

## Introduction

In twenty-first-century Mexico, politicians of the new democratic era are not shy about openly stating that poverty and inequality are the root causes of the old and new social problems the country suffers. During electoral campaigns, politicians of all levels (federal, state, and municipal) and of all parties repeatedly promise they will enact poverty-alleviation programs more effectively than their predecessors. This political rhetoric has become commonplace since the Partido Revolucionario Institucional (PRI) lost the presidential elections for the first time in 2000. Whereas studies of poverty have certainly commented about its contemporary extent, historical overviews of antipoverty policies and their impact on the population are as novel as the ubiquity of poverty-alleviation promises in electoral campaigns is common. Existing studies on poverty in Mexico reveal limitations not only in scope, but also in analyzing the effectiveness of past government policies. Moreover, most studies fail to contextualize these issues in terms of national, world, and scientific events. Electoral speeches can be taken as recognition of the state of affairs of poverty and inequality in Mexico at the beginning of the twenty-first century. *Measuring Up* shows how new research tools and an interdisciplinary perspective enable us to delve more deeply into the roles that governmental policies have played in connection with nutrition, health, and poverty, as well as how these various elements intersect, in the century between 1850 and 1950.

Although today it is acceptable to acknowledge the degree of poverty and inequality prevailing in Mexico and blame former administrations for it, it is important to recall that each administration in turn established programs to combat the conditions leading to poverty. For example, on December 12, 1988, at the beginning of his presidential administration, Carlos Salinas de Gortari created the National Solidarity Program (PRONASOL), which was designed to foster social development.<sup>1</sup>

At the time, the economic crisis that had hit Mexico hard throughout the 1980s had substantially decreased the real wages of the working classes, the number of people falling into extreme poverty was rapidly increasing,

and the resulting social discontent was reaching worrisome levels. In addition to the difficult economic circumstances, the controversial and contested 1988 presidential elections made Carlos Salinas de Gortari politically vulnerable. Maintaining political stability hinged upon the capacity to take prompt action to offer solutions to social problems. But the origins of poverty and inequality did not form part of the economic crisis of the 1980s, nor was PRONASOL the first program launched to address these issues.<sup>2</sup> Since the 1960s, the falling contribution of agriculture to gross domestic product (GDP) has been a warning of a potential crisis of the rural sector, and it has necessitated the government's creation of programs to reverse the decline in agricultural production and the pauperization of the rural population.<sup>3</sup> This is how programs such as the National Food Support Program (CONASUPO) in the 1960s, the Mexican Agrarian System (SAM) in the 1970s, and the National Program for Depressed Regions and Marginalized Groups (COPLAMAR) in the early 1980s were created. Poverty, however, was not a mid-twentieth-century phenomenon, and government policies were not able to eradicate it.

As far back as 1937, President Lázaro Cárdenas established that it was the government's responsibility to assist the poor beyond the provision of basic needs and medical assistance.<sup>4</sup> The objective behind this initiative was to integrate the poor into the labor force so that they could earn their own living and contribute to Mexico's economic growth. This was the first time in the history of modern Mexico that a president stated that assisting the poor was the responsibility of the state—nearly two decades after the revolution had ended.<sup>5</sup> Interestingly enough, social assistance programs were launched at the national level in 1940 only after land and labor reforms were completed, and only when a critical mass of workers and peasants had been sufficiently co-opted by the ruling party to ensure political stability.

By the time Lázaro Cárdenas announced that it was the government's responsibility to assist the poor, Mexico had been an independent nation for nearly 120 years. For much of this time, different governments had worked to eliminate institutions that represented the colonial order. One of the fiercest battles was fought against the Catholic Church and all this institution represented. National governments divested the Catholic Church of its wealth, its privileges, and its powers. This process was slow because it was challenged by different social groups at different times. Sometimes the challenges resulted in violent confrontations. Significantly, the Church lost control over resources to assist the needy. In 1861, the liberal government issued a decree to secularize the remaining ecclesiastical welfare institutions and proceeded to confiscate their assets. Only in 1937, when Lázaro

Cárdenas announced the principle that the government was to be responsible for assisting the poor and took concrete measures to address this matter, did these welfare institutions emerge from a form of legal and institutional limbo. Between 1861 and 1937, the government did not want the Church's interference in state affairs, including charity and welfare; yet it was not certain what to do with the poor.

