INTRODUCTION

For half a century, I have worked and published on comparative economic and social systems, developing diverse techniques to measure and rank their performance. My doctoral dissertation at Cornel University in 1968 dealt with employment, unemployment, and underemployment in socialist economies—the Soviet Union, the People's Republic of China (thereafter China), Yugoslavia, and Cuba (Mesa-Lago 1968). Later, I organized an international conference at the University of Pittsburgh on comparative socialist systems, analyzing economic and political issues, which was attended by prominent experts from all over the world; I edited a book with the best papers presented at the conference and contributed a chapter that elaborated a continuum model to compare the evolution of those economic systems (Mesa-Lago and Beck 1975). Some thirty books and more than one hundred articles or chapters in books of mine have compared social security systems (pensions, healthcare, unemployment insurance, and social assistance) and their reforms among all countries in Latin America and others in the Caribbean, Western and Eastern Europe, Asia, and Africa (the latest book is Mesa-Lago 2021b). In my historical comparison of three Latin American economic-social

models (market in Chile, socialist in Cuba, and mixed in Costa Rica), I examined their policies, measured their results with dozens of indicators, and ranked their performance (Mesa-Lago 2000). Overall, I have conducted field research in and published on some thirty-six countries in the world. In the last three years, I have expanded my comparative research on the economies and social security systems and reforms of China and Vietnam (Mesa-Lago 2014, 2018a, 2024a). This latest work sparked my interest in deepening that line of research and motivated this book.

Based on my previous work and methodological contributions, herein I compare two main socialist economic-social models. One is Cuba's central plan with dominant, state-owned large enterprises over the market and private property along with mild structural reforms oriented toward the market that have been unable to generate economic growth, resulting instead in the opposite. The other model is the Sino-Vietnamese "socialist-market" model, in which small, median, and some large private enterprises and the market predominate under a decentralized plan that is more a guideline than a straitjacket, with the state regulating the economy and controlling the largest enterprises.[1] It should be noted that Vietnam has a wider preponderance of small enterprises (also household nonfarm enterprises) than China. The share of the state sector in gross domestic product (GDP) has declined significantly in the two socialist-market economies (shares in 2019 were 27 percent in Vietnam and 31 percent in China) but is the vast majority in Cuba (96.2 percent in 2008 and 90.8 percent in 2018—in the latter year, the state accounted for 67 percent of employment).[2]

To the best of my knowledge there are not all-embracing systematic comparisons of the economic-social models and social security systems of Cuba and China-Vietnam. There are academic articles that compare specific policies of the three countries: for instance, Malesky and London (2014) on the politics of development, Mesa-Lago (2018a) on social security reforms, Monreal (2018c) on economic reforms, and P. Vidal (2014) on monetary and exchange-rate unification. Some edited handbooks have chapters on each of the three countries treating different features: for instance, Aspalter (2023) encyclopedia on social welfare with chapters on Cuba (Mesa-Lago and Aspalter 2023), on China (C. Lee 2023), and on Vietnam (Diep and Hang 2023). These exercises are useful and informative but are not systematic comparisons of overall social welfare among the three countries.

ORGANIZATION OF THIS BOOK

The book is structured in three parts. The first part is comprised of the introduction and chapters 1, 2, and 3. In the introduction I provide the

background, organization, and hypotheses of the book and analyze the key issue of the availability and reliability of statistics in the three countries. I start chapter 1 with the question of whether the three countries are truly comparable. In examining a series of indicators (the human development index, area and population size, demographics, and so forth), I find that most indicators are similar but a few are different; I discuss counterarguments to conclude that the divergent indicators are not an obstacle, hence the countries-models are comparable. In chapter 2 I contrast the two models focusing on five major economic policies: ownership of the means of production (the market vis-à-vis the plan); agrarian reform; industrialization process; employment, open unemployment, and self-employment; and currency and exchange-rate unification. I do not break new ground in this chapter but provide a synthesis of these policies in a comparative manner, which serves as a useful base for the rest of the book. In chapter 3, I contrast the economic-social performance of the two models and the three countries using twenty-seven indicators, of which fifteen are economic and twelve are social. Based on a selection of the most relevant and comparable twenty indicators (ten economic and ten social), I elaborate a composite average to rank the three countries' economic-social performance.

