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List of Acronyms

ACFI	Aged Care Funding Instrument
ADB	Asian Development Bank
ADL	Activities of daily living
AI	Artificial intelligence
AI	Aging index
ALMP	Active Labor Market Policy
ASEAN	Association of Southeast Asian Nations
AT	Assistive technologies
BMI	Body mass index
BOD	Burden of disease
CCT	Conditional cash transfer
CHE	Current health expenditure
CHS	Commune health station
CIT	Corporate income taxes
CPI	Consumer Price Index
CPR	Cardiopulmonary resuscitation
DALY	Disability-adjusted life years
DB	Defined benefit
DFAT	Department of Foreign Affairs and Trade (Australia)
DOLISA	Department of Labor, Invalids and Social Affairs
EAP	East Asia and Pacific
ECA	Europe and Central Asia
EPL	Employment protection legislation
FDI	Foreign direct investment
FINDEX	Global Financial Inclusion Database (World Bank)
FSA/FSAM	Financial Sustainability Analysis Model
G20	Group of Twenty
HCI	Human Capital Index
HCMC	Ho Chi Minh City
HIC	High-income country
IADLs	Instrumental activities of daily living
ICT	Information and communication technology
IHME	Institute for Health Metrics and Evaluation
ILO	International Labor Organization
ILSSA	Institute of Labour Science and Social Affairs
ICT	Information and communication technology
IHME	Institute for Health Metrics and Evaluation
IMF	International Monetary Fund
IMR	Infant mortality rate
InterRAI	International Resident Assessment Instrument
IPD	Implicit pension debt
ISHC	Intergenerational Self-Help Club
JAHR	Joint Annual Health Review
JICA	Japan International Cooperation Agency
LFS	Labour Force Survey
LIC	Low-income country
LLL	Lifelong learning
LMICs	Low- and middle-income countries
LTC	Long-term care
LTGM	Long-term Growth Model
MCG	Management Consulting Group
MDB	Multilateral development bank
MDC	Matching defined contribution
MICS	Multiple Indicator Cluster Survey

GBD	Global Burden of Disease Study
GDP	Gross domestic product
GSO	General Statistics Office of Vietnam
MPSARD	Master Plan for Social Assistance Reform and Development
NCD	Non-communicable diseases
NGO	Nongovernmental organization
NTP	Nationally Targeted Program
OADR	Old age dependency ratio
ODA	Official development assistance
OECD	Organization for Economic Cooperation and Development
OOP	Out-of-pocket
PCIC	People-centered integrated healthcare
PHC	Primary health care
PISA	Program for International Student Assessment
PPP	Purchasing power parity
PROST	Pension Reform Options Simulation Toolkit (World Bank)
ROK	Republic of Korea
RR	Replacement rate
RT	Robot technologies
SDGs	Sustainable Development Goals
SHA	Social Health Insurance
SI	Social Insurance
SMS	Short message service
SOM	Serviceable Obtainable Market
SP	Social protection
SRB	Sex ratio at birth
SSB	Sugar-sweetened beverage
STEPS	National Survey of Risk Factors for Non-Communicable Disease (Vietnam)
MOH	Ministry of Health (Vietnam)
MOLISA	Ministry of Labor, Invalids, and Social Affairs (Vietnam)
MOOC	Massive open online course
TDR	Total dependency ratio
TFR	Total fertility rate
TVET	Technical and vocational education and training
UHC	Universal Health Coverage
UN	United Nations
UNFPA	United Nations Population Fund
UNICO	Universal Health Coverage Study Series
USD	United States Dollars
VAE	Vietnam Association of the Elderly
VAT	Value-added tax
VHLSS	Vietnam Household Living Standards Survey
VHWs	Village health workers
VNAS	Vietnam Aging Survey
VNCA	Vietnam National Committee on Aging
VND	Vietnamese Dong
VSS/VSSF	Vietnam Social Security Fund
VWU	Vietnam Women's Union
WB	World Bank
WDI	World Development Indicators
WHO	World Health Organization
YDR	Youth dependency ratio
YLD	Years lived with disease/disability
YLL	Years of life lost