The rise of capitalism and the philosophical beliefs that endorsed it explained poverty in a way that challenged the traditional religious notions that it was inherent to all societies.<sup>6</sup> In Mexico, the bourgeoisie that formed out of the modernization of the economy, industrialization, and export-led growth during the second half of the nineteenth and early twentieth centuries favored liberal ideas. The secularization of society was a foundation of the liberal revolution. This meant promising equality before the law for all citizens, a rejection of Catholic religion and its privileges, and the rejection of any form of corporate property in favor of the principle of private property. With the rise of anticlericalism came the demise of charitable donations to the Church as an increasing proportion of the oligarchy stopped believing that it was necessary to share part of their wealth with the poor to secure their place in the kingdom of heaven. Although new modes of production created more wealth, capitalists in particular were less willing to engage in charitable enterprises. Moreover, popular social Darwinist ideas, holding that the poor were poor because they were less fit for survival, reinforced the notion that it was useless to give charity to individuals that society had labeled as undesirable. It should be stressed that the oligarchy that emerged after the 1910 Mexican Revolution were even fit generous than their predecessors. The government's anticlerical policies along with its failure to define a welfare program for the lower classes combined with the already declining interest of the oligarchy in sharing their wealth with the poor. Inevitably, this was not conducive to a more equitable society. This trend would guarantee that in spite of the sociopolitical and economic transformation that took place in Mexico during the period 1850–1950, the number of people living in poverty would continue to rise. Astonishingly, historians have focused very little attention on how this central fact of life in Mexican society took place.

The Mexican government launched emergency poverty-alleviation programs even in the midst of the period of sustained economic growth known as the Mexican Miracle (1940–1970). This raises the questions: Were levels of poverty and inequality among the Mexican population ever not a critical issue? Was there a “golden era” of equality that politicians so readily promised? Based on the extant historiography it is hard to know

what happened prior to the 1950s. There is substantial literature on the history of government welfare policies and on the programs devoted to fighting poverty since 1950, as if poverty and inequality were both phenomena that emerged in the 1950s, but this is not the case. Moreover, it would be hard to write a history of poverty and inequality without knowing the evolution of living standards. Unfortunately, the history of living standards is a subject that social, political, and economic historians have marginalized.

Of course, there is no period in the history of Mexico as a modern nation in which poverty and inequality were not issues, and no scholar denies their importance. Still, the traditional historiography that covers the period 1850–1950 addresses these topics tangentially. Much of this early historiography was written to justify and extol the 1910 Mexican Revolution. Later scholars tended to present facts from a Marxist perspective, trying to highlight the damage that capitalist development inflicted on peasants and workers. The deterioration in the standards of living and its implications for levels of poverty and inequality are constantly mentioned both as consequences of government policies and causes of political instability. To substantiate their assertions, historians have relied mainly on anecdotal information.

The general argument has been that the reforms of the mid-nineteenth century incorporated into the Constitution of 1857 mandated the privatization of lands, permitting their seizure by wealthy landowners with the government's consent.<sup>7</sup> The reform laws and related government policies were implemented differently throughout the country.<sup>8</sup> Wealthy landowners with government connections who were seeking to expand their commercial agricultural operations took advantage of this new legislation to seize peasants' communal and private lands that were near their properties. Peasants were deprived of their land and hence became dependent on wage labor for the large haciendas. Consequently, by becoming dependent on wages, peasants also became more vulnerable to changes in the price of basic foodstuffs.<sup>9</sup>

