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The Rise of Social Safety Nets and Social Insurance in the West: Implications for Developing Countries

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3.1 Introduction

The social safety net is designed to aid households facing adversity. It consists of two types of programs: means-tested redistributive programs and social insurance in which contributions are made in advance to provide protection against shocks to income or health. While social safety net programs are well established in the West, they are still evolving in developing countries. It is estimated that one-third of the world's poor escaped extreme poverty because of safety nets (World Bank 2018). Yet, one in five of the world's poor, largely in low- and middle-income countries (LMICs), still lack access to a safety net program (World Bank 2018).

LMICs stand to benefit from developing their safety net programs for several reasons. First, a very high concentration of the impoverished exist in LMICs. Second, the populations of LMICs experience income and health shocks at a greater frequency and intensity, which are more likely to worsen in the future because of climate change. And finally, contrary to widely held beliefs, the expansion of social welfare programs has not slowed the growth and development of rich nations and may even be complementary to growth (Lindert 2021).

In many LMICs, the early social safety nets provided pensions and health insurance to state employees only. But since the late 1990s, social safety nets have rapidly evolved, expanding in scope to include cash transfer programs (which exist in more than 120 developing countries), health insurance provision for the poor, food security programs, disability benefits, and minimum employment guarantee schemes (World Bank 2018). Programs have also moved away from purely state provision toward more market-based programs and contributory systems in the case of health insurance and old age pensions. Today, these programs cover 2.5 billion people in LMICs.

Yet, LMICs face many challenges in expanding their social safety nets. These include a lack of resources, a large share of informal employment and farming, limited demand for insurance, and weak state capacity. We examine how higher income countries developed

their safety nets to help LMICs avoid mistakes and find better pathways as they develop their own.

3.2 The State of the Social Safety Net in LMICs

3.2.1 Definitions

Noncontributory public assistance transfers resources to the poor and the disabled out of general tax revenues. These transfers can come in the form of cash, but frequently they are in-kind, such as food, housing, health care, or childcare. Transfers can be unconditional or, in some cases, conditional on certain behavior, such as child school attendance. Although public education could be part of the safety net, arguably it is more of a workforce development program. Here we focus on a narrower set of programs.

In *social insurance programs* the worker and/or their employer contributes to a common fund by paying specific taxes or premiums for benefits when an adverse event occurs. Such programs include insurance for unemployment, health, life, disability, and old age, as well as sick days.[1] These programs can be operated either by governments through payroll taxes, or they can operate like a private insurance market, funded privately by employers and workers who pay premiums, or through household contributions to nonprofit organizations, like mutual societies.

3.2.2 Safety Net Spending Today

Table 3.1 presents government social welfare spending as a share of GDP for the thirty most populous countries today, and for eight other interesting cases, that collectively accounted for 79 percent of the world's population in 2023. This excludes mandatory and/or voluntary contributory programs for pensions, health, disability, and life insurance programs provided through employers or nonprofits.[2] If we were to include these nongovernment programs, the ranking would change as some of the lowest public spending countries devote high percentages of gross domestic product (GDP) to mandatory or voluntary private programs. For example, low public spending countries, Uganda (2.3 percent), Kenya (1.6 percent), the Democratic Republic of the Congo (1.8 percent), and South Africa (3.0 percent) had some of the highest percentages of GDP devoted to mandatory or voluntary private health programs. The Netherlands, Switzerland, the United Kingdom, Australia, and the United States have retained that tradition more than other OECD countries. As a result, when private mandatory and voluntary programs through employers are added and taxes on benefits and consumption are subtracted, these countries move higher in the rankings.

Table 3.1 reveals several patterns. First, most social expenditures are highly concentrated on pensions and health care, with health care for the elderly accounting for a large share of overall health care spending. Spending on the elderly is much higher than on mothers and children. This is particularly true in rich countries, though including educational spending would raise the public amounts spent on children. Second, the countries with the lowest

public spending percentages tend to have low per capita incomes, large populations, and young populations. Third, political factors matter. Public social welfare spending shares are lower in areas that have lower participation in the political process and greater gender inequity (Fishback 2023). Even if we were to include mandated programs, LMICs today devote a much lower fraction of their GDP to social expenditures relative to their richer counterparts (Lindert 2004, 2021).

3.3 Key Insights into the Development of Social Safety Nets from High-Income Countries

3.3.1 Sufficiently High Incomes Are a Necessary Condition

Per capita GDP appears to be an important determinant for the development of safety net programs: Among rich countries today, expenditures did not rise much until after World War II (figure 3.1).

But when is per capita GDP high enough to establish robust safety net programs? All countries in table 3.1, except the Democratic Republic of the Congo, have reached the level of income at which European countries began mutual associations. Per capita incomes in 2011 dollars in Germany, which led in the development of social insurance programs in Europe, and the UK were $1,300 and $2,000 in 1600 when there were already guilds and friendly societies in both countries (Maddison Project 2023). By 1880, when German per capita GDP was US$3,174, about half of workers in Prussian industry and mining were in friendly societies, which were funded fifty–fifty by employers and workers, providing insurance benefits for sickness, accidents, orphans, widows, and invalids. Germany mandated that employers provide sickness insurance in 1883, accident insurance in 1884, and pensions in 1889 (US Commissioner of Labor 1893, 1:30–42) when GDP per capita rose to US$3,870 or greater.