In the second part of the book (chapters 4 and 5), which is the most important and innovative, I focus on social security/social protection and its three major components: contributory pensions, healthcare, and noncontributory social assistance.[3] Each component is compared based on the following fundamental ILO principles of social security (for the history and analysis of these principles see Mesa-Lago 2007; Olivier 2022): unity and equal treatment; universal coverage (labor force on pensions, total population on healthcare, and elderly population on social assistance); benefit sufficiency; social solidarity and gender equity; administrative efficiency, reasonable costs, and tripartite representation; and financial and actuarial sustainability. Standardized tables and selected figures are elaborated along each of these principles to compare the three countries. The treatment of them in the text, whenever suitable, is done in the same order: China, Cuba and Vietnam.

There are two chapters (6 and 7) in the third part. Chapter 6 contains the conclusions, made up of four sections. In the first section I summarize the key social security indicators in the three countries and rank the countries for their performance in such indicators (social security principles), as well as their financial-actuarial sustainability. In the second section I discuss some methodological problems in the comparisons. The third section is a confirmation of the three hypotheses of this book. And in the fourth section I search for an answer to the intriguing question as

to why Cuba has not followed the economically and socially successful model of Sino-Vietnamese socialist market.

Chapter 7 consists of policy suggestions to improve social security in the three countries; the suggestions are based on the book's diagnosis combined with my forty years of consulting experience in thirteen countries, working with international-regional organizations as well as governments and international foundations. In a brief subsection I explore the sustainability of the current model in each country and the potential alternatives or adjustments needed to increase sustainability. The rich and varied comparative experience of the three countries and the policy recommendations should be valuable for both developing and developed countries.

Several sources were used in the book. The first are statistical yearbooks from the three countries; an effort was undertaken to compile the data for both a specific time period (to identify trends) and the most recent year available. Although 2020 data was obtainable from the three countries, that year was affected by the pandemic and generated some distortions. In several cases, 2020 data is provided when such distortion does not occur or to show the impact of Covid-19 (in a few instances, statistics on 2021 and 2022 are supplied). A second source was a compilation of legislation in the three countries. A third source was consulting experts both in China and Vietnam. I had originally planned to conduct field research in both countries, but the pandemic impeded my trips.[4] Instead, I sent questionnaires to scholars, officials, and experts on the economic models and the three major components of social security in both countries, and these were answered and then tabulated by me. A fourth source was academic literature on economics and social security from the three countries. In addition to the materials obtained in the United States, I worked on the China collection at the Max-Planck Institute for Social Law and Policy in Munich and consulted with its experts. A planned stay at the Institute of Developing Economies in Tokyo to work on its excellent collection and to consult experts on Vietnam also had to be postponed due to Covid-19. A fifth source was books, academic articles, technical reports, and press articles on the three countries—more than five hundred bibliographical entries support this book.

HYPOTHESES

In the book I present three major hypotheses. The first is that the Sino-Vietnamese socialist-market model has had a better economic and social performance than the Cuban model of predominant central plan and modest ineffective reforms, even though the two Asian countries started with a much lower level of economic-social development than

Cuba, which demanded a greater effort to match and exceed Cuba's accomplishments. The second hypothesis is that Cuba developed social security much earlier, faster, and more expansively than it could financially support, making it unsustainable in the long run especially with the country's poor economic performance. Conversely, in China and Vietnam, social security developed gradually and is supported by a successful economic performance, thus it is more financially sustainable, although China is beginning to encounter several problems. The third hypothesis is that accelerated aging has had a strong adverse effect on the financial sustainability of the Cuban social security system and is beginning to have an impact in China but not yet in Vietnam. The first hypothesis will be tested in chapter 3, whereas the second and third hypotheses will be examined in chapter 6.