For small landholders, land seizure occurred somewhat differently. Most small landholders were ranchers who had obtained the title to their land from the government as a reward for their willingness to emigrate north to colonize the region and defend it from foreign invasions and indigenous attacks. The construction of the railroads that linked the north to the rest of the Mexico and to the United States, along with heavy foreign investments to industrialize the regions, increased the value of land as well as the incentive to expropriate it. Land seizures were undertaken by local oligarchies

of landholders while the government made no attempt to respond to the complaints of the colonists and of the indigenous tribes of the region.<sup>10</sup>

Scholars writing in the decades after the revolution used emotionally charged anecdotal evidence to substantiate their argument that living standards in the countryside deteriorated as a result of land privatization and concentration of ownership in the nineteenth century. Jesús Silva Herzog describes “unhappy populations with no fire in their homes, no shoes and empty stomachs.”<sup>11</sup> Luis González writes about peasants who lived semi-enslaved in the haciendas and workers who, “being victims of an uncertain life, preferred to be drunk half of their lives.”<sup>12</sup> In brief, traditional historiography treats land seizures and dependency on wage labor as synonymous with deterioration in the standard of living of the bulk of the rural population.<sup>13</sup>

With regard to the urban and industrial proletariat, the traditional argument is that discontent started circa 1900. Prior to 1900, investments in industry created jobs that paid reasonably well. The downsides of industrialization came later. As early as the 1930s scholars were supporting this argument. In 1934 Marjorie Ruth Clark wrote, “As industrialization of the country proceeded, the cost of living rose rapidly while wages, generally speaking, remained almost stationary. The already miserable standard of living fell even lower.”<sup>14</sup> Compared to the peasant population, industrial and urban workers represented a minority of the working class. However, they represented the labor force in the most dynamic sector, and their protests also created trouble in the cities for the government authorities.

The decline in real wages was a quintessential example of the decline in living standards of the urban working classes prior to the 1910 Revolution. Traditional historiography presents the strikes of Cananea (1906) and Río Blanco (1907) for higher wages as the origins of the revolution. Through Charles Cumberland’s work on the Mexican Revolution we learn that, according to early twentieth-century estimates, the laborer’s average wage ranged between twenty-five and fifty cents. By way of contrast, the price of basic commodities had increased during the same period.<sup>15</sup> Frank Tannenbaum explains, “Industrialization was paralleled by a rapid increase in the cost of living without a corresponding rise in the wages of the masses.”<sup>16</sup> Pioneering traditional Mexican historians of the revolution, like Alfonso Teja Zabre, argued along the same lines.<sup>17</sup> Decades later, Friedrich Katz still uses the same wage argument in his explanations of the causes that led the working classes to join the revolutionary movements as he writes, “The most immediate cause of worker dissatisfaction was the sharp decline in

living standards between 1900 and 1910. Even in the period up to 1907 real wages were eroded by inflation.”<sup>18</sup>

Most of the statistical information to support these arguments of the decline in living standards based on rising prices and stagnant wages is very limited. These sources are not very reliable as they have two problems: first, they are very limited as to the years and the places they cover; second, it is not clear how the data were gathered. In the case of peasants, the simple assertion that land seizures provoked a decline in living standards does not offer a tangible comparison of how standards of living declined.

For the postrevolutionary period, what we know about living standards is told indirectly. The historiography is very explicit in describing all investments that were made to modernize the country. One underlying assumption is that modernization was meant to improve the living standards of the population. The efforts translated into social reforms aimed at improving the working conditions and the property rights of the laboring classes, for example, through the land reforms (Article 27) and the labor reforms (Article 123) of the 1917 Constitution.<sup>19</sup> These reforms, however, are described as slow and limited: “Historians who point to the paucity of reform in the 1920s and the conservatism of the regime are right. . . . Formal policies—the doings of the state and the political elite—were not co-terminus with social reality, and things often changed (or refused to change) in defiance of governmental wishes.”<sup>20</sup> Elite reluctance about change did not go as far as dismissing these reforms altogether because there was a constant threat of popular revolt. Through the unionization of the working class, laborers gained, at least to a certain extent, some bargaining power over their working conditions and wage levels. Land redistribution, on the other hand, is described by Alan Knight as a positive policy for living standards: “In the short term, it not only enhanced peasant living standards and self-esteem but also shifted the political balance.”<sup>21</sup>