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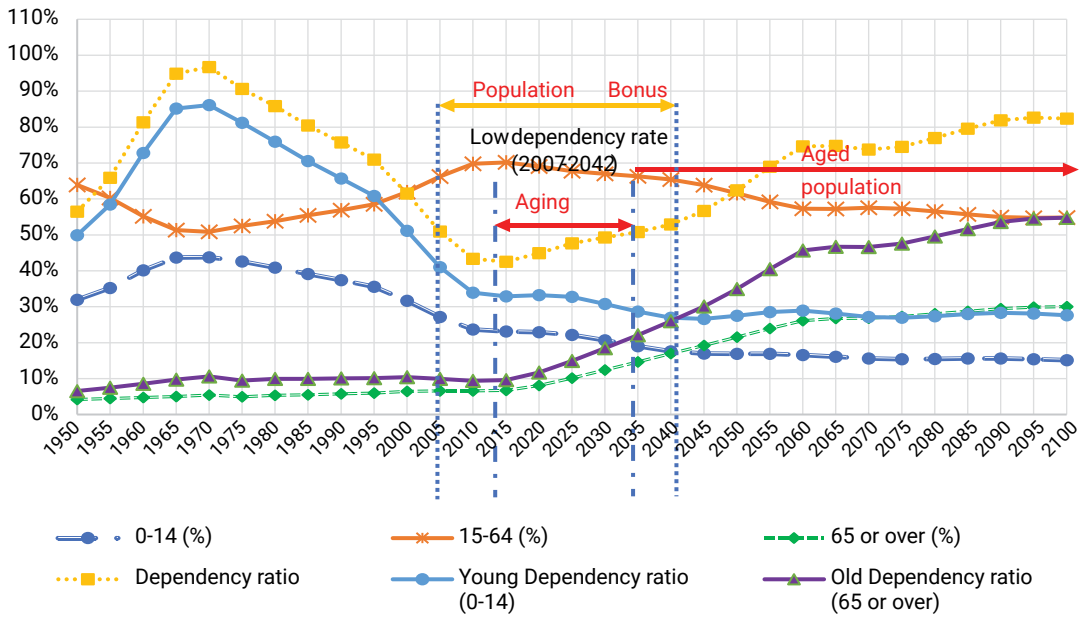
EXECUTIVE SUMMARY

Vietnam is a young country on the cusp of a dramatic aging of the population that is taking place at a faster pace and at an earlier level of development than most other countries in the world. With falling fertility rates and rising life expectancies, Vietnam became an *aging* society in 2015 and is projected to become *aged* in 2035, making Vietnam one of the fastest-aging countries in the world (World Bank 2016). Notably, it is going through this transition at an earlier stage of economic development and lower level of per capita income than other countries. Vietnam's per capita income is only 40 percent of the global average, and it has long way to go to catch up with its aspirational peers in the region and to achieve upper middle-income status by 2035. The sheer speed of Vietnam's population aging means that Vietnam will have less time to adapt policies to a more aged society than many advanced economies have had.

While Vietnam currently enjoys a demographic "window of opportunity," this window is starting to close as population aging accelerates. Vietnam has a young population, with a median age of 26 years, and its largest age cohort is between 20-34 years old. The falling youth dependency ratio that started in the 1970s supported a rapid increase in the working-age population and a decline in the overall dependency ratio. The demographic window of opportunity will remain open until 2042, but the working-age population share peaked in 2014 and is projected to decline in the coming decades. The process of aging that already started is projected to accelerate (Figure 0.1 for data and definitions). The number of older persons (65 years and older) reached 6.31 million (6.7 percent of the population) in 2014, and projections under a medium-fertility scenario show that by 2049, the number of older persons will increase sharply to 19.6 million—more than tripling compared to 2014—and will account for approximately 18.1 percent of the population.

Figure 0.1 Vietnam: Key Demographic Indicators



Notes: The total dependency ratio (TDR) is the ratio of the number of dependents 0 to 14 years of age and over the age of 65 to the total population 15 to 64 years of age.

The demographic **window of opportunity**, also called the **population bonus**, describes a demographic situation in which the working-age population—between ages 15 and 64—is greater than that of the children and the elderly. Put differently, it is when the number of working-age people is double that of dependent people and the total dependency ratio is below 50 percent.

An **aging population** is a population in which the elderly (65 years of age and above) account for 7 to 9.9 percent of the total. See Cowgill and Holmes (1970) (as quoted in Andrews and Philips, 2006).

An **aged population** is a population in which the elderly account for 10 to 19.9 percent of the total. A population in which the elderly account for 20 to 29.9 percent of the total is called very aged, and a population in which the elderly account for more than 30 percent of the total is called hyper aged.

Source: Authors, based on UN and GSO.

