-level by cohort.

⁴⁴ Margo *Wages and Labor*, xi.

market experience. The implications of this answer both contextualize the importance of nationality, race and gender in shaping a worker's labor market experience and shed light on how important innovation and improvements were during the city's early industrialization.

The results from chapter four show females to be the group facing the most consistent discrimination during the Old Republic. Based on these findings I look more closely at the female labor force in chapter five. From a research perspective, the fact that little labor legislation affecting women was enforced in São Paulo creates an ideal environment to study female work patterns and choices in early industrial labor markets. Thus, I focus on two aspects in particular regarding the female employment experience. First, how did working wives and mothers experience the labor market in particular, and second, how did a woman's opportunities shift over her lifetime. That women faced consistent and persistent discrimination has far-reaching implications in the search for Brazilian underdevelopment in the twentieth century, but the fact is that studies of gender inequality in Brazil are often overshadowed by discussions of racial inequality and discrimination. Chapter six concludes by highlighting the contributions and implications of both the dissertation and the chapters, comparing the results on inequality and discrimination in Old Republic São Paulo to later periods in Brazilian history and by suggesting future projects for expansion.

Chapter 2: Immigrants Settle in the City

Similar to the United States and Argentina, foreign immigration was one of the major causes of extraordinary population growth in São Paulo during the early twentieth century. First attracted by the state's immigrant subsidization program and then by growing opportunities due to industrial growth, almost two million immigrants arrived over the duration of the Old Republic.⁴⁵ Given the importance of these individuals, it is surprising that social scientists of Brazil have failed to systematically understand the city's diversity during such a dynamic period and have neglected studying the skill levels of different immigrant populations. Rather, in a discourse that is overshadowed by racial undertones, historians of Brazil largely debate whether immigrants as a whole were more skilled than Brazilians or vice versa.⁴⁶ Many scholars contend that immigrants were no more qualified than their Brazilian counterparts, and in some cases were even less skilled.⁴⁷ Another line of reasoning argues that immigrants were more suited to the industrializing economy than Brazilians coming out of a slave society.⁴⁸

⁴⁵ Total incoming immigration was 1,973,685 from 1891 to 1929. Net immigration, however, was just 988,744 Holloway, *Immigrants*, 179, appendix 4.

⁴⁶ A few studies do consider the complexity of the immigration to São Paulo, but most evidence is for the state, not the city. See Herbert Klein, "The Social and Economic Integration of Spanish Immigrants in Brazil," *Journal of Social History*, 25.3 (Spring 1992): 505-529; *Ibid.*, *Inmigración Española en Brasil: Siglos XIX y XX*, trans. Bergoña Mateos Rodríguez (Colombes, Asturias: Archivo de Indianos, 1996); and Holloway, *Immigrants*.

⁴⁷ The two empirical works cited above Andrews, *Black and Whites*, 71-82 and De Melo, et al, "Raça e Nacionalidade," find immigrants no more skilled than Brazilians. Also see Michael Hall, "The Origins of Mass Immigration to Brazil," PhD dissertation (Columbia University, 1969), 136-8, 179. Nathaniel Leff, *Underdevelopment and Development in Brazil*, (Boston: George Allen & Unwin., 1982), v1, 61, contends the two groups were similar and that "The immigrants' heavy participation in the local industrial work force did not occur because they constituted a trained and disciplined industrial labor force. Most of the immigrants were uneducated peasants who came from rural zones of southern Europe." He notes that higher mobility may have led to higher rates of immigrant employment in the industrial sector. Andrews, *Blacks and Whites*, 72 note 49, provides a list of works and authors that dispute Fernandes' thesis that immigrants had higher human capital.

⁴⁸ Roger Bastide and Florestan Fernandes, *Branços e Negros em São Paulo*, 2nd ed., São Paulo: Companhia Editora Nacional, 1959: 57-8. Andrews, *Blacks and Whites*, 71-82, provides an excellent review of Fernandes' thesis as it relates to Brazilians and immigrants. Contemporary reports that record employers directly contracting immigrants from Europe to work in São Paulo's factories in skilled positions offer tenuous support for Fernandes' thesis. Jacob Penteadó, *Belénzinho*, 63-4. Jacob Penteadó notes that the Vidraria Santa Maria employed over two hundred specialized glass workers who had been contracted directly from Italy and France to handle the delicate material.

This chapter uses evidence on arriving immigrants at the state's *Hospedaria de Imigrantes* to address the relative skill levels of incoming immigrant groups to the city of São Paulo. It answers the following questions: 1) How did such a large number of subsidized immigrants who were supposed to settle in the interior come to reside in the capital city of São Paulo and who were these urban migrants? 2) What was the relative skill level of specific migrant groups—urban vs. agricultural; Brazilian, Spanish, German, Italian and Portuguese? 3) Did skill levels of incoming immigrants change over the duration of the Old Republic? While there are numerous comprehensive studies of immigration to the state of São Paulo, our understanding of the means by which individuals settled in the city at such a rapid rate is minimal.⁴⁹ Poor official statistics help explain why the question of relative immigrant skill levels in the city has been reduced to a dichotomous debate: in most official documents, inhabitants were either coded as nationals or as foreigners with no notation as to an individual's national origin. Therefore, without an alternative data source, it is difficult to determine whether employers preferred to hire certain immigrant groups due to their expected skill level or to prejudice.⁵⁰ I use a new data source to answer the questions above and to address whether employers in the São Paulo labor market had reason to expect employees of certain nationalities were more skilled. I use this evidence to interpret the results from my wage series analyses, presented in chapter four of this dissertation.

Penteado describes the “artistry” required in the glassmaking process, 96-99. As Maria Lúcia Lamounier has pointed out for railroad workers in the late Empire, some highly skilled workers were directly contracted from Europe, but the vast majority of immigrant railway workers were unskilled, *Ferrovias e Mercado de Trabalho no Brasil do Século XIX*, (São Paulo: EdUSP, 2012): 184-209.

⁴⁹ For immigration to the state, see Holloway, *Immigrants*; Dean, *Rio Claro*; Evangelista, *Braços*. To my knowledge, no study depicts how subsidized immigrants became Paulistano residents.

⁵⁰ If immigrants were preferred, then the interpretation of this preference will largely depend on immigrants' skill levels relative to nationals' skill levels. Antonio Avalos and Andreas Savvides, “On the determinants of the Wage Differential in Latin America and East Asia: Openness, Technology, Transfer and Labor Supply,” LAEBA Working Paper n°19 (December 2003) and George Borjas, “The Economics of Immigration.”

To better understand how migrants settled in the city of São Paulo, I begin by detailing the massive immigration wave to the state, paying particular attention to the importance and structure of the state's immigrant subsidization program and to the changing role of the state's main immigrant receiving station, the *Hospedaria de Imigrantes*. I then sketch the immigrant's arrival and the various ways by which he or she could become a city resident. Next I present evidence regarding the relative skill level of immigrant groups and Brazilian migrants. I use a unique database, the Banco de Dados Maria José (BDMJ), to compare these groups and follow immigration trends to the city.⁵¹ By evaluating data on literacy and heads-of-household professions, I discern that Portuguese immigrants were significantly less skilled and Germans were significantly more skilled relative to Brazilian migrants. Then I compare these populations with self-selected Brazilian migrant populations passing through the *Hospedaria* and find a surprisingly skilled subset of Brazilians from the Northeast. Finally I look at changing skill level composition of the immigrant streams to the city during the Old Republic. The results show unskilled immigrants migrating prior to WWI and a more skilled group of immigrants in the 1920's. These results indicate a change in the city's industrial structure toward more skilled labor during the period.

There is an important limitation imposed by the sources requiring me to restrict the analysis to different nationalities and refrain from racial distinctions among Brazilians. Race was not recorded in official government documents between 1872 and 1930, making it difficult to measure racial discrimination.⁵² Furthermore, the few studies that do attempt to quantify racial discrimination reveal interesting results. George Reid Andrews finds evidence that immigrants

⁵¹ The formal cite is "Registros dos livros de entrada de imigrantes na Hospedaria (1882-1978)." The project to digitize the *registros* was spearheaded by Maria José, thus the name of the database (BDMJ).

⁵² The 1920 Brazilian General Census justifies the absence of race on census forms because of the inaccuracies that would occur with "mestiço" self-reporting. *Recenseamento 1920*, vol.1, 488.

crowded-out blacks in the first thirty years of the Old Republic, but makes no distinction about whether they crowded out Brazilians in general. De Melo, *et al*, in their evaluation of the Rio Brahma factory in the 1920's and 30's, find no statistically significant discrimination against blacks, but do find significant discrimination against Brazilians, regardless of race.⁵³ My own results on wage differentials in chapter four of this dissertation suggest that although employment opportunities were limited for non-whites, there was no statistically significant discrimination against non-whites regarding wages. These results suggest that racial discrimination in Old Republic São Paulo manifested in reduced access to particular jobs and sectors rather than in lower pay.

Part I: Immigration in São Paulo⁵⁴

Before addressing the questions related to relative immigrant skill level, it is important to understand the scale of immigration to São Paulo. Although immigration to the state and the city's industrial and population growth is well-noted, the ways in which migrants bypassed migration restrictions and stipulations and the means by which they settled in the city are understudied. By the 1920 Brazilian census, the city of São Paulo registered 580,000 residents, two-thirds of whom were immigrants or first generation Brazilians.⁵⁵ How had a modest city of just over 26,000 inhabitants in 1872 grown to count over 385,000 foreigners in less than fifty

⁵³ See Andrews', *Blacks and Whites*, 88-9, for the crowding out effect and, 119-21, for his study of Jafet and Light firms, which reveals within group variation. See data from de Melo, et al "Raça e Nacionalidade" for evidence on immigrant preference. The article also reveals a lesser discrimination against Portuguese employees. Data from the Rio de Janeiro Brahma factory in the 1920's and 30's find significant wage differentials in favor of immigrants.

⁵⁴ It is important to note that all official statistics and documents registering entries from the port of Santos will be overestimates, in particular the number of unsubsidized immigrants. This is due to the fact that all third-class passengers were registered as "immigrants." Therefore, the entry data will not distinguish between an Italian immigrant returning from visiting a family member and a new unsubsidized immigrant destined for the *lavoura*.

⁵⁵ Warren Dean, *The Industrialization of São Paulo, 1880-1945*. (Austin: Texas UP, 1969), 51. Dean is citing Richard Morse, *From Community to Metropolis: a Biography of São Paulo, Brazil* (New York: Octaon Books, 1974), 175-7 and São Paulo, state, *Anuário Estatístico do Estado de São Paulo*, (São Paulo: Tip. Brasil).

years? Through a group of documents available at the public state archives, and through state publications and decrees, I follow the various traditional and unconventional means by which immigrants arrived to the state and city during the late-nineteenth and early-twentieth centuries.

At the turn of the century, Brazil, like Argentina, the United States, Chile and Uruguay, was an immigrant-receiving nation. However, as described in chapter one, the roots of this immigration wave in Brazil began with the effective abolition of the slave trade in 1850. Table 2.1 registers both the importance of immigrants to Brazil, as well as significant changes in the immigrant populations between 1830 and 1933.

Table 2.1: Immigration to Brazil

Ethnic Groups	1830-1855	1856-1883	1884-1893	1894-1903	1904-1913	1914-1923	1924-1933
Africans	618000	0	0	0	0	0	0
Portuguese	16737	116000	170621	155542	384672	201252	233650
Italians	0	100000	510533	537784	196521	86320	70177
Spaniards	0	0	113116	102142	224672	94779	52405
Germans	2008	30000	22778	6698	33859	29339	61723
Japanese	0	0	0	0	11868	20398	110191
Syrians & Lebanese	0	0	96	7124	45803	20400	20400
Others	0	0	65524	42820	109222	51493	164586
TOTAL	636745	246000	882668	852110	1006617	503981	713132

Source: Instituto Brasileiro de Geografia e Estatística (IBGE)

After the Free Womb law passed in 1871, Paulista planters established the Association to Aid Colonization and Immigration in August 1871 to subsidize immigrant families' passage to São Paulo in exchange for signing contracts to work in the coffee *lavoura*. In 1886 the private company *Sociedade Promotora da Imigração* became responsible for the subsidies, but by 1891, the state's Department of Agriculture, Commerce and Public Works oversaw all immigration to the state. Incoming immigrant data attests to the initial popularity of the immigration program: in the last decade of the nineteenth century, four-fifths of arriving immigrants to the state were

subsidized.⁵⁶ Although over time, unsubsidized immigration would surpass subsidized immigration, this flow of immigrants to the state of São Paulo undeniably contributed to such a large immigrant presence in the city of São Paulo. In contrast to the United States and Argentina, where single males were the overwhelming majority of immigrants, the subsidization program meant that immigrants to Brazil often came as a family unit.

The original subsidization program functioned as follows: the *Sociedade Promotora*, and later the Department of Agriculture, Commerce and Public Works paid full passage for families who were “agriculturalists” coming to work in the coffee *lavouira*. Full compensation was provided for individuals over the age of eleven, half for children between the ages of seven and eleven, quarter for children between three and six, and passage was free for children younger than three. Once arriving in Santos, immigrants were transported via train to the *Hospedaria de Imigrantes* (henceforth, *Hospedaria*) in the city of São Paulo and from there were contracted to work in the *lavouira*. Immigrants agreed to settle in the state of São Paulo and signed one-year contracts. The program stipulated that subsidized immigrants could not have received a previous grant, and had to agree to be repatriated within thirty days if they did not satisfy the required conditions. In actuality, very few immigrants were repatriated.⁵⁷ Although the state denied

⁵⁶ Holloway also provides a good overview of the immigration system in chapter 3 of *Immigrants*, 36-45. Angelo Trento, *Do Outro Lado do Atlântico: um Século de Imigração Italiana no Brasil*, trans. Maria Rosaria Fabris and Luiz Eduardo de Lima Brandão, (São Paulo: Nobel, 1989), 107, cites that between 1887 and 1902, 63.5% of immigrants to São Paulo were Italian and between 1888 and 1919, Italians accounted for 44.7% of immigration to the state. Irineu de Carvalho Filho and Renato Colistete, “Education Performance: Was it all Determined 100 Years Ago? Evidence from São Paulo, Brazil” (paper presented at the Economic History Association 70th Annual Meeting, Evanston, Illinois, Sep 24-36, 2010), also provide a concise overview of the process.

⁵⁷ Trento shows that instead of repatriation, individuals sent to the *Hospedaria* hospital were sent back into the *lavouira* (Trento, *Do Outro Lado*, 165). Repatriations were few and the examples we have are most often recent widows and their children (for an example, see São Paulo, “Repatriação (Luiza Jordano Ortiz)”, 31 Oct 1912, Arquivo Público do Estado de São Paulo (AESP), Seção Manuscritos, Secretaria da Agricultura, 1912, C07417. In 1903, just 11 individuals were repatriated, many because “*perderem o chefe da família*” (lost the head-of-household) São Paulo, state Secretaria dos Negocios da Agricultura, Comercio e Obras Publicas. *Relatorio da Secretaria de Agricultura 1903*, (São Paulo: Typ. Do Diario Official, 1904), 68).

immigrant companies reimbursement for those immigrants deemed ineligible for the contract, by 1900, unsubsidized and even those subsidized immigrants rejected for not meeting the contract criteria were allowed entry into the *Hospedaria*.⁵⁸ Over time, a series of decrees and measures, including the Prinetti Decree, the *chamada* system, restitutions and changing migration patterns during WWI, made the immigration system much more complex.

Early in the twentieth century, Italians were the largest immigrant group in the city of São Paulo.⁵⁹ When Moreira Pinto described the city in 1900, he wrote that “whereas São Paulo was once a purely Paulista city, today it is an Italian city!!”⁶⁰ It is fair to estimate that about 85,000 Italians had moved to the city by 1904.⁶¹ Trento estimates that although Italians represented just 13% of the population in 1886, they represented 37% of the city’s population by 1916.⁶² One event in 1903 helps to explain the drop in Italian immigration to São Paulo reflected in the immigration table. Following reports of deplorable conditions in the coffee *lavourea*, Italy issued a decree in March 1902 preventing Italian immigrants from accepting subsidized passage to Brazil. This decree became known as the Prinetti Decree.⁶³ Although Italian immigration continued to São Paulo, the nature and importance of the immigrant flow shifted considerably.

⁵⁸ Originally, immigrants not meeting subsidization contract obligations were denied entry to the *Hospedaria*. State decree 823 revoked the subsidization requirement for entering the *Hospedaria*.

⁵⁹ See chapter one for a discussion of population and industrial growth in the city.

⁶⁰ Moreira Pinto, *Cidade*, 9. Original quote “Era então São Paulo uma cidade puramente paulista, hoje é uma cidade italiana!!”

⁶¹ See Appendix 2.2 for an explanation of this estimate.

⁶² Trento, *Do Outro Lado*, 124. The Perrota couple offers an example of first generation Brazilians. Bartolomeu Perrota was born in São Paulo, but his parents, who owned a cobbler and shoe-making store in São Paulo, were both from Calabria, Italy. Bartolomeu married Antonieta, who was also Brazilian, but whose parents, owners of a warehouse in São Paulo, were from Veneto, Italy. Such unions would have been the norm in early-twentieth century São Paulo (Museu Paulista (MP), Mappin collection, cx2, entrevistas, doc 53)

⁶³ The Crispi Decree was a precursor to this event, stopping immigration between March 1889 and July 1891. See Holloway, *Immigrants*, 42-3 and Trento, *Do Outro Lado*, 35-6, 52-3.

Emigration of agricultural families from the Northern Italian provinces dominated early migration. Later, post-Prinetti decree immigrants were often urban professionals and comprised 61.2% of immigration between 1903 and 1920.⁶⁴

With the Prinetti decree, the relative share of other immigrant nationalities moving to the state of São Paulo increased.⁶⁵ The decree even affected São Paulo legislation, increasing the reimbursement immigrant transport companies received from the state for bringing in Italians, and decreasing the amount paid companies for Spanish and Portuguese immigrants.⁶⁶ Immigrant transport companies were not immune to the effects. The Angelo Fiorita and Co., once the premier immigrant transport company, would declare insolvency.⁶⁷ The state, still needing workers for the coffee harvest, looked to other immigrant groups and alternate subsidization

⁶⁴ Trento studies the origins of Italians in São Paulo by looking at both Italian and Brazilian statistics. Between 1887 and 1895, he reveals that 71.8% of Italian immigrants coming into São Paulo were from Northern provinces, as opposed to 27.8% in the 1903-1920 period. *Ibid.*, 34-39, 60. On Italian immigration also see Vitor Sapienza, *Café Amargo: Resistência e Luta do Imigrante Italiano na Formação de São Paulo*, (São Paulo: Editora Meta, 1991) chapter 5.

⁶⁵ Spanish and Portuguese immigrants comprised a mere 11% and 10%, respectively, of immigration between 1887 and 1900, but 22% and 23%, respectively, in the 1901 to 1930 period. Similarly, the share of non-Italian, Spanish or Portuguese immigrants rose from 6% in the early period to 28% in the later period. Holloway, *Immigrants*, 43. The category “other” includes Japanese, Syrian, Lithuanian, Polish, Romanian, Lebanese, Turkish, and Armenian.

⁶⁶ In 1900, state decree 827 awarded immigrant transport companies 106 shillings per subsidized Italian adult and 120 shillings per Spanish or Portuguese adult. Starting in 1904, with state decree 1227, companies were given 130 shillings per Italian adult and 115 per Spanish and Portuguese adult. This price change remained throughout the period. (Discussions of decrees available in Camara dos Deputados do Estado de S. Paulo, *Annaes da Sessão Extraordinaria e Ordinaria*, (São Paulo, various years). In 1900, 100 shillings was worth 128\$000 mil-réis, or the equivalent of a month and a half worth of wages for an average day laborer. I use the exchange rate of 25.64 mil-réis per English pound from Table 1.10 in Marcellino Martins and E Johnston, Eds. *150 Anos de Café*, 2nd edition (Marcellino Martins & E. Johnston Exportadores, Ltda., 1992). They use a figure from FIBGE (1988). The daily way laborer estimation comes from the Paulista *fichas* (see chapter three).

⁶⁷ One particular petition to the Secretary of Agriculture highlights the company’s problems. Fiorita & Co. seeks to receive a contract to transport Spanish immigrants, citing the difficulty of finding Italian immigrants in the post-Prinetti period as the motive for the request. The company admits to clandestine immigration of Italians, but notes the impossibility of reaching the stipulated contract number. The company is denied this privilege. “Capital” 26 Mar. 1912, AESP, Seção Manuscritos, Secretaria da Agricultura-Requerimentos (Sec. da Ag.), 1912, C07387, n.515. In another petition, the Fiorita Co. asks to be able to introduce immigrants from Italian, French and South American ports (Fiorita & Comp. 28 Mar 1912, *Ibid.*, n.557). See Holloway, *Immigrants*, 45-8 for more on the start of Fiorita and Co. In contrast to this company, gains to other immigrants transport companies in the post-Prinetti period were significant. “Capital,” 11 Apr 1912, *Ibid.*, n. 712.

methods to address the *falta de braços* problem.⁶⁸ Although the state allowed immigrants of almost any nationality entry, Italians remained the preferred immigrant group.⁶⁹

Although most subsidized immigrants to São Paulo left from European ports, there were sizeable subsidized immigrant groups arriving from South America, Brazil and Japan. One understudied immigrant stream to São Paulo is the sizeable movement between the Rio da Prata (Argentina and Uruguay) and São Paulo. Immigrant companies contracted subsidized immigrants from Buenos Aires; the Argentine government paid for immigrant passage from the Argentine interior to Buenos Aires; the Brazilian government paid or reimbursed immigrants' passage from Buenos Aires to Santos and then into the interior.⁷⁰ There is some scholarly work on this migrant stream and anecdotal evidence confirms that such movements took place, but historians have failed to emphasize the importance of the migration from the region.⁷¹ More than 140,000 individuals left Santos for Buenos Aires or Montevideo and over 95,000 individuals entered from the region between 1903 and 1928. Figure 1 demonstrates that the importance of migration for the state of São Paulo from the Rio da Prata ports increased proportionally during

⁶⁸ The *falta de braços* refers to the lack of laborers to harvest the coffee crop in the state's interior and was cited throughout the period in requests to increase immigrant contracts and to introduce new immigrant groups. Holloway, *Immigrants*, and Vangelista, *Braços*, are the best references on the *falta de braços*.

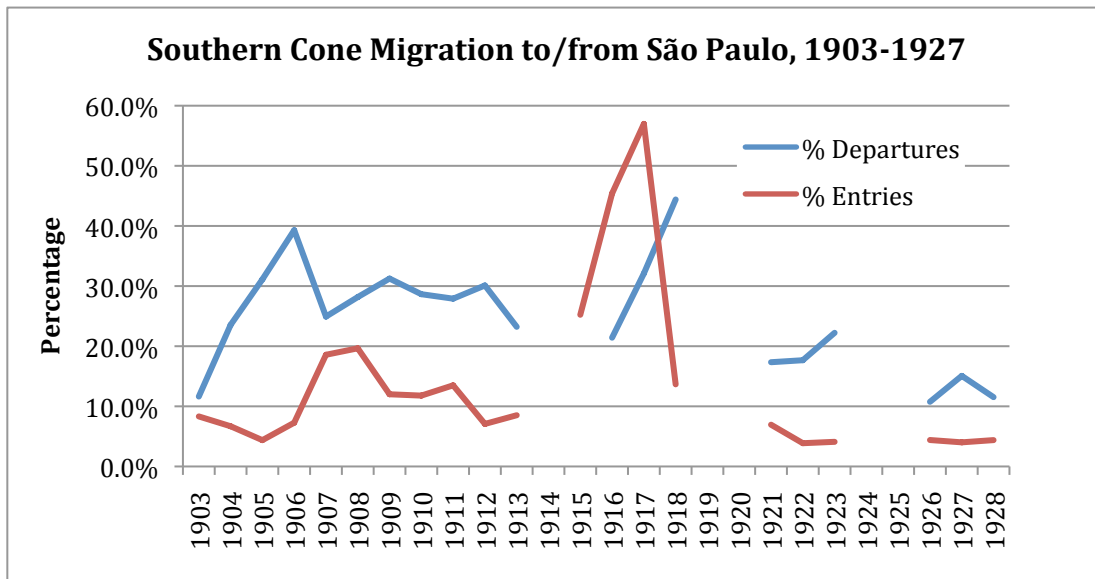
⁶⁹ In a petition to the Secretary of Agriculture, November 7, 1912, Basilio Rodrigues asked to introduce 6,000 agricultural families, preferably Italian and Albanian, into the *lavoura*. Tertuliano Gonçalves answered the request, wanting only Italian families as they worked the *lavoura* best. Gonçalves, however, would allow 30 Albanian families. ("Introdução de Immigrantes," AESP, Seção Manuscritos, Sec. da Ag. – Requerimentos, 1912, C07418, n.2035). Some immigrant groups were never welcome in the state. See ("Cópia da carta da Th Royal Mail Steam Packet Compny," 6 Aug. 1913, *Ibid.*, Sec. da Ag. – Inspetoria de Imigração Santos, 1908-1913, 1914, C09857) for a case where fourteen gypsies transported from Uruguay by the Royal Mail Steam Packet Co. were denied entry into the state of São Paulo.

⁷⁰ For the Fiorita & Cia, who held the near monopoly on Italian immigrants, Buenos Aires was especially appealing. Letter for Fiorita & Comp. to Sec. da Ag., 25 Sep 1912, AESP, Manuscritos, Sec. da Ag.-Requerimentos, 1912. See ("Carta Coronel Suares," 16 Mar. 1912, *Ibid.*, C07398, n.927) for a specific case where the state of São Paulo advises immigrants from Argentina to use this strategy.

⁷¹ For anecdotal evidence, see Penteadó *Belénzinho*, 16-20, 23-29 and MP, Mappin, cx2 entrevistas, doc74. See Klein, *La inmigración española*, 100 (table 3.7) for a breakdown of Spanish migration by region of origin or destination between 1911 and 1919, 1924 and 1928.

WWI, but by the 1920's was once again a minimal flow.⁷² Although the region's importance may have diminished for the state, it remained an important safety valve and labor alternative for many immigrants. For example, between 1911 and 1919 and 1924 and 1928, in all but two of the fourteen years, the number of Spanish immigrants destined for the Rio da Prata region from the state of São Paulo outnumbered those returning to Europe.⁷³

Figure 1



Another set of subsidized immigrants originated their journeys from within Brazil, particularly Germans. Since the 1830's Brazil made a concerted effort to populate its southern states by offering land grants and encouraging Germans to move to southern Brazil and establish colonies. Many of the Germans moving to the city of São Paulo from southern Brazilian states would have been former residents in these German colonies. The *Relatorio da Secretaria de Agricultura de 1924* noted that in 1924 over 15% of immigrants coming into the state entered by

⁷² *Relatorios da Secretaria da Agricultura*, various years. Data on immigrant arrivals and departures by destination port are missing for 1914, 1919, 1920, 1924 and 1925. See appendix 2.3 for table on Rio da Prata immigrant share and total numbers.

⁷³ Klein, *La inmigración española*, 100 (table 3.7).

rail. Of these, the majority was Brazilian, but there was also a significant share of Germans.⁷⁴ Data from the *Inspetoria de Imigração* in Santos confirm this migration pattern. In 1927, there were 2411 German immigrants that entered through the port of Santos. Of these, 691 came from other Brazilian ports, 104 from the Rio da Prata region and 1103 from Hamburg.⁷⁵ Although immigrants of other nationalities also migrated within Brazil, it is difficult to qualify their movements as trends.⁷⁶ (Here I do not consider Brazilian migrants, but Brazilians moving to the city of São Paulo will be considered later in this chapter.)

One final group of immigrants to the city deserves mention: the Japanese. Although discussion of Japanese immigration as a partial solution to the shortage of labor on São Paulo's coffee plantations began in the 1890's, it was not until 1908 that the first Japanese immigrants arrived in the state. Subsidized by the state government, the Japanese immigration company, *Kōkoku*, contracted 781 workers left Kobe, Japan, in April 1908, sailed across the Indian and Atlantic Ocean, and arrived in Santos in June.⁷⁷ Contracted for the *lavoura*, the Japanese found that in contrast to Australia and North America, they were, for the most part, welcomed into São Paulo society. By 1914, about 12,000 Japanese had entered into Brazil, but subsidies were abruptly cut off because of fluctuating demand for coffee workers and the frequency with which contracts were broken. The fact that many Japanese immigrants were not actually agriculturalists

⁷⁴ In 1924 a total of 8,964 Germans migrated to the state, 1,505 (over 16%) of these via railway. *Rel. Sec da Ag 1924*, 72-3.

⁷⁵ "Classificação dos imigrantes entrados pelo porto de Santos durante o anno de 1927," quadro II and IV, AESP, Manuscritos, Sec. da Ag. – Inspetoria de Imigração, Santos, C09835.

⁷⁶ The Secretary of Agriculture Inspetoria de Imigração Santos mentions two Polish families moving from Espiritu Santo to São Paulo. Letter to Dr. Oscar Löfgren from Luiz Ferraz, 17 Feb. 1908, AESP, Manuscritos, Sec. da Ag- Inspetoria de Imigração, Santos, C09854.

⁷⁷ For more on early Japanese immigration to Japan, see Stewart Lone, *The Japanese Community in Brazil, 1908-1940: Between Samurai and Carnival* (New York: Palgrave, 2001), chapter 2.

and created false families contributed to the substantial number of failed contracts.⁷⁸ However, after the European immigrant stream diminished greatly during WWI, a second wave of Japanese immigration began in 1917, directed by the Overseas Development Company (also known as Kaikō).⁷⁹ The complaint that many Japanese immigrants were not agriculturalists may explain the relatively rapid appearance of Japanese businesses in the city by the second half of the Old Republic.

Variations of the subsidy system also developed alongside these non-European immigrant streams to fill the *lavoura* labor demand. The *chamada* system, which developed into a way to get around the Prinetti decree, brought in roughly 50,000 immigrants to the state during the Old Republic.⁸⁰ With a *chamada*, a relative would invite an individual or family to come and work in Brazil and a patron would make a deposit to cover part of or the full passage. If the invitation was accepted, invitees would depart and upon arriving in Santos would be transported to their awaiting work and the deposit would be reimbursed.⁸¹ Transport companies were able to effectively bypass the Prinetti Decree with the system.⁸² Starting in 1913, immigrants could also

⁷⁸ *Ibid.*, 29, 35-9.

⁷⁹ *Ibid.*, 54-56. For more on 1920's and opposition to Japanese migration, see chap 3.

⁸⁰ *Relatorio da Sec da Ag*, various years. Data on the number of *chamada* entries is missing for 1911, 1919, 1920 and 1928, but even leaving out these years, the total number of *chamada* entries is 48,160. The patron would make a partial or full security deposit with the Secretary of Agriculture to cover the new immigrants' passages.

⁸¹ Only about 20-35% of *chamadas* were ever answered. *Relatorio da Secretaria da Agricultura*, various years. Once the immigrants responded to the *chamada*, the Secretary of Agriculture would reimburse the security deposit. State decree 1.400, article 4 from 1906 explains the security deposit for the *chamada* system. Although sometimes only a partial deposit was required, article 5 of the same decree notes that the person making the *chamada* would be responsible for the passage. Article 3 of state decree 2.216 from 1912 confirms the calling party's responsibility. The Antunes dos Santos & Co. immigration company cites that the *chamada* system was developed to get around the Prinetti decree. See Antunes dos Santos & Comp., Sep 1912, AESP, Manuscritos, Sec da Ag-Requerimentos, C07395, n.2095, for an explanation of the rejection process.

⁸² For examples of Italians answering *chamadas* see (12 June 1912, AESP, Manuscritos, Sec. da Ag. – Requerimentos, C07393, n.1033). For Spaniards, see (30 Aug. 1912, *ibid.*, n.1776) (20 June 1912, *ibid.*, n.1289). For Portuguese, see (*ibid.*)

use the restitutions system whereby they paid for their own passage and once arriving in Santos declared the *lavoura* as their destination.⁸³ Once the immigrant was settled on the fazenda, he or she would send a petition, accompanied by a corroborating letter from the fazenda owner, to the Secretary of Agriculture asking to be reimbursed for travel expenses. The restitution system offered a great amount of flexibility as individuals could begin their journey in any port, or in some cases, even in Brazil. The system also allowed for Italians to come to Brazil and work in the *lavoura* in the post-Prinetti Decree era.⁸⁴ Although the *chamada* system and restitutions did allow Italians an opportunity to come to São Paulo, the shift in immigrant composition to the state attests that none of these measures fully mitigated the effects of the decree. A third option to bring in immigrants was through direct appeals to the Secretary of Agriculture. Particular petitions to the Secretary of Agriculture for workers by the Estrada de Ferro Noroeste and the Estrada de Ferro Sorocabana serve as examples of these appeals. However, appeals were infrequent and their effectiveness is difficult to determine.⁸⁵

If the purpose of the subsidy system was to establish an agricultural workforce, then how did immigrants become the overwhelming majority in the rapidly growing city of São Paulo? Although some immigrants would have moved to the city after finishing their one-year

⁸³ State decree 2.400 in 1913 established the restitutions. State decree 2.533 suspended this option in 1914, but was reestablished with decree 2.668 in 1916. As state decree 823 from 1900 allowed non-subsidized immigrants to use the *Hospedaria*, the state would pay for the passage to the *Hospedaria*, the stay there and the passage to the interior.

⁸⁴ A selection of restitutions from 1912 show how Italians used the system to arrive in Brazil: 22 Jan 1912, AESP, Manuscritos, Sec. da Ag.-Requerimentos, C07400, n.220 (Buenos Aires to Santos); 6 May 1912, *ibid.*, n.1047 (Minas to SP, SP); 19 Apr 1912, *ibid.*, n.1491 (Napolis to Santos); 16 Jan. 1912, *ibid.*, n.747 (Genova to Santos); 7 Feb. 1912, *ibid.*, n.275 (Genova to Santos); 20 Jan. 1912, *ibid.*, n.165 (Almeria to Santos). Examples of restitutions in other years can be found in the Sec. da Ag portion of the AESP Manuscritos divisions in the following caixas: C04637 (1905), C07495 (1914), and C07522 (1922).

⁸⁵ For railroad requests, see note 94. On Sep 14, 1922, the engineer Lacerda asked for permission to import 2000 families to work on his land in the interior. However, due to the vagueness of his request, he was denied (14 Sep. 1912, AESP, Manuscritos, Sec. da Ag – Requerimentos, C07392, n.1683. In general, there are few personal mass immigration requests in the Secretary of Agriculture records. See Estrada de Ferro examples cited above.

agricultural contracts (Appendix 2.2 estimates that 17% of Italian immigrants working in the *lavoura* migrated to the city between 1884 and 1904), here I am more concerned with those individuals who bypassed the *lavoura*. I investigate the entry point by which many individuals established themselves in the city, the *Hospedaria* immigrant receiving station. I briefly consider those migrants coming to the capital from the state's interior, and look more closely at the different manners by which immigrants came to reside in the burgeoning metropolis directly from the *Hospedaria*.

After arriving in the port of Santos, most immigrants, both subsidized and unsubsidized, would have come to the *Hospedaria*. The subsidization contract was promising to many an unsuspecting and hopeful European immigrant, and stipulated that immigrants would be given medical care if necessary on arrival in Brazil. In actuality, many of the ships had deplorable hygiene and the conditions in the *Hospedaria* in São Paulo were hardly better.⁸⁶ The *Hospedaria* was first built to house 4,000 immigrants at a time, but as early as the 1890's, as many as 10,000 individuals crowded into the building. Figure 2 shows the *Hospedaria*'s main patio in 1910. Although the building was constructed as a place to receive new immigrants and match them with interior coffee planters needing workers, when the state granted reentries and unsubsidized

⁸⁶ A hygiene file includes a report from the *fiscal* Ernesto Tolle stating that English and German transport companies had excellent on board hygiene, which the Cia Sul Atlantique (French), had horrible conditions with dirty, old boats, overcrowding, and poorly trained personnel. (19 Nov. 1912, AESP, C07392, n344, 31-2). The hygiene file also documents overcrowding, (*ibid.*, 11) and Srs. Antunes dos Santos & Cia need to improve conditions (*ibid.*, 1-5, 13-21), attesting to the misery most immigrants experienced in arriving via boat. AESP, C07392, n.344, 1-5 speaks to the infirmary being unequipped to treat sick children. And "Informacion y Cronica," 1910-1911, AESP, Manuscritos, Sec. da Ag. – Inspetoria de Imigração Santos, C09855, describes the train journey from Santos to São Paulo and the poor medical treatment and provides a grisly anecdote whereby a pregnant woman dies in the *Hospedaria*'s courtyard giving birth after being released from the hospital.

immigrants access to the *Hospedaria*'s services in 1900, the establishment also started to function as a de facto employment service.⁸⁷

Figure 2⁸⁸



Between 1902 and 1913, an average of 27.5% of individuals in the *Hospedaria* were “reentries,” and seventy-five percent of reentries were male.⁸⁹ A *Secretária da Agricultura 1927 Relatório* reports a similar average for the end of the period. Documenting the *Hospedaria* demographic by nationality and type of entry (subsidized, spontaneous or reentry), figure 3 displays the entry status of immigrant groups registering over 1000 entries in 1927.⁹⁰ Individuals not even staying at the *Hospedaria* would use its services. For example, nocturnal *albergues*, similar to shelters,

⁸⁷ State decree 823 allowed unsubsidized, “spontaneous,” immigrants access to the *Hospedaria*. State decree 834 allowed for reentries. Both of these decrees were issued in 1900. Furthermore state decree 1.458 in 1907 allowed Brazilians from other states to use the *Hospedaria*.

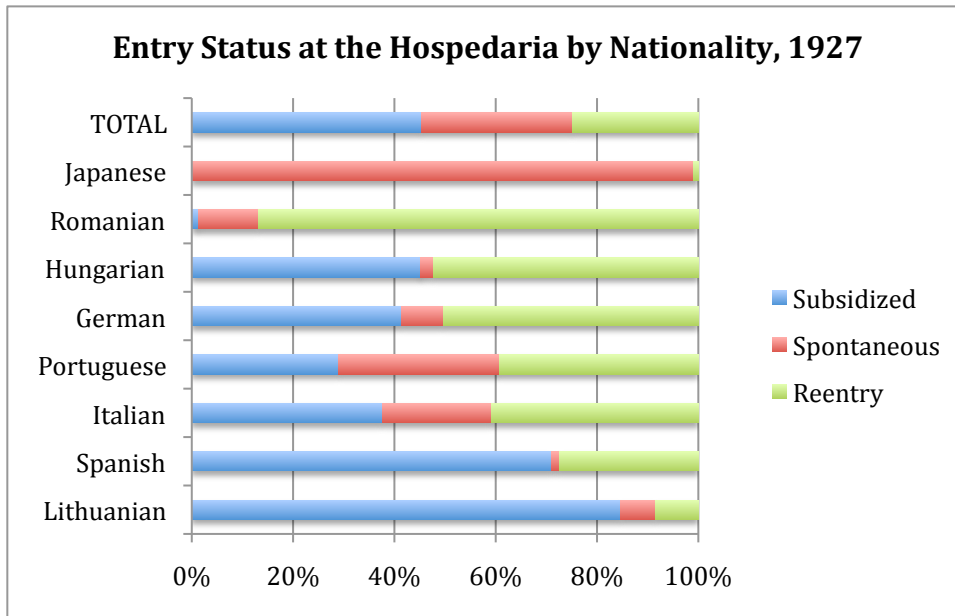
⁸⁸ Picture source: “Imigrantes no pateo interno da hospedaria 1910,” Memorial do Imigrante, Acervo Digital, Iconografias, MI_ICO_AMP_019_001_003_001.

⁸⁹ Holloway, *Immigrants*, 51-55, on the conditions at the *Hospedaria* and 55-60, on immigrant reentries.

⁹⁰ The complete table to create this graph appears in appendix 2.3.

offered individuals an alternative place to stay. Many were located close to the *Hospedaria* and individuals (mostly male) of all professions and nationalities would lodge in the *albergues* for a few nights until they were often contracted into the *lavoura*.⁹¹

Figure 3



For those immigrants who signed a labor contract, a share eventually came to reside in the capital city. The misrepresentation of immigrants as agriculturalists helps to explain the movement to the city. Individuals involved in the *lavoura* were only obligated by a one-year contract and could migrate to the state capital upon completing their contract. A contemporary article concerned with the *falta de braços* explained that colonos went to the city because they could earn six, eight and ten mil-réis a day as masons, carpenters and machinists while their rural salaries were just five, seven and half, and eight mil-réis, respectively.⁹² Wages were not the only

⁹¹ See Carlos A. Reis, Ed., *Almanach Illustrado de São Paulo* (São Paulo: Typ. Andrade & Mello, 1903), 39 for a list of night albergues. For a selection of individuals contracted from the albergues, see 1917, AESP, Sec da Ag C09859.

⁹² “Notas Economica,” *Revista Brasileiro de Commercio*, n77(May 1921),156-7. Rural salaries provided in Appendix VI of MSCB Bassanezi, “Fazenda de Santa Gertrudes—uma abordagem quantitativa das relações de trabalho em uma propriedade rural paulista—1895-1930,” (PhD dissertation, USP-FFCL, 1973).

draw as services such as educational opportunities were better in the city.⁹³ Since no uniform criteria for determining who was an agriculturalist existed, many of these *lavoura* migrants to the city were probably non-agriculturalists. This hypothesis is probable because the number of non-agriculturalists grew. A petition citing the need to support industrial worker immigration so that non-agriculturalists do not immigrate as “agriculturalists” and leave the *lavoura* provides further evidence of this misrepresentation.⁹⁴ As early as 1906, the state of São Paulo even permitted that up to five percent of subsidized immigrants could be day laborers, workers and artisans.⁹⁵ The cap grew to 10% in 1907 and could even be modified if the state government deemed it necessary.⁹⁶

There were immigrants, however, who never made it into the *lavoura*, making the *Hospedaria* their last stop before moving to the city: some even signed contracts to work directly in the city.⁹⁷ For example, in 1911, over twelve percent of the 44,556 individuals passing

⁹³ Adler and Kwon synthesize social capital approaches in their working paper “Social Capital: The good, the bad and the ugly,” (MRPS Working Paper MKT 03-09, January 2009). See Ana Maria Catelli Infantosi da Costa, *A Escola na República Velha: expansão do Ensino Primário em São Paulo*, (São Paulo: EDEC, 1983), chapter 6, for the relatively rapid growth of urban schools in comparison to rural schools.

⁹⁴ For the E.F. Noroeste, see (Letter to Dr. Oscar Löffregues, 21 June 1910, AESP, Manuscritos, Sec. da Ag – Inspeção de Imigração Santos, C09855). For E.R. Sorocabana, asking for 500 Portuguese workers (20 carpenters and 50 masons) see (“Chamada de Imigrantes <<Artistas>>,” 10 June 1912, *Ibid.*, Sec. da Ag – Requerimentos, C07417, n.1024A). The General Director did not grant this request because immigration authorities were already allowed to contract non-agricultural employees. Regarding the need for subsidization to protect *lavoura* labor, see (“Letter to Oscar,” 5 Nov. 1909, *Ibid.*, Sec. da Ag. – Inspeção de Imigrantes Santos, C09854).