Nowhere in the literature do we find compelling evidence on exactly how the standards of living improved. There is no attempt to actually measure the living standards to draw a comparison with the Porfirio Díaz regime and—to the degree that quantitative evidence is brought to bear—the analysis is not based on substantial systematic evidence.<sup>22</sup> There is, however, a constant mention of the need to decrease inequality and alleviate poverty. As early as 1947, the leading historian of the Colegio de México, Daniel Cosío Villegas, asserted that the revolutionary government had failed to diminish inequality, commenting: “Instead of being distributed equally among the most numerous groups and those in greatest need of moving up the social scale, the new wealth was allowed to fall into the

hands of a few who of course had no special merit of any kind.”<sup>23</sup> In writing on Mexico’s economic development, a leading economic historian of the mid-twentieth century, Fernando Rosenzweig, points out the poor distribution of income as one of the problems of contemporary Mexico. He bases his assertion on the data obtained in the first measurement of income distribution in 1957. He exposes the improvement of living standards as one of the tasks that need to be fulfilled by the postrevolutionary government.<sup>24</sup> Interestingly, he makes no attempt to explain why this had not already been addressed.

In the past decades cultural historians of Mexico—in Mexico and abroad—have been increasingly interested in writing the histories of the lower strata of the population with regard to both urban and rural individuals. Today the historiography on modern Mexico is rife with studies on the activities, values, yearnings, troubles, frustrations, and projects of marginalized members of society. These studies emphasize the “history from below” perspective. In contrast, almost no studies have been written on the history of poverty and inequality as sociopolitical and economic phenomena for the national period prior to 1950. Two exceptions in this historiographical lacuna are Moisés González Navarro’s *La pobreza en México*, written in 1985, and Silvia Marina Arrom’s *Containing the Poor*, published in 2000.

Judging by the scholarship produced in the fields of social, political, and economic history of Mexico in recent decades, it appears that the study of living standards has failed to awaken an interest among these scholars. There are, however, some exceptions to this apparent marginalization of the subject, such as the price series for foodstuffs created by the Colegio de México (COLMEX) group, as well as works by John Coatsworth, Aurora Gómez Galvarriato, and Jeffrey Bortz. The COLMEX group undertook the first attempt to build data series on basic food prices and wages, and then inferred the living standards of the working classes by trying to estimate their purchasing power. Nonetheless, they did not take into account the fact that a substantial portion of the population operated outside the monetized economy.<sup>25</sup> The works of Coatsworth, Gómez Galvarriato, and Bortz look at the evolution of living standards with a systematic analysis of wages and food price data, but their works only concentrate on a specific region or a specific sector at some point in time in the nineteenth or twentieth century.

Coatsworth’s essay, “La producción de alimentos durante el Porfiriato,” shows that food production for domestic consumption increased at the same rate as population growth. He thus rejects the traditional hypothesis that

developmental policies favoring industry and the export sector were detrimental to agricultural production for domestic consumption. His findings, in the aggregate, suggest that Mexicans were not eating less.<sup>26</sup> Coatsworth, however, does not venture to say anything about how this food production was distributed among the different strata of the population, leaving the effects of distribution as a subject for further study.<sup>27</sup>

Bortz's work focuses on industrial wages in Mexico City from 1939 to 1975. The data series produced by the government for that time period resulted from different methodologies and changes in the definitions of some of the industries. Bortz circumvents this problem by constructing a data series using firm-level data. He finds that real wages in Mexican industry fell sharply after 1939, reached a low point in 1946, remained exceedingly low until 1952, and did not recover their 1939 levels until 1968.<sup>28</sup> Bortz's recent essay with Marco Aguila, "Earning a Living: A History of Real Wage Studies in Twentieth-Century Mexico," concludes: "It is not clear that any generation of Mexican industrial workers can experience modernization of supply and demand for labor—under conditions of sustained underdevelopment."<sup>29</sup> In other words, in spite of heavy modernization during World War II, wages remained at an underdeveloped level.