Figure 3.2 shows the relationship between real GDP per capita and public social welfare spending as a share of GDP in several years. Greece in 1960 had the lowest per capita income at US$5,015 of any country-year that had reached a social spending share higher than 5 percent. Slovakia in 2000 was the country with the lowest per capita income of US$7,351 to reach a social share of more than 10, when it spent 18.1 percent of GDP in 2000. Thus, substantial economic growth may be required before the poorest countries (e.g., Congo, Tanzania, Ethiopia) can reach social spending above 10–15 percent of GDP.

3.3.2 Government Stability Is a Necessary Condition

A large literature in economic history shows that social welfare expenditures, incomes, education, political stability, trustworthy courts and bureaucracies, and open access in the political and economic realms are strongly related (North, Wallis, and Weingast 2011; Acemoglu and Robinson 2013; Engerman and Sokoloff 2012; Besley and Person 2014 and Lindert 2021). Political instability, wars, and especially civil wars, destroy trust, property,

Table 3.1
Public and net total spending on public assistance and social insurance programs, GDP per capita, and population for countries accounting for 79 percent of the world population

			Other Public Categories in a Year Circa 2009–2015			
Country	Total Public Including Health 2015*	Health 2015	Older People Without Health	Unemployment	Labor Program	Sickness, Maternal, Work Injury, Disability
Pakistan	0.2	0.7	1.8	n.a.	0.0	0.0
Nigeria	0.7	0.6	0.9	n.a.	. . .	0.3
Myanmar	1.0	1.2	0.7	n.a.	. . .	0.1
Indonesia	1.1	1.2	1.0	n.a.	0.0	0.0
Bangladesh	1.7	0.5	0.1	n.a.	0.4	0.0
Uganda	2.2	0.8	0.4	n.a.	. . .	0.4
Philippines	2.2	1.5	0.6	0.0	0.0	0.2
Kenya	2.3	1.7	1.6	n.a.	. . .	0.1
India	2.7	0.9	4.3	. . .	0.4	0.1
Hong Kong, China	2.7	3.0	1.6	n.a.	. . .	2.4
Ethiopia	3.2	1.0	0.3	. . .	. . .	. . .
Congo, Dem. Rep.	3.5	0.4	0.4	n.a.	. . .	0.1
Thailand	3.7	2.7	2.2	0.1	0.0	1.2
Singapore	4.2	2.0	0.7	n.a.	0.3	0.9
China	6.3	3.0	3.7	0.1	0.1	1.6
Vietnam	6.3	1.9	5.5	0.0	0.1	0.3
Tanzania	6.8	1.3	2.0	n.a.	. . .	0.0
Taiwan	9.7	6.1	4.7	0.3	0.2	0.6
South Korea	10.1	3.8	2.7	0.3	0.5	0.6
South Africa	10.1	4.6	3.4	0.2	. . .	0.6
Egypt	11.2	1.7	3.0	. . .	. . .	. . .
Mexico	12.0	3.0	1.7	0.0	0.0	0.1
Iran	12.5	3.7	5.9	0.3	. . .	1.5
Turkey	13.5	3.2	8.3	0.1	0.0	0.3
Colombia	14.1	5.3	3.8	n.a.	. . .	3.9
Russian Federation	15.6	3.1	8.7	0.2	. . .	2.7
Brazil	18.3	3.9	9.6	0.7	0.3	1.7
Australia	18.8	7.2	5.2	0.7	0.2	2.6
United States	19.0	8.5	7.0	0.4	0.1	1.4
Switzerland	19.6	3.5	6.6	0.8	0.6	2.3
United Kingdom	21.5	7.8	6.6	0.3	0.2	2.0
Netherlands	22.3	6.8	6.4	1.6	0.8	3.1
Japan	23.1	9.0	12.1	0.2	0.2	1.0
Germany	25.0	8.6	10.1	1.0	0.7	2.1
Greece	26.4	4.2	17.5	1.0	0.3	1.0
Sweden	26.7	9.1	10.0	0.5	1.4	4.3
Italy	28.9	6.6	16.4	1.7	0.4	1.7
France	31.7	8.3	14.3	1.6	0.9	1.7
Maximum	31.7	9.1	17.5	1.7	1.4	4.3
Minimum	0.2	0.4	0.1	0.0	0.0	0.0
Median	10.1	3.1	3.8	0.3	0.2	0.9

Sources and Notes: Public spending information comes from an International Labor Organization (2023) dataset. Net public and private social welfare spending was downloaded from the OECD (2022) statistics database. Real per capita GDP measures are reported in 2011 US dollars using purchasing power parity from the Maddison Project (2023). Population is from https://www.worldometers.info/world-population/population-by-country/ accessed on August 31, 2023. The percentages relative to GDP for the subcategories of spending do not always add up to the total in the first column due to differences in the year reported and the use of different sources. Information for Taiwan and Hong Kong was accessed on June 15, 2023, from https://www.google.com/search?q=taiwan+gdp+per+capita+2015+in+U.S.+dollars&rlz=1C1CHBF_enUS856US856&oq=taiwan+gdp+per+capita+2015