⁹⁵ The discussion regarding subsidizing non-agricultural workers predated 1906. An early discussion of immigrants and their role is contained in the discussion of project 107 in the *Camara de Deputados Annaes da Sessão Ordinaria de 1899*. In reference to *lavoura* immigrants quickly moving to urban centers, Representative Antonio Mercado comments that “[the Congress] cannot stop this phenomenon and cannot quit relying on it” (p646). By 1907 the number of permitted non-agriculturalists reached ten percent, and by 1910, the state stipulated more eligible professions including carpenters, masons, blacksmiths, *carroceiros*, and servants. The state’s 1906 Law 1045-C allowed day laborers and workers to be subsidized immigrants. State decree 1.458 from 1907 stipulated 10% of immigrants could be non-agriculturalists. Decree 1.921 from 1910 reduced the percentage of non-agriculturalists was reduced to five percent.

⁹⁶ This stipulation made in 1913 in decree 2.400, chapter 3, article 44.

⁹⁷ 20 June 1912, AESP, Manuscritos, Sec. da Ag. - Requerimentos, C07393, n.1289

through the *Hospedaria* were contracted to the city.⁹⁸ In 1925, over 7900 individuals went directly from the *Hospedaria* to the city.⁹⁹ Individuals also came to the city by rejecting their *chamada* and refusing to continue to their destination or by simply leaving the *Hospedaria*. The Italian Guisepe family is a good example of this rejection. ‘Called’ by the farmer José Aleixo da Silva Passos from Engenheiro Brodowski, the family of four from Napoles (Viola Giuseppe, 38, his wife Carmella, 23, and his daughters Orsola and Rosa, 6 and 3, respectively) arrived in São Paulo in August 1912. They left the *Hospedaria* on a walk one day and never returned.¹⁰⁰ Other individuals and families openly rejected the *chamadas*, many times in order to meet up with family already established in the capital.¹⁰¹

Certain companies also directly contracted skilled workers from Europe. Dean cites Morse and the *Anuario Estatístico de São Paulo de 1940* when he claims that there were “immigrants [in the city] with industrial experience who had been contracted in Italian cities by Paulista factory owners.”¹⁰² In his memoir, Penteadó remembers that the Vidraria Santa Marina

⁹⁸ Of the 44,557 individuals contracted through the *Hospedaria* in 1911, almost 12.3% were actually contracted to work in the city rather than in interior coffee cultivation. This percentage rose to over 24% in 1912 and 23% in 1913 before dropping to 5.4% in 1914. São Paulo, Secretaria da Agricultura, 1912 *Boletim do Departamento Estadual de Tabalho* [BDET], n.1-2, 196; n.5; 728. 1914, BDET, n.12-13, 813.

⁹⁹ *Relatorio da Secretaria da Agricultura 1925*, 114. In total there were 7993 individuals in 1556 families contracted to the city: 2176 Spanish, 1973 Yugoslavs, 1389 Romanians, 826 Austrians, 565 Estonians, 265 Italians, 234 Portuguese, 171 Germans, 153 Hungarians, 106 Polish, 27 Brazilians, 20 Tchech-slovenians, 28 Russians, 11 English, 21 Japanese, 8 Swiss, 3 Latvians 6 Lithuanians, 5 Ukranians and 6 Bulgarians.

¹⁰⁰ The original document reads “sahiram nesta Capital, a passeio, não voltando, para tomar o destino da chamada.” (30 Aug. 1912, AESP, C07393, n.1776, 5). For other examples of immigrants *fugindo* a chamada, see *ibid.*, p6; Requerimento por Amador de Cunha Bueno (Dr.), 29 Aug. 1912, *Ibid.*, C07395; 20 Sep. 1912, *ibid.*, n.1867; 20 Sep. 1912, *ibid.*, n.1866. The fact that immigrants were able to leave the *Hospedaria* grounds contradicts Holloway’s claim that the *Hospedaria* was heavily patrolled, *Immigrants*, 54.

¹⁰¹ Maria da Luz Encarnação (Sep. 1912, AESP, C07395, n.2095). Josepha Albiere, Letter to Dr. Inspector da Imigração, 12 Dec. 1914, AESP, Sec da Ag. – Insp. de Imigração, C0958). AESP, C07393, n.1776, 28; AESP, C07395, n.1866, 1-6. Oct. 1912, AESP, C07396, n.2070, 11-13, even includes a letter from the immigrant. For an example of how the *chamada* system could be manipulated, see the case of Maria Antonio Fernandes Anes and her family. Requerimento 29 Ago, 1912, AESP, C07395, 1-3. The family was called by chamada nº1148.

¹⁰² Dean, *Industrialization*, 51

had two hundred specialized glass workers contracted from Italy and France.¹⁰³ The British store Loja Mappin provides a more personal account of these contracts. The company hired Silvio Cicarelo Carlini in 1921 to be the manager of furniture and decorations department. Originally from Italy, Carlini was manager of the British department store “Gath & Chaves” in Buenos Aires before being contracted to São Paulo. At Mappin he became General Manager in 1925 and was an adored and capable supervisor whose efficiency and dedication brought the company much success.¹⁰⁴ Although we cannot determine the number of individual contracts awarded to foreigners in the city during the Old Republic, their importance to São Paulo is undeniable.

For individuals without specific contracts, many probably settled in the city with the hope of being hired by a fellow countryman. There is no doubt that social networks played a role in getting jobs. In the case of the Mappin department store general manager Silvio Carlini, interviews from former employees attest that Mappin hired many people because of family connections to Carlini.¹⁰⁵ If industrialists were more inclined to hire workers from their country of origin, evidence on ownership shows how certain immigrants may have had more job opportunities. For the state of São Paulo, Italians controlled almost 75% of industrial establishments owned by foreigners, and employed 69% of all industrial workers in 1920.¹⁰⁶ For the city, while Brazilians represented 45% of all registered incorporations between April and September of 1917, Italians still represented 42% of all incorporations by foreigners during the

¹⁰³ Penteadó, *Belénzinho*, 63. Penteadó also cites mostly Italian workers (or sons of Italians) in the Cristaleria Itália (109) and mostly Portuguese from Leiria, Portugal working in the Cristaleria Paraíba (117).

¹⁰⁴ Museu Paulista, Mappin collection, caixa2 Entrevistas, docs, 42, 43 and 65

¹⁰⁵ See chapter 5 of this dissertation for more on Carlini and these employment factors.

¹⁰⁶ *Recenseamento 1920*, 5.1: LXI-LXIV. Foreign share is slight less, because it only considers those firms owned by Italians, Portuguese, Spanish, Germans and Syrians.

same period.¹⁰⁷ Italian establishments were, on average, larger than establishments owned by other immigrant groups, and it is likely that unincorporated or smaller businesses owned by other national groups offered viable work opportunities for immigrants throughout the city. The 1929 *Album da Colônia Portuguesa no Brasil* recorded 203 different Portuguese-owned establishments in São Paulo. The top sectors for these businesses included general stores (26 establishments), hardware stores (19), wholesale warehouses (13), bakeries & sweetshops (11) and paper and printing locales (9).¹⁰⁸ Some of these companies, Votorantim, Martins Ferreira & Co. and Casa Pimentel, were large, and many were small. While some immigrant groups may have had an easier time finding jobs because of national connections, the diversity among Paulistano business and factory owners shows that immigrants of many different nationalities could use national networks to secure employment.

For the tens of thousands of immigrants coming to São Paulo, being the next successful immigrant industrialist was largely unattainable, but getting a job in an immigrant's factory was highly likely. São Paulo lore tells a rags to riches story about immigrant entrepreneurs in the city, but evidence in entrepreneur biographies show that most of these entrepreneurs came to Brazil with capital and were often middle class in their homelands with savings and established human capital. With the exceptions of Dante Ramenzoni and Nicolau Scarpa, very few of these successful industrialists were ever factory workers. However, they were inclined to hire their

¹⁰⁷ Klein, *La Inmigración española*, 123 (table 4.6).

¹⁰⁸ Sônia Maria de Freitas, *Presença Portuguesa em São Paulo*, (São Paulo: Memorial do Imigrante, Imprensa Oficial, 2006), 85-94. Most businesses concentrated on the streets Rua Florêncio de Abreu, Rua Líbero Badaró, Rua São Bento and Rua Direita.

own countrymen and individuals often bought goods from fellow countrymen. These origin-based social networks drew newly arriving immigrants to the city of São Paulo.¹⁰⁹

Part II: Skill Levels of São Paulo Immigrants

Above I have provided a more complete understanding of many of the avenues by which immigrants settled in the city of São Paulo. Included among these methods were employers who directly contracted individuals from Europe. Why did companies have to hire employees across the Atlantic Ocean? Were Brazilians really that unskilled? In this section I address these questions by answering three related questions. First, were immigrants to the city different from *lavouira* immigrants? Second, what was the relative skill level of the largest immigrant groups and was there any reason why employers might have preferred hiring one group over another? Finally, did the skill level composition of migrants to the city change over time and what can these shifts tell us about the nature of growth in Old Republic São Paulo? In order to answer these questions, I turn to human capital evidence available in the BDMJ.

Between 1908 and 1927 about 45-55% of immigrants coming to the state passed through the *Hospedaria*. During the same period, individuals already living in the city who went to find work comprised about 25% of the total *Hospedaria* population. The BDMJ contains the data from these *Hospedaria* entry records. When complete, each entry contains information on an individual's name, age, gender, civil status, nationality, family status, literacy, profession, arrival date, departure city, destination and previous time in Brazil. Heads-of-household have the most complete entries, but valuable information is available for each individual. Although the database is used frequently for genealogical searches, the complete entries are not readily available to the

¹⁰⁹ Dean, *Industrialization*, 51-74, provides a good overview of the largest Paulistano industrialists, including Matarazzo, Scarpa, Ramenzoni, Puglisi Carbone, Martinelli, Crespi and Jafet. Observations on the individuals' character and personality are also included.

public and have not been comprehensively studied. I examine a systematic sample of these complete data entries. Unfortunately the database contains no information on unsubsidized immigrants not passing through the *Hospedaria*, but on average, at least thirty percent of unsubsidized immigrants passed through the *Hospedaria*.¹¹⁰ Although a significant share of the immigrant population is omitted from the data, since the conditions of the *Hospedaria* were so deplorable, it is fair to assume that those immigrants passing through could not rely on friends and family for jobs or lodging and were the least socially connected or the poorest. In effect, I am comparing the bottom socio-economic sector of each immigrant group.¹¹¹ One of the greatest advantages of this database is that it differentiates immigrant characteristics by nationality.

*Banco de Dados Maria José*¹¹²

The BDMJ provides information on immigrant entries from 1882 through 1978, but the time period investigated covers from 1903 to 1927 and divides these years into three separate time periods: 1903-1913; 1914-1918; and 1919-1927.¹¹³ The 1903 to 1913 period begins the year after the Prinetti decree and ends before World War I. As most immigrants came from Europe and WWI greatly impacted those immigrant streams, the second period covers the WWI years. The last period stops short of the end of the Old Republic because the state government led by Julio Prestes, abolished state-subsidized European immigration in 1927. The entire population of

¹¹⁰ *Relatorio da Secretaria da Agricultura, various years*. The share is derived by dividing the number of unsubsidized immigrants passing through the *Hospedaria* by the total number of unsubsidized immigrants. The highest shares come in 1928 (59.2%), 1917 (55.0%) and 1918 (50.1%). The lowest shares in 1920 (8.3%), 1919 (9.7%) and 1921 (12.6%).

¹¹¹ It is important to note that literacy rates will be underestimated due to the sample bias.

¹¹² Appendix 2.1 contains a detailed account of the BDMJ characteristics and the methodologies used to analyze the data.

¹¹³ Ideally, our analysis would begin with an 1889-1903 period, but given the poor data quality in the pre-1902 years, these years have been omitted.

immigrants passing through the *Hospedaria* during the Old Republic (1889-1930) totals over 1.3 million individuals and includes individuals contracted to the *lavoura* and settling in the city.¹¹⁴ The subset arriving between 1903 and 1927 includes 457,811 individuals.

For the three chosen time periods, I search the BDMJ for individuals contracted to work in the city of São Paulo. Over the entire time period under question, there were 8,887 adult heads-of-households and 8,741 adult individuals contracted to the city (17,628 in all).¹¹⁵ The largest share, 44.3%, arrived during the first period. I create a sample by first sorting the individual and family heads-of-household alphabetically and then recording all available information for every twentieth entry of each group. Given the restrictions of the database, this is the best approximation of a representative random sample for the *Hospedaria* population. Thus, my sample includes information for 5% of *Hospedaria* residents moving directly to the city. The sample includes 1797 individuals in families and 435 individuals migrating independently and allows me to look at immigrant flow trends and literacy rates in the city of São Paulo by nationality. The purpose of this exercise is to determine whether certain immigrant groups, as a whole, had higher human capital and skill levels and whether they concentrated in the capital city or not. I then interpret these results to see if it is logical to expect to find certain nationalities in more skilled positions in the employment data I examine in chapters three and four of this dissertation.

The first question I address is whether there was any difference between urban São Paulo immigrants and *lavoura* immigrants. In order to answer this question, I look at the entire BDMJ population and compare literacy rates for adults settling in the city of São Paulo to adults settling

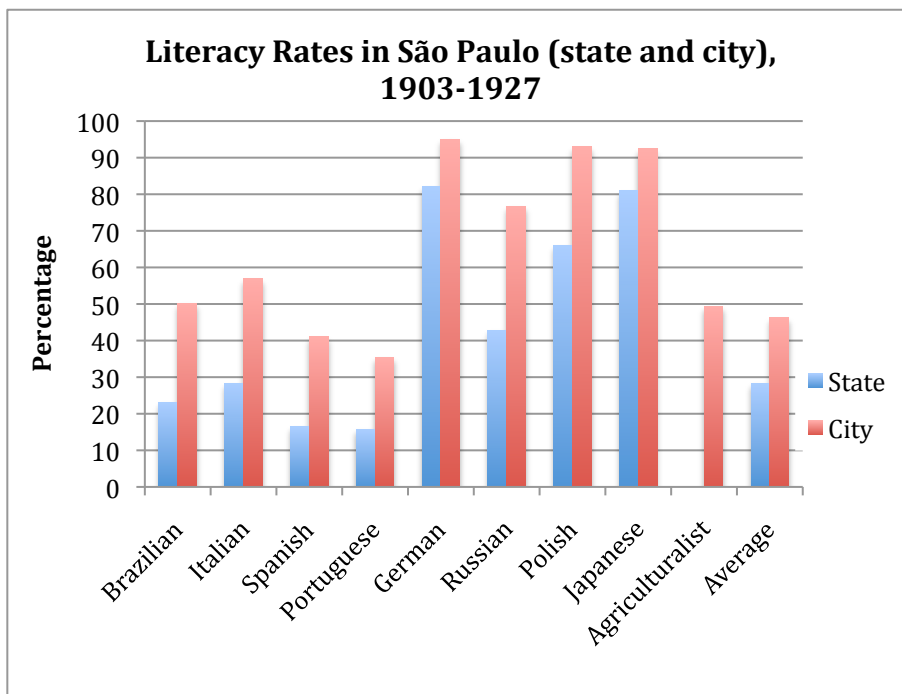
¹¹⁴ I look at immigrants after the fall of the Empire (not just the start of the Old Republic). There are 1,329,918 immigrants and 1,104,062 adults passing through the *Hospedaria*.

¹¹⁵ Immigrants were deemed to have settled in the city if "capital" was listed as the final destination.

in the entire state. Over the period, literacy rates in the city were almost double those in the entire state!¹¹⁶ As figure 4 shows, this trend holds for each nationality, including Brazilians.¹¹⁷ If literacy is an adequate judge of human capital, then it is clear that on average, workers contracted to the city had more human capital than their *lavoura* counterparts.

The graph also reveals whether certain immigrant groups were more literate than other immigrant groups. Since this dissertation is concerned with the labor market in the city of São Paulo, I concentrate my analysis on the at literacy rates for immigrants in the city of São Paulo.

Figure 4



¹¹⁶ From 1903 to 1913, the state averaged 20.2% literacy, the city, 38.7%. From 1914 to 1918, the state averaged 36.1% and the city 69.0%. For the post-war period, the state averaged 46.5% and the city 92.9%. Literacy rates for heads-of-household or individuals in the city are similar: whole period, 47.2%; 1903-1913, 28.9%; 1914-1918, 68.7%; 1919-1927, 92.7%. Whereas just 28.2% of immigrants to the state were literate, the literacy rate for individuals headed to the city was 46.3%.

¹¹⁷ The table for this figure can be found in the data appendix of this chapter. Although I examine the data by nationality, I include an additional row entitled “agriculturalist” because the majority of immigrants to the state and city were agriculturalists.

Notable trends in these rates are Portuguese immigrants' consistently low literacy rates and German, Polish and Japanese immigrants' extremely high rates. Whereas the German and Polish rates are genuinely notable, the Japanese rates are most likely artificially inflated.¹¹⁸ These rates are consistent with evidence on incoming immigrants' earnings gaps relative to natives in the United States in the early twentieth century.¹¹⁹ It is surprising that the literacy rate of Brazilians (higher than both Spanish and Portuguese) is slightly higher than the average literacy rate. An in-depth analysis of these Brazilian literacy rates and a discussion of Brazilian migrants follow later in this chapter.¹²⁰ The variance in national literacy rates is not surprising given registered literacy rates from the early-twentieth century. Portugal registered extremely low literacy rates: just 25% of individuals over the age of six were literate in 1900.¹²¹ Similar literacy and school attendance evidence suggests Spanish and Portuguese immigrants and Brazilian migrants should have been the least educated while Germans immigrants should have been the most educated.¹²²

¹¹⁸ Japanese rates are inflated because elementary enrollment was equated with literacy. In 1910 Japan, 98% of elementary aged children were enrolled; however, just 40.6% of males and 22.6% of females completed elementary school. In addition, as "literacy" in Japanese means learning 2000 characters and two 50 character alphabets, elementary school should not be equated with literacy. Johnson and Nicholas, "Health and Welfare of Women in the UK, 1785-1920" in Steckel and Floud, Eds, *Health and Welfare During Industrialization*, (Chicago: University of Chicago Press, 1997), 263.

¹¹⁹ Evidence on earnings gaps shows Portuguese to have the lowest earnings relative to natives in the first five years after arriving. Italians and Germans initially registered higher earnings than natives, although the differences of both groups relative to natives were not significant. Ran Abramitzky, Leah Boustan and Katherine Eriksson, "A Nation of Immigrants: Assimilation and Economic Outcomes in the Age of Mass Migration," (NBER Working Paper 10811, April 2012), 46.

¹²⁰ Chapter three of this dissertation discusses the debate on relative skill level of Brazilians and immigrants.

¹²¹ For Brazilian literacy rates, see Stanley Engerman and Kenneth Sokoloff, "Institutions, Factor Endowments and Paths of Development in the New World" *Journal of Economic Perspectives* v14.3 (2000): 217-232, table 3. For European rates see Gabriel Tortella "Patterns of economic retardation and recovery in south-western Europe in the nineteenth and twentieth centuries," *HER* v47.1 (1994): 11-12, 15. In 1900, the Brazilian literacy rate for the seven and older population was 25.6%.

¹²² *Ibid.*, the following literacy rates in 1910: Belgium, 85%; Britain, 100%; Italy, 62%; Spain, 50%; and Portugal, 25% (11-12). She also reports the following primary school enrollment rates in 1900 per 1000 inhabitants: Germany, 159.1; Britain, 151.0; Spain, 92.0; Italy, 84.2; and Portugal, 42.6 (15). It is notable that all of these countries registered higher enrollment rates than the state of São Paulo in 1914 (42.0), Ana Maria Catelli Infantosi da Costa, *A Escola na República Velha*, (São Paulo: EDEC, 1983), 73.

Based on the *Hospedaria* literacy rates, it is reasonable to expect that employers in Old Republic São Paulo would have preferred hiring Germans, Russians, and Polish in more skilled, higher wage positions. Similarly, the same employers may have relegated qualified Spanish and Portuguese workers into lower earning positions because of preconceived notions about their skill levels.

To complement this evidence on basic literacy rates, I use a series of statistical tests, robust logit regressions, to see how individual immigrant characteristics impacted the chance that an individual passing through the *Hospedaria* was literate.¹²³ The goal of this analysis is to see if the national literacy rates are significantly different than rates for unskilled, single, Brazilian males passing through the *Hospedaria* between 1903 and 1913 once accounting for the effects that other individual characteristics, such as age and gender, had on literacy. The results shown in the table below show the impact that different immigrant characteristics had on literacy rates among those individuals settling in the city. The results show that in comparison to Brazilian males passing through the *Hospedaria* in the earlier period of the Old Republic (1903-1913), Portuguese immigrants were almost 40% more likely to be illiterate than these Brazilians. Also notable is that the typical German or Austrian was almost 17% more likely to be literate than the average Brazilian immigrant passing through the *Hospedaria*. The logit results, which show these literacy results are statistically significant, can be found in table I of appendix 2.3. That these results were statistically significant means that something besides chance explains these higher literacy rates.

¹²³ I first restrict the test to 634 heads-of-household and consider the effects of age, gender, nationality, family status, prior time in Brazil, and skill level on an individual's literacy. The sample omits some individuals because of data input problems. The test restricts analysis to the most common nationalities: Brazilian, Portuguese, Italian, Spanish and German/Austrians. Each model takes into account fixed year effects.

Table 2.2: Impact of Immigrant Characteristics on Literacy in city of Sao Paulo: 1903-1927				
	% Change	Std. Err	Z-value	Pr> z
Female	-16.0%	0.082	-1.95	0.051
Age	-0.8%	0.013	-0.62	0.537
AgeSq	0.0%	0.000	0.63	0.529
Family	-10.1%	0.053	-1.9	0.057
Brazil Prior	7.9%	0.068	1.15	0.248
Nationality				
Portuguese	-39.9%	0.217	-1.84	0.066
Italian	-15.5%	0.216	-0.72	0.472
Spanish	-25.8%	0.218	-1.18	0.237
German/Austrian	16.9%	0.204	0.83	0.409
Skill level				
Semi-skilled	26.4%	0.112	2.36	0.018
Skilled	23.1%	0.066	3.49	0.000
Highly Skilled	8.7%	0.146	0.6	0.550
TimePeriod				
1914-1918	-7.9%	0.088	-0.89	0.371
1919-1927	8.0%	0.132	0.61	0.543
Source: BDMJ sample				

I introduce the port of embarkation and how it impacted literacy rates as an alternative was to looking at nationality because some individuals were serial immigrants and could have resided outside of their home country for a significant period of time. I choose individuals leaving from southern Spanish ports as the base group because the largest share of the sample (36%) departed from that region. Introducing this variable restricts the test to just under three hundred observations for heads-of-household and the results appear table II of appendix 2.3. Although the results are not as strong, they do provide evidence that men and individuals leaving from Dutch and German ports were as much as 45% more likely to be literate than individuals leaving from southern Spanish ports and Italians were as much as 17% more likely to be literate.¹²⁴ In sum, these results on literacy show that even unskilled Germans and Austrians

¹²⁴ The statistical significance levels of these results are lower.

coming through the *Hospedaria* had a high human capital level relative to Brazilians and to other immigrants (those leaving from southern Spain). This provides further evidence that employers may have chosen to employ Germans and Austrians over other qualified individuals because of the expectation that these workers would be more skilled.

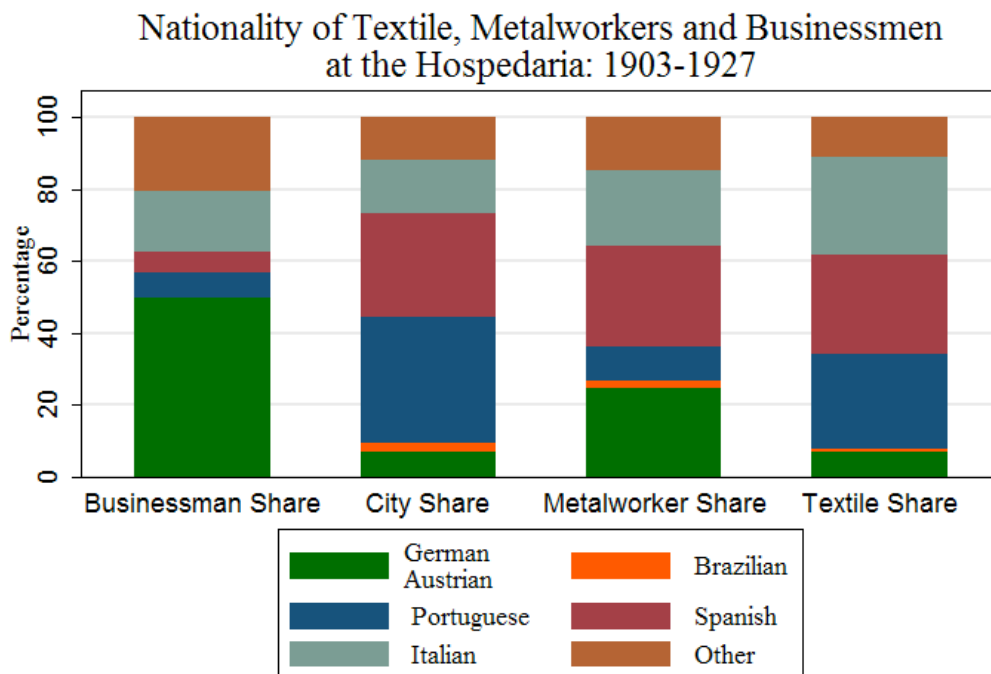
Analysis restrictions require leaving certain nationalities out of these generalizations, but the differences in literacy and skill levels among these smaller immigrant groups are also important. The case of Swedish immigrants coming to São Paulo through the *Hospedaria* between January 1, 1906 and December 31, 1910, offers an excellent example. One family of eight and thirteen individual immigrants passed through the *Hospedaria*. The family of eight and three of the individual Swedish immigrants came to reside in the city of São Paulo. One individual went to the federal capital, Rio de Janeiro; Dr. Lors Swerson, probably a fellow countryman, contracted six individual agriculturalists to work in Santa Cruz do Rio Pardo; and three individuals ended up in other interior destinations. Although there is no data on whether these Swedes were literate, that the male immigrants included nine agriculturalists, one day laborer, one sailor, one blacksmith, one business man and one mechanic, it is fair to assume that they were more skilled than the majority of their Portuguese cohorts.¹²⁵

As an alternative to the literacy measure of human capital for different incoming immigrant groups, I look at professional distinctions for the entire BDMJ population between 1903 and 1927. Since experience was arguably more important than literacy in this burgeoning industrial metropolis, this approach may be a better way to understand the expectations that employers had about certain immigrant groups. I use data from the entire population registered in the BDMJ and from the smaller sample to look at migrants' professions. I isolate individuals in

¹²⁵ 23 Mar. 1912, N.1326, AESP, Manuscritos, Sec. da Ag. – Inspetoria de Imigrantes Santos, C09855.

three different professional categories: textile workers, mechanics and blacksmiths, and businessmen. The logic is that these three groups represent three distinct sectors of the economy, and although there was arguably some variation in skill levels, textile workers were likely unskilled or semi-skilled and mechanics and blacksmiths were likely semi-skilled or skilled tradesmen. Businessmen probably represented a range of skill levels (from business owners to peddlers), but the nature of the profession offered more opportunities for social mobility. This approach, which eliminates agriculturalists, yields a subgroup of 1135 textile workers, 1659 mechanics/blacksmiths and 284 businessmen. Of these individuals, 39% settled in the city of São Paulo.¹²⁶

Figure 5

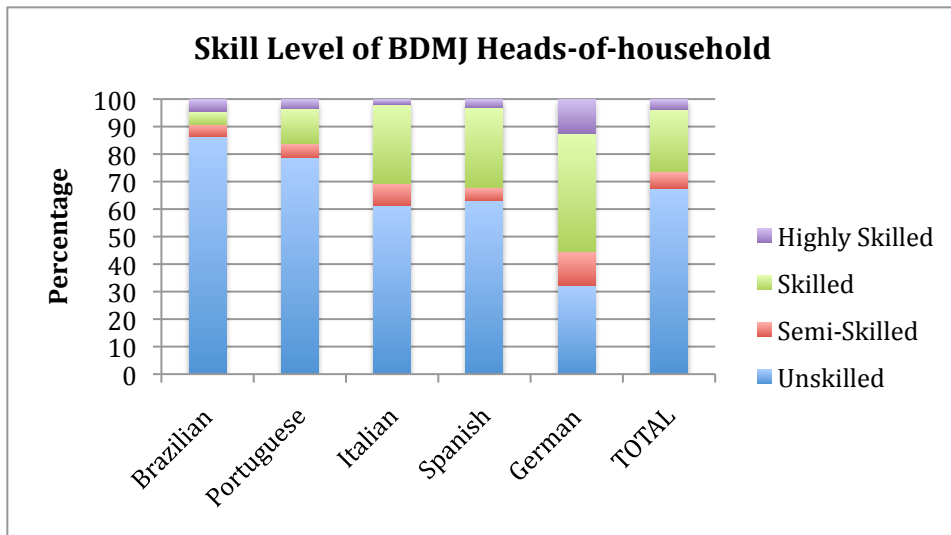


Source of data: BDMJ

¹²⁶ There were 528 textile workers moving to the city (46.5%), 587 mechanics/blacksmiths (35.4%) and 88 businessmen (31.0%).

Figure 5 above show that some immigrant groups were overrepresented in certain professions.¹²⁷ For example, between 1903 and 1927, Italians comprised just 14.9% of the adult immigrant stream passing through the *Hospedaria*; however, they represented over 27% of the immigrants moving to the city registered as textile workers.¹²⁸ Likewise, Germans only made up 7.0% of the city’s immigrant stream, but here they represent almost a quarter of the mechanics and blacksmiths and an impressive 50% of businessmen settling in the city.¹²⁹ On the other hand, Portuguese are underrepresented as mechanics, blacksmiths and businessmen and Spanish are underrepresented as businessmen.¹³⁰

Figure 6



¹²⁷ Contact the author for a complete table of professions by nationality. Appendix 2.3 includes tables with data for the graphs in this chapter.

¹²⁸ Italians make up over 37% of all textile workers registered at the *Hospedaria*.

¹²⁹ These percentages just include German immigrants in order to compare the data with the incoming immigrant population.

¹³⁰ If I consider immigrants of these professions settling in the entire state, Spanish (who were 30% of the *Hospedaria* immigrant stream) were a mere 18.7% of textile workers, 17.5% of mechanics and blacksmiths, and 3.9% of businessmen. Portuguese made up 14.2% of the immigration flow, but a mere 5.3% of mechanics and blacksmiths and 3.9% of businessmen.

To complement the data in the charts above, I look at the likelihood of a head-of-household declaring an unskilled profession when registering at the *Hospedaria*.¹³¹ Figure 6 shows the share of heads-of-household contracted from the *Hospedaria* who settled in the city declaring unskilled, semi-skilled, skilled and highly skilled professions.¹³² Noticeable trends are the high numbers of Germans and Austrians declaring skilled and highly skilled professions. Just as important is that almost 90% of Brazilians and 80% of Portuguese were unskilled laborers or agriculturalists.

I complement these data with a statistical analysis of the BDMJ sample to see whether certain immigrant groups were more likely to declare unskilled and highly skilled professions when registering in the *Hospedaria*.¹³³ The statistical results of these robust logit regressions are reported in table III of appendix 2.3. The results are mostly consistent with the results on literacy. Although immigrants were all less likely than Brazilians to register an unskilled profession, Germans and Austrians were statistically less likely and were as much as 21% less likely to be unskilled workers. These results, combined with the other evidence on human capital presented above, show that employers in the São Paulo labor market were reasonable to expect Portuguese workers to be less skilled and German workers to be more skilled than Brazilians.

How should we interpret the high literacy rates of Brazilians? The BDMJ sample shows few Brazilians contracted through the *Hospedaria* listing the city as their final destination. This small share is expected given that Brazilians were not immigrants and probably had the most

¹³¹ In order to run this regression, I apply an occupational code to each head-of-household based on the Preston-Haines occupational codes for the early twentieth century US census. I then use the quartiles from this occupational index to code workers into first, second, third and fourth quartile positions. For more on this methodology, see chapter 3 of this dissertation.

¹³² The number of share of unskilled workers is high because of the ‘agriculturalists’ coming through the *Hospedaria*. See table in the data appendix of this chapter for this graph’s source.

¹³³ Again, each of these regressions takes into account fixed year effects.

intricate social networks they could rely on to find jobs and settle in the city if that is what they desired. Therefore, those Brazilians passing through the *Hospedaria* were likely to be heading to the *lavoura*. What is surprising is the relative skill level of this small group of migration. The primary education matriculation rate per thousand inhabitants in São Paulo was lower than even that of Portuguese, but, when considering literacy rates, the Brazilians in my sample are nine and fifteen percentage points above Spanish and Portuguese, respectively. Interpreting these data require a much closer look at who these Brazilian migrants were and where they came from.

In order to look at these questions, I analyze Brazilian migration characteristics for Brazilian heads-of-household in each year between 1903 and 1927.¹³⁴ In all, over 41,000 Brazilians used the *Hospedaria* and we have origin data on over 84% of these individuals. The origins are divided into seven regions: North, Northeast, Central West, Southeast, Minas, South and capitals.¹³⁵ These divisions are based on traditional Brazilian regions, but I have separated Minas Gerais from the Southeast region because of the large share of migrants from that state and have separated the capital cities of São Paulo and Rio de Janeiro (federal capital) because both were extraordinarily large cities for that time. Over the period 28% of immigrants came from the Southeast, 25% from the Northeast, 21% from Minas, 10% from the capitals, and less than 1% from the South, North, and Central West regions. The stream of immigrants from the Southeast region was the largest during the pre-WWI period, comprising 44.3% of migration. If I include the capitals, then the share of migration from Rio de Janeiro and São Paulo rises to over 60% in the early period. During the war and in the 1919-1927 period, the Southeast region

¹³⁴ The process for organizing these data was rather complex and is found in Appendix 2.1.

¹³⁵ States appearing in the data are categorized as follows. North includes Acre, Amazonas and Pará. Northeast: Maranhão, Piauí, Ceará, Rio Grande do Norte, Pernambuco, Alagoas, Paraíba, Sergipe and Bahia. Central West includes Matto Grosso. Southeast: Espiritu Santo, São Paulo and Rio de Janeiro. South: Paraná, Santa Catarina, Rio Grande do Sul. The capitals include the federal capital, Rio de Janeiro, and the state of São Paulo capital, São Paulo.

accounted for a mere 17.7% and 13% of Brazilian migration, respectively. In the Northeast migrants represented just 3.1% of Brazilian migrants during the first period, 26.0% in the second, and almost 43% during the 1919-1927 period. Minas showed a similar increase in the later period: representing 34.4% of Brazilian migration in the later period, having steadily grown from 5.9% in the 1903-1913 period and 15.1% during WWI.

Although the traditional historiography and regional literacy data show that Northeastern migrants had low human capital and low literacy rates, looking only at Brazilian migrant heads-of-households reveals several interesting trends. First, there is an expected twelve percent increase in the literacy rate to 35.4%. Second, and most surprising are the literacy data by region. My data from the BDMJ show that, at least for those individuals migrating to the state of São Paulo through the *Hospedaria*, Brazilians coming from the northern states were no less skilled. Brazilians migrating from the exterior record the highest literacy rates (63.2%), but those living in the South (60%), the North (58.6%) and the Northeast (45.0%) followed. Considering Bahia separately from the Northeast raises literacy rates for that region even higher to 50.4%. The city of Rio de Janeiro also registered exceptional literacy rates at 67.0%.¹³⁶ These rates are higher than those for Portuguese, Spanish, Italian and Russian immigrants passing through the *Hospedaria*. Equally intriguing are the low literacy rates among Minas Gerais and Southeast migrants, 35.4% and 43.0%, respectively.¹³⁷ Just 35.2% of Brazilians from the city of São Paulo were literate. The Paraíba Valley recorded the lowest literacy rates at just 18.4%. Even considering the sample selection bias of Brazilians choosing to use the *Hospedaria*, these data on high Northeastern and Northern literacy rates complicate the traditional depiction of the

¹³⁶ The Northeast figure leaves out migrants from outlier drought years in RGN, Ceará and Paraíba when the State brought extraordinary migrants to São Paulo. See Appendix 2.1.

¹³⁷ These literacy rates for Southeast and MG migrants consider the entire period.

backwards and undereducated North and Northeast Brazil. The answers to these questions about Brazilian migrants' skill levels lie outside the scope of this dissertation; however, it seems plausible that either self-selection or political factors brought more educated Northern and Northeastern Brazilian migrants to the city. Similarly, the results seem to confirm that only individuals with extremely low human capital and few connections in the Southeast region and in Minas Gerais resorted to using the *Hospedaria* to find jobs.

Immigrant Streams

Finally I look at immigrant flows to the city as an attempt to understand how changes reflected changes in the nature of the city's industrialization. This exercise helps address the debate as to what type of industrialization was taking place in São Paulo.¹³⁸ I interpret periods where large, unskilled groups came to the city as period of labor-intensive growth. Periods with greater skilled migration suggest that the demand for skilled or semi-skilled workers had increased in the city. This evidence will complement evidence in chapter four of this dissertation on how literacy impacted a worker's wage. Using the *Hospedaria* data, I look more closely at specific immigrant streams to the city, whether there were periods when a higher concentration of unskilled or skilled workers came into the city, and how two specific immigrant flows reflect changes in incoming immigrant skill level.

Literacy rates from the *Hospedaria* data provide the first analysis to show that the education (or at least the literacy level) of immigrants did increase during the Old Republic. In the first period, 1903-1913, the average literacy rate for immigrants from the *Hospedaria* who settled in the city was just 38.7%. The rate for heads-of-household was even lower at 28.9%. The WWI period showed a sharp increase to 69% literate for all immigrants and 68.7% for

¹³⁸ For a discussion of this debate, see Shozo Motoyama's introduction to *Tecnologia e Industrialização no Brasil: Uma Perspectiva Histórica*. (São Paulo: Editora UNESP, 1994).

heads-of-household. The later period, from 1919-1927, showed a similar jump to 92.9% and 92.7%, respectively. A similar increase was recorded for females coming to the city as well. This evidence on literacy rates supports the argument that the demand for skilled and semi-skilled labor increased during the Old Republic. Looking more closely at immigration flows to the city by nationality further supports this argument.

The table below shows the shares of immigrants by nationality in different periods. Although 306,063 of individuals in the 457,811 total population did not record a final destination (they were not heads-of-household), there are two notable trends I highlight considering migration to the state’s capital. First is the high influx of Portuguese in the first two periods and second, the high proportion of Germans in the last period.¹³⁹

Nation\avg	1903-1913		1914-1918		1919-1927		1903-1927	
	State	City	State	City	State	City	State	City
Brazilian	9.5	1.9	31.5	6.1	51.9	4.3	22.1	2.4
Italian	22.9	15.1	25.9	22.4	7.4	8.3	19.0	14.9
Spanish	41.5	31.6	23.3	28.1	2.5	5.1	30.0	28.6
Portuguese	17.2	40.0	11.7	24.6	7.0	3.9	14.2	35.3
German	1.2	3.1	1.1	3.1	6.9	41.2	2.7	7.0
Russian	1.7	2.8	0.7	3.2	0.2	0.3	1.3	2.5
Polish	0.1	0.2	0.0	0.0	0.5	1.2	0.2	0.3
Japanese	2.4	1.1	3.4	5.9	17.8	3.0	6.5	1.6

Source: BDMJ. Population State=457, 812. Population city=17789

Portuguese made up 40% of the *Hospedaria* individuals that were contracted into the city between 1903 and 1913. Considering that the literacy rate for this group was the lowest (21.5%), this influx suggests that the city’s growth demanded unskilled laborers. Portuguese would have had the added advantage of speaking the same language as Brazilians and might have been more desirable to future employers. For example, at the São Paulo Tramway, Light and Power

¹³⁹ The data also show a relatively low share of Brazilians and Japanese to the city. The former is addressed earlier in this chapter. The latter can be explained by the concerted effort of moving those immigrants to the *lavoura*. Holloway shows that Italians made up 26% of immigration between 1901 and 1930, but here they are just 22.9% of the population. Holloway, *Immigrants*, 179, 43.

Company (Light), streetcar conductors and drivers were required to speak Portuguese. This prerequisite was reflected in the share of Portuguese employment in these two positions as late as 1931. Portuguese employees at Light totaled 25.9% of all employees (1633 employees); however, 55% of these Portuguese employees were either conductors or drivers.¹⁴⁰ The fact that over 63% of Portuguese staying in the capital in this period were registered as “agriculturalists,” a full fifteen percentage points higher than the average for all immigrants during the 1903-1913 period, supports this interpretation. Furthermore, while males constituted 87.7% of the Portuguese migrants in the city, they comprised only 61.5% of the state’s Portuguese immigrant population. However, Portuguese immigrants in the city were more likely to be married men and travel with their families¹⁴¹

Most Portuguese immigrants moving to the city of São Paulo departed from Leixões (the Porto region); however, a significant population also left from Lisbon.¹⁴² Freitas’ evidence shows that the largest share of immigrants came from Bragança (59.94%), while just a small portion from the Leixões/Porto region (11.46%). Although this seems to contradict the BDMJ data at first glance, two simple factors can explain these discrepancies. First is that individuals could have left from Leixões, while actually being from the interior. In the case of Bragança, this is probable because the province is landlocked. Second is evidence from the gender breakdown.

We know that many more men came to the city than women. Porto immigrants were much more

¹⁴⁰ Letter from Aug 30, 1905, FESESP, *General Letters n13*. In a letter to Miss A.J. Harney, a Light General manager notes that “as the man...is unable to speak Portuguese, it will be impossible for us to employ him as a conductor or motorman.” He does however offer that perhaps the man in question could become a mechanic. Also see Freitas, *Presença Portuguesa*, 80-4 on Light’s Portuguese drivers and conductors in 1931.

¹⁴¹ Heads-of-household (3735) vs single (2139) in city. Heads-of-household (11888) vs single (11304) in state. Single (1559) vs married (4033) in city. Single (10620) vs married (10388) in state. BDMJ.

¹⁴² There are 3221 individuals without a port of origin. Of those 2705 recording a port of embarkation, 1236 came from Leixões and 960 from Lisbon. For the entire state, more individuals listed Lisbon to Leixões, 9913 and 7979, respectively. BDMJ.

likely to be male than Bragança immigrants, so it is plausible that there was a higher concentration of Portuguese from Porto (males departing from Leixões) in the city of São Paulo.¹⁴³ This concentration of Porto men would have been significant considering that in 1890 and 1911, Porto registered a higher share of the actively working population in the industrial sector than Lisbon.¹⁴⁴ Although the *Hospedaria* Portuguese were largely illiterate “agriculturalists,” the number of carpenters (246), day laborers (239) and bricklayers (236) are likely explained by the immigrants’ being from Porto.¹⁴⁵

The other extraordinary immigrant flux was the wave of Germans to the city in the post-WWI period.¹⁴⁶ Since historians concentrate on Italian and Portuguese newcomers, this post-WWI immigration wave of Germans and Eastern Europeans is often neglected in the São Paulo immigration story.¹⁴⁷ Over 40% of individuals contracted to the capital between 1919 and 1927 were German, but Germans failed to comprise even 7% of total immigration in the state. What characteristics did these German immigrants have? As with the earlier Portuguese wave, the German influx was overwhelmingly male (over 95%). Like the Portuguese, the men were more likely to be married, but in contrast, they were more likely to come as individuals as opposed to with families. This discrepancy might be explained by changes in immigration laws, the

¹⁴³ Freitas, *Presença Portuguesa*, 51-5.