Aurora Gómez-Galvarriato's work on the evolution of prices and wages from the Porfiriato (1876–1910) to the decade following the outbreak of the 1910 Revolution also offers an interesting analysis of the living standards of industrial textile workers in Orizaba. She shows that real wages declined only toward the end of the Porfiriato, by 18 percent between 1907 and 1910.<sup>30</sup> However, she has also noted on the basis of other works that in certain respects, in contrast to agricultural workers, industrial workers were relatively privileged.<sup>31</sup> A recent historiographical essay by Gómez-Galvarriato and Mauricio Tenorio Trillo, which reviews studies on the economic history of the Porfiriato, suggests that very little of this literature addresses the evolution of living standards across Mexico.<sup>32</sup> Since the 1970s Coatsworth has been concerned with the evolution of living standards in Latin America and, up to this day, he continues to highlight the importance of studying living standards in a long-run perspective. Coatsworth has recently mentioned the possibility of using trends in stature as a tool to measure the biological standards of living.<sup>33</sup> Nevertheless, except for the work of Coatsworth, Bortz, and Gómez-Galvarriato, there has been no attempt to measure living standards over a long period.

Thus, apart from González Navarro's *La pobreza en México*, there have been no long-term studies on any of these three subjects. It is surprising that this void actually exists given the fact that living standards are better



understood when analyzed in a long-term perspective. Poverty and inequality cannot be altered in a short period of time unless there are radical social, political, and economic changes, such as a sustained revolutionary transformation as was the case with Cuba and Russia. Mexico had a revolution in 1910, but its effectiveness in improving the quality of living standards of the masses is uncertain. Government documents argued one thing; the results told a different story. Indeed, one example of the uncertainty of the effects of the revolution is the fact that there is no consensus with regard to how long it lasted. To this day, scholars still debate when the Mexican Revolution actually ended.<sup>34</sup>

By focusing on factors of height and biological well-being, this book can contrast fluctuations in the biological and material standard of living with government policies and historiographical assertions about such policies or political and economic changes. A national approach to the evolution of living standards facilitates comparisons across regions and social classes. *Measuring Up* therefore offers the first national examination of the evolution of poverty and inequality over the hundred-year period from 1850 to 1950.

The concept of “living standards” itself differs significantly across disciplines. This study takes into account the multifaceted nature of the subject. Hence, living standards will be examined from the perspectives of politics, economics, demography, scientific advances in the field of medicine and nutrition, and technological innovation applied to public health. History is used as a bridge across these disciplines. The aim is to present an integral study of the history of living standards over a hundred-year period in Mexico. I should also clarify that the scope of this book does not address the evolution of spiritual and emotional living standards of the Mexican population. These aspects of well-being fall outside the scope of this study.

The period 1850–1950 is fundamental in the history of Mexico because of profound transformations that took place both in Mexico and worldwide. Over this century, Mexico went from being a mainly rural, preindustrial country to a modern, industrialized economy full of the contrasts and disparities we recognize today. Political upheaval, a foreign invasion, and civil wars also made their mark in this time period. These events inevitably had an impact on the living standards of the population. There were global changes that had impacted Mexico’s population. Research findings in the natural sciences made it possible to learn about the causes of the most deadly infectious diseases, their prevention, and eventually, their treatment and cure. Technological innovations in civil engineering allowed the building of effective sanitary infrastructure in cities at a time when populations were becoming increasingly urbanized as a result of industrialization

and economic modernization. Science and technology made it possible to improve public health, leading to what Richard Easterlin has called a "Mortality Revolution."<sup>35</sup> These transformations reached Mexico during this period and had significant repercussions in the living standards of the population.