Though Vietnam's favorable demographic window of opportunity is still open, this report argues it should take key actions with immediate effect to prepare for a rapidly aging society. Our Long-term Growth Model projects that without reforms, long-term growth will slow down over the period 2020–2050 compared to the last 15 years by 0.9 percentage points, largely due to the aging of Vietnamese society. While calling for immediate actions, this report promotes the view that while aging brings challenges, good policies can mitigate—and in some cases even reverse—their effects. The report aims to help inform the government's development strategy through an integrated narrative and policy options to address the country's most pressing development challenges in the face of a rapidly aging society. It highlights the main challenges Vietnam faces as a result of its near-term demographic transition, and also presents key reforms that the government can already begin implementing to address these challenges. The proposed policies discussed here dovetail with existing policy dialogue and sectoral engagement. Part I, Chapter 1 starts with a brief description of the demographic situation in Vietnam, while Chapter 2 describes current patterns and trends in key socioeconomic indicators (poverty, welfare, labor market participation) across different population cohorts. Chapter 3 builds on this analysis and describes the macro implications of aging, presenting model-based forecasts linking growth and fiscal trends with demographic trends and potential reform options. Part II then focuses on a few areas that are most affected as a consequence of rapid aging, and where tackling issues effectively will require strong cross-sectoral coordination and proper sequencing: the labor market (Chapter 4), pensions (Chapter 5), health (Chapter 6), and elderly care (Chapter 7).

Growth, Demography, and Welfare

Vietnam has achieved vibrant economic growth and poverty reduction over the past few decades, thanks in large part to favorable demographic trends along with strong productivity growth. The falling youth dependency ratio supported a rapid increase in the working-age population and a decline in the dependency ratio, contributing an estimated about one-third of Vietnam's growth during this period. Increases in productivity—supported by the far-reaching *Doi Moi* reforms—accounted for the remaining two-thirds of the increase in GDP. During the period 1985-2018, per capita income increased eight-fold in Vietnam, compared to only 2.5-fold and 1.7-fold average increases in low- and middle-income countries (LMICs) and high-income countries (HICs), respectively. Vietnam's stellar growth record supported its graduation from a low-income country (LIC) to an LMIC in 2011 and brought a remarkable decline in the prevalence of poverty—e.g., from a 52.9 percent poverty headcount of the total population in 1992 to 2 percent in 2016 (at USD 1.90/day PPP 2011 international dollars).

Growth and poverty reduction have been broad-based to-date, and between 2010 to 2016, older generations benefited the most relative to the other age groups from poverty reduction.[1] Absolute poverty has fallen sharply in Vietnam over the last two decades and has benefited all generations. Data from successive Vietnam Household Living Standards Survey (VLHSS) rounds indicate that older generations benefited the most relative to other age groups: while the national poverty rate fell from 20.6 to 9.3 percent during 2010-2016, the rate among older people dropped even further, from 14.7 to 4.9 percent for those 65-69 years old, from 18.6 to 6.7 for those 70-79 years old, and from 23.3 to 8.5 percent for those age 80 and above.[2] The more rapid decline in poverty among older groups compared with other age groups occurred in both urban and rural areas. Moreover, there is no evidence that other indicators of living conditions in Vietnam are lagging for older

1 Poverty and welfare analyses presented in this report are based on the 2010, 2012, 2014, and 2016 VHLSS. Poverty rate is calculated based on the National GSO-WB definition of poverty line. Economic vulnerability is defined based on the international poverty line. Economically vulnerable have per capita consumption between US$3.2-$5.5 per day, economically secure consume US$5.5-$15 per person per day, and middle-class live on more than US$15 per person per day. See Chapter 2 and World Bank. 2018. *Climbing the Ladder: Poverty Reduction and Shared Prosperity in Vietnam.* for further information.

2 World Bank. 2018. *Climbing the Ladder: Poverty Reduction and Shared Prosperity in Vietnam*.

groups. Access to piped water, improved toilets, and phones all improved both in urban and in rural areas. Other indicators also show improved living conditions and increased accumulation of assets, a particularly important indicator because older adults tend to spend down their assets and savings. Ownership of concrete or brick homes, air conditioners, washing machines, and computers all increased for most age groups, while living area also increased.

Aging population, labor force, and GDP

Looking ahead, Vietnam's labor force is projected to contract by almost one percent per annum over the next 3 decades, creating headwinds to sustaining high economic growth rates. The effect of population aging on GDP growth depends on how population aging affects the size and productivity of the labor force, capital intensity and returns to capital, consumption, and assets accumulation (Lee 2016). From 1990 to 2018, almost 25 million Vietnamese reached working age, translating into average annual labor force growth of about 2.5 percent and an almost doubling of Vietnam's workforce. Over the decade through 2018, the annual average real GDP growth rate of 6.2 percent reflected 0.9 percent growth in the labor force and 5.3 percent growth in output per worker. While the working-age population and labor force are projected to continue to expand in absolute numbers for about two decades, the rate of increase is projected to decelerate to a markedly lower pace, to about half of the recent historical average. Indeed, relative to aggregate population, the size of the working-age population has already peaked.