¹⁴⁴ In 1890, 42% of Porto’s active working population was employed in industry compared to 31% in Lisbon. A higher share was also recorded in the 1911 Census. However, Lisbon was a more mechanized city. Miriam Halpern Pereira “Portugal Between Two Empires” *Review (Fernando Braudel Center)* v25n2 (2002): 103-134, 115.

¹⁴⁵ The number of agriculturalists is an overestimate because until 1911 only 10% of subsidized immigrants could be non-agriculturalists. This led to many people recording a false profession.

¹⁴⁶ It is worth noting that the bulk of Germans to the capital came in 1924 (450). In the other years there were 23 in 1919, 52 in 1920, 42 in 1921, 90 in 1922, 97 in 1923 and 7 in 1925. No Germans were contracted to the capital in 1926 or 1927.

¹⁴⁷ See Dudley Kirk *Europe’s Population in the Interwar Years*, (New York: Gordon and Breach, Science Publishers, Inc., 1946). Figure 20 and the subsequent analysis (76-9) show an increase in German migration from 1916-1925. In contrast, figure 21 (80) shows a decrease in Italian, Portuguese and Spanish emigration. Figure 22 confirms the relative increases and decreases of these nationalities in the immigration flow (82).

chamada and restitutions systems. As to the origins of these 761 Germans immigrants, we only have data on slightly more than half of the individuals, but the majority of those for whom we do have data for came from Prussia.¹⁴⁸ We only have professional information for 320 individuals and of these, 48% were agriculturalists (155 individuals). Other notable professions were carpenters (50), bricklayers/masons (40), industrial laborers (32), and mechanics (24). It is important to remember that the literacy rate for these German immigrants to the city was almost 99% during this period. Clearly, there was a demand for more skilled individuals in the post-WWI city of São Paulo economy.

The early influx of relatively unskilled workers and the shift to skilled workers in the 1920's suggests a change in the industrial development of the city of São Paulo. Early in the period the city's capital to labor ratio was likely low relative to later in the period. Later in the period there was greater demand for workers with higher human capital. Although this evidence on immigrant literacy cannot reveal any managerial and technological innovations or improvements in the São Paulo industrial sector, it does provide support that at least some structural change occurred.

Part III: Conclusion

The city of São Paulo was an important immigrant center during the early twentieth century, but unlike the historiography of immigrants to the United States, nobody has studied the complexity of this immigrant composition. In this chapter, I provide a portrait of the incoming immigrant composition to the city and the different skills that each group brought to the burgeoning metropolis. It is not surprising that social scientists cannot agree as to whether there was preference for immigrants or not during the period, because the question is not that simple. I

¹⁴⁸ There were 278 claiming Prussia as their local residence, 30 claiming Bavaria, and a mere 10 claiming Berlin.

provide the data that answers the more important question: 'Is there any reason to expect that certain groups of immigrants were employed in better positions not because of preferential treatment, but because of skill?' The data presented in this chapter shows that employers would have expected prospective German and Portuguese employees to be more and less skilled, respectively. Thus it would not be surprising to find evidence of statistical favoritism for German employees and discrimination against Portuguese in the wage series analysis I employ in chapter four.

I end the chapter by addressing an equally important and related topic: whether the human capital among the incoming immigrant population increased during the period. This issue is important to understanding development, industrial growth and employment practices in the Old Republic and subsequent eras of growth (the Vargas era and corporatist growth). In chapter four of this dissertation, I look particularly at how important literacy was in determining an individual's wage, skill level and opportunity for promotion in the formal São Paulo labor market. That more literate immigrants settled in the later years of the Old Republic suggests that literacy should somewhat affect wages and opportunities. This effect will support the argument that at least some degree of technological and/or managerial advances were implemented in Old Republic São Paulo and that an increase in production hours cannot merely explain increases in Paulista production.

The findings in this chapter contribute considerably to our understanding of the city. The following chapter further enriches the Paulistano picture. Until now, not only have we not known exactly who lived in the city, but we have also been unable to determine how much the typical worker earned and whether what the purchasing power of that wage was over the period. Chapter three introduces the first wage series for the city between 1891 and 1930.

Chapter 3: São Paulo Wages in the Old Republic

Despite the importance of the early twentieth century in São Paulo and Brazilian industrialization and growth, there is a dearth of statistics and data on basic information, such as wages and cost of living. The lack of this data is unfortunate because although contemporary accounts of the period can attest to the hardship of the era they cannot show how the population as a whole lived. Furthermore, social scientists often use the aforementioned evidence as measures of development, growth and productivity. Industrialists and officials in Old Republic Brazil complained about the lack of reliable data and scholars have done little to fill this void.¹⁴⁹ This chapter will use firm-level wage evidence to construct the first wage series for the city of São Paulo during the Old Republic (1891-1930). The chapter also uses the wage series evidence to preliminarily evaluate skill premiums, the wages of top earners as compared to bottom earners. The evidence shows that while real wages decreased for the majority of the Old Republic, there was only a slight increase in skill premiums. The following chapter uses the wage series to evaluate the importance of certain worker characteristics in determining wages and labor opportunities.

Barring a 1912 and 1917 study on wages in select industries and state-aggregated data from the 1920 Census, information about wages in the city of São Paulo during its impressive Old Republic growth is limited to anecdotal observations.¹⁵⁰ There is a little more knowledge about wages and cost of living for the country's capital city of Rio de Janeiro, but it is

¹⁴⁹ For complaints about reliable data see *Revista de Commercio e Industria*, v15(Nov. 1919), 278 and *ibid* yr4 n45, (Sep 1918), 308. Even the 1920 Census, which is considered 'reliable' had sporadic participation for some states. Fortunately for my research, the statistics for the state of São Paulo were considered the most reliable by Census officials.

¹⁵⁰ São Paulo state, *Boletim do Departamento Estadual do Trabalho [BDET] 1917* (São Paulo, 1918) and *Recenseamento 1920*. For an anecdotal reference, see *O Internacional* 1 Nov. 1927 and *Penteado, Belénzinho*, 102-3 (daily wage), 219 (midwife).

presumptive to assume that Rio and São Paulo wages were comparable during the period. The capital city of Rio de Janeiro was an established urban center long before the Old Republic, while São Paulo's population explosion began during the period. With the state subsidizing immigrant arrivals for most of the period, subsidized and unsubsidized immigrants and Brazilians flocked to the city with its growing industrial capacity in search of a better life. With every new Paulistano resident, the demand for more goods and services rose, which in turn, attracted even more labor and industry. By 1900, the Braz neighborhood alone housed at least nine factories.¹⁵¹ The Commercial Almanac documents an even greater variety and number of establishments in the city by 1918.¹⁵² The nature of the city's growth is not the only thing that distinguished São Paulo from Rio: the state's capital was a much more diverse city than Rio de Janeiro. This chapter proceeds by first introducing the sources and then the methodologies used to create the São Paulo Old Republic (hereafter, SPOR) wage series. It concludes with short analysis of the trends depicted in the data.

Part I: Wage Series Sources

Given that official statistics on wages are minimal and unreliable for the city of São Paulo, I derive the wage data from three individual firms to construct the SPOR wage series: the *Companhia Paulista de Estrados de Ferro* railway company (Paulista), the *Fiação, Tecelagem e Estamparia Ypiranga Jafet* (Jafet) textile factory and the *São Paulo Tramway, Light and Power Company* (Light) public works firm. A fourth firm, the *Loja Mappin* (Mappin) department store,

¹⁵¹ We have detailed information on these nine firms due to Moreira Pinto's detailed survey of the neighborhood and city, *Cidade*, 208-222. The factories he surveyed in 1900 included Alvares Penteadó (wool textiles, coffee sacks), Cia. Industrial (textiles), Cia. Fabril Industrial (textiles), Fab. De Sedas Guilherme & Poletti & Co (silk factory), Cia. Mechanica e Importadora (coffee machinery and imported machinery storehouse), Fab. Cerveja Bavaria (beer factory), Fab. de Barra Funda (cord and jute factory), Fab. de Cortumes (leather factory), Fab. de Vidros (bottle factory).

¹⁵² *Almanach Commercial Brasileiro, 1918* (São Paulo: O Ribeiro, 1918), 448-52.

provides valuable wage information for middle-class and female employees during the period and provides a comparison for lower-class laborers at the other three firms, particularly at the Jafet textile factory. Peculiarities in the nominal wages awarded by Mappin over the Old Republic period prevent it from being included in the SPOR wage series; however, the wage data will be utilized in the following two chapters of this dissertation. Other studies have utilized these data, but none have aggregated one homogenous series to study the labor market or evaluated wage differences in detail.¹⁵³ The wage series can only report the hourly wages recorded and unfortunately cannot account for bonuses awarded and fines charged, but the series will be able to provide an estimate of the changing value in an employee's hour of work over the period. The following chapter then uses these values to measure wage differentials and labor market inequality in the city's early industrialization and urbanization period.¹⁵⁴

Few industrial and commercial firms operating in early twentieth century São Paulo remain active and the number of surviving archives that contain early employment data are even fewer, but Paulista, Light and Jafet are representative firms of the period and provide the detailed worker and wage information necessary to create the SPOR wage series. I use the 1920

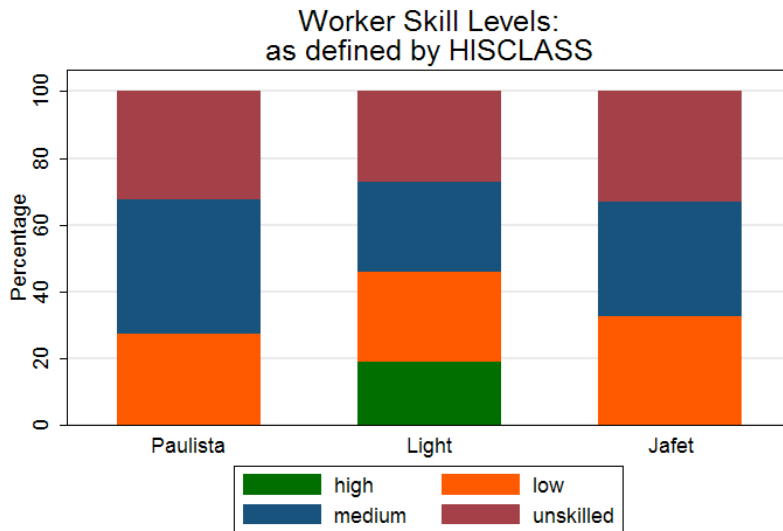
¹⁵³ George Reid Andrews used the Light and Jafet *fichas* in his study on race in São Paulo *Blacks and Whites*. The Paulista data were compiled by Ana Lúcia Duarte Lanna in her 2000 USP architectural doctoral dissertation, "Ferrovia, Cidade e Trabalhadores: A Conquista do oeste (1850-1920)." The Mappin wages were originally in the now defunct Casa Anglo-Brasileira S/A archive. They were used in the making of the book *Mappin 70 Anos* and the notes for the book, which include wage tables, are available for consultation at the *Museu Paulista*. For Jafet cards see "Fichas E Holerits De Funcionários," 1910-1951, *Fiacao, Tecelagem e Estamparia Yprianga*, CEDIC, PUC-SP, São Paulo [SP], Brazil: microfilm. For Light cards, São Paulo Tramway, Light and Power Company fichas, FESESP, 1907-1930.

¹⁵⁴ Maria Alice Rosa Ribeiro's research highlights the unfair practices of the piece-rate and fine system, whereby managers could play favorites. A number of factors, including the type of cloth, number of machines, fines, and medical costs could vary wages. For example, in 1908, workers at Mariangela with one type of loom could earn 80\$000 per month (working four looms) and with another they could earn 116\$000 per month. Fines could mean one individual earning 190\$000 per month and another 70\$000. Finally, a weaver earned 63\$000 for a month's labor in 1908 but after fines and doctors fees, just received 40\$300. *Condições de Trabalho na Indústria Têxtil Paulista (1870-1930)* (São Paulo: Editora Hucitec, 1988), 176-185. Specific fines at the Cia de Juta included 1\$000 per broken piece, but as pieces broke easily, fines were easily 5\$-6\$ per month. Also, the fine for showing up late or leaving one's post for any reason was 2\$000. (*Guerra Sociale*, 10 Apr 1917).

Brazilian Census, the 1912 *Boletim de Departamento de Trabalho*, information from the state's Secretary of Agriculture and anecdotal evidence to compare the wages and labor structure of these firms to the rest of the city and confirm their representativeness.

Figure 7 below shows that the firms provide wage observations for all skill levels in the Paulistano labor market by showing the skill level distribution across the firms. (The next section contains a detailed explanation of how these skill levels were assigned.)¹⁵⁵ The three companies show similarities in the distribution among unskilled, low skilled and medium skilled workers. At Paulista and Light, unskilled workers were largely day laborers and car or train washers. At Jafet, spinners and bobbin workers were the largest share of unskilled workers. The medium skill levels include mostly clerical workers at Paulista and Light and watchmen at Jafet.

Figure 7



Source of data: HISCLASS and SPOR wage series

Comparing these companies with their competitors show that these firms paid competitive wages and thus are good choices to create the SPOR wage series. The Paulista railway company was one of several major rail companies to service the state of São Paulo.

¹⁵⁵ Figure 7 uses the Preston-Haines skill levels as opposed to the HISCLASS codes.

Founded in 1872, the company was formed by Brazilians in the city of Campinas and linked towns in the state's coffee interior to the capital city of São Paulo. Although the transportation of coffee was an important service of the railway, the link between the two cities made Paulista much more of a passenger train than its largest competitors, the Mogiana and Sorocabana.¹⁵⁶ In 1928, the company employed 4550 individuals in the traffic department and 12,406 individuals in all. Paulista was representative of other railway companies of the era in terms of efficiency and personnel costs. For example, for Paulista and Sorocabana averaged around 60% through 1925 the personnel costs as a percentage of total costs.¹⁵⁷

Moving from rail transport to urban transport, the next company used in the series, the São Paulo Tramway, Light and Power Company (Light), provides wage evidence for the typical transportation and construction worker living in the city. Light started off as a transportation company in 1898 and put São Paulo's first electric streetcar into operation in 1900. By 1901 the company's main streetcar competitor, Viação Paulista, was liquidated and Light became the city's sole transport company in 1907. By 1911, the company signed a contract to provide all private electricity service to the city.¹⁵⁸ In 1901, the company employed over 1,100 individuals

¹⁵⁶ In the 1926-1930 period, 338.83 thousand ton/km per year per line kilometer were passenger transport for Paulista, while Mogiana just registered 125.52 and Sorocabana 261.81 (Flavio Saes *As Ferrovias de São Paulo, 1870-1940*, (São Paulo: Editora Hucitec, 1981), 143. In 1890, Paulista accounted for just over 10% of São Paulo's kilometers of rail, but by 1905 that percentage peaked at 27.5%. By 1930, the company still controlled 20.1% of the state's rail kilometers. *Ibid.*, 76-8, 29. In addition to transporting coffee, the company provided free immigrant passage to the interior between 1882 and 1917 transporting over 700,000 individuals (*Ibid.*, 42).

¹⁵⁷ In general, Paulista was slightly more efficient than Mogiana and Sorocabana (number of employees per million ton/km) and more profitable (share of costs per income); however, when looking at the personnel costs as a percentage of total costs, Paulista and Sorocabana both averaged around 60% through 1925. The personnel share of total costs data is only available for Mogiana starting in 1921. The data that are available show personnel costs being a smaller share, around 45% (*Ibid.*, 137, 139). Data on costs/income are found in table III.8, 146. Saes attributes the lower share of costs/income as a feature of Paulista being more of a passenger line and less influenced by coffee fluctuations.

¹⁵⁸ Greenfield, "Challenge of Growth," chap 2-3.

and in 1930 the company had over 6,400 employees.¹⁵⁹ A comparison between Light employee salaries and the average Paulistano construction worker wages in 1912 provide evidence of the company's representativeness. The average Paulistano carpenter made 5\$500 mil-réis per day and the average blacksmith, 7\$000. At Light, carpenters and blacksmiths made 5\$861 and 6\$593 per day, respectively, during the same period.¹⁶⁰ Although Light was the sole transportation company and private power provider, the wages for Light employees are representative of the energy and public works sector. Private letters and company reports even show that Light employees may have averaged lower salaries than the city norm.¹⁶¹

Whereas Light was the sole transportation and energy provider in the city, the Jafet factory was just one of many textile factories. Counting just knit and cotton factories in the city in 1920, the *Boletim de Directoria de Industria e Commercio* collected statistics on sixty-two factories.¹⁶² The textile industry was by far the largest industrial sector in the state's economy in 1920: the textile industry employed over 40% of the state's 57,756 industrial.¹⁶³ Given the importance of the textile industry in São Paulo's Old Republic economy it is important that the Jafet wage data be representative of the sector. First I compare Jafet to other factories to

¹⁵⁹ In 1901, Light employed 1106 individuals; by 1910, 1215 individuals; by 1920, 1648; and by 1930, 6428 employees. The largest number of employees were recorded in 1929 with 7420. (São Paulo, *Anuário Estatístico de São Paulo, 1901, 1910, 1920*) and (*Light Annual Reports, 1929 and 1930*).

¹⁶⁰ The 1912 average construction salaries in the city appear in AESP, Sec da Ag, C07393. Average Light wages include joiners, individuals employed before 1915 and calculate the average workday as 9.5 hours per day. Firm average based on *fichas*.

¹⁶¹ Light, *Annual Report, 1917, 2; 1918, 2*. In 1927, regarding the company's high labor turnover, the report cedes that "...the Company cannot expect to go on paying the same salaries and retain the good workers; a more equitable adjustment to present conditions of living must be made...", 109.

¹⁶² See Secretaria de Agricultura do Estado de São Paulo *Boletim da Directoria de Industria e Commercio* [BDIC] 1922, 60-65 for 1920 statistics.

¹⁶³ *Recenseamento 1920, 5.2, 386-417*.

determine whether it was a large or small employer in the textile industry. Then I compare Jafet wages and worker composition to other reported wages and employment records.

Evaluating Jafet along with nine other cotton factories in the city in 1911 reveals that while the Jafet factory was by no means the largest factory, it was above average in terms of size (capital, number of workers) and production capabilities (looms, spools, H.P.). A more comprehensive comparison with twenty textile-manufacturing firms (see table 3.1) registered in the *Boletim da Directoria de Industria e Comercio* (BDIC) for 1917 reveals the same relative size and production capabilities.

Table 3.1: Cotton firms in São Paulo, SP 1911 and 1917

	1911 cotton firms			1917 cotton firms		
	Average	Jafet	Max ¹⁶⁴	Average	Jafet	Max
Capital (contos de réis)	1989	4000	6000	2124	5500	15500
Laborers	691	785	1903	486	1200	2000
K/L ratio	2.88	5.10	3.15	4.37	4.58	7.75
Looms	362	444	1200	326	660	1465
Spools	9470	14000	30000	12391	18000	40000
Spools/worker	13.71	17.83	15.76	25.50	15	20
Horsepower	515	600	1200	539	1200	2000
Source: BDIC 1912, p124-5 and BDIC 1919, p120						

More important than size is whether the wages and labor force in this relatively large factory were representative of the entire industry. Evidence on select textile wages throughout the period shows the Jafet *fichas* to be so. In April 1922, the Centro de Industriais de Fiação e Tecelagem de São Paulo (CIFTSP) sent out a circular to its members asking for the average warper wage. The average wage among the five companies that responded was 5\$701 per day.¹⁶⁵

¹⁶⁴ The two largest firms in 1911 were Cotonificio Crespi, in terms of capital, and Mariangela, in terms of labor, looms, spools and horsepower. By 1917, Crespi was the largest firm in terms of capital and labor, while Mariangela remained the largest in terms of looms, spools and horsepower.

¹⁶⁵ Centro dos Industriais de Fiação e Tecelagem [CIFTSP], *Circulares* 93, 12 Apr. 1922 was sent out to members asking for the average wage for cotton *uridores*. The answers recorded on 2 May 1922 included the following responses: Cia Taubaté \$375 per hour; Ignácio & Cia 200\$000 per month; Pinotti Gamba 150\$000 per month, 27 days per month; S/A Votorantim 130\$000-140\$000 per month; IRFM [Indústrias Reunidas Francisco Matarazzo] 140\$000-150\$000 per month, 8 hours per day. Unless otherwise notes day wages are calculated with ten hours per day and 25 days per month. The Pinotti Gamba wage was for the average worker; a good worker was reported to

The 1920 Census recorded the average Paulista salary for the position at 5\$098 per day.¹⁶⁶ In the same period, Jafet warpers received 4\$920 per day.¹⁶⁷ A similar survey of carders' wages reveals more variability in this position, but still records Jafet within the range. The *Lanificio Jose Mortan* recorded the average salary at 6\$150 per day; *Fabril Pinotti Gamba* recorded 8\$148 per day and the 1920 Census recorded an average of just 4\$567 per day. Jafet carders received 5\$760 per day during the comparable period.¹⁶⁸

Jafet was not only representative in terms of wages, but also in terms of labor shares. Table 3.2 demonstrates how the factory's female labor shares compared closely to the rest of the industry. The adult female share of the Jafet workforce in the 1920's based on the *fichas* sample is compared to the gender breakdown recorded both in the 1911 BDET and the 1920 Brazilian Census for the state of São Paulo. Given the poor quality of statistical data in Brazil during this period, I underscore the validity and comprehensiveness of the 1920 Census for the state of São Paulo as I use it as a comparison point for the data.¹⁶⁹ Except for the bleaching and starching positions, the share of women at Mappin in these common textile jobs are similar to the share in other São Paulo textile firms.

receive between 280\$000 and 300\$000 per month. The IRFM uses the reported daily worker's wage, not the contract workers' wages.

¹⁶⁶ *Recenseamento 1920*, 5.2, 386-417.

¹⁶⁷ The Jafet average is calculated using wages before 1924, before factory-wide wage increases were implemented. The average, based on five observations was 5\$15 mile-réis per hour, calculated at a ten-hour workday.

¹⁶⁸ Information on carder wages is found in CIFTSP, *Circulares* 92, 19 Apr 1922. *Recenseamento 1920*, v5p2, 386-417. Jafet wages based on 5 observations of carders in 1923 and 1924 (a factory-wide increase in 1925 also occurred).

¹⁶⁹ The São Paulo state data "was one of the most perfect" collected, (*Recenseamento 1920*, vol 1, 514). Over 4,000 industrial establishments turned in data for the state, which included over 15,000 mini-industrial questionnaires; over 15,500 laborer salary questionnaires and over 1,600 factory reports *Ibid*, 490-91, 500, 514-16. The Census, if anything, had an urban bias (Yvonne Stolz, Jörg Baten and Tarcisio Botelho, "Growth effects of 19th century mass migrations: "From Zero" for Brazil," (University of Tübingen working papers in economics and finance 20, 2010), 13.

Position	Adult Female Labor		
	1911 SP	Jafet 1920's	1920 SP
Batter	18.37	14.28	1.27
Carder	44.44	31.82	9.60
<i>Passador</i>	96.77	80.65	91.23
Rover	49.08	82.42	78.30
<i>Carreteleiro</i>	35.00	80.72	70.54
Weaver	58.44	77.25	67.94
Dyer/Bleacher	9.05	0.00	1.16
Starcher	38.46	0.00	3.45
Sources: Ribeiro, <i>Condições</i> , 133; and Jafet <i>fichas</i> sample (1920-1930) ¹⁷⁰			

As a counterpoint to the wages at Paulista, Light and Jafet, I use company records from the Mappin stores to show what wages one could hope to make in a non-industrial, middle-class job. Although all three of the other firms did employ middle class workers, the share of administrative and clerical workers was minimal. The British company Mappin & Webb opened its São Paulo store, known as Mappin Stores, in the city's center triangle on November 29, 1913 with forty employees in eleven departments.¹⁷¹ Although there were some British nationals in management positions, the majority of the company's management was Brazilian. By 1919, the company had grown to employ 200 individuals in 35 departments and opened a larger store in another central city plaza. Growth continued throughout the 1920's as the store expanded to include a furniture store, shoe department and even a tourism agency.¹⁷² The Mappin stores targeted São Paulo's elite female clientele (only one of the original departments, raincoats and umbrellas, targeted male clientele) and competed directly with the city's other main department store, Casa Alemã, as well as with French boutiques and small Syrian and Lebanese stores

¹⁷⁰ An adult refers to individuals aged fourteen or older. This definition is to maintain the same "adult" definition as the 1911 BDET study and 1920 Census. The sample is based on 1317 wage observations of Jafet employees during the 1920's.

¹⁷¹ The company had been already been established in Buenos Aires by the end of the 19th Century (Zuleika M.F. Alvim and Solange Peirão. *Mappin: Setenta Anos*, (São Paulo: Editora Ex Libris, 1985), 21-2.

¹⁷² *Ibid.*, 25-8, 47-8, 56-8, 80-82.

throughout the city.¹⁷³ As for the company's employees, upper-lower-class, middle-class and lower upper class individuals with strong recommendations or family connections could aspire to work at the department store. Many female graduates of the Bráz professional school would go and work in the Mappin Stores as seamstresses or in shop positions.¹⁷⁴ A comparison between seamstress wages in the state and those at Mappin suggest why the positions were so sought after: while an average seamstress made just 3\$341 mil-réis per day, a seamstress at Mappin could make 5\$870 per day, more than 1.75 times the average. In other words, although the Mappin wages may not represent the lower class reality, they provide the wage data to understand the everyday reality of individuals working in upper level commercial jobs in the city during the Old Republic.

Part II: Methodology: Creating a Wage Series

This section details the creation of the database by looking at the particular characteristics of the SPOR wage series sources described above and by studying the methods used for homogenizing the data. In particular, it looks at 1) the individual data sources; 2) the process of reporting all salary and wage information into hourly wages; 3) two alternative methods used to assign skill levels to the listed occupations and 4) how nominal wages were standardized to real wages. The compiled information is then utilized to create wage series and wage premiums for the city of São Paulo during the Old Republic. The following chapter of this dissertation examines more closely the importance of gender, nationality, experience and age in wage determination.

¹⁷³ *Ibid.*, 40-41.

¹⁷⁴ For more on hiring practices, see chapter 5 of this dissertation. On the professional schools, see Maria Luiza Marcílio, *História da Escola em São Paulo e no Brasil*, (São Paulo: Instituto Braudel, 2005), 197.

The Paulista portion of the analysis was created using a database developed from Paulista employee entry cards (*fichas*) for Anna Lúcia Duarte Lanna's doctoral thesis. In order to utilize the information, I combined the series on worker demographics with the series on workers' employment. The resulting database included information such as an employee's entry and exit dates, wage, raises, nationality, civil status, level of schooling, residence type, occupation, promotions, resident city and race. Although the Paulista data can be rich, only 38% of employees had information for schooling level and only 68% for race. Since many of the workers did not leave the company until the 1940's, I also include over 4,400 salary increases or decreases prior to 1930 in the wage series.

Another feature of the Paulista data is that it includes individuals working in seventy-one different cities throughout the state of São Paulo. Since the wage series I construct is restricted to the city of São Paulo, I only include those individuals working within a commutable distance from São Paulo, like Campinas, Valinhos and Jundiaí. The largest share of workers lived in Jundiaí, less than 60km from São Paulo with a direct train route to the majority of the city's factories.¹⁷⁵ As a result, the Paulista portion of the SPOR wage series is based on the 1024 wage observations of 359 individuals.

The São Paulo Tramway and Light Company (Light) portion of the SPOR database is based on employee entry cards of individuals hired during the Old Republic in the car-house and mechanics departments. To systematically sample the entry cards, which were organized alphabetically by the workers' first names, I recorded every fifth entry card, creating a sample of 1999 individuals. I believe this the best sampling method for the information, because there did

¹⁷⁵ Most regression results show that living in the São Paulo area did not have a significant impact on wages; therefore, in the chapter of my dissertation that looks at wage determination, I include all 1953 workers with observations in my analysis.

not seem to be any other criteria beyond alphabetical order organizing the entry cards. There were two sets of entry cards and those with the most information revealed an employee's literacy, nationality, civil status, age, prior employer, address, position, entry, entry wage and raises.¹⁷⁶ All available information was recorded and included in the SPOR wage series, giving wage observations for 1921 individuals.¹⁷⁷

Data for Jafet was also recorded on a variety of entry cards.¹⁷⁸ Many of these cards for Old Republic employees survive on a set of four microfilm rolls.¹⁷⁹ To systematically sample the employees, I recorded information on every fifth card with detailed information. On the microfilm, the entry cards were sorted first alphabetically (by the worker's first name) and then chronologically. All cards contained an employee's name, age, nationality, civil status, entry and exit date, position, whether the worker was a piece-rate worker, wage, prior employer and raises. Some contained information on literacy, race, number of machines worked, and parentage.¹⁸⁰ This process omitted *fichas* that only included an individual's name, age, wage, entry and exit dates. Because the company rehired individuals under different employee numbers in different years, there are likely some duplicated individuals in the sample; however, I treat each record as a unique hire. The Jafet sample yields wage observations for 729 employees.¹⁸¹ The sample actually includes 1359 individuals; however, 630 were piece-rate employees and their earnings

¹⁷⁶ The more detailed entry cards appear for workers hired in the second half of the 1920's.

¹⁷⁷ Again, apprentices and helpers are excluded. Including those individuals gives observations for 1893 employees.

¹⁷⁸ George Reid Andrews provides a description of the Jafet entry cards, *fichas*, in *Blacks and Whites*, 259-262.

¹⁷⁹ Entry cards for employees whose first names began with the letters A, C, D, E, R, G, Q, U and X are not available. These rolls are available at CEDIC at the PUC-SP campus.

¹⁸⁰ Gender was inferred from workers' names.

¹⁸¹ Weavers and bobbin workers, positions registering large shares of workers, were piece-rate positions and were not included in the wage series. Including apprentices and helpers in the analysis give observations for 551 employees.

are not included in the wage series. These piece-rate employees are included in the analysis of job opportunities and skill levels in the following chapter.

The final firm analyzed, although not included in the SPOR wage series, is the Mappin department store. The dataset is derived from the archived book notes for the company's 1985 anniversary book compiled by Zuleika Alvim and Solange Peirão, *Mappin: 70 Anos*. Although much of the archived material consists of company advertisements and propaganda, some valuable interviews and a wage spreadsheet compiled between July 1983 and December 1984 provide a unique window into the working world for middle-class men and women in an elite department store. The Mappin data contained information on an individual's gender, age, entry month and year, entry job and wage, exit month and year, address and nationality. No information was available on civil status, raises and promotions, and anecdotal evidence was used to infer literacy. Also, most of the Mappin vendors worked on a 1% commission. Although there is one salary observation that equates the commission with 650\$000 mil-réis per month (around 3\$030 mil-réis per hour), I choose not to include these "salaries" in my analysis as the variance between vendors in different departments entering in different years would have been very high. Therefore, only the entry wage data for 139 Mappin employees factor into the analysis.¹⁸²

Two caveats of the Mappin data relate to nationality and literacy. First, the original researcher differentiated between those nationalities for which she was certain and for those for which she thought probable. Without the aid of employees' names, I choose to accept both the certain and probable nationalities that the wage sheet provided. Second, the Mappin data had no observations regarding literacy. However, in addition to cashiers and office workers, the

¹⁸² There were more Mappin employees; however, helpers and apprentices were excluded (5 individuals), as were commission employees.

interviews reveal that vendors were literate.¹⁸³ Therefore, all workers in these positions, as well as all of the department heads (except for the kitchen and cleaning department heads) were coded as literate. Because there was no available information on illiteracy, this variable is only relevant when Mappin employees are compared to employees in the other three firms.

The next step after compiling the data was converting all wages into the same denomination. As most wages were reported in hourly figures, I decided to compare hourly wages. The hourly wage has the additional benefit of minimizing differential worker productivity due to the number of work hours in a day. In other words, there is no reason to believe that a female thread spinner was any less productive than a male in the same position. However, because some workers received daily wages or monthly salaries, to create a single wage series, I convert those daily and monthly workers' wages and salaries into hourly figures. The conversions were done on a firm-by-firm basis given that the length of the workweek was not uniform across the city's labor market or even within certain sectors.¹⁸⁴ At Paulista, I use the English workweek (a nine-hour workday and twenty-seven working days in a month) to convert daily and monthly observations into hourly wages. For Light workers, daily workers were assumed to work 9.5 hours per day and monthly workers 27 days per month. Jafet textile workers had the most grueling workweek laboring 10 hour days, 28 days per week.¹⁸⁵ The Mappin employee wages, for the most part, were reported in monthly salaries. The company followed the English workweek, so I calculate employees worked nine-hour days 5.5 days per

¹⁸³ I infer this because vendors had to come from good families and have solid recommendations (Leonor Perrone, interview with notes by Solange Peirão, 1984, box2 doc 52, *Mappin*, Museu Paulista, SP, Brazil.)

¹⁸⁴ John French, *The Brazilian Workers' ABC: Class Conflict and Alliances in Modern São Paulo*, (Chapel Hill: University of North Carolina Press, 1992), 30-35.

¹⁸⁵ The workweek conversions were chosen based on *ficha* evidence, when available (Light and Jafet), and based on stated company policy in the case of Paulista.

week. Although the reported work schedule shows that individuals worked only eight-hour days, interviews reveal that employees worked nine-hour days.¹⁸⁶

The next and one of the most challenging tasks in homogenizing the data was assigning each worker a skill level for the entry-level job and for subsequent jobs in the event of a promotion. Determining skill level is important for determining inequality measures related to skill premiums.¹⁸⁷ I use two different data sets reporting wages for the early twentieth century to create proxies for skill levels. The first is the Preston-Haines (P-H) wage series that compiles occupational codes reported in the 1910 Census and wages from a 1903 United States Commissioner of Labor cost of living report. The second is the Historical International Social Class Scheme (HISCLASS).¹⁸⁸ I also analyzed the data using the 1920 Brazilian Census as a proxy for skill level; however, the Census only includes wage observations for the industrial sector, meaning that there are no wage observations for many of the occupations reported on the firm entry cards—bookkeeper, messenger, cleaning positions, watchman, etc. The results from the HISCLASS series are preferred because they are more easily compared to other studies and because matches between SPOR positions and occupational codes used by HISCO are more accurate. Thus, my analysis is largely based on HISCLASS results.

If agricultural jobs are not included, the P-H dataset includes 287 different occupational codes, each with available wage data. In comparison, the 1920 Brazil Census only lists 231

¹⁸⁶ Nelly Colson, interview by Solange Peirão, 1984, doc 32 box 2, *Mappin*, Museu Paulista, SP, Brazil, reveals that she worked from 8 – 18h with a one-hour lunch break.

¹⁸⁷ In chapter four of my dissertation, I calculate the importance of worker characteristics in determining the probability that an individual would be hired into an unskilled or skilled position as another measure of inequality.

¹⁸⁸ Marco H.D. van Leeuwen and Ineke Maas, *HISCLASS: A Historical International Social Class Scheme*, (Leuven, Belgium: Leuven University Press, 2011).

occupations with wage observations for the state of São Paulo.¹⁸⁹ The Preston-Haines series includes a diverse set of occupations and provides a more accurate depiction of the range of wages, and therefore skills, across the economy than the Brazilian Census does. The textile sector, however, is oversimplified in the P-H series. The assumption that the structure of pay in Old Republic São Paulo, SP was similar to that in the 1900 United States is substantiated by the correlation between quartiles as reported in the two datasets.¹⁹⁰

To determine a worker's skill level, I first input an individual's job as it appears in the employee entry data (in Portuguese). Then I code the Portuguese job determination with matched job as it appears in the P-H series in English. If an individual changed jobs over his or her tenure, I also record those respective occupational codes. Although changing jobs at Paulista was common, there were only a few individuals who changed jobs working at Light and Jafet. To create the skill level proxies, I calculate the wage quartiles for the P-H series to determine which occupations are in each of the wage quartiles. I equate workers in quartile 1 as being unskilled, workers in quartile 2 as semi-skilled, workers in quartile 3 as skilled and workers in quartile 4 as highly skilled. Figure 7 from this chapter is based on these P-H proxies for skill level.

The HISCLASS is a hierarchical scheme that divides jobs into twelve different social categories. HISCLASS bases the twelve classes on jobs as defined in the Historical International

¹⁸⁹ For the P-H series, 254 occupations record average wages based on five or more observations. The average number of observations was 89 when considering all professions. For the Brazil Census, only 190 occupations record five or more wage observations, but the each occupation averaged 218 observations.

¹⁹⁰ Of the occupations in the SPOR wage series, seventeen appear in both datasets and are directly comparable. Of those, over 62% of the top two quartile wage earners in the P-H database are also top two quartile wage earners as reported in the Census. Machinists are reported in the Census as being low wage earners; however, firm wages show that these individuals made well above average salaries. If these machinists are considered top half wage earners, then the correlation jumps to over 82%. Further support of the similarity is the share of day laborers. In the SPOR wage series, day laborers comprised 8.63% of the entering workforce. In the P-H series, when omitting farmers, inmates, students, housewives and individuals with no profession, day laborers were 11.27% of the population.

Standard Classification of Occupations (HISCO) and each class is correlated with a skill level—high, medium, low or unskilled. The classes and correlating skill levels are defined in table 3.3 below.¹⁹¹ The HISCO and HISCLASS codes have several advantages over the P-H classification scheme. First, there is a clear way to distinguish between managers, workers and foremen. Second, a wide range of studies use these codes, making comparisons easier between São Paulo and other historical examples. Third, the HISCO codes include Portuguese terms for many of the positions. Although there are some terminology differences between the Portuguese in the HISCO database (based on jobs in mainland Portugal) and the Portuguese in the Brazilian records as well as some idiosyncratic firm terminology, it was easier to have a clear match between the positions on the employee entry cards and the HISCO codes.

Class Number	Class Label	Skill Level
1	Higher managers	High
2	Higher professionals	High
3	Lower managers	Medium
4	Lower professionals, And clerical and sales personnel	Medium
5	Lower clerical and sales personnel	Low
6	Foremen	Medium
7	Medium skilled workers	Medium
8	Farmers and fishermen	Medium
9	Lower skilled workers	Low
10	Lower skilled farm workers	Low
11	Unskilled workers	Unskilled
12	Unskilled farm workers	Unskilled

Source: *HISCLASS*, 57

Assigning hourly wages and skill level dummy variables were only the first steps toward standardizing wages. The next step was to determine real wages as opposed to nominal wages. Nominal wages are the amount of money that a worker brings home in a given period. However,

¹⁹¹ Marco H.D. van Leeuwen, Ineke Maas and Andrew Miles, *HISCO: Historical International Standard Classification of Occupations*, (Leuven, Belgium: Leuven University Press, 2002). HISCO is also available online <http://historyofwork.iisg.nl/index.php>

they cannot tell much about how a worker's standard of living changed over time, because even if wages increased, if prices and rents increased more quickly, then the amount of goods and services that a worker could buy actually decreased over time. Thus, scholars often look to real wages to compare the purchasing power of wages over time. To determine real wages, scholars consider the wage changes in relation to how the prices of a set of goods changed over time. These goods are known as a basket of goods and their changing prices as a deflationary index. No deflationary index is available for the city of São Paulo during these years, so I use two alternative deflators to approximate the real wages in the city of São Paulo between 1891 and 1930: the competing deflationary indices that Eulália Lobo developed for the city of Rio de Janeiro between 1820 and 1930.¹⁹²

Ideally I would use a Paulistano cost-of-living index to deflate the wages; however, such a series is not yet available. Therefore, I look to the only complete cost-of-living index compiled for Brazil for the entirety of the Old Republic.¹⁹³ Lobo used weekly and bi-weekly price data from Rio de Janeiro published in the *Jornal de Comercio* to construct a price index for the following items: black beans, rice, jerked beef, manioc flour, wheat flour, brown sugar, coffee, codfish, bacon, beer and butter.¹⁹⁴ After compiling the price data, Lobo uses three alternative household budget studies to estimate inflation between 1820 and 1930. In order to choose which deflationary index to use, I look at the consumption basket shares of the three in comparison to a survey of São Paulo working class household consumption and cost of living conducted in

¹⁹² Eulália Maria Lahmeyer Lobo, et al “Evolução dos preços e do padrão de vida no Rio de Janeiro, 1820-1930—Resultados Preliminares” in *RBE* v25n4 (Oct Dec 1971): 235-265. This was the first in a two part article, the second of which “Estudo das categorias socioprofissionais, dos salários e do custo da alimentação no Rio de Janeiro de 1980 a 1930,” appeared in *RBE* v27n4: 129-176.

¹⁹³ The Catão index is usually preferred by most scholars, but the last year of the index is 1914.

¹⁹⁴ Rents, shoes and clothes are not included in Lobo’s analysis.

1935.¹⁹⁵ I find the 1949 FGV price deflator to be the best match with four of the six comparable food groups. I use the 1919 index as a lower bound because it matches two food groups better, leaving the 1949 index as an upper bound.¹⁹⁶ I deflate the entry wages for each individual in the SPOR wage series based on the individual's entry year using these two indices and find that they move very closely together. Given the similitude between the two series, I only report the 1949 index because it best approximates the São Paulo reality.

Part III: Wage Series Results

The results from the SPOR wage series show that although nominal wages increased over the period, real wages declined for the majority of the Old Republic. In comparison, the skill premium remained largely unchanged over the duration of the Old Republic. In addition to reporting the Paulistano trends, I also include a short discussion of Paulista, Light and Jafet trends as well as a discussion of Mappin nominal wages. I first present the evidence on nominal wages. A discussion of real wages follows with preliminary evidence on São Paulo prices. A section describing the changes in skill premiums concludes the analysis. Although some graphs are provided in the text, appendix 3.1 contains complementary graphs as well as the SPOR wage series.

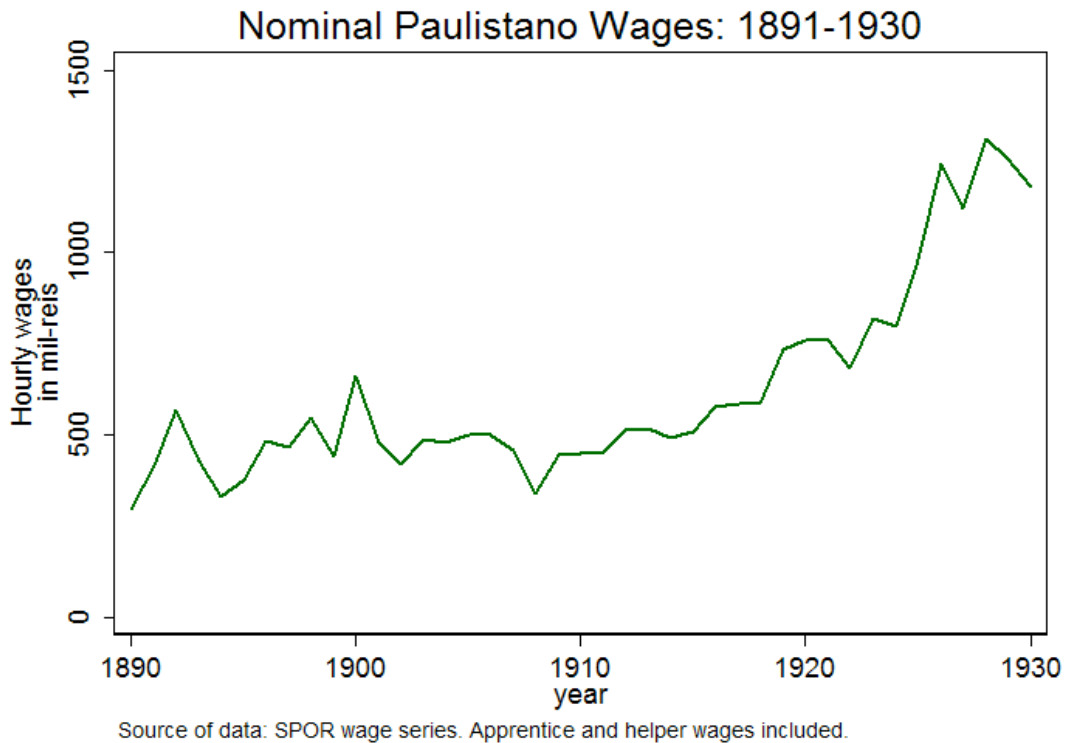
As inflation increased over the period, I expected to find increasing nominal wages in the city and in each of the firms. Figure 8 shows that for the city as a whole, nominal wages did increase over the Old Republic period. The 1890 to 1902 period showed some volatility in terms of hourly wages, but tended to increase. From 1902 to 1908 nominal wages declined

¹⁹⁵ H.B. Davis, "Padrão de Vida Dos Operários da Cidade de São Paulo," *Revista do Arquivo Municipal*, 1935.