A brief summary related to the three hypotheses follows. At the eve of its revolution, Cuba was one of the most socially developed countries in Latin America, albeit with significant differences in living standards between the capital city of Havana and other large cities and the countryside, something that was also true concerning social security. Building on that base, and with generous aid from the Soviet Union, the revolutionary government virtually closed the urban-rural gap, making education and healthcare universal and free, whereas pensions became almost universal (social assistance and housing were considerably less developed). By 1989, at the eve of the collapse of the socialist camp, Cuba probably had the most advanced system of social security in Latin America, even better than that in many socialist countries in Central and Eastern Europe (Mesa-Lago 2000).[5] The cost of social services grew steadily and peaked in 2007 at 55 percent of the state budget and 37 percent of GDP, probably the highest proportions within Latin America, constituting a heavy burden for the state. In 2007 the president Raúl Castro announced that social services and other "gratuities" (such as subsidized consumer goods through rationing, free burials, social insurance, social assistance, and so forth) could no longer be supported at the same level and had to be reduced according to the economic capacity of the nation.[6] As a result, the cost of social services steadily decreased to 41 percent of the state budget and 25 percent of GDP in 2019. Said cuts reduced access to and quality of healthcare, the purchasing value of pensions, the number of social assistance beneficiaries, and the benefit amount (Mesa-Lago and Díaz-Briquets 2021). It is remarkable that such a significant amount of public resources are allocated to social expenditure despite the severe economic crisis. In 2021, however, 37.6 percent of total investment went into enterprise services, real estate, hotels, and restaurants (despite their significant decrease) whereas only 1.7 percent

was assigned to healthcare and social assistance; the former showed an increasing trend while the latter a decreasing trend (ONEI 2022a).

Cuba has the oldest population in Latin America, and it is projected that by 2050 it will be among the most aged nations in the world. As part of this aging process, the population's old cohort is expanding fast, while the youngest cohort and the productive-age cohort are contracting, resulting in fewer active workers contributing to support the pay-as-you-go (PAYG) pension system, meaning a continuing decline of the ratio of active workers to one pensioner. Furthermore, as life expectancy rises, pensioners will be collecting their benefits for a longer period, increasing costs parallel to the revenue decline and hence boosting the pension deficit. Aging also increases healthcare costs because the elderly cohort suffers terminal and more complex and costly illnesses than those typical of the young and productive-age cohorts. The needed reforms to reduce said services (such as further age increases in pensions) face resistance from beneficiaries who fear losing or diminishing their entitlements.

The current economic crisis has made it more difficult to finance pensions and healthcare in Cuba. In 2016–2020, economic growth decreased at an annual rate of –1.3 percent, aggravating an already strained situation (see chapter 3). Cuban demographer Albizu-Campos properly characterizes the situation: "The real demographic storm is that the Cuban population has completed the process of 'reproductive revolution' [accelerated aging] but the current economic model has failed to materialize the needed 'productive revolution'" (2022c).[7]

Conversely, at the time of their revolutions, China and Vietnam had very poor social services/social security and their costs were quite low. In contrast to the Cuban case, there were no vast beneficiaries to resist the market-oriented reforms.[8] As the two Asian countries developed economically, because of high rates of GDP growth, wages rose, poverty and unemployment decreased, and coverage and benefits of social security were gradually expanded according to their respective economic capacity.[9] In his study of China's development of its health system, X. Huang (2020) proves that economic growth provided the resources needed for the distribution and expansion of social insurance, allocating to it a growing percentage of GDP and fiscal revenue. With more than one billion workers in the labor force covered by pensions and 1.35 billion of the population with access to healthcare in 2021, China has the largest social security system in the world ("Rising Pension Levels," 2021) but also the second-biggest economy.[10] Furthermore, both China and Vietnam have a mixed social security system where state services are combined with private facilities in healthcare (copayments are paid by users), and together with public social insurance, China has fully funded

individual pension accounts. Vietnam has moderate but expanding aging, whereas now China is beginning to confront labor force decreases due to the one-child policy that have placed pressure on pensions.