Increased productivity and labor force participation can help to mitigate the adverse impacts of a shrinking working-age population. Vietnam is currently benefiting from a relatively large labor force as a share of the total population (70 percent) and a relatively high participation rate (84 percent). While Vietnam has experienced rapid productivity growth over the past two decades, labor productivity is still relatively low because of the low starting base. For example, Vietnam's labor productivity is low (estimated at $11,142 in 2011 PPP adjusted to 2018) compared to selected Asian countries (with an average productivity of $47,070 in 2011 PPP in the same period).

Productivity can be raised both by accelerating the movement of workers from low to higher productivity sectors as well as through boosting human capital. Two out of five working Vietnamese toil in the relatively low-productivity agricultural sector, but younger workers are less likely than their parents to work on farms. Output per worker in this sector is only about half that of the national average, suggesting considerable scope to boost total GDP by shifting labor resources to higher value-added sectors—a trend that is already evident. Vietnam's current employment structure is heavily biased toward sectors in which productivity diminishes with age (such as construction and agriculture), but in the medium term, it is likely to change. Younger workers are now more likely than older workers to be employed in sectors in which productivity does not decline sharply with age and output per worker is higher (e.g., services and high value-added manufacturing).

Evidence suggest Vietnam's youth are already investing more in human capital than their elders. While Vietnam appears to have relatively low overall percentages of well-trained labor, educational achievement differs considerably across age groups. The 2017 Vietnam labor force survey data show that 77 percent of the labor force (ages 15-64) had no more than a lower secondary education, and the share of the workforce with university education or higher was only 9.6 percent.[3] However, such low percentages of well-trained labor are largely the consequence of older segments of the workforce having left the education system some years ago. Younger workers, by contrast, have considerably higher rates of university degrees and lower rates of less than secondary degrees (Demombynes and Testaverde 2018), so the labor force's level of training is changing rapidly under the more modern education system.

3 GSO 2018, Vietnam Labor Force Survey.

Encouraging people to continue working even when they grow older can also help compensate for the shrinking labor force. While the overall labor force participation is high, many in urban areas withdraw from work relatively early, and in case of urban women in formal jobs retirement is very early. Availability of a pension and (and its generosity) has a strong association with lower labor force participation at older age and, therefore, an increase in retirement age could help significantly extend productive working lives of urban people and mitigate the impacts of aging, provided that complementary policies in the areas of child and elderly care are put in place. Individual labor market behaviors tend to adjust to the new reality of a longer life expectancy (Lee and Mason 2017), and the same is likely true for Vietnamese workers also. If increased longevity has been achieved by adding healthy years, as the life cycle lengthens, individuals might increase their participation in employment and retire later. They can save more or invest more in education as returns to education increase, with positive repercussions on productivity. Policy interventions will need to respond to the structural change induced by population aging to stimulate positive behavioral responses and prevent potentially adverse impacts on socioeconomic well-being.

Model-based projections of long-term GDP growth and public finances

The report uses two WBG modeling frameworks to generate various scenarios to analyze potential impacts of aging trends in macroeconomic growth and the fiscal budget: the Long-Term Growth Model (LTGM) and the Fiscal Sustainability Analysis model (FSA), respectively.

The World Bank's Long-term Growth Model (LTGM) projects that long-term growth will slow by 0.9 percentage points over the period 2020–2050 compared with the last 15 years, due in large part to population aging. The main driver of the slowdown is Vietnam's shrinking labor force. Long-term growth falls under each of the other scenarios considered: this is because the impacts of even the most favorable scenario considered (e.g. *favorable increase in human capital*) are not enough to overcome the drag exerted by the shrinking labor force.