¹⁹⁶ The 1949 index is based on a study published by the FGV in *Conjuntura Econômica* 3(3) Mar (1949). The 1919 index is based on the consumption basket reported by Leo Affonseca Junior *O custo de vida na cidade do Rio de Janeiro*, Rio de Janeiro 1920. The 1949 index is a best match to the 1935 survey for vegetables and fruit (including beans), fats, sugars and alcohol. The 1919 index is the best match for breads and grains and lean meat and eggs.

somewhat, but the annual variation in wages smoothed out. From 1908 to 1930, save for a few years with minimal dips in nominal wages, the average Paulistano wage increased through the end of the Old Republic.¹⁹⁷

Figure 8



The firm-level nominal wage series (presented in figures 15-18 in appendix 3.1), are not as neat. Although nominal wages at Paulista (figure 15) seem to steadily increase over the period, wages at Light (figure 16) decrease prior to 1908 and the increase in wages at Jafet (figure 17) after 1920 is much more modest.¹⁹⁸ The nominal entry wage trend for Mappin (figure

¹⁹⁷ The average wages are consistent with wages reported for the state of São Paulo in the 1920 Census. The average adult industrial wage in São Paulo was 6\$833 mil-réis/day. The Paulistano wage series, which underestimates wages by including some child wages and reports the average wage as 5\$832 mil-réis/day (+/- 1\$845). (I assume a nine-hour day for the citywide series and a ten-hour workday for textiles.)

¹⁹⁸ The fact that there is high volatility in Jafet wages (figure 17) is due to a selection problem. There are only very few wage observations for the pre-1920 period, and workers hired during this period had exceptionally long tenures compared to other workers.

18) shows significant decreases over the entire period.¹⁹⁹ In comparison to world price trends, Brazil price trends and wages at the other three firms in my analysis, this trend is atypical.²⁰⁰

There are several possible explanations for the decreasing wage at Mappin. One explanation could be a higher number of foreign employees hired early on at the department store. Evidence on nationalities and entry years, however, show hiring practices did not differ greatly between 1914 and 1930 when it came to hiring different nationalities. Another competing explanation could be that omitting commissions from wage calculations could greatly underestimate these wages. However, because most salespeople are omitted from the analysis and as this downward trend applies to non-commissioned positions, I find the most plausible hypothesis to be that high initial salaries were awarded to employees as a premium for working at a new firm. There was no guarantee that Mappin would succeed and higher salaries would have been an enticing offer.²⁰¹ Although a logical question is why people sought out jobs when the wages offered were declining, the relative wage compared to even Paulista and Light and the perks offered to employees guaranteed that Mappin remained a competitive employer. Given the analysis of hiring practices and the atypical nominal wage trend, I do not include Mappin in the SPOR wage series.

¹⁹⁹ I look at this trend more closely for Mappin by plotting hourly wages for workers at each skill level. The data reveal decreasing nominal wages during the 1920's in all positions.

²⁰⁰ See graph 2 and table 3 for the contrast of Mappin average wages to the other three firms.

²⁰¹ One alternative hypothesis is a practice of paying British workers higher wages and hiring these workers early on. Hiring practices and wage evidence, however, disprove this hypothesis. Another alternative is that the department store was in decline during the 1920's. However, that the company expanded both in terms of number of departments and in actual store locations makes this hypothesis improbable (*Mappin 70 Anos*). Interviews also show that it was not until 1938 that the store began experiencing difficulties (Mappin, *entrevistas*, doc 62) and was not sold until 1950 (Mappin, *entrevistas*, doc48). An interview with Luis Sequeira (*entrevistas*, doc 62) supports my preferred hypothesis. He notes that Mappin asked him to come work two other times before he finally accepted in 1924 because of a better salary and better working conditions.

Somewhat more informative than nominal wages are the trends in the real wages and the comparison of those wages to those found in Brazil’s capital at the time, Rio de Janeiro. While nominal wages may have been increasing over the period, Paulistano real wages were declining more often than they were rising. This declining real wage is similar to Rio de Janeiro; however, variability between the two series and preliminary cost evidence for São Paulo confirm that a separate wage series is necessary for the city of São Paulo.

Figure 9

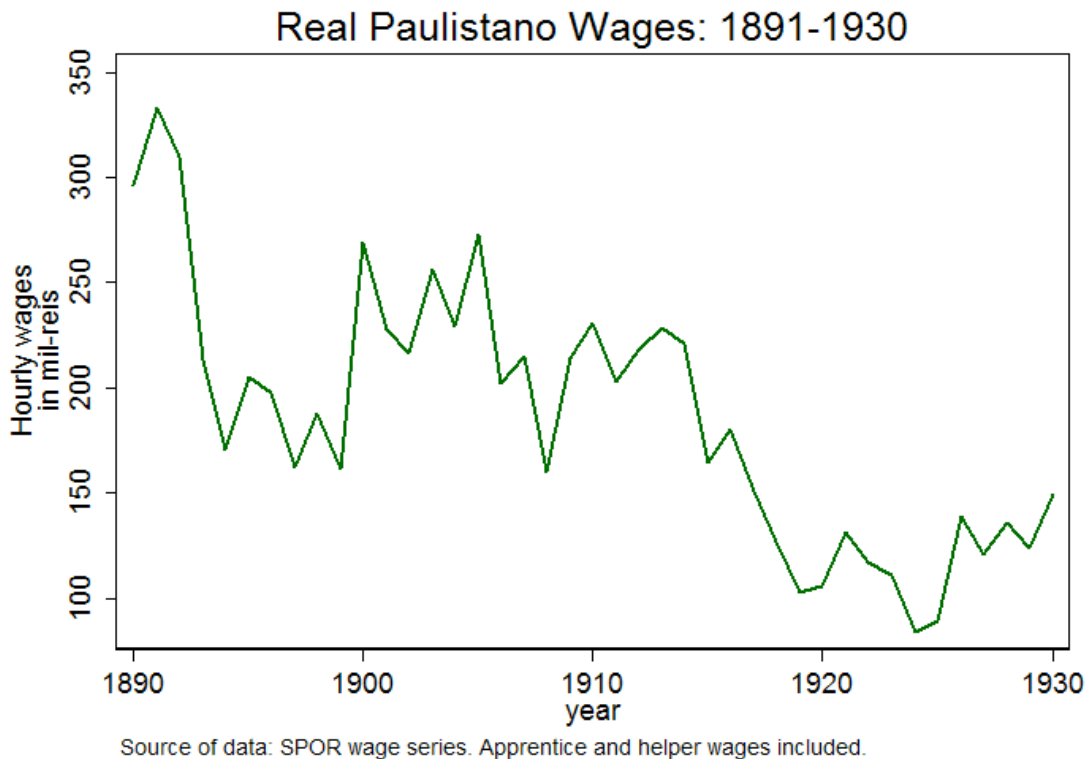


Figure 9 reports real wages for São Paulo and figure 10 compares those results to Rio de Janeiro. Figures showing firm real wages for Paulista, Light and Jafet appear in appendix 3.1. There are four distinct real wage trends in the city of São Paulo during the Old Republic, but the majority of the period was one of steady decreasing real wages and short, minimal recoveries. Figure 9 shows that except for the first five years of the twentieth century and the last five years

of the Old Republic (1925-1929), the workers in the Old Republic experienced decreasing wages. The two sharpest periods of decline in real wages were from 1892 to 1899 and from 1913 to 1924. The graph also shows that there was greater wage volatility at the beginning of the Old Republic (through 1908). Such higher volatility is expected given the stability of the industrial sector. As immigrants, migrants and agricultural workers flocked to the city with big dreams, single males were actually encouraged to use the *Hospedaria* to find industrial and agricultural work *outside* of the city due to the lack of work in the city.²⁰²

Figure 10



Source of data: SPOR wage series and Rio wages from Williamson.

Paulistano real wages reached their nadir in 1924 when workers made just 31% of the hourly wage that they had made at the turn of the century. The declining real wage was not just a Paulistano phenomenon. Workers in Rio de Janeiro also suffered during the Old Republic. In

²⁰² “Letter to Oscar”, 6 Nov. 1914, AESP, Sec da Ag. – Inspetoria de Imigração Santos, C09858.

fact, the real wage decline from 1910 to 1920 was even more dramatic than the Paulistano decline.²⁰³

Given such low wages, it is not surprising that Brazilian worker movements and labor strikes gained strength during this period. Large-scale strikes occurred in São Paulo in 1917 and 1919 and labor tensions increased greatly as “the high cost of living, combined with the fact that many of the mills had made reductions in wages the year before [1916], when conditions were bad, and did not increase [wages] when conditions improved” led to the 1917 General Strike in July.²⁰⁴ Strikers and employers came to a resolution that theoretically granted pardon to the strikers, gave workers the right to organize, provided some labor regulations for children and women, increased salaries, adopted the English workweek (8 hours a day with a 36 hour weekend), increased overtime pay, and reduced the prices of both primary goods and worker housing.²⁰⁵ The peace, however, was short-lived, and another set of General Strikes struck the city in 1919.²⁰⁶ How successful were these strikes in raising workers’ real wages? The evidence shows that although there was very little recovery in terms of real wages, at least the trend for falling wages tapered off by the mid-1920’s.

²⁰³ To compare the Paulistano wage series with real wages in Rio de Janeiro, figure 4 reports real wages with 1913 as the benchmark year to analyze these data alongside Williamson and Bértola’s work for the Southern Cone region. Williamson, “Five Centuries”; *Ibid.*, “Real Wages”; and Bértola, et al “Income Distribution.” The Rio de Janeiro wages use the nominal wages reported by Williamson in his study on real wages in Latin America; however, I deflate the reported nominal wages with the Lobo index so that they are comparable to the São Paulo wages.

²⁰⁴ Light, *1917 Annual Report*, 2. Light employees were also the only employees not to receive a raise after the strike, although drivers were given a bonus for working through the chaos. A general raise was given to employees in 1918, however, due to the cost-of-living increase. Light *1918 Annual Report*, 2.

²⁰⁵ These resolutions appear in Paulo Sergio Pinheiro and Michael Hall, *A Classe Operária no Brasil: Documentos, 1889-1930*, (São Paulo: Editora Alfa Omega, 1979), 232-4. Various other documents related to the 1917 General Strike are also included in their document compilation.

²⁰⁶ Even given the significant mobilization in 1917 and 1919, by 1920, the labor movement in the city was virtually defeated and would only really resurge after 1930 (French, *Brazilian Workers*, 30-35).

Finally, the last six years of the 1920's showed some recovery in terms of real wages. This trend is interesting given the "Industrial Crisis" that plagued the city in 1926 and 1927. During 1926 and 1927 most factories enacted reduced workweeks in both São Paulo and Rio de Janeiro.²⁰⁷ Figure 9 somewhat reflects the crisis through a citywide decrease in real wages in 1927. However, even though "most of the mills worked on short hours and made no profits during the year," hourly wages did not decrease dramatically.²⁰⁸ This is not to suggest that factory employees did not suffer. While employees receiving a monthly salary were not affected by decreased production, most laborers were paid daily and hourly and would have experienced a sizeable decrease in weekly wages.²⁰⁹ Furthermore, workers were making just 45% of what they had been making at the turn of the century.

How necessary is it to create a separate Paulistano wage series? Figure 10 suggests that during the early industrialization phase and in the end of the Old Republic the labor markets in Brazil's two largest cities were not fully integrated. The graph shows that for most of São Paulo's early industrial phase, Paulistano workers made less than their Rio de Janeiro counterparts. The two cities' real wages are then relatively close from 1913 until 1925, when São Paulo wages outpace Rio wages. It is probable that there was more variability between wages in the two cities than figure 10 shows. Evidence on prices in São Paulo are sporadic for the period, but the Santa Casa de Misericórdia annual report from 1918 reports the cost of caring for a leper patient for 1911 through 1917. Table 3.4 compares the changes to the average inflation

²⁰⁷ For more on the industrial crisis see Ribeiro, *Condições*, 71-4; Mauricio Font, *Coffee, Contention and Change in the Making of Modern Brazil*, (Cambridge, MA: B. Blackwell, 1990), 45-50; Dean, *Industrialization*, 128-135

²⁰⁸ Light *1928 Annual Report*, 10. Reports from Rio confirm that textile factories in the capital also had to shut down in 1927. This decision caused the Cia Fab de Tecidos S Pedro de Alcantara to only work four days a week between July and November 1926. (Cia. Fab. de Tecidos S. Pedro de Alcantara *1926 Relatorio*, 8; *1927 Relatorio*, 7.)

²⁰⁹ CIFTSP, *Circulares* 596, 603, 605, 606 and *Acta da CIFTSP General Assembly* 6 Jul. 1926.

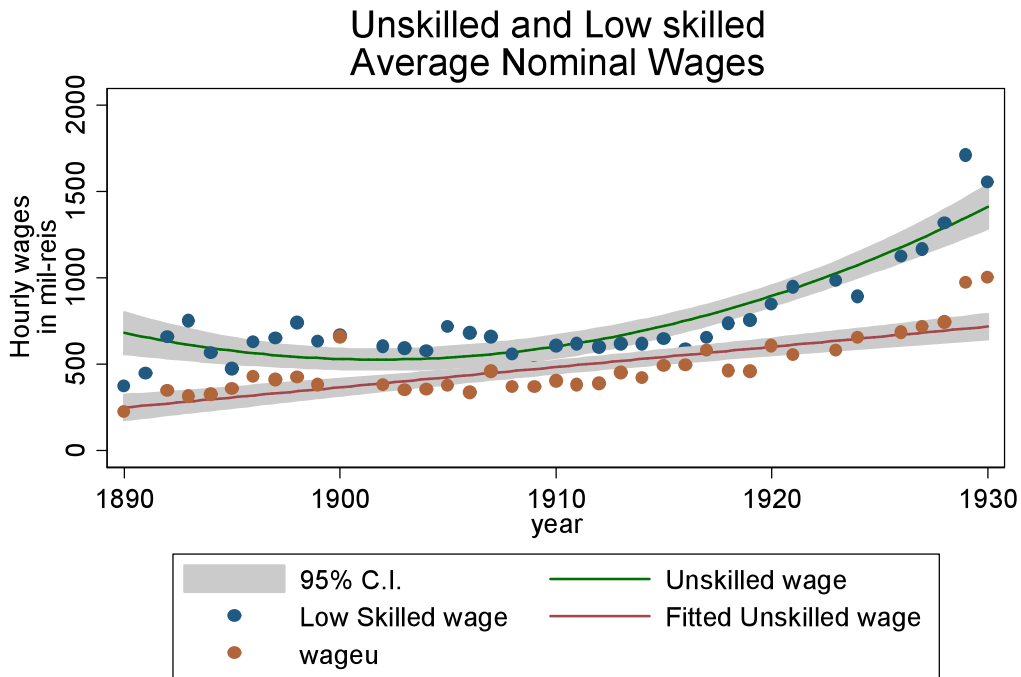
measured by Lobo's price indexes during the same period, by indexing costs and prices to the 1911 observations.²¹⁰ The table demonstrates a stark difference in the last three years: where Rio prices increased sharply, São Paulo costs decreased. Future scholars should factor in São Paulo real wages when evaluating Brazilian real wages for a more accurate measure of the period.

Table 3.4: Cost and Price Patterns in São Paulo and Rio de Janeiro, 1911-1917		
Year	São Paulo	Rio
1911	100	100
1912	93	104
1913	130	102
1914	103	100
1915	90	136
1916	97	148
1917	90	178
Source: Lobo, "Evolução," and Santa Casa <i>Relatorio 1918</i>		

Although these real wage figures are an important contribution to the historiography, they do not directly speak to the nature of inequality in the city during the Old Republic. In order to look at the question of inequality, I use the nominal wage series to look at the nature of skill premiums over the course of the period. In other words, did unskilled workers lose out more than higher skilled workers during this period of falling wages? The evidence reported in figure 11 compares the average wages of workers employed in unskilled positions with those employed in low skilled positions using the HISCLASS classification scheme. Medium skilled worker wages are not included, because most of the medium skilled workers in the SPOR sample are clerical and administrative office workers. In São Paulo, although these administrative employees were likely of a higher social standing than laborers, they received lower wages than industrial foreman and managers, who under the HISCLASS definition are low skilled.

²¹⁰ *Relatório Santa Casa de Misericórdia de São Paulo: Apresentado pelo Mordomo do Hospital dos Lázaros*, 30 Junho 1918, São Paulo: Casa Espindola, 1918, 7.

Figure 11



Preliminary evidence on skill premiums shows that through the period, the skill premium was relatively constant, but seems to have widened slightly in the 1920's. In other words, for most of the period unskilled and higher skilled workers suffered alike as real wages declined during the Old Republic. For the period, unskilled workers made roughly 65% of what low skilled workers made. More wage ratios and a firm-by-firm analysis need to be explored to better understand the nature of skill premiums and inequality in the Old Republic, but that there was no sustained increase in skill premiums over the period suggests that in terms of skill premiums, there was no sustained increase in inequality over the period. These data, however, do not include many of the wealthiest Brazilians such as industrialists, politicians and exporters. Therefore, even if skill premiums remained steady, if the wealth of the top income earners continued to grow over the period, the income inequality could have been increasing while wage differentials remained constant.

Part IV: Conclusion

The Old Republic was a time of poor working conditions where the São Paulo labor force continually dealt with declining real wages. Scholars have argued that a high cost-of-living made life especially hard for the working class. The real wage series shows that it took three people working in a household to buy the same amount of goods in 1925 that the same household could have bought with just one income in 1900. In other words, by 1920, two adults had to work to keep up with the increasing cost-of-living, and by 1925, a family would have needed at least one other adult income to keep pace. There seems to be some evidence to suggest that unskilled workers' wages rose slower than other groups of workers in the 1920's, and thus, these individuals would have suffered even greater strains than the mechanics, painters and semi-skilled workers in the city. Given these results, it is surprising that the worker movements and labor strikes in the city were not a more prominent feature during the Old Republic.

I do not propose that these real wage estimates are perfect; however, they are the best approximation available for real wages in the city of São Paulo during this period.²¹¹ The fact that the deflationary index does not consider housing costs at a time when exponential population growth put exorbitant stress on the city's housing market may inflate these estimates; however, sporadic data on rent inflation suggests that rent prices did not increase faster than food prices.²¹² These real wages are not only important to understanding how industrialization and rapid urbanization translated for laborers in the city, but also provide the necessary data to study wage inequality in Old Republic São Paulo, SP. In the following chapter, I use this SPOR wage series

²¹¹ Ideally the deflationary index would be for the city of São Paulo and would include prices for both clothes and rents; however, constructing such an index lies outside of the scope of this dissertation.

²¹² A municipal construction contract in 1908 reveals that rent for a 5 to 6 person dwelling in a worker villa would rent for 30\$000 per month. (AMWL, Fundo Intendência Municipal, Obras, cx5) Davis found that the average family (of 5 persons) in a worker villa lived in a 2.5 room dwelling and paid 84\$000 per month in 1935. (Davis, table 17 p164 and table 12, 157). This results in a 2.8 increase in rent. From 1908 to 1930, Lobo's inflation estimates for food prices in Rio de Janeiro reveal a 3.6 increase (Lobo v25)

to further study inequality, analyzing the importance of certain worker characteristics, such as gender, age and nationality, in determining wages and labor opportunities during the period.

Chapter 4: Wage and Labor Inequality in Old Republic São Paulo, SP

Inequality is a prominent feature in regions where the urbanization process was rapid and wide-scale. Most Latin American cities suffer from this ‘growing pain,’ but perhaps none so visibly as urban areas in Brazil. Unfortunately, few studies examine the inequality that workers experienced in the initial industrialization and urbanization phase. This chapter looks at national, gender and race inequality that workers faced in the formal labor market in one of the most dynamic periods in the city of São Paulo, today South America’s largest city. No other study has produced such a comprehensive and systematic study of inequality for the Old Republic period. This elision, however, is not for lack of interest, but rather from the absence of reliable statistics in a period of rapid growth and expansion. Using the wage series established in chapter three of this dissertation, I use this chapter to address inequality in the city of São Paulo’s formal labor market. I look at the discrimination certain workers experienced at three distinct points during the labor process: actually getting hired, the positions individuals were hired into, and their opportunities while employed at the firm. Although for male workers in the city of São Paulo, there seemed to be no systematic wage discrimination, the evidence does show that Afro-Brazilians had a more difficult time getting hired and that Portuguese workers were often relegated to unskilled positions when first hired. Unsurprisingly, female workers faced the greatest discrimination in the formal labor market. Not only were women excluded from many management and upper level positions, but they also received lower wages for their work.

To approach Paulistano inequality, I first look at who the typical worker was in four different São Paulo industries. For example, how old was the worker and was he or she married? Based on this evidence, I can infer who was left out of the formal labor market. Second, I see the magnitude of discrimination based on a worker’s nationality, gender or race in initial hiring

practices and in the wages workers received. Guided by the evidence on the relative skill levels of the city's immigrant population presented in chapter two, I pay particular attention to whether employers discriminated against Portuguese workers or showed favoritism to German and Austrian workers. Finally, I use the wage evidence to address a related question: whether literacy was important in determining a worker's wages and job opportunities. The implications of these results inform our understanding of the nature of São Paulo's early industrialization. The systematic and statistical approach of this chapter complements both existing literature on working conditions in the Old Republic and a growing scholarship that uses similar methods to approach questions related to growth and development.²¹³

My methodology allows for an understanding of emerging industrial economies that other data and approaches cannot provide. Although other studies can document the existence of discrimination, I can actually measure just how much gender, nationality and literacy impacted an average Paulistano's wage and opportunity to be employed in a skilled job. If the city of São Paulo had an equal opportunity formal labor market during the Old Republic, then worker characteristics such as age and experience should be more important wage and job opportunity determinants than nationality and gender. The evidence, however, shows Portuguese (not Brazilians), Afro-Brazilians and women in the city faced discrimination, and of these three groups, women encountered the greatest barriers in the labor market. Although prejudice against Afro-Brazilian and female workers is not surprising given the time period, the fact that Portuguese, and not Brazilians, suffered the most discrimination is an important distinction in

²¹³ For examples systematic approaches see Carvalho Filho and Colistete, "Education Performance;" For a Mexican example, see Aurora Gómez, "The Evolution of Prices and Real Wages in Mexico from the Porfiriato to the Revolution," in J.H. Coatsworth and A.M. Taylor, Eds., *Latin America and the World Economy in the 19th and 20th Centuries*, (Cambridge, MA: Harvard University David Rockefeller Center for Latin American Studies). Wolfe, *Working Women* and Hahner, *Poverty and Politics* provide good social histories of working class labor concerns and conditions.

understanding the urban dynamic in early-twentieth century São Paulo. While traditional Brazilian historiography debates whether employers preferred to hire immigrants over qualified Brazilians, the labor market evidence shows that in terms of nationality, the market was the most difficult for qualified Portuguese immigrants. Given the results in chapter two of this dissertation, I expect that employers hired these individuals into unskilled jobs because of the expectation that they would be unskilled.

Regarding literacy, the unimportance of this skill in the labor market enhances our understanding of how little São Paulo's early industrial development relied on technological improvements. Literacy was not even an important characteristic in determining whether a worker was going to be a manager or foreman. Given that there was a relatively competitive labor market, I suggest that low capital and technological investment characterized the period and, thus, rewarded a worker's experience more than his or her education. How should we interpret the relative unimportance of literacy within the context of labor market inequality? That a worker's nationality, race or gender was more important than his or her ability to read would have made the Paulistano labor market seem like an unfair and discriminatory environment for the men and women working there during the early-twentieth century.

I approach the question of Paulistano inequality in this chapter by looking at who was left out of the formal labor market and at how a worker's characteristics in the formal labor market impacted his or her wages and labor opportunities. I use statistical tests to see whether nationality, gender and race or age, education and experience were more important in wage and entry level job discrepancies in the Old Republic Paulistano formal labor market. The approach I use can detect systematic discrimination in the city during a highly dynamic period of growth.

The chapter proceeds in five sections. First I describe the typical worker and his or her work experience in each of the four prominent, representative Paulistano firms used to create the São Paulo Old Republic (SPOR) wage series: Paulista (railway), Jafet (textile), Light (street transportation and energy) and Mappin (department store). Perhaps more important than understanding who the companies employed is showing who did *not* get jobs.²¹⁴ Second I outline the methodology used both to find evidence of discrimination and to establish how important worker literacy was in determining Paulistano formal labor market wages and opportunities. Third, I present the results related to national, racial and gendered labor market discrimination. Fourth, I examine the importance of literacy in determining Paulistano wages. I conclude with a discussion of the implications of these results and highlight the need for further research on how inequality impacts human capital formation.

Part I: The Typical Paulistano Worker

Studies that focus on laborers in the city of São Paulo for the Old Republic period often rely on labor newspapers and industrialists' publications and circulars for evidence. Although this scholarship can describe important workers active in Old Republic strikes and labor movements and general concerns affecting the industrial labor force, it cannot recreate an image of who the typical Paulistano worker was during the Old Republic. Using employee entry data collected for individual workers, I am able to show just who was working in São Paulo's formal labor market.²¹⁵ Based on these worker profiles I look at the first level of discrimination in the formal Paulistano labor market: actually getting hired. Since the results on wage and labor opportunity differentials presented later in this chapter are restricted to those individuals actually

²¹⁴ See chapter three for a complete discussion of these firms and their representativeness of the São Paulo labor market.

²¹⁵ Appendix 4.1 of this dissertation contains a table with descriptive statistics of employees by company.

employed, it is important to remember some groups faced significant barriers to entering the formal labor market. Although the formal wage market may appear equal, the reality for those left out of the market was one of significant discrimination.

Paulista

In June of 1913, Theodulo de Macedo was hired as a cleaner by one of the state's most important railway companies, the Companhia Paulista de Estrados de Ferro (Paulista). The son of Estevam and Maria Macedo, he was a young, married Brazilian man of twenty-three starting what would become a lifelong career of working at the company (he would not retire until 1941). Like many Brazilians in São Paulo at the time, Theodulo was himself a migrant. Born in São João da Sapucaia, Minas Gerais (600km from the city of São Paulo), it appears as if his whole family moved to the state at some point during his young life, probably to work on the coffee plantations. While Theodulo went to work in Jundiaí, his family lived in nearby Campinas.²¹⁶

In many ways, Theodulo fits the image of the typical Paulista employee. All employees hired during the Old Republic were male and most employees at the company were Brazilian.²¹⁷ While we do not know his skin color or level of schooling, the odds are that he was probably literate and white. Most employees at the company were literate—almost 87% of Brazilian employees were literate—and over 83% of the employees registering race were white.²¹⁸ Non-white employees included pardos and blacks, but since race was self-reported it is probable that

²¹⁶ Paulista Registros. Duarte cites box 75.4-41 as the source for the information on de Macedo.

²¹⁷ 62.1% Brazilian, 15.7% Portuguese, 13.7% Italian and 5.5% Spanish.

²¹⁸ The literacy rates for Italians, Brazilians, Portuguese and Portuguese were 94.6%, 86.9%, 79.3% and 66.7%, respectively.

some “white” employees could have just as easily have been coded as “non-white.” Theodulo was also like most of his fellow workers in that he was married.²¹⁹

Theodulo’s career at the company also followed the norm. Hired into the unskilled cleaning position, he was promoted to stoker in August of 1918. After that promotion, he was transferred to Campinas in November 1919, so that he could care for his sick mother and began training to become a machinist a few years later. Made a machinist second-apprentice and then first-apprentice in August of 1922 and September of 1923, respectively, by 1924 he was finally promoted to machinist. By time he retired in September 1941, he had received several promotions within the machinist profession. Theodulo’s advancement in the company was not atypical. Although about an equal number of employees were first hired into unskilled and skilled positions, those workers in unskilled jobs had ample opportunity to acquire experience and move into skilled and management positions.²²⁰ Information on work tenures shows that being hired at Paulista meant having a career at the company: the average worker stayed at the firm for over 27 years, retiring around age 50! Such a degree of stability was enviable in Old Republic São Paulo where unemployment and failed enterprises were constant threats.²²¹

Given the apparent desirability of the Paulista jobs, it is important to note three underrepresented groups in the company’s labor force. First and foremost were women. During the period, not one single female was employed. Although this is not surprising given the industry, it is notable that not even secretarial, telegraph or administrative positions were open to

²¹⁹ The vast majority of Paulista workers were married, in stark contrast to the share of married workers in other firms. However, statistical tests show that the civil status of Paulista workers did not impact their real entry wages or their likelihood of being in more or less skilled positions.

²²⁰ I restrict my analysis to individuals employed in the greater São Paulo area during the Old Republic (1891-1929). This includes workers in Jundiaí, the city of São Paulo, Valinhos, Campinas and a few other cities within the 100km radius. This also excludes workers hired or registering wages prior to 1891. Almost five times out of ten a worker was hired into an unskilled positions.

²²¹ AESP, Sec da Ag, Inspetoria de Imigração Santos C09858, comments on the lack of work in the city.

females. The second underrepresented group was Spanish immigrants. While this group constituted around 30% of immigration to the city between 1903 and 1913 (when many of the Paulista workers were hired), they represented less than 15% of the Paulista workforce.²²² The third underrepresented group was Afro-Brazilians: blacks and *pardos*. At Paulista, these non-white workers constituted just 16% of the sample. Although reliable official statistics did not record information on race between 1872 and 1940, in 1872, 48.3% of the entire state population was either black or *pardo*. With extensive European immigration, just 12% of the state's population in 1940 was Afro-Brazilian. Using census populations, immigration records and state fertility and mortality rates throughout the period, I roughly estimate that around 25% of Paulistas would have been black and *pardo* throughout most of the Old Republic. Given the discrepancy between this estimation and the 16% employment share of non-whites at Paulista, it is fair to say that non-whites, along with Spanish, faced sizeable barriers to entry into Paulista's labor force.²²³ Whether these barriers for Afro-Brazilians and Spaniards were due to differences in human capital or prejudice can be inferred by comparing worker profiles in other firms and by complementing the data with results on hiring practices presented later in this chapter.

Light

Sebastião Cabral and José Martins, two employees hired by the São Paulo Light and Tramway Co. (Light), in 1925 represent the average Zé (the average Joe) hired by the company over the period.²²⁴ Unfortunately there is no average Maria to discuss, because, just as at Paulista, none of employees in the transportation sector sample were female. Cabral came to the

²²² The 1903 to 1913 data based on the entries to the city through the *Hospedaria* and the Paulista data from the Registros.

²²³ Shares and populations from Andrews *Blacks and Whites*. Fertility and mortality from SEADE 500 Anos (website using Anuarios Estatísticos). Immigration data from Holloway, *Immigrants*, 179.

²²⁴ Light. *fichas*.

company on May 27, 1925. He was a young, married Brazilian living in Santo Amaro, at the border of the city proper. Working at the company's Cambucy office, his morning and evening commutes would have been considerable. Although we do not know the type of business of his prior employer, Lazaro & Cia, since Sebastião was hired as a mechanic's helper, it is likely that it was some type of transportation or mechanic shop. Sebastião was in the mechanic position, just like most of married Brazilians hired at Light. José Martins, on the other hand, was hired as a car washer for the company in November of 1925. At twenty-nine, this Brazilian was still single and lived in the northern part of the city in a working-class neighborhood.²²⁵ Martins, however, had not been in the city long and listed his last employer as in the state's interior, where he most likely worked on the coffee plantations. (Although Light's workforce was more nationally diverse than Paulista's, employees were still more likely to be Brazilian.²²⁶)

Although the workforce hired at Light was similar to Paulista's in many ways, employee expectations for advancement at the two firms could not have been more different. The median Paulista career was decades, but the median Light tenure was just over a third of a year. Sebastião Cabral and José Martins offer tangible examples. Cabral came to Light at the end of May in 1925, but less than three months later (August 10), he just quit showing up for work. This was rather common among Light employees and probably meant that they had found better-paying work elsewhere. José Martins left a little over six months after being hired (double the company's median tenure) because of the poor pay. The high turnover of the company probably helps explain why the average age of employees was 28.5 years, about five years older than that

²²⁵ Martins lived on Rua Doutor Zuquim, near São Paulo's present-day Santana neighborhood.

²²⁶ The Light employee sample includes 1893 workers and reveals a fairly skilled workforce mostly hired in the 1920's. The data is more detailed for employees hired in the 1920's. Nationality observations based on 879 observations show 55% of the workforce to be foreign. As for the entry dates, over 70% of the sample was hired during the 1920's, with the most being hired in 1925 and a significant share (7.55%) also being hired in 1912.

of Paulista employees. Given that many positions at Light were skilled or highly skilled, employees were expected to have a certain skill level and experience at hiring that they would have acquired with age.²²⁷ Although most Light employees did not count on a career at the company, they could expect to find ample opportunity to be hired as skilled workers.²²⁸

The image of the typical Light worker in the transportation department reveals that the company excluded women and avoided hiring Spanish immigrants. It seems as if the company went out of its way to hire Hungarian and Polish workers. Spanish immigrants constituted 28.6% of immigrants who passed through the *Hospedaria* and settled in the city between 1903 and 1927, but they only represented 9.5% immigrants hired by Light. In contrast, while Hungarians and Poles trickled into the city, they represented 4.6% and 2.7%, respectively, of the sample Light immigrant workforce.²²⁹ While no racial information is included in the employee entry cards used to elaborate the wage series, Andrews' study of later entry cards suggest that non-white workers did not face the same difficulties that women and Spaniards did in getting hired at Light. However, we should be cautious with these findings given their selection bias. Since Light had such a high turnover rate, the fact that Andrews' evidence relies on Light career employees means that the group he analyzes for the 1920's is not the average company employee.²³⁰

²²⁷ Workers in skilled and highly skilled positions accounted for 61.55% of Light hirees. In addition to the wage data, the Light entry cards provide valuable information why a worker left the company. A number of reasons were recorded for leaving including not enough work, going to the interior, low pay and getting fired. I divide the reasons for exiting into voluntary and involuntary in an effort to determine why Light registered such a high labor turnover, the average tenure for employees being just eight months.

²²⁸ As chapter three of this dissertation shows, almost 70% of Light employees in the sample were either skilled or highly skilled. The high literacy rate also suggests that Light employees as a whole were relatively skilled in the Paulistano labor market. Although literacy was only recorded for 216 individuals, of these men, almost 90% (194) were literate.

²²⁹ Information on immigration shares comes from 17789 individuals settling in the capital as recorded in the BDMJ and Light from the Light sample that relies on 883 total observations and 483 immigrant observations.

²³⁰ Andrews uses social security data for employees hired in the 1920's and remaining at the company to determine that non-whites were 20.9% of the Light workforce in the 1920's and 42.3% of the COBAST section of the

Jafet

The average worker in the city's Jafet cotton textile factory had a much different gender and skill level profile than the individuals hired at Paulista and Light. While no women were hired at Paulista and Light, the textile sector was one of the largest employers of women in the state of São Paulo in 1920, and at Jafet, females constituted over 50% of the sample workforce. In addition, whereas a few teenagers were employed at the transportation firms, children made up a large share of the workforce at Jafet. Thus, it is important to know who could expect to find a job at the firm and how that changed across gender and age.

On July third, 1924, Jafet hired both Jeronymo Pedro Lemm and Maria Rosa Feijão to work on the factory's ring frames in the spinning department.²³¹ Both were single thirteen-year-old Brazilians living in the city's industrial neighborhoods: Jeronymo lived in the Vila São José while Maria lived very close to the factory on the Rua Manifesto in the Ipiranga neighborhood.²³² Prior to being at Jafet, Jeronymo had been working in another of the city's many textile factories, the Estamparia Silex. He stayed at Jafet for a little over a year working at the ring frames. Just like Maria, he received the company-wide ten percent raise on January first, but other than that, he did not receive any other promotions or raises. When he left the company, he probably went to work in another textile factory. Maria had already been working at Jafet as an apprentice. In October 1924, she finally was promoted to an experienced rings worker and her wage rose by nearly 30%. She then received the 10% company-wide raise at the start of 1925

company (largely construction). *Blacks and Whites*, 95-8. It is plausible that Afro-Brazilians would be more likely to persist at Light because of the difficulty in procuring employment in another firm (due to discrimination).

²³¹ The company hired many individuals on July third, 1924.

²³² In the sample see ficha 387 for Jeronymo and 428 for Maria for the respective information on these individuals.

and stayed at the company a whole other year without promotions or raises before leaving on January 18, 1926.

João José Facito was also hired to work on the ring frames in 1924, but perhaps because he was slightly older (sixteen), and presumably more experienced, he received two non-standard raises before the company-wide raise at the start of 1925. Prior to working at Jafet, João had worked at the Assad stocking factory, another Lebanese-owned textile factory in the Ipiranga neighborhood. Jafet hired the twenty-one-year old Brazilian weaver, Maria Luzia Alves, on August 24, 1927.²³³ While 1924 was the hiring peak for children and for men, the largest share of women was hired at Jafet in 1927, towards the end of the city's Industrial Crisis. João and Maria Luiza were practically neighbors: both lived close to the factory on the Rua Silva Bueno and Avenida Nazareth, respectively, in the Ipiranga neighborhood. Since Maria Luiza was unmarried, she probably still lived with her parents, Luiz Alves and Maria da Conceição Alves. Prior to working at Jafet, Maria had worked at yet another of the city's textile firms, the Cia Taubaté Industrial. She stayed at Jafet for just eight months, and likely left the firm either to work at another factory or to get married.²³⁴

Jeronymo, Maria Rosa and João, like most of the employees hired, were unskilled workers (almost 80% of Jafet's labor force was unskilled).²³⁵ Maria Luiza, a semi-skilled weaver, also fits the norm, however. The largest share of women hired was actually in this position. Each of these workers also fits the company's national profile. Although more than 70% of Jafet workers were Brazilian, the Brazilian share of the adult Jafet workforce (aged

²³³ See ficha 400 for information on João and ficha 979 for information on Maria Luiza. João and Maria Luiza represent the average fifteen and older employees at Jafet. If I restrict the adult working population to 18+ the profile would likely shift, particularly for male employees.

²³⁴ See chapter five for women exiting the wage labor force upon getting married.

²³⁵ See chapter three of this dissertation.

eighteen or older) was just 56.5%. In other words, many of Jafet's young employees were first-generation Brazilians and the share of adult Brazilian workers at Jafet (56.5%), Paulista (62.1%) and Light (45.3%) were similar.²³⁶ As for the racial composition, limited information on race shows Jafet workers had a similar profile to Paulista workers: nine out of ten workers with race observations in the Jafet sample were white.²³⁷ Although we do not know if Jeronymo, Maria Rosa and João were white, the odds are that they were and we know that Maria Luzia was white. While the national and racial composition of workers at the three firms were comparable, work tenure at Jafet was distinct. Jafet workers stayed for much less time than Paulista workers but almost five months longer than Light employees.²³⁸ The four employees cited above fall within the norm: Jeronymo and João stayed for a little over and under a year, respectively. Maria Luiza stayed for eight months and Maria Rosa stayed the longest, at almost a year and a half. Just like at Light, it seems like there were minimal firm-specific skills acquired at Jafet. Workers often switched between firms in the same industry, probably in search of higher wages.²³⁹

The Jafet sample shows that the typical Jafet worker was younger and less skilled than employees at Paulista and Light. Furthermore, these differences were accentuated for female

²³⁶ See the section on human capital cycles in chapter two for more on first-generation Brazilians. The 56.5% here uses employees eighteen or older in the sample. If I just look at workers fifteen and older, the Brazilian drops to 62.7%. I argue that using the 18 and older variable is better because almost all Paulista and Light employees were over 18.

²³⁷ The race information is based on 329 workers with race recorded. The averages did not change significantly based on workers' ages or gender. A separate sample elaborated by Andrews in *Blacks and Whites* find that non-whites constituted 7.6% of the Jafet workforce in the 1920's.

²³⁸ This statement is based on median tenure observations for Jafet (240 days) and Light (79 days). The median tenures are better measures because they control for outlier employees at both firms who stayed for well over five years and whose observations inflate the work tenure average significantly.

²³⁹ Many textile workers listed textile firms as their prior employer. The same holds true for mechanics at Light who came from garages or the auto industry. The Light *fichas* show that workers often left because the pay was low.

employees, who constituted 55% of the Jafet sample workforce.²⁴⁰ The average age for Jafet female employees was almost nineteen years old and most females were hired into unskilled positions. The average male employee age, however, was 22 years-of-age and although he was most likely to be an unskilled employee, there were also a fair number of mechanics and bleach workers at the factory.²⁴¹ Literacy rates confirm these gendered differences. Although the average female and male literacy rates for employees of all ages were 48% and 59%, respectively, the divergence widens to 37% and 61%, respectively, when just considering the eighteen and older population. With our four workers, Jeronymo and João were both literate, while young Maria Rosa was illiterate and we do not know about Maria Luzia's ability to read and write.

The information on Jafet employees shows one sector where females could find work in the formal Paulistano labor market. Furthermore, women represent the majority of the sample workforce. Racial evidence from the firm, however, does reveal hiring discrimination. The fact that just 10% of the Jafet workforce was non-white when black and *pardos* made up 25% of the city's population is evidence of racial discrimination at the time of hiring. Evidence on worker nationality reveals an overrepresentation of 'Syrian' and Spanish workers at the firm. While the large share of 'Syrian' workers can be explained by the fact that the factory was owned by Lebanese immigrants, the large share of Spanish employees suggests that Spanish were less skilled and overrepresented in unskilled jobs (Jafet) and underrepresented in skilled positions

²⁴⁰ The sample of 754 individuals hired between 1910 and 1929, confirm this expectation. The original sample included 1369 individuals. These summary statistics, unfortunately, do not consider piece-rate workers. Over 75% of female workers at Jafet were single.

²⁴¹ The median ages for females and males were 16 and 17, respectively. However, the oldest quarter of males workers were over 25 while the oldest quarter of female workers were just over 22.

(Light and Paulista) due to their lower human capital and not to prejudice.²⁴² (Statistical testing elaborated later in this chapter will be able to reveal whether this is the case.) Thus the typical Jafet worker profile shows that, again, Afro-Brazilians faced steep barriers to entry into the formal labor market, even in unskilled textile jobs.