The dearth of long-term studies on poverty and inequality in Mexico before 1950 is partly due to the lack of relevant databases to analyze the evolution of standards of living from a long-term perspective using the same methodologies employed to measure living standards in post-1950s studies. This does not mean that it is impossible to study the history of living standards before 1950. Rather, it is necessary to find alternative methods to measure living standards. In particular, recent advances in the field of human biology allow a better understanding of the determinants of human growth. These findings have been used by economists, who have shown that human measurements can be used as a welfare measure.<sup>36</sup>

The interest in auxology (the study of human growth) goes back much further, to the seventeenth and eighteenth centuries. In these centuries, a few individuals recorded human heights. More extensive progress in the field of auxology came in the late nineteenth century.<sup>37</sup> But the deplorable use of human measurements in Hitler's Germany for racist purposes in the 1930s and 1940s undermined the credibility of this methodology. This led to work by scholars who were interested in developing a national accounting system and in measuring welfare to avoid the use of human stature as an indicator of health and nutritional status. This culminated in the 1950s when the United Nations set standards of developing indicators to measure global living standards.<sup>38</sup>

Only since the 1960s have economic historians of Europe and the United States used heights to assess the impact of industrialization on the living standards of the populations, in a field that came to be known as "historical anthropometry." Most of these studies deal with the eighteenth and nineteenth centuries, when institutions like the military, prisons, and schools began to gather these data in a systematic way. However, as more scholarly research has been produced in this field, the use of heights as a measurement of living standards has been criticized by some scholars on the basis that "height is an excellent indicator of the nutritional status of children, but it has deficiencies as a more general measure of nutritional status of the whole population."<sup>39</sup> In this debate, other scholars have argued in favor of its use, stating, "Carefully handled, measurements of the height of adults can be excellent indicators of the nutritional status of those adults as they grow older."<sup>40</sup> In addition, some scholars have defended the use of height

data to examine the evolution of living standards in cases in which it is the only reliable data available, as is the case of subsistence-based economies, cash economies, “and economies where the government’s administrative apparatus is very weak, [and] may suffer from very poor and incomplete data collection.”<sup>41</sup> Researchers also argue that adult heights remain relevant to study “in countries whose income levels have not reached those of the West.”<sup>42</sup> The case of Mexico in the period 1850–1950 is one in which the use of adult heights as a measure of living standards is pertinent.

Living standards are not only affected by economic and political events; health and nutrition, too, have an impact on the quality of life. This is why Richard Steckel, a leading scholar in the field of anthropometric history, suggests that in analyzing the trends in heights in a particular country “one should take into account three equally important elements: first, the timing of industrialization relative to the recognition of germ theory of disease and public health principles; second, the extent of urbanization; and third, diet.”<sup>43</sup> *Measuring Up* applied all these factors to the case of Mexico.

In keeping with the multidisciplinary nature of this study, the chapters of this book are organized thematically while following a chronological order within each chapter. Because this study is intended for an audience with varying interests, very technical aspects are presented in the endnotes or in the Appendix. This allows the reader to follow the argument without having to focus on quantitative analyses or on technical knowledge of welfare legislation or on the nutrients a balanced diet should include and the pathologies resulting from nutritional deficiencies.

Section 1 traces the origins of poverty alleviation, including social welfare programs from the mid-nineteenth century until 1950. It explains from a long-term perspective how the issues of poverty and the needs of those at the bottom of the social scale were addressed by the authorities in power. It includes a survey on the evolution of ideologies and objectives that informed the design of policies concerning welfare. The politics behind the provision of welfare and the design of welfare institution are also discussed.

I argue that nineteenth-century liberal reforms affected the living standards of the popular classes by reducing assistance given through religious institutions. The banning of religious corporations of lay members and the disentanglement of communal property undermined local communities’ ability to organize. Private welfare institutions created during the Díaz administration (1877–1911) were limited in number and extent in great part because of the absence of laws that would support and protect them. In Mexico, social legislation came late and with a certain lack of detail that allowed for the perpetuation of inequality. The labor law that emerged from

the 1917 Constitution covered a small proportion of the working classes. This in turn established strong foundations for the growth of the informal economy. After many delays, the government finally established a poverty-relief agenda in the late 1930s. Although a unionized working class was eventually protected by social legislation—and this was reflected positively in their standards of living—the great majority of the working classes remained marginalized, especially those living in the countryside.