Projections based on the Fiscal Sustainability Analysis model indicate that aging and the evolution of associated government programs could potentially add 1.4–4.6 percent of GDP in additional government expenditures. To analyze possible impacts of aging on public expenditures on education (disaggregated by primary, secondary and tertiary), pensions, healthcare, and social protection, the FSA model considered three scenarios, which indicate that Vietnam's aging society—and the evolution of government programs to accommodate it—are projected to add 1.4 – 4.6 percent of GDP in additional expenditure.[4] For example, in the next three decades, annual expenditure for healthcare for the elderly is projected to increase four- to five-fold as a share of the economy. Spending on education is also expected to increase, with the expansion of coverage and improvements in service quality driving future growth in fiscal costs. Vietnam's extra-budgetary contributory pension, VSSF, is projected to become cash-flow negative between 2028 and 2034, depending on the scenario, and exhaust its reserves between 2036 and 2042. An inability to balance the various fiscal needs could translate into rising deficits and debts—putting upward pressures on interest rates, potentially crowding out much-needed domestic and foreign investment and threatening the country's macroeconomic stability.

The impacts of an aging population will be felt in terms of both fiscal revenues and expenditures, and pressure public finances in the absence of timely reforms. As an increasing share of the population enters retirement—and hence no longer earns an income—there will be a commensurate

4 The projections presented in this report do not take into account the impacts of the global COVID-19 health crisis, which hit during report preparation, and which could have implications for Vietnam's GDP growth going forward. For more details on the possible fiscal impact of the COVID pandemic, please see the WBG COVID-19 Policy Update (Morriset et al. 2020. *Taking Stock: What will be the New Normal for Vietnam? - The Economic Impact of COVID-19 (English).* Vietnam Taking Stock Washington, DC.)

impact of revenues generated from personal income tax. An aging population will also place increased demands on public (and private) health-care and pension systems. Additionally, with a need to boost productivity, there will be pressures to increase government expenditures on education and infrastructure—exacerbated by Vietnam's status as a developing country, vulnerable to the impacts of climate change. Combined, these factors would add to existing strains on Vietnam's public finances.

Managing Aging

The Government of Vietnam has stated the ambitious goal of achieving HIC status by 2045, and with the country's current demographic trajectory, Vietnam faces a "now or never" policy challenge. Vietnam already faces challenges associated with being an LMIC, such as avoiding the "middle-income trap." Many countries fall into the so-called middle-income trap, in which many years of strong growth are followed by an extended period of relatively stagnant per-capita income growth. While each country faces unique challenges, one common characteristic is the difficulty in transitioning from input-driven growth (such as labor supply), with limited areas of output, to a more broadly-based output structure, driven by increased competitiveness and higher domestic value-added and powered by domestic consumption. Increased productivity will require greater investments in physical and human capital from the public sector as well as domestic private and foreign investors.[5] Currently, low wages attract foreign investment, but as wages increase with rising incomes (and productivity), it is unclear what will drive Vietnam's comparative advantage. Other developmental challenges include the need to expand social protection, rising demand for human capital development, infrastructure, climate change action, and ongoing modernization of Vietnam's institutions. As one of the most open economies in the world for trade, Vietnam also faces headwinds currently tied to a slowing global economy, along with rapidly evolving shifts in global value chains and the growing digitization of production.

Supporting productivity outturns in Vietnam—including through policies supporting inter-sectoral employment shifts—will be critical for sustaining high growth in the face of a rapidly aging population. The modeling exercises show that with a waning of the demographic dividend, future growth trends will increasingly depend on human capital and productivity growth. The biggest potential for boosting productivity is from inter-sectoral employment shifts, such as the movement of labor from agriculture to higher value-added sectors in export-oriented manufacturing and services which is already underway. To support this reallocation, a broad set of policies is needed across a wide range of policy domains.

Rising labor productivity will require significant investment in human capital and a supporting policy and regulatory environment. In addition to a stable macro-economic environment, investment and productivity would benefit from improvements to financial intermediation and the business environment. The extent to which rising productivity growth can buffer the Vietnamese economy from demographic headwinds—and the policies needed to support productivity growth—will be some of the most important macroeconomic questions facing the country in the medium to long term.

Faced with a rapidly aging society, Vietnam needs to continue investing in people along the lifecycle to address emerging needs. Vietnam's track record of investing in the human capital of its people is remarkable, but human capital gaps continue to persist across ethnic groups and between rural and urban populations. Investments

5 The recent Vibrant Vietnam report highlights 4 key areas for improving the pace and quality of Vietnam's growth to take advantage of the remaining demographic dividend: (i) better allocation of resources from low to highly productive firms and removal of obstacles in the business environment; (ii) improving the efficiency of spending on infrastructure and broadening its financing; (iii) "greening the economy" through improved pricing mechanisms for public services to cover environmental externalities, as well as direct government interventions (i.e. better coordination across jurisdictions, adopting explicit rules for environmental management, and making information and data available for decision-making processes),and (iv) is upgrading skills and boosting opportunities for jobs for all.

in the earliest years of life are often most critical and cost-effective, and Vietnam can take the opportunity to close human capital gaps among the young with effective nutrition interventions and behavioral changes through conditional cash transfers (CCTs). Investing in human capital does not stop at youth, and continuous lifelong learning has a special place in the arsenal of labor market policies in Vietnam, as obsolete skills continue to pose a major problem for the Vietnamese labor force. Technology will play an important role in extending productive working lives. It will also be important to improve labor market outcomes of groups of workers who are not faring as well as the majority in the labor market—notably, ethnic minorities and both younger and older individuals in the rural workforce.