Mappin

The Mappin department store provides invaluable information on Paulistanos employed in the commercial sector. Since most employees were middle-class individuals, looking at the store's workforce also provides a snapshot of working individuals of higher socio-economic status. Mappin hired 263 individuals between the years of 1914 and 1930, but only 144 have salary information. Like Jafet, the average entry age among employees was around twenty years old.²⁴³ Mappin hired both male and female workers and women represented nearly 28% of individuals hired. In direct contrast to Jafet, Mappin employees were relatively skilled: only 20.86% of workers were hired into unskilled positions, and a total of 57.58% were either skilled or highly skilled employees. By far the professions with the largest shares of workers were the salesperson, department head and seamstress and tailor positions.²⁴⁴ The relatively high number of skilled positions compared to unskilled positions was probably due to two related factors: 1) that Mappin was a department store with few salary positions for unskilled workers and 2) the company hired out embroidering and some sewing to piece-rate workers working from home

²⁴² The shares for the city are seen in footnote above. At Jafet, Syrians and Spanish represented 14.9% and 37.6%, respectively, of the 202 immigrant workers in the sample.

²⁴³ I find variance among the average entry age of employees based on their skill levels. As expected, unskilled workers recorded the youngest average entry age and skilled workers the highest. Also, as in the Jafet textile factory, men recorded higher average entry ages than women. The average entry age for unskilled male workers was 19.25 years old (4 observations, omitting one individual who entered at age 57). For female unskilled workers, it was 15.5 years (2 obs). Semi-skilled males entered at 21.8 years (32 obs) and females at 18.5 years (39 obs). Skilled males entered at 24.7 years (20 obs) and females at 24.7 years (6 obs). Based on 102 total observations.

²⁴⁴ Almost 25% of all hires were salespeople, over 14% were department heads and over 7% were seamstresses or tailors.

who would not have appeared on the salary sheets.²⁴⁵ Given this composition, I expect Mappin employees had high literacy rates. However, since no literacy information is provided for employees I rely on interview evidence to show that most, if not all, Mappin employees were literate.

One of the most striking differences between the Mappin workforce and the other three firms is in terms of worker nationalities. Whereas the largest share of workers at Paulista, Light and Jafet were Brazilian, just 23.4% of Mappin employees were Brazilian. Italians, Portuguese, British and Germans represented 35.46%, 28.37%, 8.51% and 3.55% of employees, respectively. The high share of British employees is understandable given that the company was British, and evidence on employees' entry years and nationalities reveals that the hiring of British was relatively steady throughout the time period under consideration.²⁴⁶ I propose that the high share of Italian employees was a factor of family connections and of intricate social networks. Anecdotal evidence from interviews supports this hypothesis, as on more than one occasion an individual was hired because a family member worked at Mappin or because his or her family was close to the general manager and compatriot, Silvio Carlini.²⁴⁷ It is also important to note that the Portuguese employees at Mappin do not follow the trends found in the three other firms where Portuguese are overrepresented in unskilled positions: at Mappin they are overrepresented in SKILLED positions.²⁴⁸ It is possible that the high share of foreign employees was due to an initiative by the firm to bring in upper-class, non-Portuguese speaking clientele. However, it is

²⁴⁵ See chapter five for more on interviews that discuss these workers.

²⁴⁶ Before 1923, British composed over 5% of hires. In 1923 forwards, British hires represented a slightly higher share of new employees.

²⁴⁷ See chapter five.

²⁴⁸ Of the 39 Portuguese employees with registered skill levels, 20.5% were unskilled, 28.46 were semi-skilled and 41.03% were skilled. Even though most of these employees were male, the share of skilled workers was still higher than that for males at the company (34.7%).

also possible that the non-Brazilian nationalities are overestimated due to my decision to accept the researcher's probable nationalities.

The Mappin data show a preference for non-Brazilian employees, meaning that at the entry point into the formal labor market, there was some discrimination against Brazilians. Unfortunately there is no more information on worker characteristics at the individual level. However, an interview reveals discrimination in hiring practices. Employees who had contact with customers had to “be very clean...be recommended by good families and they had to come from good families.”²⁴⁹ Given the official policy of ‘whitening’ during the time, Afro-Brazilians would have been passed over for these coveted sales positions jobs that had the added benefits of tips and work on commission.

Having profiled the typical employee at these four firms, it is easy to see which two groups faced the largest barriers to entering the formal Paulistano labor market: women and Afro-Brazilians. Two of the firms had all male employees. In the data on race that do exist, only 10 to 15% of workers were reported as not being white, and at Mappin a non-white would not have hired or promoted into the coveted salesperson positions. In 1940, 12% of São Paulo state's population was Afro-Brazilian, but in 1872, over 48% of the state was black or *pardo*. Although there is no Census data on the racial composition of São Paulo during the Old Republic, even accounting for the massive European influx, the state's population was probably around 25% Afro-Brazilian during the period. It is important to remember that regardless of the results on wage and labor opportunity differentials, these two groups faced significant discrimination in terms of actually getting jobs.

²⁴⁹ Perrone, on hiring practices at Mappin. Leonor Perrone, interview.

Part II: Methodology (Finding Evidence of Labor Market Discrimination & Importance of Literacy)

For those individuals who were employed in the formal labor market, how much discrimination did they face when getting hired and throughout their tenure at a firm? And did it pay for workers to be literate? To answer these questions, I rely on a series of statistical tests that measure how important nationality, gender, race and literacy were in determining a worker's wages, and his or her opportunities for skilled employment and advancement. The data for these tests look at how the characteristics of 2872 employees employed at Paulista, Light, Jafet and Mappin during the Old Republic impacted work experience.²⁵⁰

I use variations of two statistical tests to see if there was evidence of discrimination in the labor market. The first is a standard linear regression and the second is a logit regression. A standard linear regression tries to explain the impact that certain variables have on a particular outcome. For example, in the Paulistano labor market, I want to see if nationality (N), race (R), gender (F) and literacy (L) impacted the wage a worker received. Thus, a very basic approach looks at the coefficients on x, y, z and w to determine the impact of the aforementioned variables on the natural log of wages. The natural log of real wages is used as the dependent variable instead of the real wage in order to make a relative real wage scale and allow me to compare an engineer's salary to a bobbin worker's wage.

$$\ln(wage_i) = xN_i + yR_i + zF_i + wL_i + u_i$$

In the model above the female, race and literacy variables are all dummy variables, meaning that each individual observation only has two possible values. The value of the Female variable for a male worker would be 0 (false) and while that of a female worker would be 1 (true).

²⁵⁰ See chapter three for how the wage series was developed.

When it comes to interpreting the results, I am largely concerned with whether there is a negative or positive correlation between an independent variable and wages and whether that result is statistically significant. If there were a positive correlation between literacy and the natural log of wages, this would show that if two workers were identical in every way except for one was literate and one was not, then the real wages for the literate individual would be higher. If the result were statistically significant to the 10% level it means that when a random literate worker is pulled from the sample, his or her wage will be higher than an identical, illiterate worker's wage nine out of ten times. A more practical interpretation is that a statistically significant coefficient on the literate variable means that differences in wages between literate and illiterate workers is not due just to chance.

Obviously the worker characteristics listed above were only a few of the variables that impacted a worker's wage. I also measure the impact of other factors, like a worker's age and experience and the year of the wage observation.²⁵¹ If when I include these other factors in my analysis, an individual's nationality, race or gender still statistically impacts his or her wage, then the labor market shows evidence of discrimination in the form of wage inequality. Since subsequent wage observations are included in the analysis, these wage differential results somewhat address whether a worker experienced discrimination throughout his or her tenure at the firm. Even results that are not statistically significant can suggest discrimination. For example, if being female is continually correlated with lower wages, but the results are not

²⁵¹ Other variables include quartile of employment (skill-level proxy), tenure and company dummies. At the present, I have not considered the type of pay (hourly, daily, monthly).

statistically significant, the results suggest that with a larger sample size the results may show a statistically significant result.²⁵²

The logit analysis that I use is conceptually similar to the standard linear regression described above. The outcome (dependent variable), however, is a dummy variable. Therefore instead of measuring how much a certain worker characteristic impacted another variable, it shows the likelihood that change in an independent variable will make the dependent variable equal to one (true). For example, in the equation below, a worker's literacy (L) is impacted by age and gender. The coefficient (x) on age shows that for every year older that the individual is, he or she is x% more or less likely to be literate. For the Paulistano data, I expect that younger workers were more likely to be literate because of a concerted effort by the state of São Paulo to increase literacy.²⁵³ Using the coefficient (y) on female (F), I can compute what percentage more or less likely a female than a male of the same age is to be literate. In the context of the Paulistano labor market, I am concerned with how worker characteristics impacted the probability of being hired into unskilled and highly skilled positions.

$$L_i = xage_i + yF_i + u_i$$

The linear and logit regressions that I use look to find out how much discrimination there was against certain nationalities, non-whites and women in three major aspects of a laborer's work experience: wages, hiring and opportunities while at the firm. Although I intend to analyze promotions and raise patterns more in depth, at present I just consider raises. I look at these experiences both within each company and in the formal labor market as a whole (using

²⁵² Although I have a relatively large number of observations, for statistical tests, the observations are few. Thus, significance level is lowered each time new variables are added and a result can 'lose' significance by accounting for other, related variables.

²⁵³ For more on the measure to increase literacy, which meant a decrease in the years of compulsory schooling, see chapter five of this dissertation.

observations from all of the companies).²⁵⁴ To look at wage discrimination, I see how worker characteristics impacted the natural log of all recorded wages. In other words, what made companies contract certain individuals at a higher wage? What made companies reward higher wages? As an alternate measure, I look at the likelihood an individual was hired or promoted into one of three positions: 1) managerial or foreman; 2) metalworkers and 3) unskilled positions. The reason for looking at these professions is because discrimination may not have been detectable in terms of wage discrimination, but rather in hiring practices. If certain groups of people were statistically more likely to be hired into positions below their skill level, I interpret this as evidence of hiring discrimination. Similarly, if certain groups were disproportionately hired into highly skilled positions, I interpret this as evidence of employers favoring those groups.

My analysis is not limited to these statistical regressions. In the case of the Jafet textile workers, one of the more challenging aspects of the data was accounting for inequality among piece-rate workers, which included eighty-seven bobbin workers and four hundred weavers—together, over 30% of the workforce. It is impossible to determine inequality among the bobbin workers because the *fichas* give no salary or auxiliary information. In the case of weavers, I have information on the number of looms tended by thirty-two individuals in the early 1920's.

I expect to find different degrees of national, racial and gender discrimination in the analyses described above. A female worker likely received lower wages, was more likely to be in unskilled jobs and had less opportunity for advancement than her male counterparts. (Whether this discrimination was based on the expectation that a woman would exit the labor market upon getting married or having a child is explored in chapter five of this dissertation.) I believe

²⁵⁴ I use what is known as a panel dataset. This panel dataset compares the individuals at each of the four companies over time.

evidence of national discrimination, however, will only appear in the results on hiring practices.²⁵⁵ Since my analysis of incoming immigrants to the city (chapter two) showed disproportionate shares of unskilled Portuguese in the early-twentieth century and of skilled Germans and Austrians in the 1920's, I expect to find a disproportionate number of Germans and Austrians in highly skilled positions and of Portuguese in unskilled positions. If after accounting for differences in skill levels, Portuguese are still more likely to be hired into unskilled positions, the result would show statistical discrimination existed with employers' national hiring preferences. The expectation that Portuguese were unskilled limited the jobs that even skilled Portuguese were offered. Any evidence of racial discrimination will most likely appear in the hiring and promotion analysis results. As the previous section on the average worker showed, non-white workers probably experienced the most discrimination in actually getting a job. Once they were hired, however, there is no reason to believe that their wages would be lower.²⁵⁶

After focusing on the results related to discrimination, I see whether literacy increased a worker's wage, the skill level of his or her job and the opportunities for advancement. This is an important question to answer because it helps us understand the maturity of São Paulo's industrial growth. If literacy was important to Paulistano employers, then there is evidence that they placed a premium on improving the quality of São Paulo industry. In contrast, if literacy was not valued at all, this suggests that Old Republic industrialization was labor-intensive and

²⁵⁵ Studies on Rio de Janeiro do not find evidence of racial wage differentials. See de Melo, et al. "Raça e Nacionalidade."

²⁵⁶ This is consistent with evidence from Foote, Whatley and Wright, who find that racial discrimination did not manifest in wage differences at the Ford Motor Company in Detroit, "Arbitraging a Discriminatory Labor Market: Black Workers at the Ford Motor Company, 1918-1947," *JLE* 21.3 (2003). Robert Higgs also finds that ethnic discrimination in 1909 in the United States did not impact wages, "Race, Skills, and Earnings: American Immigrants in 1909." *JEH* 31.2 (June 1971): 420-8.

placed little value on technological or managerial improvements. Unfortunately, prior studies suggest that the latter possibility is the more probable.

Part IIIA: Results for Labor Market Discrimination

National Discrimination

One of the more debated questions in Paulistano historiography is whether foreigners received preference over Brazilians in the labor market. The racial undertone of this argument is whether employers chose ‘white’ Europeans over ‘black’ Brazilians. However, as chapter two of this dissertation explains this dichotomous view is faulty. Different immigrant groups had distinct labor market experiences; thus, I look to how workers of different nationalities experienced the labor market. The results show that most discrimination appeared in the positions that a worker was hired into and that Spanish and Portuguese workers suffered the greatest discrimination within the formal labor market.

The results presented in table 4.1 show that in comparison to Brazilian males hired in 1920, only Portuguese workers were more likely to be hired into unskilled positions. This trend was magnified at Light, where Portuguese workers were statistically more likely to be found in these positions. Portuguese workers were also less likely to be metal workers, although they were more likely to be in management or foremen positions at Paulista and in the entire labor market. As for the wages that these workers received, when controlling for age, company effects, year effects and literacy, there is minimal evidence that workers of certain nationalities received lower or higher wages. For example, there is some evidence that Italians received higher wages than Brazilians at Paulista and Mappin and that Germans and Austrians received higher wages in the city as a whole. The evidence on wages also shows Portuguese receiving lower wages at Light and Spanish workers receiving just 92% of the average Brazilian’s salary

(tables VI and IX in appendix 4.1). The results on workers' wages, however, are neither consistent nor robust. These results confirm that Paulistano labor market discrimination was most acutely registered in the position a worker was hired into. Expecting that Portuguese workers were unskilled, employers preferred to hire them into unskilled positions. These prejudices, however, did not reflect in the wages workers received.

Table 4.1: Impact of Nationality, Race and Literacy on Professional Position				
Probability of Being a Metal Worker				
Nationality	SPOR	Paulista	Light	Jafet
Portuguese	-8.5%	-7.3%	-23.5%	3.4%
Italian	11.7%	15.2%	5.4%	2.8%
Spanish	14.6%	18.3%	-18.7%	1.1%
German/Austrian			19.6%	
Other	59.5%	59.3%	0.1%	1.2%
Literacy	9.2%	1.1%		5.6%
White		-3.3%		
Source: Statistical regressions in data appendix, table IV. See columns 2, 5, 6 and 9				
Probability of Being a Manager/Foreman				
Nationality	SPOR	Paulista	Light	
Portuguese	10.2%	11.0%	-3.0%	
Italian	5.0%	3.2%	5.7%	
Spanish	5.0%	3.9%	-2.5%	
German/Austrian			7.7%	
Other	34.9%	57.7%	4.1%	
Literacy	-2.3%			
White		4.9%		
Source: Statistical regressions in data appendix, table V. See columns 2, 5, and 6.				
Probability of Being an Unskilled Worker				
Nationality	SPOR	Paulista	Light	
Portuguese	3.6%	4.6%	32.2%	
Italian	-11.1%	-9.3%	-11.1%	
Spanish	-19.7%	-16.9%	21.1%	
German/Austrian			-18.5%	
Other	2.2%		16.7%	
Literacy	-16.8%	-16.5%	-30.8%	
White	-3.8%	-3.3%		
Source: Statistical regressions in data appendix, table III. See columns 2, 5, and 7.				

One final non-regression result also shows minimal national discrimination. At Light, for many positions, workers were qualified as a class 1, 2, 3, helper or apprentice when they were hired. A natural progression would be from apprentice or helper to class 3, then to class 2 and finally to class 1. In actuality, very few Light employees were employed at the firm long enough to make more than one of these transitions. Table 4.2 looks at the class qualification of workers based on nationality. Here the differences between nationalities are less pronounced. The only notable trends are the predominance of Germans and Austro-Hungarians in first and second-class positions, and the higher share of Brazilians working as helpers and apprentices. This evidence shows that at least within positions, there did not seem to be discrimination. Age most likely explains the higher concentration of Brazilians among apprentice and helper positions and the absence of Germans and Austro-Hungarians in the same. Whereas the average overall age for employees was 28.6 years, Brazilian employees were, on average, just 25.2 years old and Germans and Austro-Hungarians were 32.1 years old.

Nationality	First (%)	Second (%)	Third (%)	Aj (%)	Ap (%)	Total (n)
Brazilian	21	13	10	45	11	237
Portuguese	30	18	4	44	4	50
Italian	36	20	7	35	2	69
Ger/Aus	48	32	4	16	0	25
Polish	20	20	10	50	0	10
Hungarian	33	44	11	11	0	9
Total	28	17	8	41	6	464

Source: Light *fichas*, primarily the second half of the 1920's

The results presented above show that there was minimal discrimination against workers of certain nationalities once they were hired into the formal labor market. More importantly, Brazilian workers were not among any of the discriminated groups. Portuguese workers were the one group that did experience systematic labor market discrimination in that they were hired disproportionately into unskilled positions. However, since the previous section showed Afro-

Brazilians and women experienced the greatest barriers to entry into the formal labor market, it is likely that discrimination in the formal labor market will be higher for these two groups than for the Portuguese worker.

Racial Discrimination

The results for racial discrimination are limited to the two firms for which racial evidence is available: Paulista and Jafet. Even within those two firms, race evidence is minimal. However, the statistical analysis reveals mixed results that are polemic, at least in the Brazilian historiography context. First is the question as to whether a worker's race affected the probability that he or she would be hired as an unskilled worker. The evidence in table 4.1 shows that there was no major difference in the racial composition of unskilled workers, metal workers or manager or foremen. The results on wages also do not show any statistically significant difference between whites and non-whites, and in the Jafet case, the log wages for white workers in the sample, on average, were actually lower than the log wages for non-white workers. The story told by these regressions is a logical one. As demonstrated in the previous section, Afro-Brazilians found it more difficult to get hired in the formal labor market than white Brazilians. However, once getting hired, there is no evidence of wage discrimination in the formal labor market.

Gender Discrimination

Like Afro-Brazilians, women faced significant barriers to entry into the formal labor market: Paulista and Light were all-male companies! The regression results and complementary evidence on the number of looms that men and women tended at Jafet, however, show that women faced significant inequality even in what was supposed to be one of the most egalitarian positions. The evidence on unskilled positions is the most telling. At the Jafet textile factory,

women were between 14.7% and 20.7% more likely to be hired into unskilled positions (table X of appendix 4.1), and in the Paulistano labor market women were between 38.7% and 46.6% more likely to be hired into unskilled jobs than men!²⁵⁷ Furthermore, women were almost completely excluded from highly skilled positions: there was only one female *contra-mestre* that appeared in the Jafet sample of workers.

This gendered labor market inequality persisted in the recorded wages. In the market as a whole, females made just 83% of the male wage. Even at Jafet, which employed largely unskilled and semi-skilled workers, female workers made statistically less than male workers. Although the male to female wage ratio is relatively high compared to other early industrial economies, the following chapter of this dissertation will show that because this percentage also includes child workers' wages, it is artificially high. The difference between male and female wages was much greater during a woman's childbearing years.

Further evidence on gender inequality comes from an analysis of the number of looms that men and women weavers tended at Jafet. In general, the weaver position was thought to be one of the most equal positions; however, my evidence on looms tended contradicts this assumption.²⁵⁸ Employee entry cards fail to record wage data for piece-rate employees and four hundred workers in the Jafet sample were hired as weavers. Fortunately, there are remarks about the number of looms tended for thirty-two weavers hired between 1919 and 1922.²⁵⁹ Of the group, six employees tended four looms, one tended three looms and twenty-four tended two looms. Gender was the most important distinction between these groups. Whereas twenty-three

²⁵⁷ These results are based on unskilled profession as defined by P-H as opposed to HISCO

²⁵⁸ Cite literature that weavers thought to be the most equal positions (Ribeiro, 1912 study, etc.)

²⁵⁹ The daily wages for these individuals were recorded on *fichas* emitted in 1931 or 1932 and that were developed for the *Lei de Ferias*. The machines information was recorded on the small *fichas*.

of the twenty-four individuals in the group tending two looms were female, five of the six tending four were male. The person tending the three looms was an Argentinean female.²⁶⁰ In other words, male weavers had the opportunity to make almost 1.75 times what female weavers did.

These results on national, racial and gender discrimination enrich our understanding of the Paulistano reality during the Old Republic. In comparison to the average Brazilian male worker in the city, Portuguese, Afro-Brazilians and women faced a grimmer reality. For Portuguese workers, employers saw them as unskilled and it was harder to get hired into skilled positions, even if they were qualified for the jobs. Afro-Brazilians also found it harder to be hired into skilled jobs, but in contrast to Portuguese workers, just getting hired at any job in the formal labor market was an accomplishment for Afro-Brazilians, who faced considerable hiring discrimination. Finally, women faced the greatest number of obstacles in getting fair compensation. Excluded from many jobs, hired disproportionately into unskilled jobs and for a lower wage than their male coworkers, this single group faced the hardest reality in the Paulistano labor market.

Part IIIB: Results for Importance of Literacy

An equally important question for Paulistano and Brazilian historiography is how important development and innovation were in this early industrialization period. Although consistent evidence on such improvements are not available for the four firms, calculating how important literacy was in determining wages and labor market opportunities can provide some insight into this question. The evidence shows that there were minimal structural changes during

²⁶⁰ The average age for all three groups was between 18 and 20 and there were twenty Brazilians in this subset of weavers (62.5%).

the period: São Paulo's early industrialization was best classified as a high labor to capital ratio that depended on little technological and managerial improvements.

The statistical evidence shows that literacy had a minimal impact on log wages and labor market opportunities. At the city level and firm level, literacy mattered little in deciding who was hired as a metalworker or in a management position. However, literate workers were 17% less likely to be unskilled workers in the city as a whole and 31% less likely to be unskilled workers at Light (a statistically significant result). Concerning wages, there was only minimal evidence that literacy may have meant a higher wage at the Jafet textile factory. This result, however, does not necessarily mean that literacy did not matter for workers in São Paulo. Literate individuals may have been more likely to get jobs in the formal labor market in the first place: they would have been able to read job announcements and employers may have used literacy as criteria in the hiring process.

Given that this period was one of early industrialization, it is not surprising that literacy is not a more important variable in determining a worker's wage or labor opportunity. At first, experience would have been valued over the ability to read and write. However, in a relative sense, it is noteworthy that a worker's nationality, race and gender was each a more important determinant of his or her labor experience than literacy. Within this context, the city of São Paulo would have seemed like quite an unequal and unfair labor environment.

Part IV: Conclusion

The rapid growth in the city of São Paulo during the Old Republic made for exciting opportunities, but it also made for turbulent conditions and a high level of uncertainty. For the working class, this meant struggling for steady employment and for higher wage. Showing whether certain individuals had more opportunity to be successful in these pursuits is the aim of

this chapter. The evidence on entering the formal labor market, on getting hired at certain skill level and on real wages show that Portuguese, Afro-Brazilians and women faced differing levels of labor market discrimination during the Old Republic. The greatest inequality for these individuals was not recorded in wage differentials, but rather in the opportunities both for getting hired and for skilled employment that a worker had. Female workers faced the most consistent barriers to higher wages and more skilled positions. In the case of Afro-Brazilians, it is likely that prejudice explains their hardships in the Paulistano labor market. However, for Portuguese and female workers, it is likely that statistical discrimination helps explain their labor market experiences. Portuguese residents in the city were less skilled than other groups (see chapter two) and employers would have made initial hiring decisions based on this knowledge. In the case of women, the expectation that they would get married and start a family likely discouraged employers from offering them better positions or higher salaries. Given the magnitude of discrimination that women faced and the extreme dearth of quantitative studies on gender inequality in São Paulo and Brazil during this important period, I dedicate the next chapter of the dissertation to working females and the specific challenges they faced in the labor force.

The impact of these wage differentials and reduced opportunities would have been more than just a matter of a lower salary. In an environment where most families were barely subsisting in squalid tenement housing, a better job could have meant the difference in being able to afford put food on the table. Even in families of higher socio-economic status, more opportunity and a higher income might have meant sending another child to school instead of to work in the factory. The long-term impact of such a decision on human capital accumulation has yet to be explored in the Brazilian context. Although such a study is beyond the scope of this dissertation, the evidence presented here confirms the need for such a study.

Chapter 5: The Working Paulistana Woman

At the age of 29, Dona Maria Clayton applied to become a head seamstress at Loja Mappin, one of São Paulo's premier department stores. It was 1922 and after years of training, she was ready leave her own atelier office for the prestige and benefits that working for Mappin could offer. Once hired at Mappin she was not only a seamstress, but also trained other employees. She also received discounts on merchandise and even went to Europe every three to four years to buy clothes. Dona Maria Clayton made quite a career at the department store. But up until 1920, she was in many ways the typical Paulistana woman: a daughter of Portuguese immigrants raised with several brothers and sisters by a single mother, a wife to a Swedish immigrant, a mother to three children of her own. However, at the age of 27, she became one of the first women in São Paulo to legally separate from her husband. Even more shocking for her day, she remarried an Englishman and sent her children to be raised by relatives. She eventually moved with her husband to Europe, but not before making a name for herself at Mappin. Dona Maria's determination to confront social norms and stigmas in both the professional and personal spheres of her life made her a truly notable woman.²⁶¹

Clayton's choosing her career over traditional motherhood is even more remarkable given the complex series of obstacles women faced when it came to laboring in wage earning positions. Although Dona Maria Clayton's case is exceptional, it highlights a serious void in our understanding of working women in the early industrialization and urbanization of the late-nineteenth and early-twentieth centuries. We still do not fully understand why mothers chose to remain in the formal labor market in the first half of the twentieth century. There is no reason to assume that all women who remained in the workforce upon getting married or having children

²⁶¹ Interview with her son. Senhor Guilherme Pauli, interview and notes by Solange Peirão, 1984, box2 doc 48, *Mappin*, MP, SP, Brazil. Also see Nelly Colson, interview.

did so out of necessity, and yet that is how most female labor force participation is interpreted.²⁶² This chapter addresses this void by looking at working married women in the city of São Paulo's formal wage labor market during the early twentieth century.²⁶³ The chapter also provides a much richer understanding of the gender wage differentials and discrimination that women faced in the formal labor market. While scholars have acknowledged the presence of these wage differentials, their studies look at aggregate data and thus only address overall wage differences between men and women. Scholars have not studied the wage discrimination a woman faced over her working lifetime.

I am able to address both a working mothers' decision to remain in the labor force and the wage differentials over a working woman's lifetime by using individual-level employment data in two prominent São Paulo firms, the Mappin department store and the Jafet textile factory.²⁶⁴ The chapter is divided into three sections. I first look at young women and their decision to leave or remain in the labor market upon getting married or having a child. I find notable married female participation among women of all ages in both middle- and working-class labor forces. Although most women did exit the wage labor force upon getting married or having a child, some women chose to remain in the workforce. This evidence shows that future studies of working mothers and wives for the early industrialization period should consider that some women wanted to continue working. The chapter proceeds by looking at gendered wage

²⁶² For example, see Hahner, *Poverty and Politics*, 204: "Even a high rate of female employment may denote large-scale relegation to low paying... whose major social function is to supplement low family income or to support families without male heads of household."

²⁶³ This chapter does not consider the informal labor market, reproductive labor or domestic workers (who are reported as working in the formal labor market in the 1920 Brazilian Census).

²⁶⁴ The Jafet textile factory is based on 1369 individuals hired at the company between 1910 and 1929. These individuals are a 20% sample of the available employee entry cards for the company. The Mappin department store data is based on an employee wage spreadsheet and includes 235 individuals hired at the company between 1914 and 1930. See chapter three of this dissertation.

differentials based on the age of working females in the formal São Paulo labor market. For young girls I look at school enrollment rates and wages and find both relatively equivalent for boys and girls. I find that gender wage differentials appeared around age twenty. Furthermore, I find that females of all ages had much fewer opportunities than men and that there is evidence of statistical discrimination persisting throughout a woman's childbearing years.

Although the challenges working women in São Paulo faced described in this chapter are similar to those that working women in many early-industrial societies faced, this chapter contributes significantly to our understanding of women's working decisions to remain in the workforce. It also provides the first measure of labor market differentials for Brazil. In light of these important differentials, I attempt to explain why gender discrimination is largely absent from the Brazilian historiography by looking at the relative importance of gender and class differences during the period. Since class differences were much more pronounced, I surmise that these class differences overshadowed gender disparities in São Paulo's Old Republic and in subsequent studies of the period.²⁶⁵ Finally, I conclude by emphasizing the importance of examining the impact of gender differentials on the next Paulistano generation.

Part I: The Demand for Mothers, Wives and Workers

Industrialization challenged the traditional positivist model that idealized women as wives, mothers and homemakers, and as the moral basis of the family. In São Paulo, industrial growth called for women to keep proper homes, to make sure their husbands were efficient workers and to rear future workers, but exponential commercial and factory growth also meant

²⁶⁵ Questions and studies of racial inequality also overshadow questions related to gender inequality. For a preliminary measure of racial wage inequality, see chapter four of this dissertation.

an increase in available work and many women left the home in search of jobs.²⁶⁶ In some ways, the Old Republic offered women a degree of flexibility when it came to working outside the home that they had never before experienced.²⁶⁷ The traditional historiography assumes that women who worked past marriage and motherhood did so out of necessity. I contend that in spite of heavy criticism, at least some middle- and working-class women chose to remain in the labor market.²⁶⁸

Almost eighteen percent of São Paulo's female population was formally employed, and the largest share worked in the clothing and beauty sector, followed by women and girls employed as domestics and then by those in the textile industry.²⁶⁹ Given the importance of both the clothing and beauty sector and of the textile industry as well as the availability of employment data, I use company records for employees at the Mappin department store and in

²⁶⁶ CIFTSP, circular 397, 31 Dec 1924. Since both parents worked in many households, industrialists sometimes set up schools in textile factories for workers' children. The industrialists argued the schools were "[making] female labor more efficient" and "preparing a new generation of laborers—sound in body and spirit" CIFTSP, "Relatório E Balanco: Exercício 1925-6," Feb 1926.

²⁶⁷ Wolfe states that limits on female night employment, a condition in the post-1917 General Strike, would limit women much earlier. Although these stigmas did exist, employment evidence shows that women were still active in the workforce in the 1920's. Joel Wolfe, *Working Women*, 21. Besse argues that "the modernized gender system" of the 1920's and 1930's legitimized male domination later on. Susan K. Besse, *Restructuring Patriarchy: The Modernization of Gender Inequality in Brazil, 1914-1940* (Chapel Hill: University of North Carolina Press, 1996), 9.

²⁶⁸ When considering lower class women, historians have failed to entertain that some women chose to remain in the labor force. Teresa Veccia, "My Duty as a Woman": Gender Ideology, Work, and Working-Class Women's Lives in São Paulo, Brazil, 1900-1950," *The Gendered Worlds of Latin American Women Workers*, ed. John D. French and Daniel James, (Durham, NC: Duke UP, 1997); *Ibid.*, "Family and Factory: Textile Work and Women's Lives in São Paulo, Brazil, 1880-1940," (Ph.D. dissertation, University of Wisconsin-Madison, 1995); June Hahner, "Feminism, Women's Rights, and the Suffrage Movement in Brazil, 1850-1932," *LARR*, 15.1; Soihet, *Condição Feminina e Formas de Violência: Mulheres Pobres e Ordem Urbana, 1890-1920*, (Rio de Janeiro: Forense Universitária, 1989). Besse briefly suggests that some middle class women may have wanted to work Besse, *Restructuring Patriarchy*, p138-40.

²⁶⁹ The Census reports 285,026 female in the city of São Paulo, 51,003 of whom worked. Of these, 20,958 worked in the clothing and beauty sector, 12,729 worked as domestics and 6,072 worked in the textile industry. *Recenseamento*, 5.4, 786-7.

the Jafet textile factory to look at young women of a marrying age in the São Paulo Old Republic labor market.²⁷⁰

Before looking more closely at these employees at Mappin and Jafet employees working after marriage or motherhood, it is important to understand the criticism that women in the workforce faced. Even labor newspapers claimed that the entry of women and children into the workforce led to more male unemployment and to the creation of a new class of men called *chupias*. The word literally references sucking, but in the context was described as a man living off his wife's and children's salaries. Given the perversion of the typical family structure, the journalists, as men of "principle," vowed to fight against this trend.²⁷¹ Businessmen saw working women as unnatural, citing that women had neither the making nor the aspiration to work in commerce and explained that women received lower pay because "the home calls them."²⁷² Male coworkers also opposed female employment. For example, during most of the Old Republic, restaurant and hotel servers were male. However, in the late 1920's, a number of São Paulo restaurants and cafés began employing waitresses. When employers threatened to replace male servers with women, waiters called for an organization against waitresses.²⁷³ São Paulo's changing labor market may have presented some new opportunities for women, but the opposition and challenges they faced made advancement an uphill battle. This was especially true for those women hoping to work after getting married and while being mothers.

²⁷⁰ Based on the city's marriage patterns, I define women twenty and above as being of marrying age. See note 275.

²⁷¹ Florentino de Carvalho, "Em Defesa Dos Menores Martirisados," *Guerra Sociale*, March 24, 1917.

²⁷² Lellis Vieira, "Commentos E Reflexões," *Revista de Commercio e Industria*, May 1919, 143-4. The author further states "the role of marriage is to put *Evas* in their places" [my italics]. Original "o casamento se encarrega de collocar as Evas nos seus lugares."

²⁷³ Waiters were up in arms over the "unwanted interference" and saw it as an "adaptation of the botequin system in Braz" where young girls were barmaids. Braz was the largest working-class neighborhood in São Paulo. "Café Atlantico: Os Empregados Em Cafés E as Garconettes," *O Internacional*, May 1, 1929.

Evidence on tenure and from interviews at São Paulo's Mappin department store shows that while most middle class women quit work upon getting married, some women, like Dona Maria Clayton introduced at the beginning of this chapter, chose other paths. One of the first department stores in São Paulo, the Loja Mappin, employed a number of middle-class and lower-upper-class Paulistana women. Between 1914 and 1930, sixty-one of the 253 employees the company hired were female. Although most women were seamstresses (21) and saleswomen (26), a few held secretarial and managerial positions. Since most employees at Mappin were middle class and would have spent their childhood and adolescence in school, the average starting age for female employees was twenty years old. These young women then worked for an average of eight years. Seamstresses, as I demonstrate later in this chapter, were arguably from a lower social standing and averaged an entry age of seventeen and left the firm after 7.1 years.²⁷⁴ These start ages and tenures are consistent with data on marrying ages in the city, which steadily increased over the period. The trend was accelerated in the more affluent areas of the city and retarded in the periphery neighborhoods.²⁷⁵ Employees at Mappin would have left at a reasonable marrying age: twenty-eight for all female employees and twenty-four for the less affluent seamstresses.

Interviews from former Mappin employees confirm that most women quit working upon marrying. Nelly Colson, Angela Sgarro Specchio, and Antonieta da'Bello Perrota all worked at

²⁷⁴ The twenty year-old average includes all workers. If only vendors are considered, the average start age was nineteen and average employment 8.7 years. The argument that seamstresses were of a lower social standing will become clear later in this chapter. Mappin, MP.

²⁷⁵ Although most women (55%) in São Paulo married between the ages of fourteen and twenty in 1901, by 1913 almost 60% of the population married at age twenty or older, *Anuario Estatístico 1901*, 403; *1913*, 8. In 1910, 9% of brides in the more affluent downtown neighborhoods of Sé, Consolação, Santa Ephigênia and Santa Cecília were between 26 and 30. By 1915, their share increased to 10.1%, and by 1919 was at 15.8%. By 1927, towards the end of the Old Republic, 17.3% of brides in those four neighborhoods were between 26 and 30. The share of brides between 26 and 30 for the entire city was lower in each of the respective years, at 7.8%, 7.1%, 11.2% and 13.0%. São Paulo (state), *Anuario Estatístico De São Paulo (Brasil): Movimento Da População*, [various years], (São Paulo, Brazil: Typ do Diario Official). For 1910 *Anuario*, 205; 1915, 84; 1919, 157; and 1927, 136.

Mappin until they got married. Nelly Colson was a daughter of American immigrants living in a town in São Paulo's interior, Americana. After becoming a widow at the age of twenty-six, she moved to the city of São Paulo and was hired at Mappin. It was the first time in her life that she had worked. The company sent Nelly to England for training and when she got back, she worked in the beauty salon, earning 600\$000 per month plus commissions.²⁷⁶ She made in an hour what women employed in the textile industry made in a day. Still, as soon as she got married, she quit working at Mappin.²⁷⁷ Angela and Antonieta were daughters of Italian immigrants, and although they were of a lower social class than Nelly Colson, both also quit working as soon as they got married.²⁷⁸

Although Nelly, Angela and Antonieta were the norm, interviews that describe other Mappin employees—Mademoiselle Rosenthal, Leonor Perrone, Helena Rubenstein and Maria Clayton—show that some women did work beyond the marrying age.²⁷⁹ These women did advance their careers, but often at the expense of marriage or by rejecting the responsibilities of motherhood. Mme. Rosenthal was a single, French woman who was head of the porcelain division. Leonor Perrone started off in the presents division, then moved to the porcelain division before becoming a milliner and department head. She retired from Mappin in 1979, never having married, as she had promised her parents that she would not. Helena Rubenstein was a unique

²⁷⁶ The *mil-réis* was the standard currency in Brazil through 1942. One *mil-réis* was written as 1\$000. Large sums of money used the *conto*, which equaled 1,000 *mil-réis* and was written as 1:000\$000. Small sums like \$500 were 500 *réis*. Thus, Colson earned 600,000 *mil-réis* per month plus commissions.

²⁷⁷ Nelly Colson, interview with notes by Solange Peirão, 1984, box2 doc32, *Mappin*, MP, SP, Brazil.

²⁷⁸ Angela Sgarro Specchio, interview and notes by Solange Peirão, 1984, box2 doc66, *Mappin*, MP, SP, Brazil; Bartolomeu Perrota and Antonieta Dal Bello Perrota, interview and notes by Solange Peirão, 1984, box2 doc53, *Mappin*, MP, SP, Brazil. Angela started working at age twelve. Antonieta sewed buttons onto clothes and worked at Mappin from 1924 to 1927.

²⁷⁹ Unfortunately there is not information on the marital status of other high-ranking women at Mappin, such as the clothing designer Dona Inês, and the beauty assistant Lory Dawson. For mention of Dawson see Nelly Colson, interview. For mention of Dona Inês, see Leonor Perrone, interview and notes by Solange Peirão, 1984, box2 doc52, *Mappin*, MP, SP, Brazil.

case. She was married to a Light engineer and could not even speak Portuguese. Nevertheless, she was hired into the beauty department only to leave six months later. It seems she was hired due to her British citizenship rather than for her skills.²⁸⁰

Now I return to the case of Dona Maria Clayton, the Mappin head seamstress who divorced her first husband and sent her children to live with relatives. An exceptional woman of her time and an example of social mobility, Maria Clayton followed her own desires rather than conscribe to society's gender and class norms. Her story is intriguing because in order to pursue her career at Mappin, she rejected the two roles most associated with women at the time: that of wife and mother. First, she divorced her husband; then, she sent her children to be raised by relatives. Like Leonor Perrone, who swore she would not marry, being a middle- or upper-class woman and having a career in Old Republic São Paulo often meant rejecting social conformity.

Similar to middle-class women, most working-class women seemed to exit the industrial labor force upon getting married. Scholars largely assume that the strain of family life and São Paulo's high cost-of-living coupled with low wages meant that some women who may have wanted to leave the labor force were forced to stay by necessity. However, those working-class women that did remain in the workforce faced less criticism than their middle- and upper-class counterparts, and it is possible that some working-class women chose to remain in the industrial workforce.²⁸¹ From a research perspective, this contradiction provides a challenge when looking at the decisions and desires of working-class women to leave the labor market. To overcome this obstacle, I look at the work tenure and entry patterns of single and married women of different

²⁸⁰ See Leonor Perrone, interview, and João Batista Masetti, interview and notes by Solange Peirão, 1984, box2 doc42, *Mappin*, MP, SP, Brazil. for Rosenthal. See Nelly Colson, interview, for Helena Rubenstein.

²⁸¹ The fact that industrialists sometimes set up schools in textile factories is evidence that female employment was accepted CIFTSP, "Relatório E Balanco: Exercício 1925-6."

nationalities at the Jafet textile factory. Data suggest that Spanish women worked past marriage and throughout motherhood out of necessity, but Italian women chose to continue working.

Even with meager salaries and high inflation, it was possible for working-class women to leave the factory. In a 1935 *Revista do Arquivo Municipal de São Paulo* study that surveyed 221 working class families, there were 235 working adult males and 64 working adult females. In other words, adult males were almost four times more likely to work than adult females.²⁸² In a study of female textile employees at the S/A Cotonificio Paulista in 1935, the author found that about one third of the female employees above the age of thirty were married.²⁸³ Marital status of Jafet workers suggests similar patterns for the Old Republic period. Of the 859 women registered in the Jafet sample, only 27.5% were married.²⁸⁴ This did not necessarily mean that a woman stopped working once she was married—as the Mappin interviews reveal, a woman could often work from home on a piece-rate system as a seamstress or embroideress—but she often did exit the industrial labor force.²⁸⁵

The low labor participation of married women does not exclude the possibility that some working-class women wanted to work; however, on a whole, scholars ignore this hypothesis. Most depictions of Old Republic São Paulo portray the working class mother as forced into work when the man could not adequately provide. The 1935 *Revista do Arquivo Municipal* study suggested that a mother of two children “prefer[ed] not to work outside the home” and only went

²⁸² H.B. Davis, "Padrão de Vida," 127-8. Although some of the homes may have had a female head-of-household and adult children counted among the working members of the family, the ratio of male to female workers is still indicative that men were more likely to work than women.

²⁸³ Veccia, "My Duty as Woman," 124-6.

²⁸⁴ Jafet fichas. This includes all females, including young girls. Women under twenty were by far the largest age group of workers, representing 65.7% of the female labor share. It is important to note that majority of these Jafet observations come from the end of the Old Republic in the mid to late 1920's.

²⁸⁵ José Colassuono, interview and notes by Solange Peirão, 1984, box2 doc84, *Mappin*, MP, SP Brazil. Bartolomeu and Antonieta Perrota, interview.

to work out of necessity. The author offered an example as support, where a mother of three children, the youngest a mere nineteen days old, returned to work only after her husband became unemployed.²⁸⁶ An allegory printed in the working class newspaper *O Internacional* offers a more graphic description. The story depicts workers in a dangerous, unhealthy and depressing textile factory. Amid the drone of the machines, one of the workers screams, and it turns out that the pregnant woman has given birth. The story ends with the moral to its readers that “It’s a laboring woman’s life: to work pregnant until she gives birth.”²⁸⁷ The S/A Cotonificio study proposed that “whether or not women continued to work in the textile mills after marriage or after they became mothers essentially boiled down to a matter of money.”²⁸⁸

A survey of 314 immigrant women who worked in the Philadelphia, Pennsylvania region in the early twentieth century supports the hypothesis that some female labor force participation could be explained by choice. (Unfortunately, to my knowledge, a similar study does not exist for Brazil or other Latin American countries.) The survey approached women who had left the workforce upon getting married but who had eventually returned and found that 67.8% returned out of necessity, but 20.1% reported returning “to buy a home or furniture” and 6.1% returned to improve their family’s standard of living or to raise money for later in life.²⁸⁹ Another possible motivation would have been the camaraderie that these women would have found working

²⁸⁶ Davis, "Padrão De Vida," 130-2.