It has been properly argued that Vietnam was better prepared than Cuba to confront the disappearance of the Soviet Union and the socialist camp in the early 1990s (P. Vidal 2016). Vietnam reforms began before the collapse of socialism in Central and Eastern Europe, and the rise in economic growth cushioned the fall in trade and aid from the Union of Soviet Socialist Republics (USSR). In the same vein, China started its reform in 1978 and had more than a decade of growth before the Soviet collapse. In addition, China did not have the same dependence on trade and aid as Vietnam and Cuba did, and China had an ideological confrontation with the USSR to lead the communist movement globally. Cuba had the highest dependence of the three countries on the Soviet Union and the Council of Mutual Economic Assistance (CMEA) in trade, aid, and subsidies. Furthermore, in 1986–1990, Cuba turned radically to the left and away from the market ("Rectification Process"), which damaged economic growth and, therefore, was the most affected by the socialist-camp collapse: its GDP decreased 35 percent in 1989–1993 (Mesa-Lago 2000).

With its decades-long policy of one child per family, China is confronting accelerated aging that is a threat to the financial-actuarial sustainability of its pension program. The previous policy was changed, increasing the number of children allowed per family first to two and then to three, but such policy change cannot reverse the adverse demographic effects—though it will take longer for China to reach Cuba's critical situation. Opposite to these two countries, Vietnam has a much younger population and does not need to confront this threat in the short and middle term.

Now for a word about asymmetries in my knowledge and experience in researching the three countries. I have devoted sixty years of my life to the study of the Cuban economy and social policy, publishing about 45 books or monographs and more than 150 academic articles or chapters in books on those subjects. Conversely, my previous work on China was mostly comparative and limited to the cited doctoral dissertation and comparison on socialist-economic models, the pension model most applicable to China, and my recent piece on social security reform. My work on Vietnam has been on the comparison of its reform with Cuba's both on the economy and social security. In the last three years, I have tried to fill that vacuum with intensive study of the literature of the two Asian countries and the invaluable collaboration from many colleagues who are experts on their economy and social security policy. As this

book indicates, I have substantially reduced the noted information gap with China and to a less extent with Vietnam, and I hope to continue in this pursuit in the future.

An Important Note on the Availability and Reliability of Statistics

This section is fundamental in comparing the quality of data in the three countries, in detecting missing statistics, and in regarding discrepancies in the comparisons and poor reliability of some data. The Statistical Capacity Index (SCI) measures 144 countries from 2004 to 2020 based on twenty-five criteria that are compressed into three scores (methodology, source data, and periodicity) and, in turn, into a composite scale—from 0 (best) to 100 (worst)—that is used to rank the countries (World Bank 2022b). Each country is also compared with its geographical region according to its three scores. In 2020, China's overall score was 80.0 and it was ranked thirty-first, meaning it has better statistical systems than about 80 percent of all countries and ranked eleventh among 34 Asian countries. Vietnam scored 74.4 overall and was ranked forty-fourth among 144 countries, or eighteenth among 34 Asian countries. Cuba is excluded from the SCI; it is the only excluded country in Latin America (SCI includes the least developed Latin American countries such as Haiti, Nicaragua, and Honduras). One potential explanation for such exclusion is that Cuba is not a World Bank member; nevertheless, the Bank provides several Cuban indicators, such as GDP, fiscal balance, population, and so forth.