General Social Assistance	Children Without Health	Net Public and Private after Taxing Benefits and Consumption, 2017	2015 GDP Per Capita in 2011 PPP $	Pop. in Millions 2023
0.2	0.0	na	5,030	240
0.2	0.0	na	5,578	224
0.0	0.0	na	5,021	55
0.8	0.7	na	10,484	278
0.3	0.0	na	3,402	173
0.3	0.0	na	1,954	49
0.5	0.1	na	7,047	117
0.1	0.1	na	3,046	55
0.4	0.1	na	5,794	1,428
0.0	0.2	na	47,777	8
. . .	. . .	na	1,553	127
. . .	0.0	na	836	102
0.1	0.5	na	15,020	72
0.7	0.0	na	65,660	6
0.3	0.2	na	12,224	1,426
0.3	0.0	na	5,763	99
0.4	0.0	na	2,566	67
0.5	0.4	na	41,668	24
0.6	1.1	12.6	35,269	52
0.0	1.6	na	12,246	60
. . .	. . .	na	11,159	112
1.5	1.1	7.6	16,096	128
5.0	1.0	na	16,253	89
0.2	0.4	11.9	19,836	86
0.8	0.4	na	13,218	52
1.8	0.6	na	23,691	144
4.5	0.6	na	15,826	216
0.8	2.8	22.5	48,357	26
1.2	0.7	29.6	52,551	340
0.8	1.6	24.9	59,307	9
1.8	3.8	23.3	36,941	68
1.7	1.3	24.7	44,869	18
0.4	1.3	23.8	37,031	123
0.8	2.2	25.2	44,293	83
0.7	1.3	21.1	22,442	10
1.2	3.6	24.4	43,746	11
0.2	1.4	24.7	33,118	59
1.5	2.9	31.2	36,827	65
5.0	3.8	31.2	65660.0	1,428
0.0	0.0	7.6	836.0	6
0.5	0.5	24.1	15961.0	78

+in+U.S.+dollars&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRirAjIKCAIQIRgWGB0YHtIBCTE5NjMxajBqN6gCALACAA&sourceid=chrome&ie=UTF-8; Taiwan GDP in PPP 2015 from International Monetary Fund World Economic Outlook Database https://www.imf.org/en/Publications/WEO/weo-database/2022/October/download-entire-database; Hong Kong Health Expenditure as share of GDP is from https://www.healthbureau.gov.hk/statistics/download/dha/en/table1_1920.pdf.

*Countries with data for years besides 2015: Bangladesh 2014, Congo 2012, Ethiopia 2010, India 2014, Iran 2010, Japan 2013, Kenya 2012, Nigeria 2012, Pakistan 2014, Taiwan 2010, and Turkey 2014.

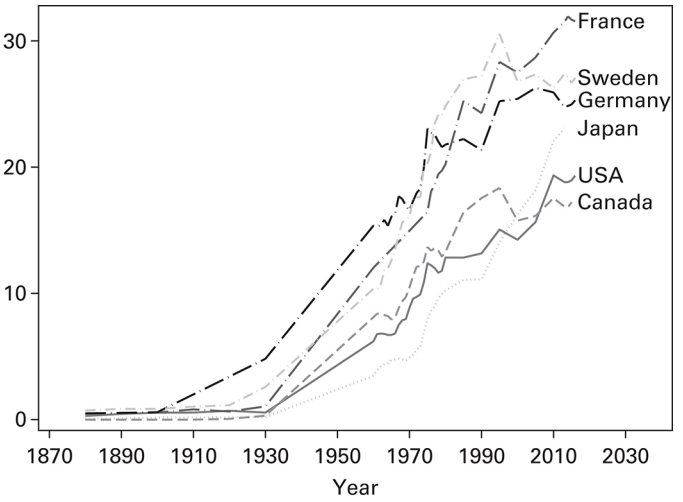

Figure 3.1
Public social spending as a share of GDP, 1880 to 2006. Notes: Data from OECD and Lindert (2004). The database was downloaded from https://ourworldindata.org/grapher/social-spending-oecd-longrun on March 5, 2024 (Ortiz-Ospina and Roser 2016). Social spending includes, among others: health, old age, incapacity-related benefits, family, active labor market programs, unemployment, and housing.