²⁸⁷ "Contos: Na Fabrica," *O Internacional*, June 15, 1924. In her description of daily life in factory housing, Dona Cinta recalls “all women worked, even when they had newborns.” Dona Cinta, interview by Rúbia Barreto, 1980's, *Projeto Maria Zélia*, Museu da Cidade, Acervo Historia Oral, SP, Brazil.

²⁸⁸ Veccia, 124-6., "My Duty as Woman". Veccia finds that 51% of the women working at the firm were single and that for women above age thirty, only about thirty-three percent were married. The author's graph showing that married women stayed at the firm for longer suggests that even when a family's economic status improved, some women stayed at work, 126.

²⁸⁹ Caroline Manning and United States. Women's Bureau., *The Immigrant Woman and Her Job*, Reprint ed. (New York: Arno Press, 1970), 51. Manning's study looked at 2000 immigrant women in the regions. The survey did not address the 556 women who did not take time out of the workforce after marrying.

amongst their peers in a factory setting. To suggest that all married, working women in São Paulo did so out of necessity robs these women of the agency they should be afforded. I look at employment patterns by nationality from women at Jafet to suggest that some working class women's decisions to remain in the workforce were not, in fact, a matter of necessity.²⁹⁰

What follows is an analysis of working-class women's motivations to go to work. In particular I address whether a woman's nationality impacted her decision to work while married. The largest age group of workers recorded in the Jafet *ficha* sample was the fifteen to nineteen cohort and these individuals were overwhelmingly single (93.97% for females and 95.45% for males). However, when looking at the twenty and over population, the data shows that women were more likely to be married than not.²⁹¹ As a first step, I break down the data on marriage patterns of women aged fifteen and older by nationality: the results, shown in table 5.1, reveal some interesting patterns. I find Italian women, in direct contrast to Brazilian, Spanish, Austrian and German women, were more likely to be married than single.

	All	Braz	Port	Ital	Span	Aus/ Ger	Syr
Number married women	236	122	15	35	31	4	12
Number single women	406	272	16	29	52	7	12
Ratio (Married/Single)	0.58	0.45	0.94	1.21	0.60	0.57	1.00
Source: Jafet <i>fichas</i>							

These results are consistent with the results in figure 1 where Italian married women, on average, stayed at the company longer than Italian single women. These results suggest that a woman's

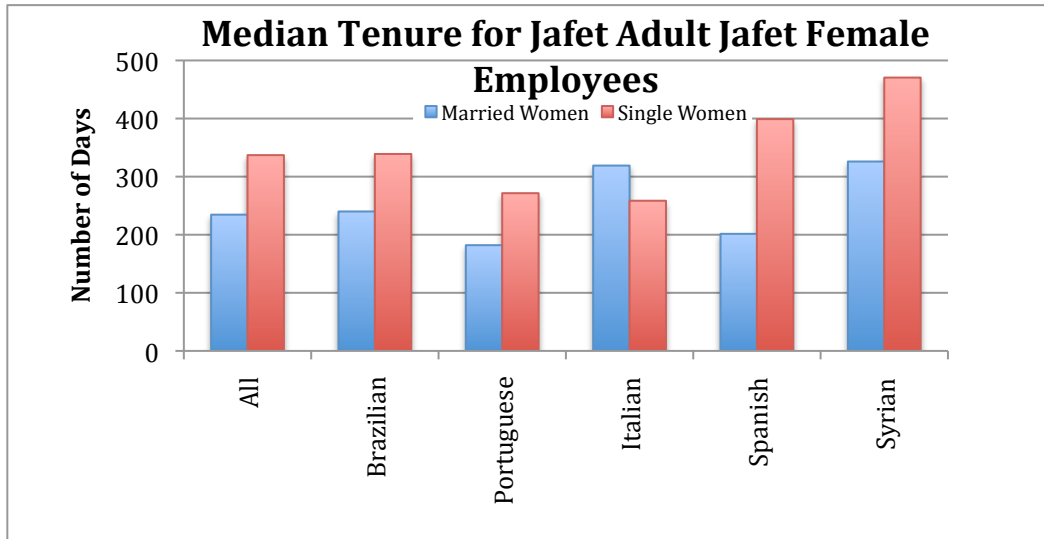
²⁹⁰ The decision to look at different nationalities was an attempt to separate women along national preferences. This does not preclude that other characteristics could influence these women, but given the limited data, nationality is the best available subgroup for analysis.

²⁹¹ For women ages 20-24 (136 observations), 51.5% were married; for 25-29 (70), 84.3% were married; for 30-34 (43), 79.1% were married; for 35-39 (40), 63.3% were married; and for women forty or older (32), 62.5% were married. Married men at Jafet became the majority starting at age 25. This evidence is congruent with the marriage age for women available in the São Paulo *Anuario Estatísticos*. See note 14.

decision to stay in the workforce may have been influenced by her nationality. (See Table I in appendix 5.1 for figure 11 data.)

I then look at the difference between work tenures among females for greater insight into why an individual might go to work. The logic being that if a married woman of a certain nationality spent less time at a firm than her single compatriot, the married woman's employment may be a sign of greater economic necessity. I compare the median tenure of married and single women of different nationalities aged fifteen and older in figure 12 below. I find that except for Italians, married women stayed less time than single women at Jafet and that Spanish workers recorded a significant decrease in tenure among married women.²⁹² I interpret these data as support that Spanish married women may have worked out of necessity, whereas Italian married women may have wanted to work.²⁹³

Figure 12



²⁹² In her study of female workers at the S/A Cotonificio Paulista textile factory from 1935, Veccia finds much longer tenures for married women. Veccia, "Family and Factory", 332, figure 3.

²⁹³ I use a t-test to see whether Italian married women stayed longer or whether Spanish married women stayed less time. Results for Italian married women are statistically insignificant. However, results for Spanish married women show they stayed statistically less time (to the .05 level) at the firm. Linear regression results show the correct signs, but no statistical significance for the married Italian women or married Spanish women variables. The table used to construct figure 4.1 is found in this chapter's appendix.

Finally, I look at employment patterns of married women during the 1926 and 1927 industrial crisis to further clarify the impact nationality had on a married woman's employment decisions. During these years, textile factories often operated with reduced hours and in some cases only three days a week.²⁹⁴ Married women were ideal employees for the part-time employment factories could offer. First, many women would have been looking for temporary jobs to supplement household incomes when a husband's hours were cut back. Second, women often worked informally from the home and would have been deterred from factory employment because of the fulltime commitment. During the Industrial Crisis, wives and mothers could have worked these same hours in the factory. Thus, I expect to see a spike in hiring of married women during this period. If a certain nationality were harder hit by the industrial crisis, I would expect to see an even greater spike in married female hirings.²⁹⁵ Figure 13 depicts Jafet hiring practices during the 1920's, and highlights hiring during the industrial crisis. The results show that only 23% of the individuals in the Jafet sample were hired during 1926 and 1927. This share rises to 26% for all females, but jumps to 33% for married females. The increase in employment among married Spanish females is more notable, constituting almost 60% of the married Spanish female sample. This evidence further supports the argument that married Spanish women worked out of necessity.²⁹⁶ (See Table II in appendix 5.2 for figure 13 data.) Non-factory evidence also supports this conclusion. The 1935 *Revista do Arquivo Municipal* study of working class incomes and consumption showed Spanish households with the lowest levels of 'luxury'

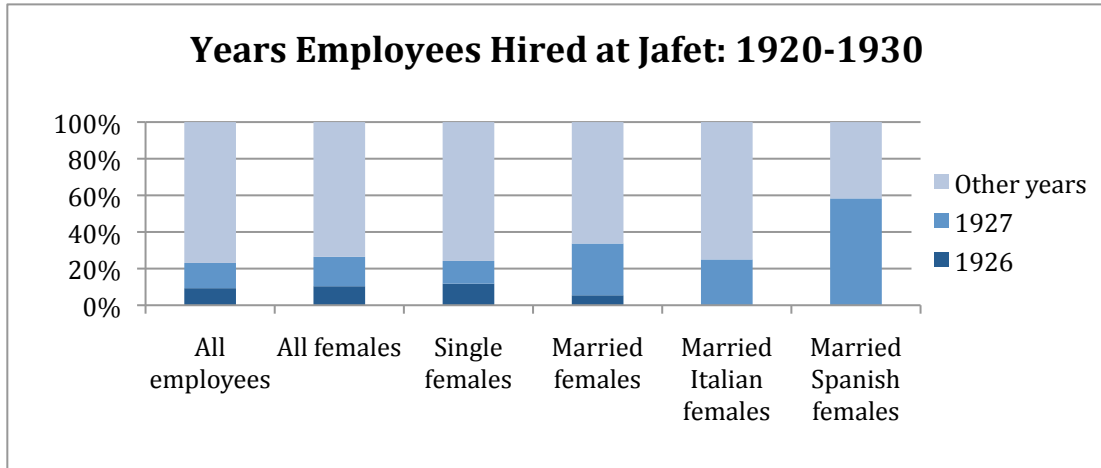
²⁹⁴ CIFTSP circulars 596, 603, 605, 606 and "Acta da CIFTSP General Assembly" July 6, 1926.

²⁹⁵ Goldin highlights the correlation between more part time employment in the United States and an increase in working married women (p165, chap 6)

²⁹⁶ There is also the possibility that Italian women had greater social networks than Spanish women, allowing them to look for work outside of the home. However the significant Spanish migration to the city makes this explanation less plausible.

consumption.²⁹⁷ Fully exploring for the impact of culture and nationality on a woman’s decision to stay in the workforce lies beyond the scope of this dissertation; however, it is an interesting question for future discussion.

Figure 13



Although for some women working was not a choice but rather a matter of family survival, other women, such as the young women working at Mappin and some at the Jafet textile factory, did have a choice. Distinguishing between choice and necessity is an important distinction that is often left out of the literature and robs these women of their agency. For the middle-class women at Mappin, remaining in the workforce meant rejecting the roles of wife and mother. Working-class women at Jafet probably faced less opposition when they continued to work but were still greatly in the minority among their peers. These women chose to continue working in spite of the prejudices and difficulties that they knew they would face. In the next two

²⁹⁷ In the study, I look most closely at milk and cheese consumption because these goods were somewhat of a luxury among staple goods. Although some other consumption patterns were likely cultural (in particular in terms of pasta and fish consumption), milk consumption was so deficient that consumption would have increased with a family’s income. The average family spent 9% of their budget on milk and cheese: Italians spent 10%, German, Austrian, Lithuanian and Polish households spent 11%, Spanish spent 6% and Portuguese spent 8% Davis, "Padrão Da Vida," 148., table 9. See p166 for his Davis’ description of milk deficiency in the Paulistano diet.

sections, I look more closely at both the gender wage differentials and the class differences that these women encountered.

Part II: Gendered Differences

The fact that some women chose to remain in the workforce in spite of gendered wage differentials makes their choices even more remarkable. Women in Old Republic São Paulo occupied significant shares of the education, healthcare, domestic, commerce and textile labor markets. I investigate both young girls and adult women employed in the textile and commerce sectors of São Paulo because of the rich data available on these sectors. The primary data comes from Jafet and Mappin employment records and is complemented with information from city almanacs and official statistics. The evidence shows minimal wage differences between working girls and boys, but a marked difference in working opportunities. Adult females confronted both reduced labor opportunities and significant wage differentials that started around age twenty and persisted through their childbearing years. The long-term implications of these gendered wage differentials have yet to be fully appreciated.

I first look at enrollment and literacy rates to approach gendered differences among the young Paulistano population. Since schooling was mandatory for two years, these rates should reflect relative equality among boys and girls. The state's official statistics reported that by 1910 over 93% of the city's school-aged population was enrolled in school, but attendance rates and education quality show that official statistics did not reflect the Paulistano reality. A 1910 attendance estimate shows that only 75% of enrolled students actually attended schools.²⁹⁸ Early twentieth century classroom data confirm poor attendance.²⁹⁹ In addition, order and attendance

²⁹⁸ São Paulo (state), *Anuario Estatístico, 1910*, 215.

²⁹⁹ Attendance was sporadic throughout the period among all schools. Records for elementary schools are available in various books in the Secretário do Interior series, Instrução Pública subseries at the state's Arquivo Público do

were the main concerns of the official school inspectors, not the deplorable literacy rates and the poor teacher quality that permeated the system.³⁰⁰

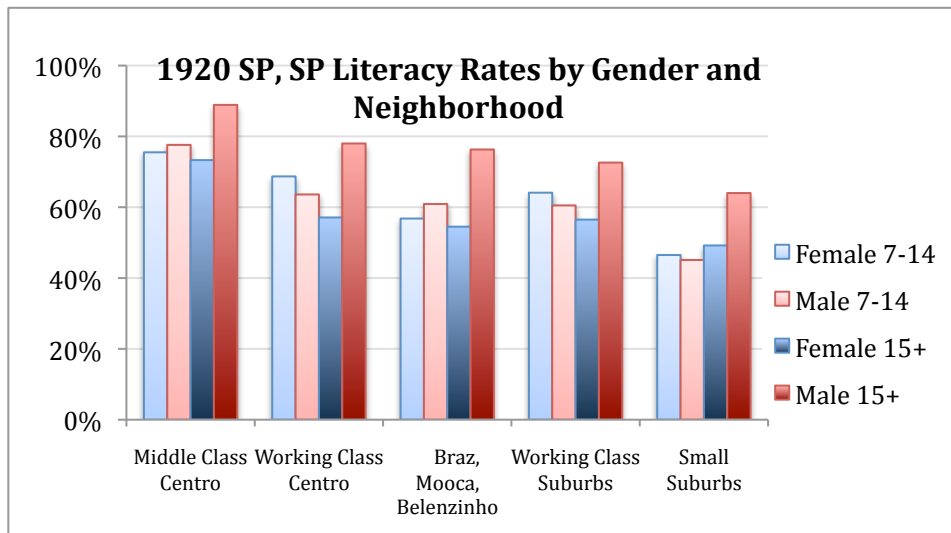
Given the poor attendance rate and school quality, literacy rates reported for boys and girls in São Paulo's individual neighborhoods in the 1920 Census offer another glance at gendered differences among young Paulistanos. The rates are combined into neighborhood groups and appear in figure 14. The rates reveal a narrowing in the gendered literacy gap for Paulistano residents born between 1906 and 1913 in comparison to residents born prior to 1906. The fact that by 1921, the male and female public school ratio was nearly equal, with 49.9% of enrolled students being male and 50.1% being female, contributed greatly to this narrowing.³⁰¹ For the earlier Paulistano generation, represented by the fifteen and older population, female enrollment rates would have been lower than male rates. (The differences between neighborhood literacy rates will be explored later in this chapter.)

Estado de São Paulo (AESP) "Turmas De Visita, Escola Feminina E Mixta Liberdade," E02227, Sep 1899– May 1910; "Turmas De Visita, Escola Mixta Belemzinho," E02243, Nov 1900–Aug 1908; "Turmas De Visita, Escola Masculino Belemzinho," E02243, Nov 1900–Aug 1906; "Livro De Presencia, Escola Feminina Rua Visconde De Parnahyba," E02332, 1894; "Livro De Presencia, Escola Feminina Barra Funda," E02447, 1898; "Livro De Presencia, Escola Feminina Rua Gazometro," E04465, 1895; "Turmas De Visita, Escola Mixta Nossa Senhora Da Penha," E02812, Oct 1900–Jan 1914; "Turmas De Visita, Escola Feminina Cambucy," E02215, Aug 1901–Aug 1907; "Turmas De Visita, Escola Feminina Sant'anna," E02202, Aug 1901–May 1908).

³⁰⁰ Multiple inspectors were assigned to a school over the years. Of the eight available inspector books (at least 24 inspectors), only two commented on literacy rates. "Turmas De Visita, Liberdade."; "Turmas De Visita, N.S. Da Penha."

³⁰¹ Marcílio, *História Da Escola*, 177.

Figure 14³⁰²



Many young Paulistanos during the Old Republic worked instead of going to school.³⁰³

Legally, child labor was regulated in the city as early as 1891, but in reality, employers rarely heeded child labor laws during the Old Republic.³⁰⁴ It was not until the 1927 Código de Menores that a concerted effort was made to curtail child employment and abuses, affirming fourteen as the minimum working age and restricting individuals under eighteen years old to a five-hour

³⁰² The source for this graph is the *Recenseamento 1920*, 4.4, 803-4. The middle class centro includes Sé, Consolação, Santa Cecilia and Santa Efigênia. The working class centro includes Bela Vista, Bom Retiro, Cambucí, Braz, Mooca and Belemzinho. The working class suburbs are composed of Vila Marianna, Sant'Anna, Lapa and Ipiranga. The small suburbs are defined as suburbs with a 7-14 female population under 1000 and include São Miguel, Osasco, Butantan, Perdizes, Penha da França and Nossa Senhora do 'O. Liberdade is eliminated from the count because of the large Japanese population in the neighborhood and the inflated literacy rates for Japanese. Paul Johnson and Stephen Nicholas, "Health and Welfare of Women in the United Kingdom, 1785–1920," in *Health and Welfare During Industrialization: A National Bureau of Economic Research Project Report*, ed. Richard H. Steckel and Roderick Floud (Chicago, Ill.: University of Chicago Press, 1997), 263.

³⁰³ The fact compulsory education in the state was only two years helps explain high enrollment and child labor rates. Infants da Costa, *A Escola*, 121. The reform came December 8, 1920 under the law nº1750.

³⁰⁴ Besse, *Restructuring Patriarchy*, 95-6. For example, the 1919 Código Sanitário that increased the minimum working age to fourteen years was largely ignored. In the Jafet factory sample, I find 320 children hired under the age of fifteen in the 1920's, representing almost a full quarter of the sample workforce hired during that decade (Jafet fichas). For further evidence of child employment, see "Relação de alguns menores que trabalham nas fábricas e nas oficinas," *Guerra Social*, 24 Mar 1917.

workday. Even then, the city's industrialists called the code "impossible" to follow.³⁰⁵ The 1935 *Revista do Arquivo Municipal* study found that of 221 families, even in 1935, seventy-four boys and fifty-eight girls contributed to their family's income, many working eight to nine hours a day. The share of working children during the Old Republic would have been much higher.³⁰⁶ The stress of maintaining a family in a city where family size was growing and prices of foodstuffs was rising while real wages kept falling increased the pressure for girls and boys to go to work.³⁰⁷

Families in need of an extra income sent boys and girls alike into the industrial labor force because for children working in the industrial sector, there was often no pay difference in jobs held by both boys and girls. Girls were most likely to be employed in textile, food, and chemical factories or in the clothing and beauty sector with the largest share, by far, in the various textile factories around the city.³⁰⁸ At Jafet, girls under fourteen represented a full 8.55%

³⁰⁵ The industrialists cited that many teenagers already had adult bodies; that in Taubaté when the code was enforced, criminality rose; and that without the labor of the 150,000 children employed within the city of São Paulo, the industries would fail, thereby eliminating these workers' incomes. CIFTSP, "Carta Dos Industrial Ao Exmo Sr. Seputado Arthur De Souza Lemos," 15 Jun 1929. Antonio Stocco describes being called out to play soccer while at work when the juiz de menores came to inspect the factory for child labor. Antonio Stocco, interview, 1980's, oficina 11, 12, 23, *Memoria Fabril*, Museu da Cidade, Acervo Historia Oral, SP, Brazil.

³⁰⁶ Davis, "Padrão Da Vida," 127-8. This study comes after the Código de Menores from 1927, which limited working hours for children under eighteen to five hours per day. Children represented just 5.3% of the workforce surveyed, while children under fourteen make up over 12% of the Jafet *ficha* sample.

³⁰⁷ For information on the high cost of living, see Wolfe, *Working Women*, 10, table 1.2; Ribeiro, *Condições*, 75, table VI. Bolsonaro de Moura contends that while women were discouraged from entering the workforce, children were often encouraged to join, providing a labor "solution" as well as controlling delinquency, abandonment and vagrancy. Esmeralda Blanco Bolsonaro de Moura, *Trabalho Feminino E Condição Social Do Menor Em São Paulo : 1890-1920*, (São Paulo: Estudos CEDHAL, 1988), 31. In an interview, Ermínia Albertinia recalls quitting school before fourth grade and going to work in order to help her family. Veccia, "My Duty as Woman," 102-3.

³⁰⁸ The 1920 Census registered 6762 working girls under fifteen in the state. Of these, 4016, 59.4%, worked in textiles; 2403, 35.5%, worked in the food industries; 409, 6.1%, worked in the clothing and beauty sector; and 321 girls, 4.8%, worked in chemical industries. *Recenseamento*, 5.2, 386-417. These statistics do not take into account the girls who worked as domestics. In the Census, 4071 women under twenty worked as domestics. Some of these women must have been under 15 *ibid.*, 5.4, 786-7.

of the workforce, whereas boys made up a mere 3.65%.³⁰⁹ When it came to wages, the 1920 Census even reported a higher average daily wage for girls than for boys in the textile sector within the state of São Paulo. Evidence from Jafet confirms that boys and girls below fourteen were paid roughly the same wage. Using a sample of the company's employee entry cards, *fichas*, I found that on average girls under fourteen made almost 90% of the average boy's hourly wage.³¹⁰ As I will show later in this section, it was not until around the age of twenty that men began to make significantly more than women in the textile industry. The fact that a girl could make just as much as her brother doing the same job would have been an incentive for struggling families to send both daughters and sons to work.³¹¹

My data shows that boys and girls may have received equal pay for equal work in the textile sector, but boys had many more opportunities and chances for growth within a company. Young girls were restricted to specific areas of the labor market and tended to be heavily concentrated in the few high paying positions available to them.³¹² Boys, on the other hand, could be found employed in glass factories, as trade apprentices, in cafés and in pottery factories

³⁰⁹ Jafet fichas. For children under fifteen, girls were 15.85% of the workforce and boys 7.81%.

³¹⁰ The sample yielded 129 workers under the age of fourteen. Of these, forty-two were boys averaged 36.22 mil-reis per hour and eighty-seven were girls and averaged 32.14 mil-reis per hour. Girls fifteen and under made over 90% of the boy wage.

³¹¹ Wages as reported from the 1920 Census shows girls averaged 2\$108 mil-réis per day, whereas boys averaged 2\$183 mil-réis. As with the textile industry, girls working in food industry recorded higher average salaries than boys. The average girl's daily wage was 2\$403 whereas the average boy's was just 2\$208. *Recenseamento*, 5.2, 386-417.

³¹² Averaging the equations $(\sum w_f \Phi_m - \bar{w}_f) / (\bar{w}_m - \bar{w}_f)$ and $-(\sum w_m \Phi_f + \bar{w}_m) / (\bar{w}_m - \bar{w}_f)$ can be used to indicate the importance of occupational distribution (Φ) in male and female wage (w) differentials. When testing the importance for boys and girls in the state of São Paulo using the 1920 Brazilian Census, the results, -1.53 and 1.3, respectively, show that girls highly concentrated in a few high paying positions (the quotient is both larger than one and negative for the first equation). See Claudia Goldin, *Understanding the Gender Gap: An Economic History of American Women*, (New York: Oxford UP, 1990), 71-3, for methodology.

around town.³¹³ The 1920 Census registers girls in just sixty-three jobs throughout the state, but boys were employed in 120, almost double the amount for girls.³¹⁴ Although the grueling hours and abuses in these industries were no less harsh, boys earned significantly more in some sectors that were closed off to girls. For example, a busboy in a local café earned as much as 150\$000 per month (5\$371 per day), over two times what a child working in a textile factory could expect to earn.³¹⁵ Even within the textile sector, boys had more opportunities. Most children at Jafet were employed in the bobbin and rings positions; however, only boys held top-earning positions, especially those that offered greater promotional opportunities, such as jobs in the bleaching and mechanics departments.³¹⁶ Antonio Stocco's labor market experience highlights this reality. Stocco worked in the dyeing section of a textile factory at age fourteen, earning 5\$940 réis per day at the end of the 1920's.³¹⁷ Such a position would have never been available to a young girl.

Although both the literacy and wage evidence show that young Paulistanas were just as likely to be literate and earn what their male cohorts did, by age twenty, men and women encountered substantial wage differentials. Several features of female employment help us to better understand the period. First, women concentrated in the higher paying positions available

³¹³ For boys employed in a number of factories see "Relação De Alguns Menores Que Trabalham Nas Fabricas E Nas Oficinas." Also, Penteadó, *Belenzinho*; Rio Affonso, "Exploração De Menores," *Guerra Social*, April 10, 1917. also mention boys working in glass factories. For evidence on young boys working in cafés see "Pela Classe: Brandão D'um Café, Etc. Etal," *O Internacional*, June 15, 1924; José Alves Apolinario, "Pela Unificação Dos Empregados Em Cafés De São Paulo," *O Internacional*, June 27, 1925; "A Situação Dos Jovens Que Trabalham Em Cafés," *O Internacional*, May 1, 1929.

³¹⁴ *Recenseamento*, 5.2, 386-417.

³¹⁵ Boys working in cafés were between the ages of ten and fifteen. Apolinario, "Pela Unificação Dos Empregados Em Cafés De São Paulo." and the 150\$000 per month rate was reported in; "Pela Classe: Brandão D'um Café, Etc. Etal."

³¹⁶ In Jafet, five fourteen year-old boys were employed in the bleaching positions. Two fifteen year-olds were mechanics, one an assistant and one a full mechanic. The highest position given to girls was that of weaver, and as shown later in this chapter, women often tended less looms than men.

³¹⁷ Antonio Stocco, interview. Stocco reports making \$660 réis per hour. If he worked a mere eight hour day, he would have made 5\$940 per day. Likely he worked more than eight hours per day.

to them (many of the highest paying jobs in the economy were restricted to men).³¹⁸ Second, firms reduced wage premiums to women during their childbearing years, and third, there were fewer opportunities for women to advance. I highlight these differences among adult employees in professions related to clothing and textiles. A better understanding of the challenges and discrimination that women aged twenty and over faced in the Old Republic labor market allows us a better basis for understanding subsequent Paulistano generations and their decisions to invest in or fail to invest in education.

To better explain gendered wage differentials, I first look at the role that occupational distribution played in wage determination. I approach this question using the wages reported for the state of São Paulo and the male to female job distribution as reported in the 1920 Census. I look at how the average female wage would have changed if women had been employed over a male distribution and what the average male wage would have been over a female distribution. The average female wage over the male distribution drops considerably, providing evidence that females overwhelmingly concentrated in those positions where they were paid the greatest wages.³¹⁹ Since I only consider jobs where both men and women were employed, this concentration was arguably even larger considering the number of positions reserved only for male employment.

Although this aggregate approach provides valuable insight into the labor market dynamic, in order to better understand the daily challenges that women faced in the labor market I use employment data from the Mappin department and Jafet textile factory to measure gender wage discrepancies. The Mappin analysis allows me to look at gender discrimination among

³¹⁸ There were 142 jobs registering only male employees as opposed to 9 jobs registering only female employees.

³¹⁹ See note 312 for methodology. When looking at female wages over a male occupational distribution, the result reveals -.598. When looking at male wages over a female distribution, the result is much less extreme at .051.

middle- and upper-lower-class employees. The Jafet evidence looks at the same discrimination among working-class employees and provides a comparison for Mappin employees. The evidence shows consistent wage differentials between men and women in both companies, and that the highest gendered wage differentials were in upper level positions. The evidence on differentials during a woman's childbearing years suggests that the expectation that a woman would leave the labor market during these years lessened what employers were willing to invest in women, in general.

For Mappin employees, I first highlight the male-to-female wage ratio for three distinct positions requiring different skill levels. I compare employees hired by the company between 1914 and 1930 as seamstresses/tailors, vendors and department heads/office employees. In all, fifty males and thirty-five females fit into these categories. Table 5.2 below displays the differences in daily salaries and average starting ages for employees.

MALES				Position	FEMALES				M:F Sal
Avg Yrs Tenure	Avg entryage	Avg Sal (mil-r)	N°		N°	Avg Sal (mil-r)	Avg entryage	Avg Yrs Tenure	
9.3	26.5	192.23	2	Seamstress/Tailor ³²⁰	19	94.38	17.8	8	2.04
9	19.9	248.83	19	Vendor	12	181.21	21.5	7.1	1.37
7.5	21.4	620.64	29	Dept. Head/Office	4	280.92	27.5	8	2.21
9	21.6	340.28	99	All Positions	39	175.56	20.3	7.6	1.94

Source: Mappin *folha de pagamento*. Wages are real hourly wages.

The data show that the upper-level office and department head positions registered the largest wage differentials. The position showing the lowest wage differential was that of vendor. Not only did women hold a fair share of these positions, but they also made over 70% of the male wage. The table above also reveals that for upper-level positions, males were hired at a much younger age than females. This trend suggests that while Mappin may have hired men into

³²⁰ The 1920 Brazil Census reports male tailors (*cortador de roupa*) made 1.87 more than female tailors and male seamstresses 1.24 more than female seamstresses. Male tailors, however, made 2.63 more than female seamstresses.

upper-level positions with the expectation of long tenure, the company required women hired into the same positions to already have experience and be well into their childbearing years.

Finally, table 5.2 shows that while 90% of females employed at Mappin fell within the three main professional categories, just 51% of male employees held these positions. Women were not completely excluded from other professions, but were extremely limited in the types of jobs that they could hold. Positions such as chauffeur, hairdresser, watchman, carpenter and designer were far from the Paulistana working woman's reality.³²¹

To see if the same types of gender differentials persisted among working-class employees, I look at the Jafet textile factory data. Earlier in this section I showed that during the Old Republic there was relative wage equality between girls and boys. However, the 1912 *Boletim do Departamento do Estado de Trabalho* report on textile wages for men and women in the state of São Paulo showed that in positions where both men and women were employed, men received 1.6 times greater pay than women.³²² This wage discrepancy is particularly striking considering girls registered higher salaries than boys during the same period. At what age did these differentials emerge? I use the Jafet *ficha* data to answer this question.

To examine the gendered differentials more closely at Jafet I divide the adult workers into five-year gendered cohorts, and then look at the average hourly real wage for each group.

When I look at all positions, including managerial and mechanical jobs, I find that the wage

³²¹ "Folha De Pagamento." These data are consistent with results from the Brazilian Census that show that among the jobs where both men and women were employed, women concentrated in higher paying positions. When looking at adult workers in the state as reported in the 1920 Census using the equations appearing in note 312 of this chapter, the resulting quotients are -.60 for female wages over a male distribution and .05 for male wages over a female distribution.

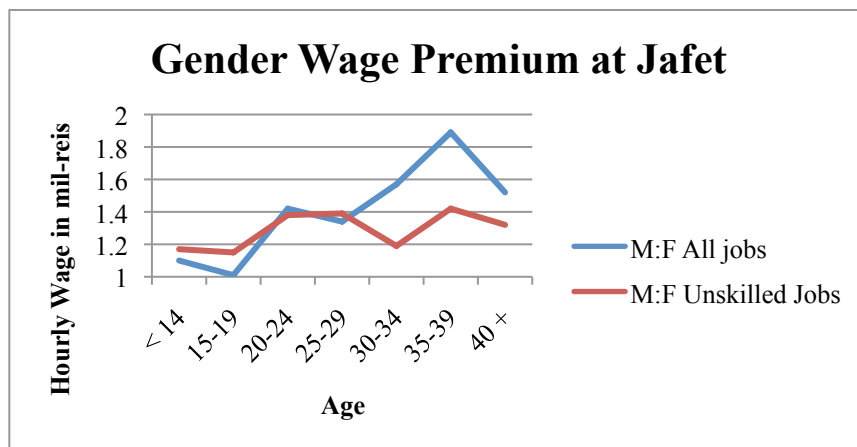
³²² The jobs with the highest discrepancy were managerial positions and the starcher and threader positions, while the most equal position was supposedly that of weavers. The ratio for the managerial positions was 1.97; for starcher, 1.85; for threader, 1.75 and for weavers, just 1.125. Ribeiro, *Condições*, 171, table XII., as reported in the BDET 1912, p76-7.

differences between genders emerges around age twenty. Table 5.3 below reports the average wage results and figure 15 reflects the returns to age by gender. I find that the returns to age for men largely surpass those of women between the ages of twenty and thirty-five and that the largest single pay jump for men from nineteen to twenty (57%). A thirty-five year-old man made over twice what a nineteen year-old man did, but a thirty-five year-old woman made just 26% more than a nineteen year-old woman did. These differentials in wage gains result in a 1.89 ratio of male to female wages among the thirty-five to thirty-nine age cohort.

Age Cohort	All Positions			Only Unskilled Workers ³²³		
	Male	Female	M:F	Male	Female	M:F
15-19	53.96 (95)	53.37 (124)	1.01	62.53 (9)	54.26 (17)	1.15
20-24	85.06 (55)	59.82 (43)	1.42	77.25 (12)	56.03 (12)	1.38
25-29	83.42 (24)	62.02 (28)	1.34	82.51 (7)	59.25 (11)	1.39
30-34	97.10 (13)	62.00 (18)	1.57	73.08 (1)	61.73 (6)	1.19
35-39	114.32 (11)	60.36 (12)	1.89	78.80 (3)	55.60 (5)	1.42
40 +	87.49 (34)	57.53 (14)	1.52	77.71 (10)	59.05 (6)	1.32

Source: Jafet *fichas*.
Notes: Wages standardized using the real wage series developed in chapter 3 of this dissertation.
Number of observations in parentheses.

Figure 15



³²³ Unskilled workers as defined by the HISCLASS classification scheme described in chapter three. These include spinners and loom threaders.

A combination of theories can help explain these wage differentials displayed in table 5.3 and figure 15. One argues that women received lower pay because employers expected them to exit the labor force upon marriage or having children. Another argues that a reduction in opportunities explained wage differentials. Still, many scholars find that productivity differences between genders explain the lower female wage.³²⁴ That the increase in the male to female wage ratio comes during a woman's childbearing years supports the first theory. Since, on average, married women spent less time at Jafet, it is logical that employers were less likely to promote females, expecting them to leave upon getting married or having children. The 1920 Census shows that women did concentrate in certain high-paying positions, thus the occupational distribution does help explain wage differentials. As for productivity, the fact that the São Paulo wages are reported in hours weakens this argument: the productivity of a male and female rover or ring spinner would have been equal.

If the change in wages during a woman's childbearing years supports the first theory, then evidence on the limited positions available to female Jafet employees supports the second. Most jobs within the textile factories were gendered and the traditionally male jobs recorded the highest wages. The highest paying positions in 1912 in São Paulo were that of carder, starcher, bleacher/dyer, printer, finisher, floor boss, mechanic, and office employee.³²⁵ Males eventually constituted the majority of employees in all of these positions except for one.³²⁶ Since the gender divisions at Jafet proved to be representative of the São Paulo industry in general, I omit

³²⁴ See Joyce Burnette, *Gender, Work and Wages in Industrial Revolution Britain*, (Cambridge ; New York: Cambridge University Press, 2008), 80-4. for a discussion of this literature. Burnette herself determines that strength differences and less access to school for women led to lower female wages, 104-123.

³²⁵ Ribeiro, *Condições*, 171, table XII., as reported in the BDET 1912, p76-7.

³²⁶ Women constituted 37.6% and 51.58% of finishers in 1911 and 1920, respectively. For 1911, see *ibid.*, 171. For 1920, see *Recenseamento* 5.2, 386-417. In 1911, males constituted only 11.11% of carders, but by 1920, they held 85% of the positions. In all other positions, males always represented at least 60% of employees.

higher-skilled positions and analyze only on those positions up to a weaver's skill level to test whether limited employment opportunities accounted for gender wage discrepancies.³²⁷ I omit weavers and bobbin workers from the analysis because they were paid by piece-rate.³²⁸ In this restricted analysis, men still receive a greater wage premium in these years, but the contrast is less pronounced. The cohort from twenty-five to twenty-nine age range registers the highest ratio showing that men were compensated 1.5 times more than women in these relatively unskilled positions. In the forty and over age range, where the ratio for all positions was a full 1.86, the ratio falls to 1.24 for lower skilled positions.

To consider the important weaving position, I recall my analysis from the previous chapter of this dissertation regarding the number of looms tended by men and women. The data show that four of the five individuals tending to four looms were male; there was one female tending to three looms; and only one of the twenty-four individuals tending two looms was male.³²⁹ Although the 1912 *BDET* recorded a mere 1.125 male-to-female wage ratio among weavers, the Jafet reality was that most male weavers could earn double what female weavers could.

The importance of these wage differentials becomes apparent when I consider the impact they had over the lifetime of a working-class woman. Using the average wages for the lower-level positions above, I estimate that a woman working between the ages of fifteen and fifty–

³²⁷ "Fichas Jafet." ; Ribeiro, *Condições*, 133, table VIII. Male positions at Jafet included: drier, batter, carder, bleaching, finishing, dyeing, preparation/printing and starching positions, office work, mechanic work, security, floor boss and kitchen work. Female jobs included combers (*passadeira*), bobbin workers, folders, ring spinners, rovers, cloth room workers, polishers, remitters, warpers, and weavers. Men and women were represented equally as spoolers and cutters/measurers/weighters. Compared to 1912 and 1920 estimates women at Jafet had slightly higher employment shares as batters, carders, rovers, bobbin machines and weavers. Women were underrepresented as threader, finishers, dyers/bleacher, and starchers, four relatively high-paying positions.

³²⁸ This analysis includes all positions except for weavers, bobbin workers, mechanics, *mestres*, stampers and technicians and preparation workers.

³²⁹ See chapter 3 for a more in depth explanation of this analysis.

assuming she worker the entire time—earned about 80% of a man’s salary over the same period.³³⁰ This difference, in the Old Republic, would have been the equivalent of almost a quarter of the average family’s expenditures on rent, water and light. If I consider all positions in my calculation, I find that the average Jafet female employee earned just 63% of what the average male employee would make if they both worked from age fifteen to fifty.³³¹ In São Paulo, where the average family income relied on at least three workers, if men and women had been compensated equally, the difference would have meant significant improvement in the family’s quality of life: an extra bedroom, greater meat consumption or schooling for a young child.³³² The consequences of these gender wage differentials were not limited to monetary losses. Women, knowing that they would be paid less than men for the same work and that their possibility of reaching a skilled position was nearly impossible, were less likely to invest in their own human capital. Furthermore it is likely that concerns about future discrimination influenced these women when making decisions about their daughters’ educations. Measuring the impact of this reduced human capital on economic growth in São Paulo and Brazil in the years following the Old Republic is beyond the scope of this dissertation. However, such a study will be important to determine the costs of gender inequality not only for the Paulistana working woman but also on the country’s development.

That there are gender wage differentials is not surprising in the era of early industrial growth and urbanization in São Paulo; however, quantifying these differences, in particular for age cohorts, gives an understanding of gender inequality in São Paulo far beyond previous

³³⁰ My estimate considers the average salaries for each year between fifteen and fifty as reported in table 5.3.

³³¹ The budget estimations come from Davis, "Padrão Da Vida," 163-5, table 17. Davis reports that the average working class family monthly budget spent 37.7% on food and drink; 22.3% on rent, water and light; and 10% on clothing expenditures.

³³² *Ibid.*, 146, table 7., shows that meat consumption increased as the food budget per person in a family increased.

scholarship. The wage differentials detected here are by no means extraordinary in comparison with those of other countries, but they are still significant in terms of the implications for future Paulistano generations.³³³ Looking at both middle- and working-class data, it seems that wage differentials between men and women were the smallest in the lowest skilled positions, and that inequality increased in mid-level jobs, such as weavers, seamstresses and bleachers. With the highest-skilled positions, wage inequality is almost a nonexistent argument because few, if any, women could aspire to such jobs.³³⁴ In the rare instances where women were employed in these positions, the gendered wage differentials were substantial. Was this gender inequality a result of productivity differences or of discrimination? In the São Paulo case, the fact that wage differentials only emerged when girls reached a marrying age and narrowed once they passed childbearing age suggests that the expectation that women would exit the workforce led to lower wages.³³⁵ Evidence from section one that confirms most married women did exit the industrial labor force further supports this hypothesis. The effect of this statistical discrimination likely influenced the next generation of Paulistanas' choices regarding education and working, but measuring the true impact of these differences in São Paulo remains for future studies.

Part III: Class Differences

If gender inequality was a persistent feature in Old Republic São Paulo, why is it largely missing from the historiography? In this section I show that gender discrimination was not the only discrimination that women faced. The magnitude of Paulistano class differences often

³³³ For example, Goldin finds the female to male wage ratio in 1930 for sales jobs to be .607 and the ratio for manufacturing jobs to be .575 (*Understanding*, 64-5 table 3.2). In São Paulo, I find a ratio of .728 for sales jobs (Mappin vendors) and a range between 1.00 (15-19) and .514 (35-39) for manufacturing positions, depending on the age cohort.

³³⁴ In the Jafet sample, only one of the seven *mestres* was female, and since no wage was recorded for her, it is not possible to speak to wage differences among *mestres*.

³³⁵ Some scholars suggest that productivity differences could explain the wage differential; however, the fact that my data are reported in hourly wages weakens this argument.

overshadows important gender differences of the era. Using literacy rates and evidence of class wage differentials for men and women within the Mappin firm and in comparison to the Jafet textile factory, I show that while all women faced gendered wage differentials, class divisions were much more pronounced than gender differences.

The biggest difference for young girls of different social classes was the opportunity to go to school. Among young Paulistanos more privileged children went to school, while lower-class children often entered the workforce.³³⁶ For middle-class and elite females, secondary and even superior schools became viable options during the Old Republic. The São Paulo education system improved dramatically over the Old Republic, and these improvements in overall education also meant advancements in education for women.³³⁷ The city's *Escolas Normais*, schools devoted to training future teachers, were a particular draw: in 1930, females represented over 90% of enrollment in pedagogy programs in the state. Furthermore, even though they were few in numbers, women had broken the gender glass ceiling by enrolling in many of São Paulo's professional schools and counting among the city's lawyers, doctors and pharmacists.³³⁸ Some lower-middle-class and upper-lower-class girls enrolled in the city's few professional and

³³⁶ An example from the Barra Funda attendance book of Mar 1898 registers two girls leaving school in order to get a job Livro De Presencia, Barra Funda." Veccia, "Family and Factory", 300-17., also finds that working class boys and girls often had to work at the expense of going to school. Work here includes working at home, as many girls did, even though the official record will not register these girls as working.

³³⁷ In 1894, there were only thirteen private secondary schools in the city, with only three devoted to female education. Marcílio, *História Da Escola*, 222-3. In 1922, the Federação Brasileira pelo Progresso Feminino successfully lobbied for girls to be allowed at the exclusive Colégio Dom Pedro II, the best school in Rio de Janeiro. See Hahner, "Feminism, Women's Rights," 102.

³³⁸ Besse, *Restructuring Patriarchy*, 116. Besse finds that 91% of pedagogy students were women. The share of women in other programs were as follows: primary and preprimary (46.3%); complementary (77.6%); secondary (22.7%); ecclesiastical (0%); arts (89.9%); typing, stenography, technical (36.9%); agronomy (0%); seamanship (0%); obstetrics (100%); law (0.5%); medicine (3.7%); veterinary medicine (0%); polytechnic arts (0.9%); dentistry, pharmacology (26.1%); philosophy, literature (0%). For more on upper and middle class women and the feminist movement in São Paulo, see Hahner, "Feminism, Women's Rights."

vocational schools; however, most vocational training was seen as a “male privilege.”³³⁹ In general, though, the barely literate Paulistana factory girls in the working-class neighborhoods largely outnumbered the share of girls with significant schooling.