The most economically and demographically advanced countries employ a mix of strategies to extend the productive working lives of older workers who wish to work. Such initiatives include job search services focused particularly on older workers, vouchers for employers who hire older workers, retraining schemes targeted at those whose formal education took place significantly far in the past, provision of wage subsidies that effectively lower the cost of employing older workers, and subsidies or grants to encourage training to raise older workers' productivity and help them acquire new skills. A range of measures at the firm level can also help, such as: reducing seniority-based wage setting mechanisms (which make older workers less attractive and are typically not linked to worker productivity); promoting flexible work arrangements such as part-time, flexi-work, and job sharing; and introducing adjustments in the workplace to make them more suited to the physical capacity of older workers, which can be very cost-effective. Extending productive working lives has often required comprehensive interventions in many areas, with technology playing an important role. Another reform for extending working life in the formal sector is appropriate retirement reform, notably gradually increasing the retirement age and equalizing it for men and women.

Lifestyle changes will increasingly be needed to promote healthy, active, and dignified aging. Some key actions in this area include effectiveness in tobacco control, interventions to ensure a healthy diet to curtail obesity, and prevention of excessive alcohol consumption. To ensure dignified aging, it will be vital to take the approach of "aging in place," most urgently in urban planning and development. Aging in place—as opposed to people moving to institutional settings when they become older and frail and require care—is both sustainable and contributes to quality of life. As Vietnam is now planning the footprint of many cities, it is important to design this footprint to allow for aging in place. Numerous international good practices can provide useful examples in this regard.[6]

Given the rapid pace of aging and at such a relatively low-income, Vietnam will need to intensify efforts to strengthen its service delivery while meeting rising demands. Vietnam needs a major shift in its pension policy to expand the pension system to cover a majority of the population, including those in the informal sector, which will be possible only through a diversified system. Its health care system requires a fundamental reorientation too, shifting toward more emphasis on primary care and reduced reliance on hospital care while at the same time building stronger coordination among health providers and strengthening health promotion and illness prevention measures. At the same time Vietnam will need to respond to the increasing demand for elderly care, as the traditional informal family-based (familial) care model is increasingly strained by urbanization, migration and demography, by developing its own vision for formal provision and financing, which will most certainly have to rely on private providers under government stewardship.

6 See, for example, Center for Policy on Ageing (2016); Epstein, Ann S. and Boisvert, Christine (2006); and Garcia, Sergio and Marti, Pablo (2014).

The table below summarizes some key policy recommendations made in this report to increase labor productivity and improve public service delivery so Vietnam can take advantage of the remaining window of opportunity and prepare for its aging society.

Summary of policy recommendations

Objective	Action
Enhancing Growth	
Human capital	
Improve human capital among the young and close the gaps between ethnic groups and urban and rural populations.	Ensure early childhood nutrition and access to health services and sanitation. Strengthen and expand conditional cash transfers combined with behavioral change counseling to stimulate demand for maternal and child health services. Promote skills development for ethnic minorities, including entrepreneurship skills, technical skills for wage employment, and life and soft skills to promote the pursuit of livelihoods.
Encourage labor market transitions to sectors that show increasing productivity over the lifespan.	Provide skills development for workers to move up the rural value chain into the knowledge economy. Support the rural-urban migration of ethnic minorities by reducing costs.
Build worker skills for today's and tomorrow's jobs.	Increase resources to tertiary education with results-based targets for improvements in access, equity, relevance, research and innovation, and technology transfer. Allow equal access to private tertiary education institutions to compete for government-funded service and/or research contracts. Establish the institutional conditions for a well-regulated market of private and public training services providers with the close cooperation of employers. Incentivize and facilitate expanded on-the-job training and individual learning schemes.
Employment policies	
Facilitate the labor force participation of older workers.	Promote life-long learning and retraining schemes targeted at those with formal education significantly in the past. Pilot subsidies and grants to encourage training to raise older workers' productivity and help them acquire new skills. Incentivize firms to promote flexible work arrangements and to introduce adjustments in the workplace that make them more suited to the physical capacity of older workers. Develop job search services focused on older workers.
Reform retirement and hiring policies to lengthen productive working lives.	Increase the retirement age and equalize it for men and women. Ensure the enforcement of laws preventing discrimination against older workers. Deploy awareness campaigns to address negative attitudes regarding the capacity of older workers and use examples of initiatives in other countries that provide tools and information for managing an older workforce.
Close gender gaps in labor market outcomes.	Implement policies to reduce the burdens of childcare and elderly care for working-age women by improving/subsidizing childcare and elder care services.