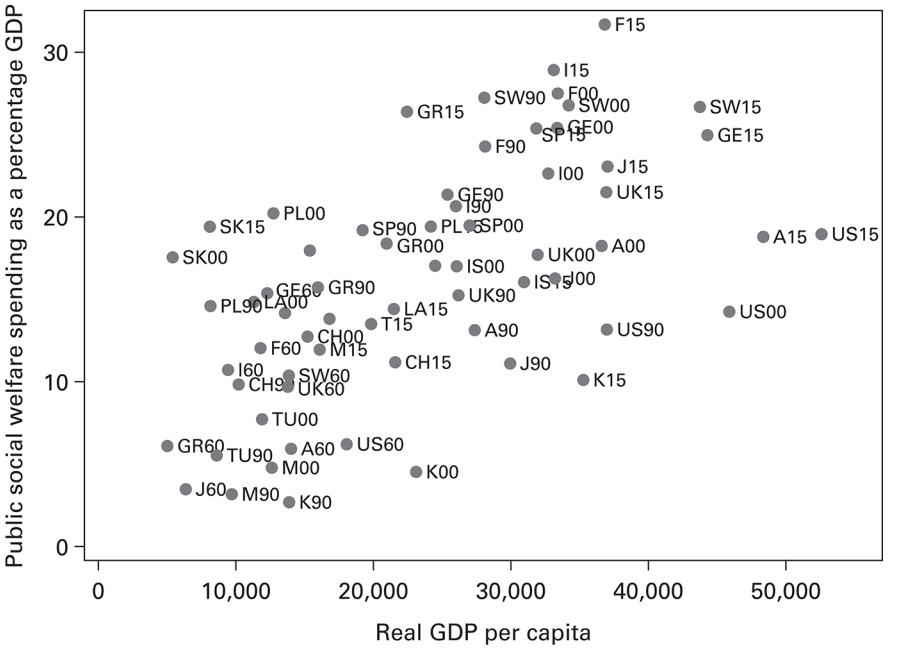

Figure 3.2
Share of GDP spent on public social welfare and real GDP per capita selected countries, 1960, 1990, 2000, and 2015. Notes: Real GDP is computed in 2011 purchasing power parity US dollars. Each dot represents a country in a year (60 = 1960, 90 = 1990, 00 = 2000, 15 = 2015). Country abbreviations are A = Australia, CH = Chile, F = France, GE = Germany, GR = Greece, IS = Israel, I = Italy, J = Japan, K = South Korea, LA = Latvia, M = Mexico, PL = Poland, SK = Slovakia, SP = Spain, SW = Sweden, T = Turkey, UK = United Kingdom, US = United States. Sources: OECD (1985, 2007, 2022) and Maddison Project (2023).

and freedom and create refugees. It takes years to rebuild lost infrastructure and human capital, and even longer to rebuild the trust necessary to build social safety nets.

Many of the countries with the lowest share of GDP devoted to social spending in table 3.1 have experienced a mix of wars and political instability, followed by long periods during which per capita GDP failed to reach its prior peak (e.g., Congo, Myanmar). Without political stability, it is difficult for countries to grow and to develop formal, effective, and uncorrupted bureaucracies that people trust and view as legitimate. Svensson (2005) finds that corruption is less prevalent in higher income countries, although it is not uniquely determined by GDP (Olken and Pande 2012).

Government social insurance systems also require the capacity to collect taxes. LMICs face substantial problems in this area because informal sectors are large and tax evasion is significant (Finan, Olken, and Pande 2017). On average, tax revenue amounts to between 10 and 20 percent of GDP in low-income countries, substantially lower than the 40 percent observed in high-income countries (Besley and Persson 2014).

In OECD countries, tax avoidance is lowest among countries that collect taxes by using withholding-at-the-source methods and that rely on extensive reporting information systems. Trust in government is also predictive of tax compliance (Slemrod 2007). In the United States, efforts to finance World War II, which had broad support in the population, were critical in creating a mass income tax system: Before the war only one in twenty citizens paid taxes. By the end, more than three-fourths did (Zelenak 2018).

3.3.3 Development of High-Quality Bureaucracies: Monitoring, Independence, and Meritocracy

In addition to income and political stability, other factors were important in the creation of efficient and effective state bureaucracies in the West. In the United States, favorable political conditions were key to the creation of professional, autonomous bureaucracies (Glaeser and Goldin 2006; World Bank 2016; and Fukuyama 2018). A confluence of factors led to bureaucratic reforms in the United States and improved state capacity: a rise in demand among elites for urban public goods, greater political engagement by nonelite citizens, and greater transparency about corruption in politics through the emergence of a cheap and independent press.

Improved state capacity was greatly enhanced by advances in information and monitoring. For example, using data on the internal organization of the US federal bureaucracy 1817–1905, Mastrorocco and Teso (2023) show that the ability of politicians to monitor state agents throughout the territory was key to the development of high quality, modern bureaucracies.

Another important factor in building state capacity was the shift toward meritocratic selection and promotion of state administrators. For example, in France this was achieved by the development of *Grandes Écoles*, which trained and selected the best students to work in public administration based on competitive exams. The elimination of patronage—the

practice of electing or promoting state employees at the discretion of the top government officials—was also key. Xu (2018) documents that the elimination of discretionary promotions in the British Empire during 1854–1966 led to greater efficiency and revenue collection.

Finally, most Western countries also evolved to create independent regulatory agencies. In the UK, reforms following the Northcote–Trevelyan report of 1854, instituted meritocratic selection *and* independence of bureaucrats from politicians. Countries with well-functioning meritocratic and impartial bureaucracies have greater levels of GDP and GDP growth (Besley et al. 2022).

3.3.4 Redistribution Programs Have Remained Small in the West and Moved Toward In-Kind and Conditional Assistance

In the West, although many countries have pure noncontributory cash safety net programs, they tend to be small, comprising no more than 1.1 percent of GDP in 1880, rising to 2.7 percent by 1920, where such spending largely remains today (Lindert 2004, 1994 OECD 2022). The structure of these programs, however, has changed dramatically over time, as illustrated by the case of the US welfare system. Until the Great Depression of the 1930s, state and local governments had full responsibility for antipoverty programs. The federal government began providing grants to states to provide work-relief jobs and direct aid to the poor in 1933. In a compromise related to the Social Security Act of 1935, it began providing matching funds to the states that expanded noncontributory cash benefits for Aid to Dependent Children (ADC), Aid to the Blind, and Old Age Assistance. Despite the severity of the Great Depression, expenditures on these programs remained relatively small, reaching only 5–6 percent of GDP by 1940 (US Census Bureau 1975).