I recall figure 14 to emphasize these differences in education. While there were no significant differences between boys and girls regarding the reported literacy rates, there were significant differences between neighborhood literacy rates. The established downtown (*centro*), middle-class neighborhoods showed the highest literacy rates and the small periphery neighborhoods the lowest. In addition, the subset of the three largest working-class neighborhoods—Braz, Mooca and Belenzinho—only measured higher literacy than the small periphery neighborhoods. These rates show that the largest differences among São Paulo children were not between boys and girls, but rather between social classes.

Class differences are easier to quantify among Paulistano adults and prove to be substantial. To detect these differences I compare workers’ wages of different socio-economic statuses working at Mappin and the differences between workers at Mappin and Jafet. For Mappin, I compare the salaries and experiences of seamstresses/tailors, vendors and department heads at the store. Anecdotal evidence on hiring practices suggests that an individual’s position was influenced as much by his or her family’s socio-economic status as it was by skill. Vendors and department heads had to interact with the department store’s elite clientele and sometimes female vendors even served as models for client fashion shows. As such,

The girls who worked [as vendors and department heads] at Mappin had to be very clean, very attentive to hygiene and to their health. They had to be recommended by good families and they had to come from good families.³⁴⁰

³³⁹ Veccia, 103-4., "My Duty as Woman." If a working class family could forego the extra paycheck, it was the boys that went to school and the girls who either worked at home or went to work in the factories.

³⁴⁰ Perrone, on hiring practices at Mappin. Leonor Perrone, interview.

Seamstresses and embroideresses, on the other hand, were often hired because other family members already worked at Mappin or because of a close family relationship with the store's general manager Silvio Carlini.³⁴¹ Although social mobility was not unheard of, employees could not change their families to meet the requirements for the higher paying jobs where employees interacted with clientele.³⁴² Using the average salaries reported for the three positions in table 5.2 to compare upper (department head/office) to middle (vendor) and lower (seamstress) level positions at the firm, I find that department heads and office employees made between 2.5 and 1.6 times more than male and female vendors, respectively, and 3.2 to 3.0 times more than seamstresses and tailors. These class-based salary differences for both men and women are striking compared to the gender wage differentials at the firm. (The largest gendered wage differential at Mappin was that between department head and office employees at 2.21.)

Analyzing the differences between adult employees at Mappin and Jafet produces even starker contrasts between social classes. To look at the scale of difference between the firms, I compare the ratio of the bottom 25% of wage earners at Mappin and Jafet. I then compute the ratio for the mid-employees and for the top 25% of wage earners between the two firms. This exercise allows me to compare wages between working-class and middle-class individuals. I find, on average, the least discrepancy between the lowest quartile of workers at the two firms: the ratio increases for higher paying jobs. Of particular note is the extreme difference between top male wage earners at the two firms. These wage discrepancies between social classes are much more pronounced than the gender discrepancies reported in tables 5.2 and 5.3. In almost

³⁴¹ In the Angela Sgarro Specchio, interview, Angela reveals that nine of her close family members worked at Jafet. Her father, who came from Italy and was first hired by the firm, was good friends with Carlini

³⁴² For an example of social mobility, see the story of Maria Clayton presented earlier in this chapter.

all cases, the class wage discrepancies between the two firms were greater than gender discrepancies.³⁴³

Table 5.4: Ratio of Average Real Wage of Adults 15 at Mappin and Jafet			
	Q1 (25 th)	Q2 (50 th)	Q3 (75 th)
Males (Mappin/Jafet)	3.34	3.25	9.08
Females (Mappin/Jafet)	1.77	2.16	3.49
Source: Mappin and Jafet <i>fichas</i> . The ratios use the 1949 real wage and use 214 females at Jafet, 166 males at Jafet, 26 females at Mappin and 14 males at Mappin.			

Considering the relative scale of gender and class wage differentials in Old Republic São Paulo, it is understandable why gender differentials are often overlooked in historiography. Although women of all socio-economic levels may have felt similar pressures and responsibilities that came with the gender stigmas of the day, class affiliations and concerns were probably much more prevalent during the Old Republic and continue to be of interest to social scientists. However, the presence of such drastic social class stratification does not exclude the importance of gender differentials and the need for more research in this area.

Part IV: Conclusion

By the 1930's, the stigmas facing women in the workforce became more rigid as worker training and labor standards were institutionalized. The institutionalized training implemented with the introduction of the *Serviço Nacional de Aprendizagem Industrial* (SENAI) regulated women even further into domestic duties. Historian Susan Besse argues that women were often restricted to courses on motherhood, childcare and textile training, thus “the potentially radical effects of the expansion of female education were dulled by the content of the education that most girls actually received.”³⁴⁴ Stricter labor codes also hindered female employment. For

³⁴³ In the case of seamstresses and tailors, the gender discrepancy was 2.04 and with upper level positions, it was 2.21. However, only for first quartile female employees were the class discrepancies lower than these two ratios.

³⁴⁴ Quote from Besse, *Restructuring Patriarchy*, 116. See *ibid.*, chap 5 and 6; Weinstein, "Unskilled Worker, Skilled Housewife," 79-83; See Barbara Weinstein, *For Social Peace in Brazil: Industrialists and the Remaking of the*

example, the maternity laws meant to protect women often backfired: even in the 1950's married women were fired so that employers could avoid both paying for the mandatory three-months maternity pay and the implementation of nurseries in factories.³⁴⁵

Relative to these later years, the Old Republic was a period of greater flexibility for women in the workforce and provides an opportunity to observe their choices in light of the discrimination they faced in the labor market. This chapter is by no means a complete analysis of this period, but by using firm level data, it provides a unique and groundbreaking window into the personal decision of working women to exit or remain in the labor force upon getting married or having children.³⁴⁶ The firm-level approach I employ also provides more precise and reliable estimates of the wage discrimination that women faced at different stages of their working lives.³⁴⁷ That there were women who wanted to stay in the labor force in spite of fewer job opportunities and reduced wage premiums during their childbearing years makes their decision to do so even more remarkable.

Working Class in São Paulo, 1920-1964 (Chapel Hill: University of North Carolina Press, 1996)., for more on the narrowing of opportunities women experienced after the 1930's. Weinstein HHR, 1990,

³⁴⁵ See Besse, *Restructuring Patriarchy*, 140-1., on the maternity laws and ; Vecchia, "Family and Factory", 383., for evidence of married women being fired.

³⁴⁶ Considering the sizeable share of women employed as teachers, midwives, nurses, domestic workers, prostitutes, piece-rate workers, in the arts and in the informal economy lies outside of the scope of both the sources and this dissertation. For some references to these women see Mahomet, "A Semana," *Folha do Braz*, February 10, 1901; "Miseria Moral" *O International*, December 1, 1927; "As Loterias" *O Rebate*, August 23, 1899; Margareth Rago *Do Cabaré Ao Lar: A Utopia da Cidade Disciplinar: Brasil 1890-1930*, Coleção Estudos Brasileiros (Rio de Janeiro: Paz e Terra, 1985), chap 2.

³⁴⁷ This evidence is particularly valuable for a period of the country's history where reliable official statistics are minimal. See chapter 2 and 3 of this dissertation for a discussion of the scarcity of reliable statistics.

Chapter 6: Conclusion

The city of São Paulo during the Old Republic offers the ideal environment to examine workers' lived experiences in rapidly growing and industrializing cities in the first half of the twentieth century. This dissertation informs us not only about the complexity of the formal labor market in the city of São Paulo, but also provides a new approach to inequality studies and a new framework with which to approach working women in early industrial societies. In many ways, São Paulo, Brazil is a model for Latin America's rapid urbanization and industrialization that would peak in the 1950s and 1960s. São Paulo, Brazil was one of the first cities in the region where these transitions occurred, and the scale and rapidity of the city's industrial and population growth remains impressive even by Latin American standards. While massive migration to urban centers has been studied, how inequality manifests in the shadow of such migration and change has not. This omission is especially problematic because it has become apparent that inequality accompanies this urban growth and is an endemic problem for the region as a whole. Social scientists search for a resolution to the region's current struggle with inequality, but few studies systematically study historical inequality during initial urban growth following industrialization. This dissertation is the first study to comprehensively examine and measure inequality that workers faced in the Paulistano formal labor market during this period. In addition to showing that Portuguese and black workers received fewer opportunities and the extent that women received not only fewer opportunities, but also lower pay, this dissertation also contributes significantly to our understanding of daily life and interactions during the Old Republic in what is today's largest South American city.

The impressive growth of the city of São Paulo during the Old Republic (1891-1930) and the important role immigrant groups played in that growth is well documented, but chapter two

of this dissertation provides a better understanding of the different ways that immigrants destined for the *lavoura* came to settle in the city, as well as the first analysis of the skill sets that different immigrant groups brought to the city during the period. The state's immigrant subsidization program was designed to bring in agricultural workers to the coffee plantations in family units, but it also channeled non-agricultural workers into the city. As such, São Paulo grew from an agricultural entrêpot with around 31,000 inhabitants in 1872 to Brazil's largest industrial hub with over one million residents in 1934.

Scholars have failed to appreciate the importance of the *Hospedaria de Imigrantes* for laborers in the city of São Paulo. Depicted as merely the stopping point between the port of Santos and the coffee interior *lavoura*, the fluidity with which individuals entered and left the *Hospedaria* is understated and the fact that a sizeable number of immigrants were actually contracted to work in the city is overlooked. As chapter two shows, the *Hospedaria* was solely an immigrant receiving station only through 1900. After this year, the building and contract system also began to function as an employment service. Between 1902 and 1913, over 27% of individuals passing through the *Hospedaria* were not newly arrived immigrants, but rather re-entries. In other words, the *Hospedaria* was a safety valve for individuals unable to find work in the city: a *lavoura* job and free passage to the interior was always a guarantee. In fact, individuals did not even have to stay in the *Hospedaria* (which was often overcrowded) in order to sign a new contract. Staying at a nearby shelters, men could walk to the *Hospedaria* and sign a labor contract within a matter of days. This function of the *Hospedaria* helps explain why workers may have continued to migrate to the city even when labor demand was low. The city offered goods and services and opportunities that rural São Paulo did not, but if life in the city

did not work out, then individuals could just take a streetcar to the Brás neighborhood, walk to and register at the *Hospedaria* and get a new job without even having to pay for relocation.

In addition to providing a more realistic understanding of the *Hospedaria* and what it meant to Paulistano workers, chapter two also provides a better understanding for the various ways in which workers arrived in the city directly from the *Hospedaria*. In some years, as many as 24% of all individuals registered in the *Hospedaria* were directly contracted to work in the city rather than in the *lavoura*. Although this share could change dramatically from year to year, the fact was that the increased labor demand from Paulistano industrial and commercial expansion sometimes trumped the demand for coffee laborers.

In addition to these formal contracts, some individuals manipulated the chamada system and left the *Hospedaria* illegally to reside in the city. The chamada system was designed to bypass subsidized immigration bans that several European countries enacted against Brazil, most notably the Prinetti decree of 1903. Individuals would be ‘called’ by relatives already working in the Paulista *lavoura* and those relatives (or plantation owners) were responsible for paying their passage. Chapter two shows that many times individuals rejected the chamada once arriving in São Paulo. Some fled from the boat in Santos; some openly rejected the chamada once at the *Hospedaria* and went to live with relatives in the city; others just walked out of the *Hospedaria*, never to come back. Again, the manipulation of the chamada system shows just how fluid movement at the *Hospedaria* was during the Old Republic.

Finally, chapter two provides our first understanding of the relative skill level of incoming immigrants to the city. Brazil was second only to the United States and Argentina as an immigrant receiving nation during the period, but the Brazilian historiography on immigrant skill levels has largely been confined to a dichotomous debate: were immigrants more skilled than

Brazilians? Using the Banco de dados Maria José (BDMJ), I am able to answer the more multifaceted questions: what were the relative skill levels of different immigrant groups in the city? and, did those change over time? The BDMJ shows that, as a whole, immigrants who came to reside in the city of São Paulo were more skilled than those immigrants settling in the interior: between 1919 and 1927, less than 50% of immigrants settling in the interior were literate, but over 92% of immigrants settling in the city could read! Certain groups, however, were more likely to be literate and skilled. Portuguese settling in the city were 40% less likely and Germans and Austrians were over 15% more likely to be literate than Brazilians. The fact that disproportionately large groups of unskilled Portuguese immigrants settled in the city between 1903 and 1913 and skilled Germans settled between 1919 and 1927 suggests that there was increased labor demand for higher skilled workers later in the Old Republic. Thus, it is not surprising that Portuguese experienced some discrimination in terms of hiring practices depicted in chapter four: employers expected Portuguese workers to be less skilled than other groups of immigrants.

So many immigrants and Brazilian migrants moved to the state capital during the Old Republic; but what was daily life actually like? Contemporary accounts and scholarship on labor movements and neighborhoods provide poignant images of São Paulo as a diverse and dynamic city rife with the growing pains associated with industrialization and rapid urbanization. These depictions are evocative; however, they cannot provide a perspective for how the population as a whole lived during the period. Chapter three of this dissertation provides the first nominal and real wage series for the city of São Paulo during the Old Republic.

Using individual-level wage evidence from four different firms in the city, I analyze nominal wages, real wages and skilled wage premiums over the duration of the Old Republic.

Workers' nominal wages did increase over the period, but not nearly enough to keep pace with the rising cost-of-living. Although there were some periods of sporadic recovery, until the last five years of the Old Republic, São Paulo real wages were in steady decline. In 1924, a Paulistano's work hour was worth just 31% of what it had been at the turn of the century. The wage series results also confirm the need for a separate São Paulo wages series: although São Paulo and Rio de Janeiro wages did move in similar patterns over the period, the markets were not fully integrated. The chapter also gives the first evidence on inequality as observed by skill wage premiums over the period. The fact that wages for unskilled workers grew nominally at the same rate as they did for other workers through 1920 suggests that in the labor force, it was not until the end of the Old Republic that there were noticeable changes in inequality. This relatively slow change, however, does not preclude the possibility that there was faster growing income inequality during the period, as this analysis is restricted to the formal labor market, excluding some of the richest and poorest (informal workers) individuals from the analysis.

Creating a new data series for Brazil's Old Republic is a critical contribution because reliable statistics and data for the period are scarce. This new series finally provides social scientists a framework to examine the city and country's development and growth that has not existed before. Although the applications of this series are numerous, this dissertation uses the series to understand how Paulistanos experienced inequality and discrimination in the formal labor market during the period.

Inequality is a prominent feature in modern Latin America, but our understanding of how such inequality developed is very limited. In no setting are the stark differences between rich and poor more pronounced than in Latin America's cities: mega-mansions and high-rise skyscrapers with state-of-the-art security systems in affluent São Paulo, Mexico City and

Santiago neighborhoods within close proximity to informal housing rife with corruption, violence and make-shift infrastructure. Furthermore, inequality studies often address regional and urban/rural differences, rather than the variation within cities. For the typical resident, labor market inequality within the city is more relevant than what he or she is making or can do relative to somebody living thousands of miles away. Chapter four systematically studies how a worker's nationality, race and gender impacted his or her wages and labor market experience in São Paulo during the city's initial urbanization period after industrialization. Although the results are limited to São Paulo, similar patterns of discrimination and inequality likely emerged in other urban centers throughout the region. In addition, my methodology of using firm-level results in the absence of official statistics for the period can be used to study inequality in other regions where official data is either inexistent or unreliable.

The results from chapter four call for scholars, particularly in the United States, to reprioritize their studies of Brazilian inequality and discrimination. Since the 1960's, historians have produced many well-researched projects concerning race relations, but this research does not reflect the complexity of the country's historical experience. This concern derives from the dissolution of the racial equality myth in Brazil, the rise of the Civil Rights movement and persists because racial inequality still exists in Brazil. However, for all of the impressive race studies, there has been little work on the equally important topic of gender inequality. As chapter four of this dissertation shows, although gender inequality was much larger than racial inequality, there has been no prior attempt to measure the degree of that inequality for the Old Republic period. Studies of national discrimination have also been underdeveloped. For example, racial undertones feature so strongly in the debate on whether [white] immigrants were

more skilled than [black] Brazilians that historians have failed to seek out the relative skill level of different immigrants groups presented in chapter two of this dissertation.

This does not mean that race was not an important component of the labor market, but rather that by solely focusing on race we neglect other important dynamics that were equally important in the Old Republic. The evidence in chapter four shows that Afro-Brazilians, Portuguese workers and women all had to overcome some form of discrimination in the city's formal labor market. For Afro-Brazilians, although they constituted approximately 25% of the Paulistano population, they were only 10-15% of the workers in the SPOR wage series. Once employed in the formal labor market, however, Afro-Brazilians were paid equally and represented proportionately as unskilled workers, metalworkers and in management and foremen positions.

The results also show that, to some extent, Portuguese workers in São Paulo had to overcome a certain amount of prejudice. At Light, in particular, Portuguese workers were 32% more likely to be hired into an unskilled job than Brazilians and 23% less likely to be employed as mechanics or metal-workers. These results are expected given the composition of the immigrants settling in the city of São Paulo described in chapter two. While Portuguese immigrants represented almost 35% of *Hospedaria* registered immigrants settling in the city of São Paulo between 1903 and 1927, they were just 5.3% of the mechanics or blacksmiths that settled in the city. Future employers would have been less likely to hire qualified, Portuguese workers into these more skilled positions because of the expectation that Portuguese in general were less skilled. This discrimination based on expectations is known as statistical discrimination.

Although the statistical discrimination against Portuguese and prejudice against Afro-Brazilians are noteworthy, women faced the highest barriers to entry into the formal labor market and consistently received lower wages.³⁴⁸ The importance of these differences would be the equivalent of sending a child to school instead of having them go to work. The implications for the next generation of Paulistanos being that if women had been paid more, then more children (likely girls) would have enrolled in and attended school and the educational achievement and social mobility in Brazil would have been higher.

Since chapter four of this dissertation measures gender inequality, chapter five further explores the gendered wage differentials and attempts to deepen our understanding of what working meant to female Paulistanas, particularly working mothers and wives. As racial inequality has been the predominant focus for scholars of this period, gender inequality has been largely understudied. Chapter five also helps fill an important void in the study of working women in early industrializing and urbanizing economies: the fact that some women may have chosen to work after getting married or having a child. We cannot fully understand why mothers remained in the formal labor market in the first half of the twentieth century if we blindly interpret their labor force participation as a matter of necessity.

A series of interviews of working middle-class women at Mappin and a deeper investigation into wage differentials among working-class women at Jafet reveals that in the Paulistano case, although most wives and mothers did exit the labor force, some did choose to remain in the labor market. For middle-class women at Mappin, working meant rejecting the roles of mother and wife. Working-class women, however, did not face the same stigmas and it

³⁴⁸ Considering the evidence on racial and gender inequality, it is likely that discrimination and inequality was highest for Afro-Brazilian women. Unfortunately, the sources consulted for this dissertation are unable to specifically address Afro-Brazilian women.

seems as if some Italian women chose to remain in the labor market. That Spanish married women seemed to work only out of necessity further distinguishes these Italian textile workers. Since chapter five shows that wage differentials emerged between male and female workers at age twenty and persisted through a woman's childbearing years, the fact that some women chose to work, despite the statistical discrimination they faced, makes them that much more remarkable. There is no reason to believe that Paulistanas behaved dramatically different than other women in early industrializing areas. Chapter five calls for scholars of these women in other societies to keep an open mind as they reexamine the evidence on why women may have kept working. The evidence shows that despite significant stigmas and discrimination, some Paulistana wives and mothers did choose to remain in or enter the labor market. Their full story is not told in this dissertation, but merits future research into the complex motivations and responsibilities that compelled women to work. The data, although limited, demonstrates that a new approach with a richer dataset can provide important insight into working women's motivations.

The importance of this dissertation to the historiography of São Paulo and Brazil is evident. First, it finally provides a measure for the relative skill level of different immigrant groups settling in the state and the city over the duration of the Old Republic. Second, it provides an important new data source for a period of the city's history where we have little reliable information on workers and employment. This SPOR wage series should be incorporated not only into Brazilian studies, but also into research that evaluates the international labor market and relative wages. Third, the dissertation shows that the Old Republic may have been a difficult period in terms of real wages, but it was not a period of increasing labor market inequality or of overwhelming discrimination for male workers. Female workers of all

nationalities and social classes, however, did experience heavy discrimination. These results suggest that wage and labor market differences among men became distinguished in the post-Old Republic era. Whether these changes occurred in the Vargas or post-Vargas era will be a question for future scholarship to determine.

Measuring the wage and labor opportunity differences for different groups of people within a particular labor market is also an important step for understanding the individual-level experience. For example, in the Paulistano case, a Brazilian worker was not statically paid less than an Italian worker. However, the fact the Brazilian worker's wage would not be higher, even if he was literate and the Italian worker was illiterate explains why Brazilians might feel that the market was discriminatory: even a formal education could not provide the means for social mobility. The example of São Paulo's female workers also shows how using evidence for groups as a whole can provide insight into the individual-level experience. The data analysis shows that women of a childbearing age faced particularly high discrimination during the Old Republic. Nevertheless, differences in work patterns show that despite such inequality, for the Italian mother living in São Paulo, the textile factory did not represent her husband's inability to find work and provide for the family, but rather her own opportunity to earn extra money working alongside her peers. In the absence of letters and diaries, it is the economic history approach and the wage perspective model that can answer these important questions about the lived labor experience.

I show how we can combine new and existing sources of evidence to reexamine labor market inequality via wages and opportunities. This approach can hopefully fill the void on studies of Latin American inequality for this period. First, we must understand who is settling in large cities in order to appreciate why certain groups may have experienced favoritism or

prejudice. Once we know how much money people made and what jobs they were employed in, we can evaluate the relative importance of worker characteristics in determining those jobs and wages, paying particular attention to those groups distinguished in the initial evaluation of the labor market.

Looking at these differences across time, we may finally be able to understand if there is a critical point when formal labor market inequality expands. Comparing the results of this dissertation with evidence of racial and gender wage discrimination and inequality in the city of São Paulo from 1960 to 2000 suggests that while gender discrimination during the early industrialization period was similar to the later period, racial discrimination, in terms of wage inequality, was actually lower in the Old Republic. In other words, the significant discrimination that Afro-Brazilians experienced in the city from 1960 to 2000 probably increased during the Vargas-era and the Second Brazilian Republic and there was no success in decreasing gender discrimination in the same period.³⁴⁹ This evidence suggests that the Vargas-era and the Second Brazilian Republic, rather than the Old Republic, are key periods when inequality and discrimination expanded in Brazil.

³⁴⁹ See Peggy Lovell, "Race, Gender and Work in São Paulo, Brazil, 1960-2000," *LARR*, 41.3 (Oct 2006): 80.

Appendices

Appendix 2.1: BDMJ

The *Memorial do Imigrante* in São Paulo, São Paulo houses the *Registros dos livros de entrada de imigrantes na Hospedaria (1882-1978)*, referenced here as the Banco de dados Maria José (BDMJ). Developed from the *Hospedaria*'s original entry books, the database is searchable on two computers in the research section of the *Memorial*. Searching the database is generally restricted to basic searches using individuals' last names and origins, but much more information is available for each individual. When searching through the records, I noticed that quite a few entries listed "capital" as the immigrant's destination. After multiple inquiries, I was granted access to do simple query searches within the database. At first, I tried to isolate individuals arriving between 1889 and 1930, the years of the Old Republic. This search returned 1,329,918 individuals (1,104,062 adults), but the data for individuals before 1902 contained no information beyond arrival date, name and origin. I then decided to limit my searches to the years between 1903 and 1927 using the 1903-1913, 1914-1918 and 1919-1927 subdivisions. These dates capture the post-Prinetti decree period and stop right before Julio Prestes ended subsidized immigration. The population size of the 1903 to 1927 years was 457,811 individuals.

My first aim was to isolate all of the individuals listing the "capital," São Paulo city, as their final destination. I filtered for individuals aged fifteen and older (in order to keep consistent with the BDET annual reports). I realized that final destinations were only recorded for heads-of-household, leaving out all spouses and adult children. Individuals coming into the *Hospedaria* without a family were also registered as heads-of-household, so I added a filter to isolate heads-of-households and then an additional filter to distinguish individuals coming with families (*chefe*) versus those coming alone (*só*). The search revealed 8887 true heads-of-household and

8741 individuals coming into the city between 1903 and 1927. As the database was restricted to simple queries, I had to recreate the database manually. Retyping all the entries was impossible, but a five percent sample seemed manageable in the time available.

In order to create a random sample, I sorted each group alphabetically by the individual's first name. I chose to use the first name because most Brazilian documents are filed alphabetically by an individual's first name, including the Light and Jafet *fichas*. I then recorded every twentieth individual's record locator: each individual was assigned a book, page and family number in the *Hospedaria* records. I then filtered for each of these individuals by their record locator and input all the recorded information, including civil status, age, port of embarkation, previous time in Brazil, profession, etc., into a separate excel file. I was very fortunate to have the invaluable help of Roberta Veiga, an undergraduate student in the USP economics department, in inputting this portion of the data. For those individuals who were heads-of-household, we input the information for each member of the family, coding for most of the fields including nationality, port of embarkation, gender, literacy and family status. Unless otherwise noted, we assumed that all individuals in a family were destined for the "capital." We noticed that although literacy was recorded for each individual, professions were not. We also coded differently for family members under 15. The resulting database included 435 individuals who came to the city as individuals and 1797 individuals coming over as part of a family, a total of 2232 individuals, and 1404 adults. This sample allowed me to answer some important questions. For example, how many individuals coming to the city had been in Brazil before? 19.3% (including 31 Portuguese, 49 Italians, 25 Spanish, 12 Germans and 4 Austrians). How many individuals settling in the city came from the Rio da Prata region? 15.8%, with Italians (29

individuals) and Spanish (21 individuals) comprising over 78% of this stream from Argentina and Uruguay.

Coding for occupations was one of the more difficult tasks, because it was important to be able to distinguish a specific occupation and relative skill level. We turned to the Preston-Haines (P-H) occupation series based on the 1910 US Census to code for occupations. As the P-H series assigns wages to different professions, this would allow us to estimate the value of each position and relative skill level. The logic was that the 1910 US Census was close to São Paulo Old Republic wage structure, and that even in the post-WWI period, the production methods in São Paulo altered very little. As we also used the P-H series to code professions in the Light and Jafet *fichas*, this coding keeps homogeneity across databases.

The BDMJ provided numerous other search opportunities. Guided by the Light data and the debate as to whether immigrants were more skilled than Brazilians, I set up to look at literacy rates by nationality for individuals over age 15. One advantage was that literacy was recorded for non-heads-of household too, so this search would include wives and children. A great challenge, however, was making sure to include all immigrants as multiple variations in spelling appeared in the database. As I was restricted to simple filters, both Aleman and Alleman had to be used to search for Germans, Espanhol and Hespanhol for Spaniards, etc., etc. Under the literacy column I also had to include “Nao” and “Nãõ” to find illiterates. After applying these basic filters, I could look further into literacy by profession as well as differences between immigrants to the entire state and immigrants just coming to the city.

In order to check the representativeness of our sample, we compare the 850 adult males (we consider anyone aged fifteen or older as an adult) in our sample to the entire adult male population coming to the city between 1903 and 1927. By comparing the shares of the

immigrant flow and the literacy rates by nationality we find that although literacy rates vary a bit more than we would like, our random sample correlates well with the entire population.

Representativeness of BDMJ Sample Compared to BDMJ Population: 1903-1927				
Nationality	Sample Share	Population Share	Sample Literacy	Population Literacy
Brazilian	2.1	2.4	61.1	63.4
Portuguese	33.4	35.3	24.3	19.5
Italian	13.6	15.1	58.6	68.9
Spanish	33.9	31.6	34.7	41.2
German	8.1	7.0	95.7	98.5
Source: BDMJ				

Further evidence that the sample is representative comes from comparing the share of the sample arriving during each time period to the whole adult population coming to the city. For the entire population, 83.4% of the data comes from the 1903 to 1913 period, 6.3% from the WWI years, and 10.4% from the 1919 to 1927 period. In our sample, 86% of the individuals arrived between 1903 and 1913, 4.2% between 1914 and 1918, and 9.8% after 1919.³⁵⁰

In order to filter by professions, we applied the same basic principles and allowed for spelling variations. For textile workers, we included weavers (*tecelões*), seamstresses (*costureiras*), and tailors (*alfaiates*), but left out twenty-seven dyers (*tintoreiros*) because they were arguably more skilled. For the mechanics and blacksmiths category we include mechanics (*mecanicos, technicos*), tin workers (*funileiros*), and blacksmiths (*ferreiros, fundidores*). For the businessman category we include *negociantes*. See figure 5 in this chapter for the results of this analysis.

Finally, we used the BDMJ to look at the Brazilian population passing through the *Hospedaria*. This was one of the most nuanced portions of data accumulation due to the multiple ways in which Brazilian origins were recorded. In some years, information was

³⁵⁰ The total number of adults arriving between 1903 and 1927 to the city was 17,796. The total number in our head of household or individual sample is 850.

recorded in the observation field, while in others it was recorded in a combination of the observation, local residence, reason for entry into the *Hospedaria*, country of residence, departure point, and boat of entry fields.

Brazilian Migrant Heads-of-Household Literacy by State: 1903-1927							
	Total Number	Nº Literate	No Info	Literacy (BDMJ)	15+ Literate 1920 ³⁵¹	Agricultural Workers	Share Ag
Acre	1	1	0	100.0%	40.0%	1	100.0%
Amazon	11	8	0	72.7%	38.5%	11	100.0%
Pará	46	25	1	54.3%	41.8%	45	97.8%
Maranhão	3	1	1	33.3%	22.8%	2	66.7%
Piauí	6	4	0	66.7%	18.7%	6	100.0%
Ceará	1781	567	5	31.8%	27.2%	1613	90.6%
Ceará (no 1915, 1916, 1920)	171	92	5	53.8%		142	83.0%
RGN	673	123	420	18.3%	26.4%	585	86.9%
RGN (no 1904)	253	123	0	48.6%		215	85.0%
Pernambuco	751	392	6	52.2%	25.3%	638	85.0%
Alagoas	1644	784	0	47.7%	21.2%	1625	98.8%
Paraíba	179	77	72	43.0%	19.8%	153	85.5%
Paraíba (no 1904)	107	77	0	72.0%		96	89.7%
Sergipe	158	85	0	53.8%	22.8%	157	99.4%
Bahia	4910	2046	8	41.7%	27.0%	4747	96.7%
Mgrosso	6	3	0	50.0%	41.5%	6	100.0%
Minas	8521	3017	73	35.4%	31.2%	8389	98.5%
ES	93	40	23	43.0%	35.4%	92	98.9%
RiodeJ	4863	1547	531	31.8%	35.5%	4541	93.4%
SP	804	364	0	45.3%	41.4%	492	61.2%
RJ/SP border	5701	1048	20	18.4%		4629	81.2%
Paraná	49	25	13	51.0%	40.0%	38	77.6%
SC	76	45	1	59.2%	41.6%	66	86.8%
RGS	95	62	5	65.3%	55.5%	82	86.3%
capital (SP)	2971	1046	1	35.2%	67.1%	1362	45.8%
capital (fed)	960	643	0	67.0%	74.2%	833	86.8%
estrangeiro	304	192	20	63.2%		210	69.1%
Total	35137	12437	1205	35.4%		30776	87.6%

Source: BDMJ

Because each year was recorded differently, the tabulation of Brazilian migrants' origins was a time-consuming and tedious process. The years between 1908 and 1913 offered a particular

³⁵¹ *Recenseamento 1920*, v4.4, X-XI, 803-4.

challenge because origin information for individuals entering to “collocar-se por intermedio da *Hospedaria*” was available in the local residence section. This required tabulating individuals on a town-by-town basis. Due to time constraints, I was only able to record 85% of these individuals, but most came from the Paraiba Valley region near the São Paulo, Rio de Janeiro border. This demonstrates a weakness in the Brazilian data: how to interpret Rio de Janeiro? In many years, individuals labeled as coming from Rio could actually be coming from the federal capital or from the Paraiba Valley or from other parts of the state. As the literacy results show above, since individuals from the city had the highest rate of all Brazilian migrants and those from the Paraiba Valley had the lowest, the registered Southeast literacy rates could be either over or underestimates (see table above).

Limited by time and resources, I was unable to explore all of the many questions that the database can help answer. For example, the observation column (“obs”) registers the street address for a sizeable number of immigrants settling in the capital. Time restraints prevented filtering this field by “*rua*” “*ave*” and “*trav*” searches. Such information could have been helpful in determining residency in immigrant neighborhoods. Hopefully researchers can gain full access to this public database soon and will be able to address and answer many questions that remain unanswered in São Paulo and Brazilian historiography.

Appendix 2.2: Estimating Italian Immigrants in São Paulo in 1904

Over one million Italians immigrated to Brazil between 1884 and 1904 and the majority came to São Paulo. To follow Italian, rather than total immigrant migration, requires estimating what share of the total incoming immigrant population was Italian. To determine this figure, I estimate the number of total Italian immigrants coming to São Paulo during this time period as the share of total immigration to the state.

$$SPi_I = \sum (0.62 * SPi_I)_{t1894-1904}$$

The number of Italian immigrants coming into Brazil between 1894 and 1904 totaled 1,048,317. The number of immigrants coming into the state of São Paulo in the same time period totaled 1,054,278. A lowerbound estimate of the Italian immigrant share of São Paulo immigration during this time period is 62%. This percentage is derived from immigrant land ownership data compiled by Thomas Holloway.³⁵² The number of Italian immigrant owners divided by the total number of immigrant landowners yields this percentage. The estimate is a lowerbound because the Portuguese share of landowners is probably disproportionately high. Given these considerations, a very rough estimate of the number of Italian immigrants in the state of São Paulo between 1894 and 1904 is 653,652 immigrants.

For simplicity, I round this number to 654,000 immigrants. Thomas Holloway estimates that during this approximate time period, a mere 310,000 workers were needed for coffee cultivation. The number of incoming Italian immigrants is 344,000 people more than the number of workers needed. Even if Italian immigrants supplied all of the coffee labor and only half of the population was of full working capacity, that still leaves a surplus of almost 17,000 Italian

³⁵² The data for these calculations are found in Thomas H. Holloway “Creating the Reserve Army? The Immigration Program of São Paulo, 1886-1930.” *International Migration Review*. 12.2 (Summer, 1978): 187-209.

immigrants. Considering that non-Italian immigrants also came to the state, there appears to be an oversupply of labor. Looking at the options available to Italian immigrants solves this paradox. Since colonos were only bound by one-year contracts, at the year's end, an Italian immigrant in São Paulo had four options: 1) to extend their colono contract on the same farm; 2) to leave the state of São Paulo; 3) to move to the coffee frontier and buy their own land or 4) to migrate to the burgeoning city of São Paulo.

Poor working conditions inspired many immigrants to repatriate or leave the state. Data on these individuals is very limited. The state of São Paulo recorded the total number of immigrants leaving state each year starting in 1900. Assuming Italian immigrants were no more likely to return than other immigrants, the number of recorded departures between 1900 and 1904 totaled 164,542, therefore at least 102,000 Italians returned to Italy. But, this estimate only covers the last four years of the twenty-year time period. Since no earlier data exist, multiplying this number by five provides an estimate for the Italians returning to Italy, 510,000. This estimate is biased upward because few immigrants at the beginning of the time period would have accumulated sufficient funds for such a move.

Becoming a landowner was an attractive option for obvious reasons, but the likelihood of an immigrant obtaining this level of success was unlikely. Thomas Holloway has tracked ownership of São Paulo properties by nationality for 1905, finding 5,239 properties owned by Italians. Assuming that colono families attended to these properties, the number of immigrants who became landowners or lived on their family's land totaled 26,195.³⁵³ This estimate is also biased upward because moving a whole family to the interior would have been cost prohibitive.

³⁵³ This value was estimated by multiplying the total Italian owned rural properties by five as that was the average Italian family size.

Passenger freight rates equaled twelve weeks pay, and passage for a five-person family would have been nearly impossible to accumulate.³⁵⁴

Thus far, we have accounted for 78% of Italian immigrants, but what of the remaining 143,600? How many moved to the city of São Paulo and how many remained in areas located near their original contracts? The share of immigrants contracted in the traditional areas dropped from 98% to around 90% between 1893 and 1904. Assuming that the previous ten years hovered around 98%, the average share of immigrants remaining in traditional regions was 5%. This implies that roughly 32,600 immigrants remained on or near their original contracted lands. Summing these numbers and subtracting them from the estimate of Italian immigrants to the state produces a lower bound estimate of the number of Italians moving to the city of São Paulo: roughly 84,857. This number is impressive given that the city's 1900 population totaled 240,000 inhabitants. This means that Italian immigrants made up over 35% of the city of São Paulo's population. This estimate suggests that Magalhães 1913 statement that roughly one third of the state's population was Italian also applied to the city of São Paulo.³⁵⁵

³⁵⁴ Summerhill, *Order*, 74.

³⁵⁵ Magalhães, *São Paulo*, chap 3.

Appendix 2.3: Chapter Two Data Appendix

Table I: Impact of Nationality on Literacy
(Base is unskilled Brazilian male arriving between 1903 and 1913)

	(1)	(2)	(3)	(4)	(5)	(6)
	b/se	b/se	b/se	b/se	b/se	b/se
Portuguese	-1.421** (0.48)	-1.078* (0.52)	-0.627 (0.57)	-0.603 (0.59)	-0.667 (0.59)	-1.371* (0.54)
Italian	0.436 (0.51)	0.691 (0.54)	0.955 (0.56)	0.848 (0.58)	0.735 (0.59)	-0.080 (0.58)
Spanish	-0.488 (0.48)	-0.175 (0.51)	0.266 (0.57)	0.213 (0.59)	0.151 (0.59)	-0.759 (0.55)
German/Austrian	4.019*** (1.10)	3.926*** (1.11)	4.323*** (1.12)	4.135*** (1.13)	4.032*** (1.14)	2.967* (1.18)
Female	-1.226** (0.39)	-1.222** (0.38)	-1.177** (0.39)	-1.003* (0.41)	-0.837* (0.39)	-0.863* (0.38)
Married	-0.303 (0.22)	-0.308 (0.22)	-0.258 (0.23)	-0.307 (0.23)		
Family					-0.434 (0.23)	-0.548* (0.22)
Brazil Prior			0.546* (0.26)	0.680* (0.27)	0.609* (0.27)	
1914-1918		0.418 (0.43)	0.377 (0.44)	0.408 (0.48)	0.277 (0.47)	
1919-1927		0.979 (0.67)	0.950 (0.66)	1.080 (0.64)	1.151 (0.66)	
Semi-skilled				0.887* (0.42)	0.873* (0.42)	1.897* (0.77)
Skilled				1.047*** (0.23)	1.050*** (0.23)	1.203*** (0.33)
4.quartile				0.147 (0.46)	0.169 (0.47)	-0.010 (0.92)
Nationality*Skill						(.)
Age Effects	Y	Y	Y	Y	Y	Y
Constant	-0.045 (0.79)	-0.280 (0.81)	-0.615 (0.84)	-0.604 (0.87)	-0.500 (0.87)	0.248 (0.85)
Obs	673	672	662	651	651	608
PseudoR-sq	0.22	0.22	0.22	0.25	0.25	0.18
AIC	741.0	741.2	726.6	697.6	695.6	700.3
BIC	781.6	790.8	780.6	764.7	762.7	775.2

Source of data: BDMJ

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table II: Impact of Port of Embarkation on Literacy
 (Base is unskilled Spanish male arriving between 1903 and 1913)

	(1)	(2)	(3)	(4)
	b/se	b/se	b/se	b/se
Netherlands/ Germany	3.297** (1.11)	3.060** (1.17)	2.454 (1.30)	2.784* (1.27)
France	0.465 (1.42)	0.489 (1.45)	0.487 (1.48)	0.156 (2.07)
Rio de la Plata	0.717 (0.44)	0.758 (0.45)	0.716 (0.49)	0.299 (0.55)
Italy	0.858* (0.43)	0.778 (0.43)	0.927 (0.48)	0.627 (0.55)
Portugal	-0.556 (0.36)	-0.516 (0.36)	-0.554 (0.38)	-0.127 (0.42)
Brazil	0.446 (0.69)	0.419 (0.74)	-0.217 (0.85)	1.038 (0.93)
Canaries/Azores/ islands	-0.704 (1.04)	-0.681 (1.04)	-0.670 (1.05)	omit
Northern Spain	0.164 (0.73)	0.182 (0.72)	0.151 (0.74)	0.638 (0.81)
Time Period * Port			Y	
Female	-1.333** (0.45)	-1.266** (0.46)	-1.289** (0.49)	-0.983* (0.47)
Family	-0.292 (0.31)	-0.334 (0.31)	-0.419 (0.32)	-0.527 (0.34)
Age Effects	Y	Y	Y	Y
Brazil Prior	0.501 (0.42)	0.530 (0.41)	0.521 (0.42)	0.544 (0.45)
1914-1918		-0.167 (0.46)	-0.820 (1.07)	-0.283 (0.50)
1919-1927		0.788 (0.71)	0.826 (1.21)	0.851 (0.75)
Port * Skill level				Y
Constant	1.453 (1.19)	1.460 (1.20)	1.186 (1.22)	0.807 (1.39)
Obs	305	305	287	259
PseudoR-sq	0.15	0.16	0.12	0.18
AIC	382.6	385.0	389.5	334.1
BIC	434.7	444.5	466.4	408.8

Source of data: BDMJ

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table III: Impact of Nationality on Probability of Unskilled Profession
(Base is Illiterate Brazilian male arriving between 1903 and 1913)

	(1)	(2)	(3)	(4)	(5)
	b/se	b/se	b/se	b/se	b/se
Portuguese	0.684 (0.93)	0.974 (1.00)	0.902 (1.05)	1.019 (1.10)	0.888 (1.26)
Italian	-0.477 (0.90)	-0.243 (0.95)	-0.585 (1.01)	-0.600 (1.03)	-0.381 (1.31)
Spanish	-0.373 (0.90)	-0.110 (0.96)	-0.331 (1.01)	-0.291 (1.06)	-0.673 (1.09)
German/ Austrian	-0.745 (0.91)	-0.658 (0.94)	-0.980 (1.00)	-1.028 (1.03)	-1.545 (1.06)
Female	2.916** (1.03)	2.961** (1.04)	3.239** (1.05)	3.192** (1.06)	3.143** (1.07)
Age Effects	Y	Y	Y	Y	Y
Family			-0.771* (0.32)	-0.704* (0.32)	-0.700* (0.32)
Brazil Prior				-0.097 (0.37)	-0.038 (0.38)
1914-1918		0.242 (0.45)	0.067 (0.46)	0.085 (0.47)	0.115 (0.48)
1919-1927		0.398 (0.48)	0.557 (0.53)	0.723 (0.55)	0.696 (0.57)
Literate	-1.060*** (0.31)	-1.063*** (0.31)	-1.146*** (0.31)	-1.082*** (0.32)	-0.835 (0.45)
Nationality*L					0.000 (.) (.)
Constant	1.199 (1.59)	1.038 (1.61)	0.973 (1.64)	0.621 (1.64)	0.954 (1.72)
Obs	311	311	311	305	303
PseudoR-sq	0.17	0.17	0.18	0.19	0.19
AIC	352.5	355.8	351.7	342.2	341.0
BIC	386.2	397.0	396.6	390.6	396.7

Source of data: BDMJ

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table IV: Migration Flow Between Rio da Prata and São Paulo: 1903-1928

Year	Number Departures	Number Arrivals	Share of Departures	Share of Entries
1903	4234	1511	11.6%	8.3%
1904	7694	1856	23.5%	6.7%
1905	10836	2092	31.1%	4.4%
1906	16248	3596	39.3%	7.3%
1907	9040	5885	24.9%	18.6%
1908	8663	7904	28.2%	19.6%
1909	10784	4763	31.2%	12.0%
1910	8813	4442	28.6%	11.8%
1911	7627	6876	27.9%	13.5%
1912	11259	6470	30.1%	7.1%
1913	9557	9421	23.2%	8.5%
1914				
1915	4171.5	4192		25.2%
1916	4171.5	8107	21.4%	45.4%
1917	3016	13102	32.1%	57.0%
1918	2905	1647	44.4%	13.7%
1919				
1920				
1921	2912	2238	17.3%	6.9%
1922	3642	1256	17.7%	3.9%
1923	4601	1936	22.2%	4.1%
1924				
1925				
1926	2841	2762	10.8%	4.4%
1927	3970	2745	15.1%	4.0%
1928	3065	2275	11.5%	4.4%
Source: <i>Sec. da Ag Relatorio</i> , various years. 1915 and 1916 departures are an average as the <i>Relatorio</i> reported departures for the two combined years.				