Objective	Action
Support a segmented rural workforce.	Continue agricultural restructuring to maximize productivity and returns for farming. Extend and support Intergenerational Self-Help Clubs to increase economic development and income generation among older workers in rural communities.
Other productivity-enhancing policies	
Integrate technology into multiple solutions for aging labor markets and improved growth.	Encourage growth of biotech to automate diagnosis, surgery, and therapies. Automate and increase use of AI, machine learning, and cloud computing in the workplace. Transform labor market function via remote and virtual education/ training, cloud-based matching services, and ergonomic/human function aiding devices in workplace. Build on the post-COVID "new normal" of using technology in work. Support the boom in e-commerce by enhancing digital payments.
Promote a healthy workforce.	Strengthen tobacco control policies, including large relative cigarette taxes and comprehensive smoke-free air laws in indoor spaces. Encourage consumer demand for healthy food with complementary policies in trade, food, and agricultural policies to incentivize producers and retailers; tight regulation of good marketing; and clear standards of healthy dietary practice throughout the life span. Prevent obesity by taxing sugar-sweetened beverages and ultra-processed foods and requiring labeling and nutrition profiling. Reduce the burden of disease from alcohol consumption by raising prices via excise taxes and other pricing policies.
Improving efficiency of fiscal spending	
Pensions	
Increase pension coverage to provide an income floor for those without contributory pensions.	Gradually lower the age for social pension eligibility to 70 years of age.
Reform the formal sector contributory system.	Gradually increase the official retirement age and close the retirement age gap between men and women, beginning as soon as possible. Reduce financial incentives for early retirement by applying an actuarially fair reduction (e.g., 6 percent per year). Equalize benefits between public and private sector workers on a more accelerated basis. Make rules for indexation and valorization of past wages more predictable by automating price indexation. Move from discretionary or ad hoc indexation to automatic price indexation of pensions.
Reform the existing matching contributory scheme to better suit the needs of informal workers and increase coverage of social insurance.	Create mechanisms for informal workers to interact with the system conveniently, with a focus on digital solutions. Provide stronger financial incentives for workers to contribute toward their pensions. Simplify contribution rules to accommodate irregular incomes. Design the system to include behavioral nudges to encourage participation. Rely on common platforms to identify participants and manage their accounts and track them throughout their lives.

Objective	Action
Health	
Prioritize and support intersectoral cooperation.	Ensure policy linkages between health care and other policies affecting the health of older persons.
Emphasize primary care and reduce reliance on hospital care.	Scale up effective models of primary health care. Create essential primary care packages focused on patient needs including curative, preventative, social, and financial interventions. Integrate and streamline the healthcare delivery system. Build the capacity of health workers and caregivers to more effectively respond to the needs of older persons. Increase the scale and effectiveness of public health communication to increase health literacy. Develop more effective disease screening and primary health care, including clear technical guidance accounting for cost-effectiveness and targeting high-risk groups.
Improve health financing.	Strengthen the legal and regulatory framework for PPPs. Improve accountability and oversight mechanisms. Shift budget allocation mechanisms and health worker remuneration. Lower financial barriers to care for older workers. Prioritize financing decisions based on data and provide a guaranteed voice for affected communities.
Empower individuals and households to ensure their health.	Target reforms to promote healthy choices. Implement programs encouraging the population to seek early care for health programs. Increase knowledge of disease symptoms. Emphasize participation in screenings and health checkups. Aid caregivers to increase their knowledge of the needs of aging individuals.
Elderly Care	
Promote “aging in place” in urban planning and development.	Draw on international best practices to design cities that allow for aging in place.
Build a well-functioning market for elderly care services.	Develop a strategy for aged long-term care (LTC) and a plan to diversify types of available care (including home-based, community-based, and institutional). Start developing sustainable financing mechanisms. Strengthen government regulatory and oversight capacity. Encourage private sector participation by both opening existing welfare homes to self-paying patients and developing concessional arrangements for use of government buildings. Prepare a well-trained cadre of volunteers and professionals to staff and manage the LTC delivery network. Engage in a continuous dialogue on government responsibilities.
Help ensure for realistic choices for families in care decisions for elderly persons.	Continue developing ISHCs and support community-based care. Start piloting provision of subsidies for care to eligible beneficiaries with the option of respite care.