During a period of rapid economic growth in the mid-1960s, the US federal government launched a "war on poverty" with programs that provided in-kind goods and services. The Food Stamp program provided food aid. Head Start provided childcare, remedial education, nutrition, and parental support for poor preschool children. Medicaid increased health care access for the poor. Aside from Medicaid, the programs added little to the share of GDP spent on social welfare programs.

Throughout the history of political debates on safety-net programs, concerns have been articulated about aid to the "unworthy" poor who would choose not to work if a safety-net system were in place. Economists define this concern as "moral hazard," which arises when someone protected against a risk acts in a way that increases that risk. To reduce moral hazard, redistributive programs across countries have adopted strategies such as increasing scrutiny at the time of application and reapplication, using proxies for measuring poverty, moving to transfers of food or health care coverage, imposing enrollment hurdles, or requiring work to obtain relief (Grosh and Baker 1995; Alatas et al. 2019). Social "stigma" attached to receiving aid also limits the moral hazard problem.

In 1996 the United States responded to moral hazard problems by replacing the traditional unconditional cash transfer program that grew out of ADC with Temporary Assistance to

Needy Families (TANF), which instituted lifetime maximums, imposed working conditions, and significantly lowered federal funding. Concurrently, the Earned Income Tax Credit (EITC) program adopted in 1975 expanded payments to the working poor and became the largest source of noncontributory public assistance funds. Excluding Medicaid, the major US redistributive programs accounted for only 2.3 percent of GDP in 2015 (Greenstein 2015). Most of this assistance is either conditional on work (EITC) or provided in kind.

The safety net in Europe and other Western countries initially developed along the same lines as in the United States (Boyer 2019; Flora et al. 1986a, 1986b). But European countries did not move away from unconditional cash transfers as much: In 2015, average expenditures on cash benefits exceeded the average for services and in-kind benefits (Nygård et al. 2019). In both the United States and Europe, however, expenditures on noncontributory programs have remained less than 3 or 4 percent of GDP. Political opposition to expanding the noncontributory safety net continues to be strong in many countries.

3.3.5 Prevention Rather Than Cure: Popularity of Social Insurance Programs

In contrast to transfers, social insurance has dominated the expansion of the safety net because it reduced the problems of eligibility determination, social stigma, and political opposition that bedeviled the noncontributory public assistance programs.

The largest component of the rise in public social welfare expenditures has been contributory social insurance. Since 1920, spending on public assistance and public social insurance assistance in high-income countries in the OECD has risen sharply from less than 3 percent of GDP to as much as 30 percent in the 2000s (figure 3.1). These figures understate the total amount of social insurance because they exclude privately provided insurance *mandated* by the government. When those mandates are included for the United States, Canada, the United Kingdom, and the Netherlands, the share of GDP spent on social welfare increases substantially. (See the Net Public and Private column in table 3.1.)

Contributory social insurance helped resolve several of the problems associated with noncontributory public assistance. Rather than attempting to identify and help the poor, social insurance programs have sought to prevent poverty by insuring against the main shocks that cause poverty (e.g., sickness, disability, old age, and unemployment). Willingness to contribute to these programs has been high, in large part because the risk is high. This "prevention rather than cure" approach is popular, and, as a result, social insurance programs have proved hard to modify.

Identification of the worthiness of the recipient was rendered moot because the insured or their employer were paying premiums to provide coverage during the adverse event to a predetermined pool of contributors. The insurance relationship also largely eliminated the associated social stigma since all contributors are, by definition, eligible, having signed up prior to the event triggering the transfer. Gustav Moeller, a leader in the move toward social insurance in Sweden in the 1930s, considered the removal of social stigma one of the most significant reasons for adopting social insurance.

Social insurance programs successfully controlled moral hazard problems by setting benefits at half to two-thirds or even less of wages and by establishing waiting periods. When some countries, Sweden for example, experimented with paying replacement rates above 80 percent, funding problems developed, and they returned to lower replacement rates.

With the rise of social insurance, political battles over eligibility and benefit size shifted from the general public funding of the poor to negotiations between representatives of employers and workers about the size of the benefits and relative contributions to funding. Employer opposition to benefits was reduced when labor markets allowed them to pay lower wages as a compensating wage differential for higher benefits.

What is often less appreciated by the public, politicians, and academics alike is that social insurance programs de facto redistribute from rich to poor recipients. For example, the benefits paid under unemployment insurance and workers' compensation are subject to weekly minimum and maximum amounts and thus replace a greater fraction of the wages of low-wage earners than high-wage earners. Health insurance limits out-of-pocket spending as a share of earnings for poor individuals with more frequent illnesses. Pension payouts are computed such that individuals with low lifetime earnings receive a higher replacement rate than those with high earnings. Experience rating, whereby employers with greater layoffs pay higher unemployment insurance premiums, is not used in all countries; and when it is, it is quite imprecise. As a result, the highest-risk individuals are often subsidized by the lowest-risk individuals.