Table V: Reentries in the *Hospedaria* by Nationality, 1927

Nationality	Subsidized	Spontaneous	Reentry	Total
Lithuanian	8681	703	878	10262
Spanish	4436	92	1718	6246
Italian	802	461	869	2132
Portuguese	392	428	531	1351
German	562	112	684	1358
Hungarian	107	6	124	237
Romanian	24	207	1523	1754
Japanese ³⁵⁶	0	7950	76	8026
Russian	0	0	42	42
Tchech-Sloveno	46	23	48	117
Polish	480	154	205	839
Austrian	168	48	250	466
Estonian	67	0	212	279
TOTAL	15765	10184	7160	33109
Sources: <i>Relatorio da Sec. da Ag. 1927</i> , 199-200. ³⁵⁷				

Table VI: Literacy Rates: Adults from 1903-1927 in São Paulo, city and state

Nationality	1903-1913		1914-1918		1919-1927		1903-1927	
	State	City	State	City	State	City	State	City
Brazilian	20.2	40.6	21.9	69.1	25.0	67.5	23.1	50.2
Italian	23.8	53.6	33.7	73.1	59.8	78.4	28.3	56.9
Spanish	14.2	37.9	45.7	76.0	46.7	78.7	16.4	41.0
Portuguese	12.8	21.5	32.9	38.7	27.7	45.8	15.8	35.3
German	66.6	88.4	81.8	97.1	88.7	98.8	82.0	95.0
Russian	42.2	76.2	52.1	77.8	45.7	100	42.7	76.6
Polish	38.7	88.6			76.9	100	65.9	93.0
Japanese	76.8	87.0	93.4	100	81.7	100	80.9	92.4
Agriculturalist		29.8		57.6		85.6		49.3
Average	20.2	38.7	36.1	69.0	46.5	92.9	28.2	46.3
Source: BDMJ. Population State=457, 812. Population city=17789								

³⁵⁶ The number of subsidized versus spontaneous Japanese immigrants seems to be a typo in the original document.

³⁵⁷ This table excludes the 28,754 Brazilians who were included in the original table. Of these, 9694 were subsidized, 13808 were spontaneous and 5252 were reentries.

Table VII: Nationalities as Share of Textile Workers, Mechanics/Blacksmiths and Businessman Immigrants in SP, SP 1903-1927

Nationality	Textile Workers				Mechanics and blacksmiths				Businessmen			
	Share (%)	after WWI	to capital	w/no dest.	Share (%)	After WWI	To capital	w/no dest	Share (%)	After WWI	To capital	w/no dest
German/Austrian	10.4	42.4	6.8	28.1	34.2	66.6	24.7	52.8	50.3	74.8	50.0	63.0
Russian/Estonian	6.0	5.5	7.2	0.8	3.6	1.3	3.1	0.9	2.7	0.0	1.1	1.9
Brazilian	3.5	6.7	0.9	0.8	5.3	6.5	1.9	6.5	5.1	7.3	0.0	13.0
Portuguese	17.9	1.2	26.5	14.1	5.2	0.2	9.7	1.6	3.8	0.7	6.8	1.9
Spanish	18.7	4.2	27.5	13.3	17.1	1.3	27.9	9.0	3.8	0.0	5.7	0.0
Italian	37.2	3.0	27.5	13.3	17.1	1.3	27.9	9.0	3.8	0.0	5.7	0.0
Polish	0.4	3.0	0.4	0.0	0.6	1.1	0.9	0.3	1.4	1.3	2.3	0.0
Latvian/Lithuanian	2.6	17.6	0.0	5.5	0.7	2.2	0.0	3.1	1.0	2.0	0.0	5.6
Central Europe ³⁵⁸	1.3	8.5	1.7	2.3	2.2	5.8	2.2	4.7	3.8	7.3	4.5	9.3
Japanese	0.0	0.0	0.0	0.0	2.0	0.2	2.4	0.9	2.7	0.7	6.8	1.9
<i>Total (number)</i>	<i>1135</i>	<i>165</i>	<i>528</i>	<i>128</i>	<i>1692</i>	<i>554</i>	<i>587</i>	<i>322</i>	<i>292</i>	<i>151</i>	<i>88</i>	<i>54</i>

Source: BDMJ. Data include 1135 textile workers, 1659 mechanics/blacksmiths and 284 businessmen

Table VIII: BDMJ Heads-of-Household Recorded Professions Share, by Nationality and Skill Level

Nationality	Unskilled	Semi-Skilled	Skilled	Highly Skilled	Obs
Brazilian	86.36	4.55	4.55	4.55	22
Portuguese	78.69	5.15	12.71	3.44	291
Italian	61.26	8.11	28.83	1.80	111
Spanish	63.09	4.72	29.18	3.00	233
German	32.14	12.50	42.86	12.50	56
TOTAL	67.46	6.03	22.72	3.79	713

Source: BDMJ (Q1 is unskilled, Q2 is semi-skilled, Q3 is skilled and Q4 is highly skilled)

³⁵⁸ Central Europe refers to Yugoslavia, Czech, Romanians, Ukrainians and Hungarians.

Appendix 3.1: Chapter 3 Data Appendix

SPOR Nominal and Real Wages: 1890-1930³⁵⁹

Year	Nominal Wage	Real Wage
1890	296	296
1891	417	333
1892	571	310
1893	428	213
1894	331	170
1895	378	205
1896	482	198
1897	467	162
1898	548	188
1899	440	161
1900	661	269
1901	482	227
1902	422	217
1903	490	257
1904	479	229
1905	499	273
1906	500	202
1907	459	215
1908	340	160
1909	445	214
1910	452	231
1911	455	203
1912	514	218
1913	519	228
1914	493	221
1915	511	165
1916	578	180
1917	586	151
1918	584	127
1919	733	103
1920	761	105
1921	762	132
1922	683	117
1923	820	111
1924	797	84
1925	979	89
1926	1245	139
1927	1119	121
1928	1313	136
1929	1256	124
1930	1181	149

³⁵⁹ Source: SPOR wage series. Deflationary index used to compute real wages indexes 1890 as 1. For complete tables that include standard errors, please write the author (mollycball@gmail.com)

Figure 16

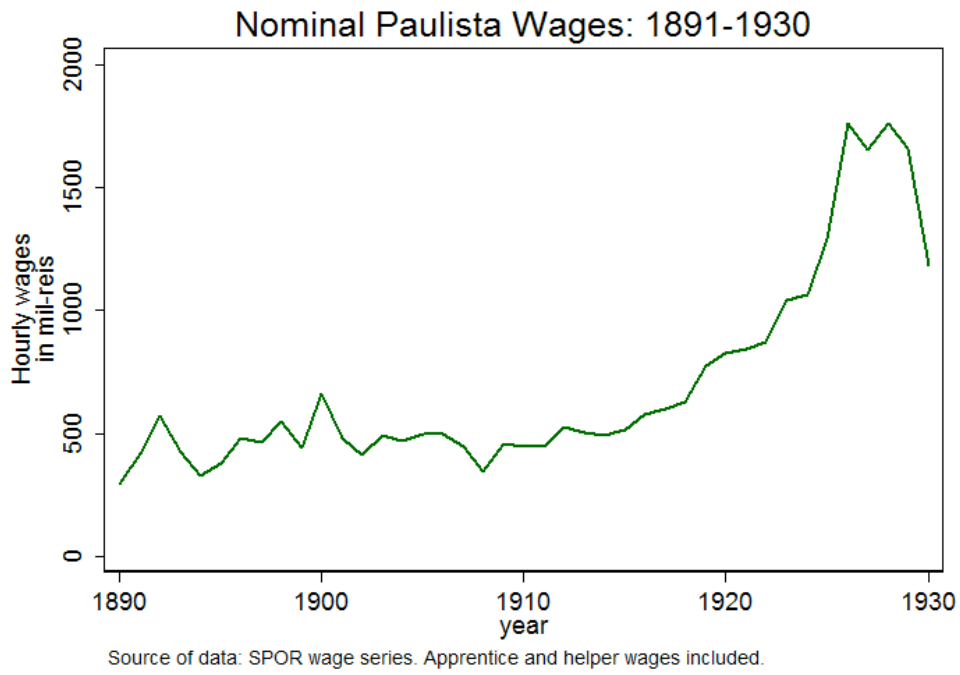


Figure 17

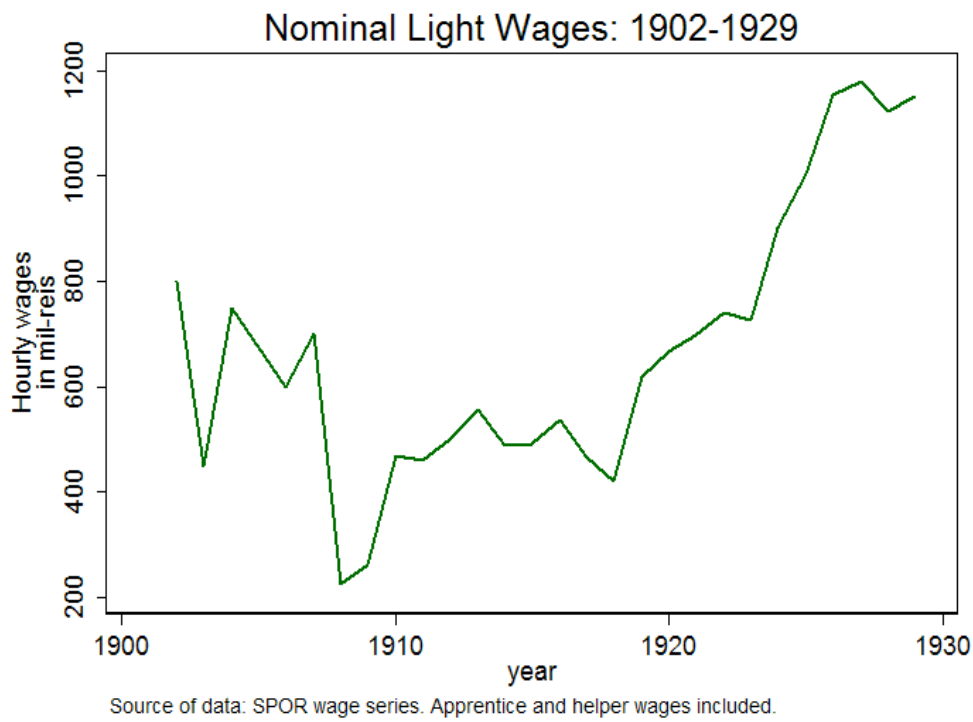
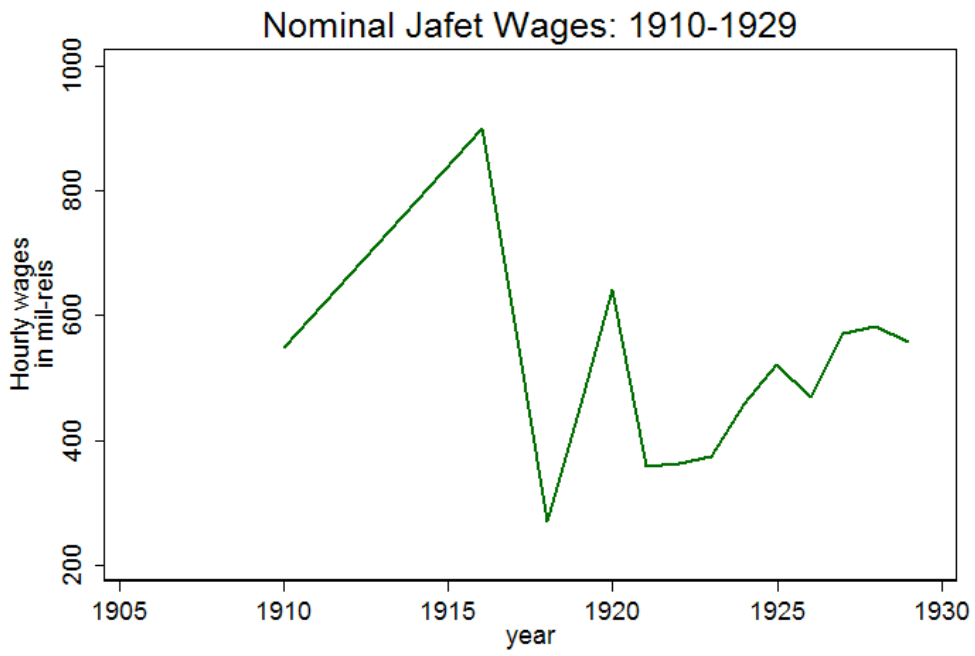
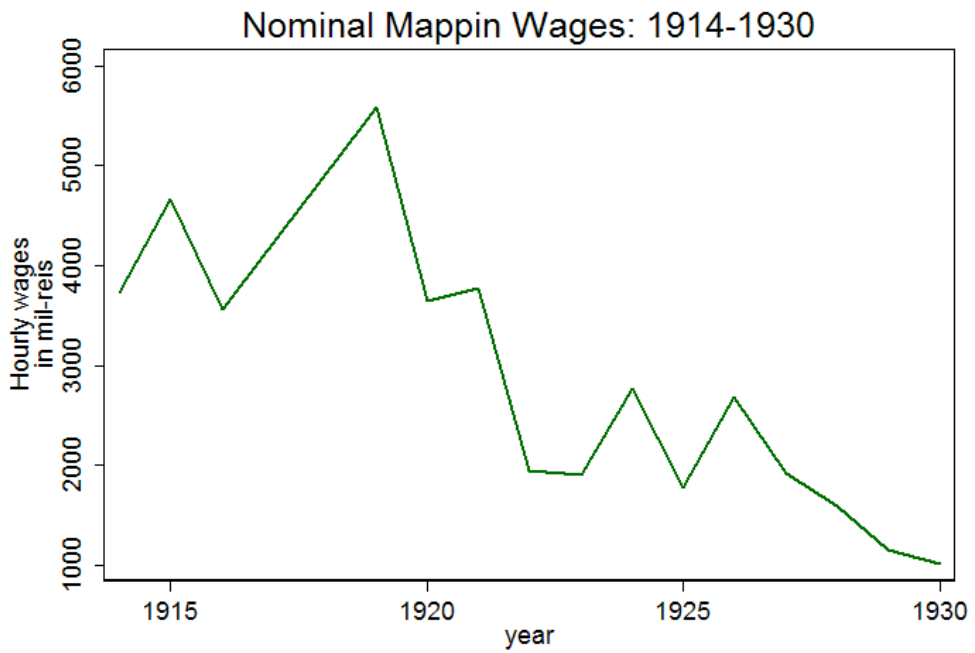


Figure 18



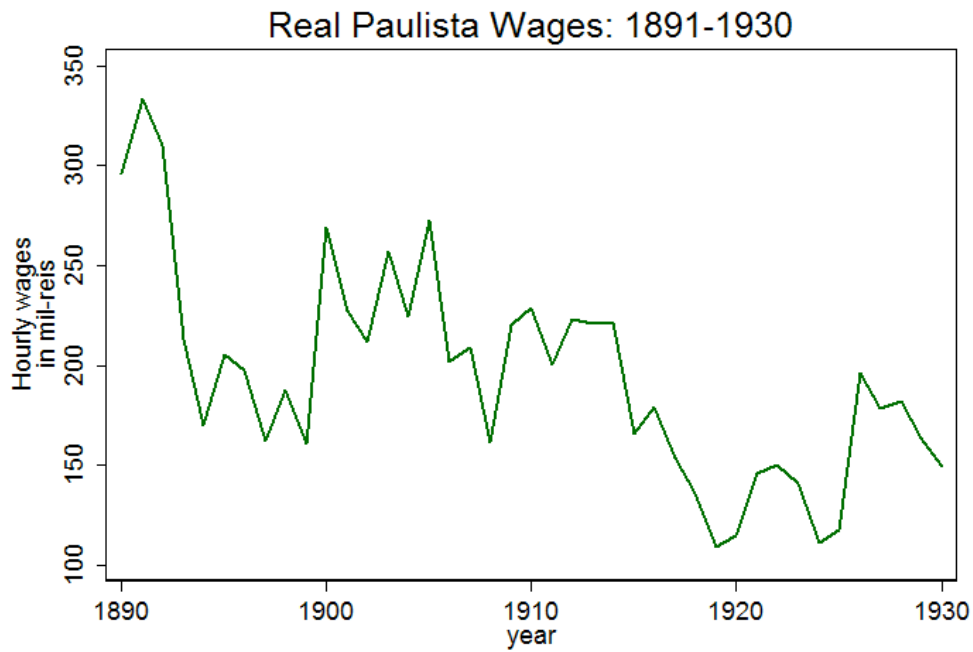
Source of data: SPOR wage series. Apprentice and helper wages included.

Figure 19



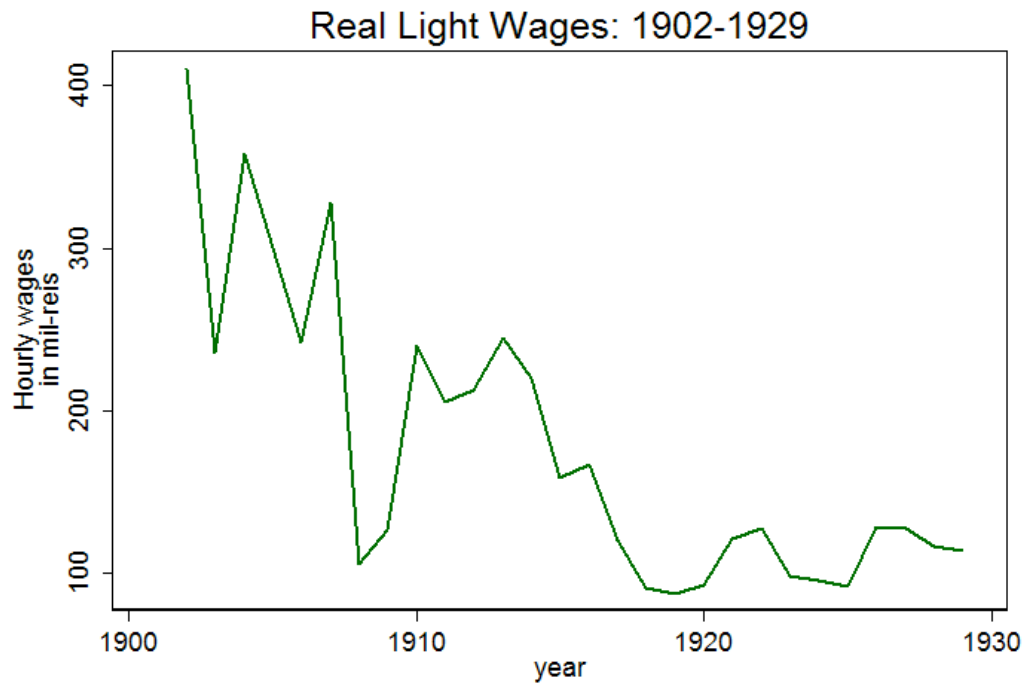
Source of data: Mappin collection. Museu Paulista.

Figure 20



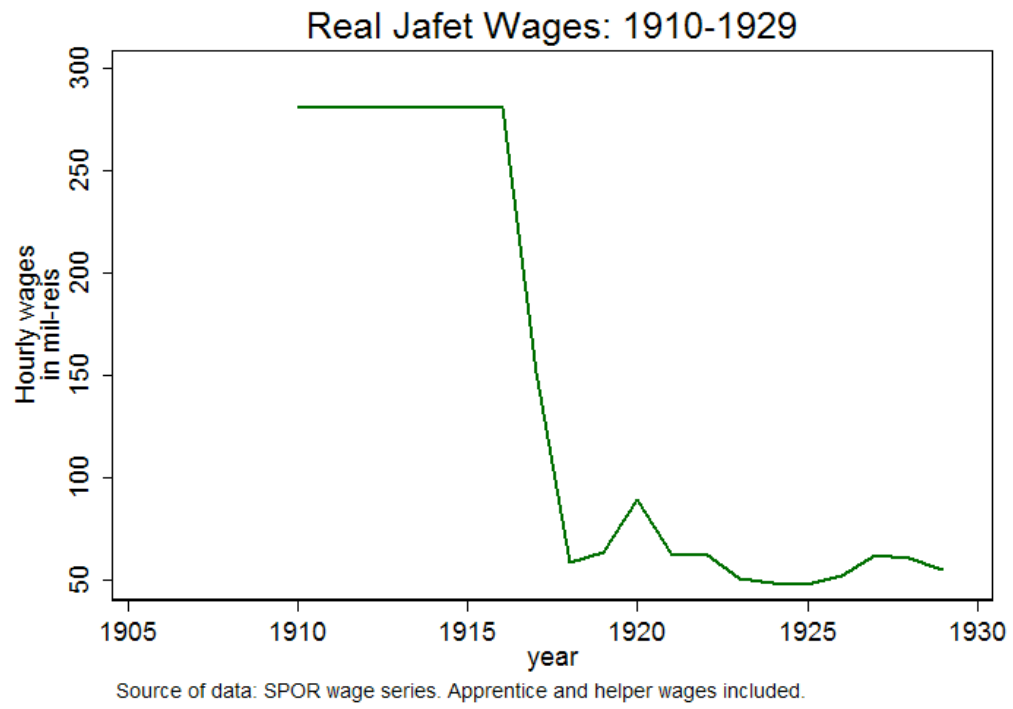
Source of data: SPOR wage series. Apprentice and helper wages included.

Figure 21



Source of data: SPOR wage series. Apprentice and helper wages included.

Figure 22



SPOR firm descriptive statistics

Paulista (1890-1930)			
Variable	Number	Mean	Std. Dev.
obs	3404	845.297	549.3302
age	3404	31.16625	11.05296
female	3404	0	0
literacy	0		
white	0		
Brazil	3362	0.573468	0.494647
Light (1902-1929)			
Variable	Number	Mean	Std. Dev.
obs	1921	2961	554.6893
age	857	28.63536	9.23912
female	1921	0	0
literacy	206	0.898058	0.303309
white	0		
Brazil	882	0.447846	0.497555
Jafet (1910-1929)			
Variable	Number	Mean	Std. Dev.
obs	1360	4680.5	392.7425
age	1349	20.92735	9.010992
female	1351	0.645448	0.478555
literacy	900	0.528889	0.499442
white	631	0.931854	0.252196
Brazil	1348	0.662463	0.473045

Appendix 4.1: Chapter 4 Data Appendix

Regression Variables and Fixed Effect Explanations:

Female: Dummy variable for gender. Female is equal to 1.

Nationality variables: Dummy variables for select nationalities. Where a Portuguese worker will have Portuguese equal to 1 and German, Brazilian, Spanish, Italian and Other equal to 0. German and Austrian workers are combined into one dummy variable.

Literacy: Dummy variable for literacy where literacy is equal to 1. When there is no literacy observation, the dummy variable is coded as missing.

White: Race variable where white workers are coded as 1 and pardo and preto workers are coded as 0. When there is no racial observation, the dummy variable is coded as missing.

Year Fixed Effects: Dummy variable for each year in the series.

Age Fixed Effects: Age and age squared.

Experience Fixed Effects: Experience is the number of days a worker was at the company at the wage observation and experience squared is the square of that number.

Cia Fixed Effects: Dummy variable for each of the three companies.

Education: Ordinal variable that measures schooling level as defined for some Paulista employees—excellent, good, average, poor or illiterate.

Quartile Fixed Effects: Four dummy variables for skill level assigned for each worker based on the P-H occupational series. Q1 equals 1 for unskilled workers; Q2 equals 1 for semi-skilled workers; Q3 equals 1 for skilled workers and Q4 equals 1 for highly skilled workers.

Table I: Firm-level Descriptive Statistics

Firm-level Descriptive Statistics				
	Paulista	Light	Jafet ³⁶⁰	Mappin
Observations				
Average Age	23.42 (710)	28.52 (859)	20.28 (748)	20.54 (48)
% Female	0% (749)	0% (1893)	54.59% (751)	27.95% (143)
% Married	(591)	(863)	(747)	- (0)
% Literate	86% (269)	90% (216)	53% (510)	100% (78)
% White	84% (782)	- (0)	90% (329)	- (0)
% Q1	48%	18%	78%	21%
% Q2	4%	14%	15%	22%
% Q3	33%	62%	4%	30%
% Q4	15% (782)	6% (1849)	3% (711)	27% (139)
Nationality Shares	62.24% Braz. 15.49% Port. 13.83% Ital. 5.26% Span. (723)	45.3% Braz. 15.97% Port. 13.59% Ital. 5.21% Span. 6.34% Ger./Aus. (883)	70.12% Braz. 3.9% Port. 6.86% Ital. 10.22% Span. 1.35% Ger./Aus. 4.04% Syrian (743)	23.4% Braz. 28.37% Port. 35.46% Ital. 3.55% Ger. 8.51% British (141)
Average tenure (years)	27.76 (880)	0.67 (1838)	1.55 (529)	- (0)
Note: Number of observations for each variable listed below in parentheses.				

³⁶⁰ These statistics do NOT include piece-rate workers at Jafet. For piece-rate workers (number of observations in parentheses), the average age was 21.5 (600); 77.1% were female (602); 52.4% were literate (382); 96.4% were white (305); the average number of days were 811 (412); 28.2% were unskilled, 70.3% semi-skilled, 1.2% skilled and .3% highly skilled (593). As for nationality of these piece-rate workers, 62.2% were Brazilian, 13% Spanish, 10.4% Italian, 5.5% Syrian, 4.4% Portuguese and 1% German/Austrian (598).

Table II: Probability for being an Unskilled Worker at Jafet:
Impact of Nationality, Gender, Race and Literacy

	(1)	(2)	(3)
	b/se	b/se	b/se
Female	omit		omit
	(.)		(.)
Portuguese	-0.339 (0.81)	0.450 (1.31)	0.199 (1.17)
Italian	0.663 (0.91)	0.081 (1.04)	0.263 (1.10)
Spanish	0.237 (0.78)	-0.172 (0.66)	0.141 (0.87)
German/ Austrian	omit (.)	omit	omit
Other	1.505 (1.15)	1.007 (1.13)	1.312 (1.52)
Literacy		-1.337* (0.56)	-0.935 (0.67)
Age	-0.107 (0.13)	-0.192 (0.11)	-0.142 (0.14)
AgeSq	0.001 (0.00)	0.002 (0.00)	0.001 (0.00)
Fixed Yr Effects	Y	Y	Y
Constant	-0.008 (1.85)	4.278* (1.73)	1.380 (2.09)
Workers	87	134	65
PseudojR2	0.13	0.20	0.13
AIC	129.9	128.4	103.8
BIC	166.9	171.8	136.4

Source: Paulistano wage series. Base is Brazilian in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table III: Probability for being an Unskilled Worker: Impact of Nationality, Race and Literacy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SPOR	SPOR	Paulista	Paulista	Paulista	Light	Light
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
White		-0.191 (0.12)		-0.191 (0.12)	-0.178 (0.22)		
Portuguese	0.322* (0.15)	0.372* (0.15)	0.322* (0.15)	0.372* (0.15)	0.236 (0.24)	1.211*** (0.25)	1.541*** (0.42)
Italian	-0.036 (0.19)	0.041 (0.19)	-0.036 (0.19)	0.041 (0.19)	-0.528 (0.34)	-0.728* (0.32)	-0.535 (0.56)
Spanish	-0.237 (0.24)	-0.198 (0.25)	-0.237 (0.24)	-0.198 (0.25)	-1.043* (0.50)	1.239** (0.42)	0.961 (0.70)
German/ Austrian	-0.146 (0.64)	-0.008 (0.65)	-0.146 (0.64)	-0.008 (0.65)		-1.579** (0.55)	-0.944 (1.03)
Other	-0.656 (1.15)	-0.522 (1.15)	-0.656 (1.15)	-0.522 (1.15)	omit	-0.167 (0.31)	0.754 (0.83)
Literate					-0.879** (0.34)		-1.554** (0.60)
Experience	-0.001*** (0.00)	-0.001*** (0.00)	-0.001*** (0.00)	-0.001*** (0.00)	-0.001*** (0.00)		
Exp.Sq	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)		
Age	0.087** (0.03)	0.083** (0.03)	0.087** (0.03)	0.083** (0.03)	0.159** (0.05)	0.003 (0.07)	-0.250 (0.15)
AgeSq	-0.001 (0.00)	-0.000 (0.00)	-0.001 (0.00)	-0.000 (0.00)	-0.002* (0.00)	0.000 (0.00)	0.004 (0.00)
Fixed Yr. Effects	Y	Y	Y	Y	Y	Y	Y
Cia. Effects	Y	Y					
_cons	-1.987*** (0.53)	-1.799*** (0.54)	-1.987*** (0.53)	-1.799*** (0.54)	-1.884 (1.02)	-0.653 (1.01)	4.670* (2.23)
Workers	2906	2906	2906	2906	1000	599	175
PseudojR2	0.12	0.12	0.12	0.12	0.14	0.11	0.16
AIC	3476.0	3473.7	3476.0	3473.7	1202.4	707.4	228.8
BIC	3780.7	3784.3	3780.7	3784.3	1418.4	764.5	269.9

Source: Paulistano wage series. Base is Brazilian in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table IV: Probability for being a Metalworker: Impact of Nationality, Race and Literacy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	SPOR	SPOR	Paulista	Paulista	Paulista	Light	Light	Jafet	Jafet
	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Portuguese	-0.092 (0.16)	-0.589 (0.31)	-0.092 (0.16)	-0.561 (0.34)	-0.572 (0.35)	-1.030*** (0.23)	-1.626*** (0.42)	0.671 (0.82)	1.231 (1.03)
Italian	0.519* (0.22)	0.817* (0.33)	0.519* (0.22)	0.878* (0.35)	0.902** (0.35)	0.223 (0.23)	0.673 (0.53)	0.133 (0.57)	1.073 (0.70)
Spanish	0.470 (0.27)	1.014* (0.41)	0.470 (0.27)	0.989* (0.43)	1.058* (0.43)	-0.797* (0.36)	-1.246 (0.72)	-0.350 (0.64)	0.555 (0.60)
German/ Austrian	0.068 (0.42)	omit	0.068 (0.42)	omit	omit	0.848* (0.34)	2.058 (1.78)	omit	omit
Other	2.207** (0.82)	3.029*** (0.63)	2.207** (0.82)	3.362*** (0.68)	3.203*** (0.67)	0.005 (0.24)	-1.151 (0.79)	-0.760 (1.11)	0.579 (1.25)
White				-0.230 (0.27)	-0.240 (0.27)				
Literate		0.639 (0.50)			1.109 (0.59)		1.240* (0.55)		2.676*** (0.69)
Experience	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)				
Exp.Sq	-0.000** (0.00)	-0.000*** (0.00)	-0.000** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)				
Age	-0.085* (0.03)	-0.065 (0.06)	-0.085* (0.03)	-0.069 (0.06)	-0.073 (0.06)	0.040 (0.05)	0.322* (0.14)	0.348** (0.11)	0.304* (0.12)
AgeSq	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	-0.001 (0.00)	-0.005* (0.00)	-0.004* (0.00)	-0.003 (0.00)
Education				-0.033 (0.12)	-0.200 (0.16)				
Constant	-0.632 (0.58)	-1.635 (1.11)	-0.632 (0.58)	-0.669 (1.08)	-1.365 (1.16)	-0.452 (0.76)	-5.710** (2.13)	-10.410*** (1.57)	-10.836*** (1.83)
Workers	3118	1160	3118	1160	1160	801	182	1163	702
PseudojR2	0.06	0.12	0.06	0.12	0.13	0.05	0.18	0.14	0.25
AIC	3099.9	1124.3	3099.9	1127.1	1123.9	1077.5	233.7	212.8	150.1
BIC	3402.1	1336.7	3402.1	1344.5	1346.4	1138.4	275.3	293.7	218.5

Source: Paulistano wage series. Base is Brazilian in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table V: Probability for being a Manager: Impact of Nationality and Literacy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SPOR	SPOR	Paulista	Paulista	Paulista	Light	Light
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Portuguese	0.803*** (0.19)	1.175*** (0.32)	0.803*** (0.19)	0.765*** (0.19)	1.082*** (0.33)	-0.339 (0.35)	-2.394* (1.04)
Italian	0.379 (0.27)	0.577 (0.46)	0.379 (0.27)	0.313 (0.27)	0.413 (0.50)	0.501 (0.34)	-0.011 (0.72)
Spanish	0.588 (0.35)	0.574 (0.51)	0.588 (0.35)	0.557 (0.36)	0.515 (0.52)	-0.281 (0.60)	omit
German/ Austrian	1.876*** (0.53)	omit	1.876*** (0.53)	1.760** (0.54)	omit	0.644 (0.42)	-0.613 (1.51)
Other	2.128*** (0.54)	4.035*** (0.65)	2.128*** (0.54)	2.046*** (0.54)	3.564*** (0.65)	0.376 (0.34)	omit
White				0.190 (0.17)	0.552 (0.34)		
Literate		-0.284 (0.48)					omit
Experience	0.000*** (0.00)	0.000* (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000* (0.00)		
Exp.Sq	-0.000* (0.00)	-0.000 (0.00)	-0.000* (0.00)	-0.000* (0.00)	-0.000 (0.00)		
Age	0.169** (0.05)	0.230* (0.11)	0.169** (0.05)	0.171** (0.05)	0.236* (0.11)	0.121 (0.07)	-0.261 (0.25)
AgeSq	-0.002** (0.00)	-0.003* (0.00)	-0.002** (0.00)	-0.002** (0.00)	-0.003* (0.00)	-0.001 (0.00)	0.006 (0.00)
Education					0.053 (0.18)		
Constant	-5.822*** (0.94)	-6.761*** (1.99)	-5.822*** (0.94)	-6.001*** (0.96)	-7.737*** (2.01)	-3.873** (1.19)	1.587 (3.72)
Workers	3008	1025	3008	3008	1025	804	140
PseudojR2	0.14	0.19	0.14	0.14	0.20	0.12	0.22
AIC	2017.6	666.5	2017.6	2017.5	664.8	579.8	101.6
BIC	2288.0	824.3	2288.0	2294.0	827.6	636.0	128.0

Source: Paulistano wage series. Base is Brazilian in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table VI:

Impact of Nationality on Paulistano Log Wages

	Paulistano 1	Paulistano 2	Paulistano 3
	b/se	b/se	b/se
Portuguese	0.079* (0.03)	0.048 (0.03)	0.004 (0.03)
Italian	0.069 (0.04)	0.047 (0.03)	0.018 (0.03)
Spanish	-0.060 (0.03)	-0.021 (0.03)	-0.077* (0.03)
Ger/Austrian	0.062 (0.03)	0.100** (0.03)	0.091** (0.03)
Hungarian	0.040 (0.04)	0.078 (0.04)	0.083* (0.04)
Female	Y	Y	Y
Married			Y
Age FE	Y	Y	Y
Experience FE			Y
Cia FE		Y	Y
Quartile FE	Y	Y	Y
Year FE	Y	Y	Y
Constant	3.276*** (0.17)	2.961*** (0.17)	2.906*** (0.17)
Workers	2077	2077	1909
AdjR2	0.53	0.58	0.63
AIC	3824.4	3540.3	2699.1
BIC	4170.6	3904.3	3058.1

Source: Paulistano wage series

Base is Brazilian hired in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table VII:

Impact of Gender on Paulistano Wages

	Paulistano 1 b/se	Paulistano 2 b/se	Paulistano 3 b/se
National FE	Y	Y	Y
Female	-0.255*** (0.03)	-0.179*** (0.03)	-0.175*** (0.03)
Married			Y (0.03)
Age FE	Y	Y	Y
Experience FE			Y
Cia FE		Y	Y
Quartile FE	Y	Y	Y
Year FE	Y	Y	Y
Constant	3.276*** (0.17)	2.961*** (0.17)	2.906*** (0.17)
Workers	2077	2077	1909
AdjR2	0.53	0.58	0.63
AIC	3824.4	3540.3	2699.1
BIC	4170.6	3904.3	3058.1

Source: Paulistano wage series

Base is Brazilian hired in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table VIII:

Impact of Gender/Race on Firm Log Wages

	Jafet Wages 2 b/se	Jafet Wages 3 b/se	Light Wages 2 b/se	Paulista Wages 2 b/se	Paulista Wages 3 b/se	Mappin Wages 1 b/se
Nation. FE	Y	Y	Y	Y	Y	Y
Female	-0.008 (0.03)	-0.071** (0.03)				-0.311* (0.13)
White	-0.043 (0.04)			0.006 (0.08)	0.038 (0.10)	
Literate		Y	Y		Y	
Married	Y	Y	Y	Y	Y	
Age FE	Y	Y	Y	Y	Y	Y
Exp. FE	Y	Y	Y	Y	Y	Y
Cia FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Sal. Obs	Y	Y	Y	Y	Y	Y
Constant	3.738*** (0.09)	2.964*** (0.21)	4.766*** (0.14)	2.944*** (0.45)	2.748*** (0.64)	3.248*** (0.87)
Workers	298	469	200	363	167	47
AdjR2	0.78	0.74	0.67	0.21	0.18	0.92
AIC	-151.1	-21.9	-197.6	1370.6	576.2	14.9
BIC	-41.9	121.8	-120.9	1627.4	758.8	51.9

Source: Paulistano wage series

Base is Brazilian hired in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table IX:

Impact of Worker Nationality on Firm Log Wages

	Jafet Wages 2 b/se	Jafet Wages 3 b/se	Light Wages 1 b/se	Light Wages 2 b/se	Paulista Wages 2 b/se	Paulista Wages 3 b/se	Mappin Wages 1 b/se
Portuguese	-0.127 (0.07)	0.019 (0.04)	-0.023 (0.02)	-0.056* (0.02)	0.213* (0.10)	0.127 (0.12)	0.271 (0.20)
Italian	0.007 (0.06)	-0.010 (0.04)	0.017 (0.03)	0.058 (0.04)	0.300** (0.11)	0.296** (0.11)	0.190* (0.09)
Spanish	0.052 (0.04)	-0.076 (0.04)	0.018 (0.03)	-0.056 (0.03)	-0.051 (0.14)	-0.150 (0.15)	
Ger/Aus.	-0.097 (0.06)	-0.189* (0.07)	0.153*** (0.03)	0.083 (0.05)			
Female	Y	Y					Y
White	Y					Y	
Literate		Y		Y	Y	Y	
Married	Y	Y	Y	Y	Y	Y	
Age FE	Y	Y	Y	Y	Y	Y	Y
Exp. FE	Y	Y	Y	Y	Y	Y	Y
Quart. FE	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y
Sal. Obs	Y	Y	Y	Y	Y	Y	
Constant	3.738*** (0.09)	2.964*** (0.21)	4.126*** (0.11)	4.766*** (0.14)	2.556*** (0.59)	2.748*** (0.64)	3.248*** (0.87)
Workers	298	469	835	200	199	167	47
AdjR2	0.78	0.74	0.51	0.67	0.19	0.18	0.92
AIC	-151.1	-21.9	-57.8	-197.6	724.9	576.2	14.9
BIC	-41.9	121.8	67.0	-120.9	912.3	758.8	51.9

Source: Paulistano wage series

Base is Brazilian hired in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table X:

Impact of Gender/Race on Q1 Hire by Firm

	Jafet Q1 2 b/se	Jafet Q1 3 b/se	Light Q1 2 b/se	Paulista Q1 3 b/se	Paulista Q1 4 b/se	Mappin Q1 1 b/se
National FE	Y	Y	Y	Y	Y	Y
Female	2.787*** (0.55)	2.571*** (0.55)				Omitted
White	-3.310* (1.30)			-1.101** (0.39)	-0.624 (0.51)	
Literate		Y	Y		Y	
Married	Y	Y	Y	Y	Y	
Age FE	Y	Y	Y	Y	Y	Y
Cia FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Logwage	Y	Y	Y	Y	Y	Y
Constant	58.546*** (13.61)	27.457*** (5.39)	101.016** (33.47)	-0.377 (1.55)	0.083 (2.33)	2586.343 (.)
Workers	277	435	198	339	135	21
PseudoR2	0.73	0.62	0.62	0.16	0.18	1.00
AIC	105.0	227.2	138.0	460.6	202.7	0.0
BIC	166.6	320.9	197.2	590.7	275.3	0.0

Source: Paulistano wage series

Base is Brazilian hired in 1920

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix 5.1: Chapter 5 data appendix

Table I: Real Wage and Tenure of Jafet Female Employees³⁶¹

Median Number of Days							
	All	Braz	Port	Ital	Span	Germ/Aus	Syrian
Married Women	234.5 (158)	240 (81)	182 (12)	319 (23)	201.5 (20)	113.5 (2)	326 (7)
Single Women	337 (273)	339 (189)	271.5 (14)	258.5 (18)	399 (29)	720 (5)	470.5 (10)
Average Real Wage							
	All	Braz	Port	Ital	Span	Germ/Aus	Syrian
Married Women	62.93 (90)	60.77 (46)	51.79 (7)	59.93 (17)	63.55 (12)	58.31 (2)	63.79 (3)
Single Women	52.89 (145)	53.18 (109)	55.65 (4)	55.86 (6)	50.3 (16)	44.89 (4)	57.43 (2)

Table II: Share of Jafet 1920's Sample Hired During the Industrial Crisis³⁶²

	1926(%)	1927(%)	Other years (%)	1926&7 (%)
All employees	9.31	13.77	76.92	23.08
All females	10.37	16.05	73.58	26.42
Single females	11.76	12.42	75.82	24.18
Married females	5.49	28.57	67.02	32.98
Married Italian females	0	25	75	25
Married Spanish females	0	58.33	41.67	58.33
Married Portuguese females	0	14.29	85.71	14.29

³⁶¹ This table is the source for [figure 1](#) in chapter five. The numbers in parentheses represent the number of observations for each median or average. The source is the Jafet *fichas*.

³⁶² This table is the source for [figure 2](#) in chapter five. The 1920 subsample includes 741 total employees, 405 female employees, 306 single women, 91 married women, 16 married Italian women, 12 married Spanish women and 7 married Portuguese women.

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