Section 2 analyzes the evolution of standards of living. It is possible to evaluate whether the evolution of welfare institutions favored the perpetuation of inequality across social classes. The first chapter presents the methods and sources employed in the analysis and discusses the subject of well-being and living standards. It goes from the philosophical question of what it means to “live well” to the more practical questions of how we measure living standards and income inequality, then to why adult heights are the best way to study the evolution of biological standards of living in Mexico. It presents a road map pointing out where to obtain height information, how to build databases, and how to organize information to analyze trends in height.

The second chapter tests the relevance of political events and policies discussed in Section 1 for the population’s well-being. I compare the trends in heights of the upper and lower strata of the population as well as trends across regions. An advantage of this long-term study is that we can observe if there is a convergence over time. I also test if there was a structural break in the trends in heights for people who were born after the enactment of the liberal reforms in the nineteenth century and after the 1910 Revolution. The timing of industrialization relative to the recognition of the germ theory of disease and public health, and the extent of urbanization and diet, are all taken into consideration. I argue that the different trajectories of heights in our samples reflect living standards of the different sectors of the population as well as the effects of welfare policies on the people’s well-being. Upper classes display a tendency similar to that of the evolution of GDP per capita. The working classes inserted in the formal economy are shorter in height than the upper classes, but there is a converging trend with the wealthy. By way of contrast, the heights of people belonging to the classes who received little or no assistance to overcome poverty suffered a decline during the nineteenth century, evidence that their standards of living deteriorated during the Díaz administration and the years of the revolution. Their biological standards of living decline and do not start to recover until the 1930s. After this period recovery is relatively fast, and cohorts born in 1950 have the average stature of their ancestors born in 1850.

To complete the height analysis, I compare the case of Mexico with other countries and with respect to modern-day standards. This way it is possible to put the Mexican case in a global context. In 1850 Mexicans are not the shortest in the sample, but by 1950 they do fall to the lowest rank.

In Section 3, I will show that health and nutrition influenced the trends in heights presented in the previous section. The first chapter presents a narrative of the history of health and nutrition during the years studied. Through the examination of the health and demographic history of Mexico, as well as the evolution of dietary habits of its population, this chapter will delve into the ways in which health and nutrition influenced the evolution of the biological standards of living of the population. I argue that the unequal provision of health services, dietary habits that perpetuated nutritional deficiencies among the popular classes, and unchanging fertility patterns all played a crucial role in creating the evolution and perpetuation of unequal living standards among the Mexican population. Poor health status affected the evolution of biological standards of living of the popular classes for cohorts born between 1850 and 1950. Although some figures on health status improved over time, such as life expectancy, there were others, such as average stature of the population, for which there was no sign of improvement by the mid-twentieth century. Ongoing economic, social, and political changes would have suggested otherwise. Innovations in medicine, along with government's investments in public health and public works, were able to control the spread of infectious diseases, but there was little improvement in nutrition. Government investments were a good start to improve public health but insufficient to service a population with very rapid demographic growth. On the issue of nutrition, I will argue two things: the dietary habits of the majority of the population barely changed during this time, and there were sharp contrasts in diet across social classes. The second chapter of the section will continue to look into the synergies between health and nutrition by way of the analysis of the quantitative evidence available.

This book thus synthesizes different strands of evidence to create an integral framework for understanding the evolution of living standards of Mexico's population between 1850 and 1950. It starts to fill the historiographical lacunae on living standards. It seeks to shed light on the past, leaving food for thought on the present and future of living standards. Accordingly, it makes a contribution from the field of history for scholars of the present interested in formulating policies to alleviate poverty in countries such as Mexico that are rich but unequal.