Thus, social insurance has reduced poverty by implementing universal programs that prevent poverty and by de facto subsidizing of the poor through the design of its benefits.

3.3.6 The Early Social Insurance Programs Focused on Workplace Accidents, Sickness, and Unemployment for Workers

The main drawback of insurance programs is the potential for adverse selection. Adverse selection occurs when individuals are allowed to voluntarily select into an insurance pool, and only those with the greatest risks enroll. Government mandates in social insurance schemes, starting in the 1880s, solved this adverse-selection problem with little government spending. For example, in the United States, the Social Security Act of 1935 established unemployment insurance in which all firms with at least eight workers had to participate. States ran the programs and set benefits, employers financed the benefits, and the national government covered administrative costs.

Workplace accident and unemployment insurance were a natural route for the development of social insurance in the early 1900s, as they are for LMICs today, for several reasons. First, the programs were tied to employment because workplace injuries, unemployment, and to some extent sickness were influenced by employment. Full coverage of all workers on employers' payrolls reduced problems with adverse selection. Second, restrictions on the replacement share of earnings helped control moral hazard, as did monitoring by the employer and/or fellow workers in union- or worker-based funds. Third, payments to fund

social insurance tended to be small relative to payrolls. Table 3.1 shows that these forms of social insurance typically account for only 1 to 3 percent of GDP even today.

Yet, many LMICs face significant barriers to the development of these programs: (1) Large shares of their populations are outside the formal sector, particularly in agriculture; (2) private insurers lack the information required to resolve problems of adverse selection and moral hazard; (3) most of the population has limited understanding of insurance; and (4) the legal structure for enforcing contracts and adjudicating disputes is limited.

High-income countries faced many of these same problems before the twentieth century. As a transition to the more formal structures described earlier, many began by developing mutual societies. Voluntary societies often associated with employment had become relatively common in industrial economies in the late nineteenth century. These mutuals, cooperatives, fraternal societies, and guilds provided benefits to workers in the event of sickness or accident, as well as to orphans, widows, and invalids.

Because members know each other and control membership, mutual societies are reasonably effective at resolving moral hazard and adverse selection issues. However, these societies can have a high failure rate: Many failed when they could not attract new members, or when their funds were overwhelmed by an adverse event, like a factory fire, that harmed a significant share of the membership. However, this problem of correlated risks might be reduced by the development of reinsurance: It allows pooling of the risks of multiple mutual societies with similar risk profiles with government support.

Having developed a better understanding of insurance through the mutual societies and seeking to gain a longer-term solution, members of the informal economy might be more willing to seek more formal insurance arrangements. Indeed, in many of the LMICs, mutual societies have been forming in the informal sector (Ligon et al. 2002).

3.3.7 Old Age Pensions: Popular but Pay-Go Programs are Increasingly Problematic

Old age programs were some of the first and most popular programs in the West. They have been a major driver of the rise in total safety-net spending in OECD countries, accounting for between 30 and 66 percent of the increases in the twentieth century (table 3.1). The three main drivers of increased spending on old age insurance are the aging of the population, the increasing coverage of the population, and the shift away from relying on a single pension amount, toward tying the benefits to lifetime earnings. Many consider current spending levels unsustainable.

In the early 1900s, old age and invalid pensions were small and operated more like means-tested noncontributory old age assistance. Eventually countries moved toward a contributory system with fixed pensions, in which pensions were determined by the individual worker's earnings history. Sweden established both means-tested payments and a contributory universal pension plan in 1913, although the compulsory plan offered very low benefits. In contrast, the US Social Security Act of 1935 set up a national old age

pension program with worker and employer contributions, with pensions based on the worker's prior earnings. The benefits for a male worker in 1950 were about 24 percent of the average wage of workers covered by Social Security (Carter et al. 2006). European countries added earnings-related supplemental pensions much later: Sweden in 1959, Finland in 1962, Denmark in 1964, Italy in 1969, and Great Britain in 1974. Average benefits then moved closer to 40 percent of average industrial earnings in all of these countries by 1980 (Flora et al. 1986a, 1986b). Since 1970, many countries have redesigned their systems to combine various types of pension programs under one umbrella.

When contributory pensions were introduced, many countries adopted a pay-as-you-go (PAYG) system to provide pensions to people immediately. Thus, the PAYG systems started out with subsidies per recipient that declined over time as their contributions increased. After carving out some revenues to cover the subsidies, and if productivity is stable, PAYG systems can be sustainable in the long run if the relative size of the recipient and working populations is stable. However, it is rare to find a high-income country running a PAYG system that has not experienced a rise in the elderly share of the population, declining fertility rates, and a reduction in the share of the working population paying into the system.

The US experience illustrates these problems. The program is based on a promise that the federal government will collect enough taxes to provide workers with the promised benefits when they become eligible. Initially workers and employers contributed 1 percent each toward payroll taxes for Social Security pensions. Contributions have been increased in response to inadequate funding. For example, in the 1980s, the rates rose to 6.2 percent for both workers and employers. Today experts suggest that a sustainable rate would require an 8–9 percent contribution.