In terms of availability, it is quite helpful that the major statistical yearbooks of the three countries, with the latest edition available at the time of finishing this book being 2021 (NBSC 2022a; ONEI 2022a; GSO 2022b), are easily accessible online, as well as other statistical materials, particularly those in China (the country with the largest number of online available statistical publications). Nevertheless, in recent years, the National Bureau of Statistics, China (NBSC), has discontinued hundreds of series of data that were used by experts to double-check the veracity of broader government statistics such as economic growth, making it progressively harder to access this data (Bradsher 2022b). In 2023, because of adverse data, the NBSC discontinued the series on consumer confidence, published for thirty-three years, as well as the series on youth unemployment (Bradsher 2023d; Fu 2023b). In 2007, Premier Li Keqiang privately acknowledged to the US ambassador to China that official economic statistics were "manmade" and unreliable (Buckley and Bradsher 2023). There are reports in the international press of censorship to criticism of some official statistics (Yuan 2023a). Concerning prompt-

ness in publishing the data, Cuba takes the most time, especially during economic crises. The production of statistics is highly centralized in the three countries (although data is also gathered locally), which generates some problems. The three countries prohibit private or independent collection of data, and it is quite difficult or impossible (depending on the subject) to conduct free surveys.

China requests official acceptance or approval of foreign researchers who want to conduct fieldwork and surveys; anthropology researchers can reside in rural communities only with the permission and cooperation of local authorities (Rawski 2022a), but in some cases, people taking surveys without permission are picked up by the local police. On the other hand, Brandt (2022) reports her experience on surveys as generally being positive (save for one case): her Chinese colleagues have been given permission from the authorities, although she cautions that said colleagues tried not to publicize differences with official data and that she knows of cases where scholars were declared persona non grata after they did so. Solinger (2022a) reports that in the 1990s and early 2000s, she worked through scholars in China to gain entry to communities where she held interviews but that it is not possible now to do any fieldwork in China. In Cuba and Vietnam, the government requires a special visa submitted with a research project approved by a ministry, an academic institution, or another official agency that guarantees the project. In Cuba, when the researcher arrives, a meeting ought to be held at the host institution, which thereafter arranges the necessary appointments (my own experience in Cuba; Pérez Villanueva 2022b). Therefore, there is no alternative independent data with which to check the national official figures, and this opens the door for potential manipulation by the government. Another common hindrance in Cuba is the lack of transparency regarding the methods used for data collection and/or calculation and the lack of information on how to analyze and interpret the official data. Finally, in the three countries, those generating or managing the data may have a personal interest that benefits them or the government; for instance, positive indicators on economic growth, output production, and social indicators could result in promotion and negative ones could result in demotion (Wei et al. 2019b; Mondorf 2020).

Reliable statistics on China are complex to obtain given the large territory, the second highest population in the world, and the significant diversity among regions. In 2006–2015, there were an increasing number of annual publications on China's statistical reliability (Plekhanov 2017). Most questionable data is on GDP in constant prices (overvaluation), inflation particularly on healthcare (undervaluation), industrial growth, investment, and unemployment (undervaluation) (Rawski 2001,

2002, 2022; Holz 2003; Orlik 2011; Wei et al. 2019a, 2019b; Yingyao and Jiaxiong Yao 2021; Wallace 2022; Yuan 2023a). Specific reliability problems have been more elaborated by Mondorf (2020): The National Bureau of Statistics, China, reports directly to the State Council, the highest administrative institution in China, which supervises the administration of the NBSC and provides its management staff and financial resources, corroborating that it is not an independent institution. In addition to collecting its own data, the NBSC also receives information from other agencies such as the Ministry of Human Resources and Social Security (MOHRSS), but this data cannot be checked by the NBSC for completeness and accuracy. Statistical inconsistencies in the same publication year have been found; for instance, adding up data from provinces comes to a total that is higher than the national GDP figure. In addition to the NBSC staff, there are 40 million civil servants at national, provincial, and local levels, making individual records hard to trace back to any one specific person, and there are incentives for local officials to manipulate data as it can have a positive impact on their careers. Public expenditure on healthcare and education in 2011 was reported as 8,000,000 million yuan, tantamount to 17 percent of GDP in that year, a percentage that did not match official statistics. The local statistical staff report directly to the respective government in the provinces but not to the NBSC, hence data may be "touched up" at the local level despite the fact that this is illegal. Nevertheless, since the economic reforms of 1978, there is no hard evidence that data is manipulated at the central level of government, but it might be at the local level, resulting in deviations when data is merged. There should not be any interest in inaccurate data at the national level because distorted data would lead to incorrect decisions. Finally, as part of President Xi Jinping's anticorruption campaign, investigation teams have been sent to several provinces to address some of the cited problems and try to improve the situation (Mondorf 2020).