Defined benefit systems have become underfunded in many rich countries as well. Private pension funds face similar challenges. As a result, some countries and some corporations have moved to defined contribution plans that pay benefits as a function of the value of the assets accumulated in the fund. This partially solves the problem of funding but does not address the concerns related to the aging of the population. Specifically, this arrangement replaces an insurance program (with a guaranteed payout in the event of an adverse event) with an investment-type program where the investment is fixed and the returns are uncertain, and thus they may leave aging populations still vulnerable to old age financial insecurity.

Some governments have moved to privatize their pensions instead, with mixed success, and several have abandoned their efforts. In the late 1990s, Sweden recognized the unsustainability of their PAYG system and has been transitioning away from their notional defined-benefit PAYG system to a notional defined-contribution system. They also allow partial privatization by allowing workers to invest 1.5 percent of their earnings in over four hundred government-approved mutual funds. While the best way to fund these old age pensions remains uncertain, it is clear that PAYG systems should not be adopted by LMICs unless their governments can credibly commit to keep public pensions limited (Lindert 2021).

3.3.8 The Rise and Diversity of Health Insurance Schemes

The second major contributor to the rise in social spending is health care. Western countries have adopted multiple models of health insurance coverage. Health insurance coverage is near universal, and quality of care is high. But universality was reached slowly over time.

Coverage for health shocks transitioned after World War II from sickness insurance that replaced lost earnings to health insurance that covered the cost of medical care. Before 1945, the cost of health care treatment was relatively low because very few health technologies were available. For example, health care expenditures in the United States accounted for only about 3.5 percent of GDP in 1929 and only 5 percent of GDP as late as 1960 (Carter et al. 2006). As health technologies improved, health care expenditures increased. Sulfa drugs, invented in the late 1930s (and later penicillin in the 1940s), were cheap and greatly improved survival from infectious diseases and infections. As a result, hospital procedures became viable and demand for hospital care increased. The availability of other lifesaving, but extremely costly, technologies that became available in the post–World War II era, such as bypass surgery, generated broad demand and raised the question of how to provide access to these innovations.

In the last sixty years, total health care expenditures have increased to 8–10 percent of GDP in OECD countries (and to 17 percent in the United States) and account for 30 to 50 percent of public social welfare expenditures in many countries (table 3.1). This increase in expenditures partly reflects the increase in demand for health care and for health insurance that has accompanied the development of successful treatments. It also reflects the large increase in incomes of the population and the fact that health care is likely a luxury good (Hall and Jones 2007).

In LMICs, the most common arrangement for health care relies heavily on out-of-pocket expenditures, which would include direct purchase of health insurance by the insured. In several countries there is also some sort of public social insurance program for civil servants and individuals in high-income occupations. In contrast, many high-income countries today provide close to universal health insurance to their populations. The issue of coverage of the poor was solved in most countries by mandating universal participation in health insurance pools, the most notable exception being the United States.

There are currently three models of health insurance coverage among high-income countries. We describe each with example countries and include their 2015 measure of the Health Access and Quality Index (HAQI), which is based on death rates from causes that should not occur in the presence of high-quality health care (GBD 2019; Health Care and Access Quality Collaborators 2022).

One model is the single-payer system where the state employs health care providers. William Beveridge of Great Britain (HAQI 84.6) designed a single-payer British health care system (adopted in 1948) in which the government owns the hospitals and clinics and employs most of the doctors, and patients are not billed for their health care. This Beveridge plan evolved out of an employer-based compulsory plan that had existed in the 1930s. Other

countries following this plan include Spain (89.6), New Zealand (86.2), Denmark (85.7), Hong Kong, Cuba (73.5), and, to some degree, the US Department of Veterans Affairs.[3]

The Bismarck model, developed by the German chancellor in 1870, calls for compulsory health insurance provided through employers, combined with private provision of medical care. It is commonly financed through employer and worker payroll taxes. This is the structure in Germany (84.9), Japan (89), France (87.9), Belgium (87.9), Switzerland (91.8), the Netherlands (89.5), US employment-based insurance for employers with more than fifty full-time workers after 2010, and possibly US Medicare.

The third model consists of government-run national health insurance based on taxpayer contributions with private but independent doctors and hospitals. Canada (87.6), Taiwan (77.6), South Korea (85.8), and, to some extent, the US Medicare program follow this model. The United States has a mixed system in which employers provide health insurance for the working population and the government provides health insurance to the elderly and low-income populations. The United States has an HAQI of 81.3.[4]

Several lessons emerge from these observations. First, every rich country has managed to provide close to universal health insurance for its population and has done so while providing high-quality care, though the way they do so varies a lot. Thus, developing countries have various potential paths to follow. Second, there is a great deal of path dependence in the organization of health care networks across the OECD countries that LMICs could follow. Several of the leading social welfare spenders built their health care systems at the local level first and then have continued their reliance on local institutions in a federal framework.[5] Other countries have relied more heavily on the federal government. Both can be successful. Lastly, it might be optimal for poor countries to proceed by first encouraging catastrophic insurance in the formal sector where there might be demand for it, as richer countries did. Poor countries already provide free, although minimal, basic care to all populations. Demand for health insurance more generally is likely high only among relatively rich individuals who want to protect their assets from costly shocks.