In the case of Cuba, for more than fifty years I have assessed the availability and reliability of statistics (Mesa-Lago 1969, 2001, 2022) concluding that the weakest are macroeconomic indicators such as the calculation of GDP, economic growth rates, gross capital formation, inflation, unemployment, and so forth. Conversely, data on foreign trade is fairly reliable as it can be contrasted with the World Trade Organization (WTO) and other international trade data, but hyperinflation and devaluation of the Cuban peso has led to severe distortions in its conversion to US dollars (Mesa-Lago 2024). Tourism statistics on the number of visitors are reliable as they can be checked with those of the UN WTO, but data given in gross revenue does not subtract imports for the tourist

industry. The availability of data has varied through time. For instance, during the severe crisis of the 1990s, the statistical yearbook was halted and was not resumed for a decade, creating a huge vacuum (Mesa-Lago 2000). Until 1989, social statistics were fairly reliable, but because of the crisis and subsequent economic-social deterioration, its reliability decreased (particularly for unemployment and infant mortality). It is common that a series is published when results are good and then suspended when they are bad, for instance on production of medicines (ONEI 2021). In 2021, out of twenty-four statistical tables relevant to Cuba in the annual statistical publication of the UN's Economic Commission for Latin America and the Caribbean (ECLAC), data on Cuba is only included in two: the GDP (absolute and per capita) and the consumer price index (CPI), both questionable indicators. The other nineteen countries in Latin America are included in those tables, even the least developed country, Haiti (ECLAC 2021; Mesa-Lago 2022). In an ILO study on informal workers, Cuba is the only country in Latin America that does not appear (ILO/WIEGO 2018). Key indicators available in most countries in the world—such as poverty incidence, the Gini coefficient, and coverage of the labor force on pensions and of the population on health—have not been officially published under the revolution.

A search for academic literature examining the reliability of Vietnam statistics was less successful than in China and Cuba. Trinh (2019) studied how agents at lower levels distort data; using nighttime luminosity data he measured the inflated GDP numbers estimated by provincial governments. Economist Ca Tran Ngoc (2022) noted that data on Vietnam economy by the General Statistical Office (GSO) could diverge with other sources such as World Bank, the International Monetary Fund (IMF), Asian Development Bank, and other international banking and financial organizations; but this is also true of many other countries of the world. I have detected statistical contradictions between official sources on the balance of pension revenue and expenses. There are three different series with a significant divergence among them (GSO 2021b; K. T. Nguyen 2017; ILSSA/ILO 2022). The first gives a much lower balance than the other two. In response to my questionnaire, an economist in Hanoi stated that GSO statistics "are the most reliable" and that "statistical information outside state statistics is less reliable because . . . these figures have no value as a substitute for state statistical information" (Hoàng 2022). Vu Hoàng (2014) quoted some Vietnamese officials, but without providing the sources, so their veracity could not be checked. Vũ Quang Viêt (2020), a lecturer on statistics in Vietnam, reported frequent inconsistencies in data collection by sampling on family income and spending. Le Dang Doanh, former director of the Central

Institute for Economic Management, stated that there are many experts, including himself, who have doubts on the accuracy of statistics; for instance, GDP growth reported from provinces is often double the reported national GDP growth (Huy 2022).