It is worth emphasizing that the situation for developing countries today differs considerably from the situation of rich countries even back in the 1960s, when their health insurance systems were implemented. Because today many more technologies are available even in low-income countries, the components of the "basic bundle" of health care have expanded greatly. Some of those components are costly, making the cost of providing the basic bundle of health care through social insurance much higher as a share of GDP today than it was when the high-income countries first developed health insurance.

Another important difference is that there are a large number of international NGOs and governments that provide foreign aid to LMICs, particularly to help with the provision of available health products and services. This extragovernmental aid, which is about 224 billion dollars according to the OECD and comes with strings attached, was not really available in the past, but can potentially help LMICs provide adequate levels of care.[6]

3.3.9 OECD Countries Have Failed to Provide Access to Social Insurance for Many People in the Informal and Agricultural Sectors

Initially old age pensions and other safety-net programs covered a rather small subset of eligible individuals. In the West, the transition to close to universal coverage took about fifty years for old age security.

One issue of relevance to LMICs with large rural populations is the treatment of farmers and agricultural workers. Nearly all Western countries left the self-employed out of the early versions of their social insurance programs, excluding from participation farmers, farm workers, and domestic servants. The United States waited until the 1950s to add these groups to the national pension system (Nelson 1985). Germany in 1957, Italy in the 1960s, and Finland in 1970 are examples of countries that did so even later (Flora et al. 1986a, 1986b). The US coverage of farm workers in other social insurance programs is even smaller. Currently, only fourteen states require workers' compensation for all farm workers, twenty-one require coverage of some workers, and fifteen require no coverage. US farm workers are still not covered by unemployment insurance.

After World War I, many advanced countries tried to assist farmers facing negative income shocks by developing farm programs that paid farmers for their unsold commodities at higher than market prices and also paid farmers to remove their land from production. Most of these programs targeted larger farmers and led to farm consolidation. This harmed tenants, croppers, and farm workers (Fishback 2022). Farm subsidies continue to operate today and remain controversial given that they often fail to adequately protect small farmers from negative shocks.

Changes in employment patterns and the wage structure in the United States after World War II brought more workers into the formal sector. This change played a large role in increasing safety-net coverage through workplace insurance programs. However, workers in small firms are still often excluded from many social insurance programs. Notably, this group is seen as particularly important for growth and innovation, and policymakers are reluctant to impose additional mandates and costs on firms because of the perception that doing so will hinder firm creation and growth.

3.4 Conclusion

The historical experience in high-income countries might not translate to LMICs today for a number of reasons, as we have noted throughout. Nevertheless, the key insights that the history of the West provides are: (1) Income and political stability are necessary for large safety nets to emerge; (2) development of efficient and professional bureaucracies are key; (3) social insurance is easier to sustain than redistribution; (4) social insurance works well if a sufficiently large portion of the population is in the formal sector, though small programs may be sustainable in informal markets; (5) western pay-as-you-go models for old age

pensions are not sustainable in countries with low fertility rates and growing shares of elderly populations, which today include a large number of LMICs, unless they experience very different productivity or immigration levels; (6) many models of health care can be adopted to eventually cover the needs of the entire population; and (7) the OECD countries do not provide good solutions for providing social insurance to workers outside the formal sector.

We end by noting that LMICs today might have different values and, thus, different objectives. For example, the West today has many transfers and social insurance programs for the elderly that allow them to live independently. But in many LMICs, tradition dictates that families should take care of the elderly. LMICs might have different values and priorities than the West in other domains as well. Costa Rica and the state of Kerala in India have defined equity as an important objective, and they have chosen to provide large safety nets at lower levels of GDP, instead of pursuing higher tax rates and/or investing in defense. Thus, the path of Western countries may be neither feasible nor desirable for LMICs.

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Notes

1 The noncontributory programs can be seen as insurance programs. Over the course of a lifetime, people have intermittent experiences with poverty. They pay taxes when working and then receive benefits when poor and not working, and the taxes that they pay can be considered as payment of a premium to receive benefits when not.

2 Out-of-pocket health spending not run through a program are not counted as social welfare expenditures by the OECD.

3 https://healthsystemsfacts.org/national-health-systems/ accessed July 3, 2023; https://www.pnhp.org/single_payer_resources/health_care_systems_four_basic_models.php accessed on 7/3/2023; and https://ourworldindata.org/grapher/healthcare-access-and-quality-index?tab=table, accessed 7/5/2023.

4 https://healthsystemsfacts.org/national-health-systems/ accessed July 3, 2023; https://www.pnhp.org/single_payer_resources/health_care_systems_four_basic_models.php accessed on 7/3/2023; and https://ourworldindata.org/grapher/healthcare-access-and-quality-index?tab=table, accessed 7/5/2023.

5 In Sweden in 1862, the county councils took over the hospitals, and Denmark followed a similar path of local government provision of hospitals (Flora et al. 1986a). Canada's system developed at the provincial level (Marchildon et al. 2020*)*. Both countries continue to rely heavily on subnational administration and funding of the health care system.

6 See https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/official-development-assistance.htm, downloaded on April 12, 2016.

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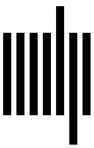

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