PART I.

Part I of this report has three chapters which set forth the main trends and implications of aging in Vietnam. It starts with a brief description of the demographic situation in Chapter 1, characterizing the dual factors of lower fertility and higher life expectancy driving the trends that will soon make Vietnam the fastest-aging country in the world and the implications of these trends along the lines of age group, gender, geography and ethnicity. It also dives into other important patterns that influence demography, such as the prominence of internal migration, demographic trends of non-majority ethnic groups, and life expectancy outcomes of males versus females. Chapter 2 describes current patterns and trends in key socioeconomic indicators (poverty, welfare, economic mobility, education, labor market participation) across different cohorts of the population, highlighting differences between older, middle-aged and younger groups. It examines the distribution of benefits from the country's recent economic growth along age group and demographic lines and characterizes the sources of support for the elderly population. Chapter 3 build on these trends and patterns and describes the macroeconomic implications of aging, presenting model-based forecasts that link growth and fiscal trends with demographic trends and potential reform options. In particular, the situation of Vietnam as a middle-income country entering a phase of rapid aging is characterized in terms of labor productivity and the potential consequences of projected fiscal commitments. A policy approach that best positions Vietnam for the future with an aging workforce is then briefly described.

Chapter 1: VIETNAM'S DEMOGRAPHIC TRANSITION

1.1. Introduction and Summary

Vietnam now is experiencing the "demographic window of opportunity," but it will close in two decades. Aging will be fast and severe. Not only will the proportion of elderly in the population and the numbers of the elderly increase, but the prime-aged population will be older, and the elderly population will be older. Increasingly, the elderly will be living in rural areas and in the poor provinces. And, increasingly, children will be born in the poor provinces.

The age structure of the ethnic minorities groups is considerably more balanced compared with the majority group. This means that ethnic minorities will be overrepresented among the young and prime-aged population for years to come.

Women will continue being overrepresented among the elderly, although these differences will somewhat diminish over time. Women (girls) are increasingly underrepresented in the age 0-4 population group, which is driven by the differences in sex ratio at birth (SRB). This is a very worrisome trend and to reverse it requires concerted action on the part of all stakeholders.

Overall, aging is a major population trend in Vietnam, which together with urbanization and high internal mobility will continue to reshape the society for years to come.

This chapter is organized as follows. The first section characterizes Vietnam's current demographic "window of opportunity," elaborating on the population trends behind it and how they are expected to shift in upcoming decades. It further discusses the driving factors behind population aging. It then breaks down demographic trends more finely into important sub-categories along lines of age group, gender, geography and ethnicity.

1.2. The "demographic window of opportunity" and patterns and drivers of aging in Vietnam

Vietnam has been experiencing a *demographic window of opportunity* since 2007, which it is projected to enjoy until 2042 (Box 1.1). The total dependency ratio (TDR) in Vietnam started declining in late 1970s and has been declining rapidly, dropping from 0.78 in 1989 to 0.64 in 1999 and to 0.45 in 2009. The decline has been driven by the decline in youth dependency ratio (YDR). The total dependency ratio reached its minimum between 2009 and 2016 and started to increase. This increase is driven by the increase in Vietnam's old age dependency ratio (OADR). OADR is projected to double from 0.11 in 2019 to 0.22 in 2039. At the same time, the YDR is projected to continue its half-century-long decline. These trends mean that the rapid increase in the dependency ratio toward the middle of the 21st century is due to an increase in the proportion of elderly, in contrast to the rapid increase in the dependency ratio in middle of the 20th century which was due to an increase in the share of youth.

The share of prime-age adults peaked in 2014 and is now declining as well, although at a rate slower than the rate of decline in the youth population. As an example of these demographic changes, in 1990, there were 0.7 people under the age of 15 and over the age of 64 for every person 15 to 64 years of age. This means that, on aggregate, each working-age individual had 0.7 people as dependents. This dependency ratio declined to 0.44 by 2015 and will start increasing again in 2020. By 2049, the ratio is projected to reach around 0.56.[7]

7 General Statistics Office of Vietnam "Vietnam Population Projection 2014-2019", available at https://vietnam.unfpa.org/en/publications/viet-nam-population-projection-2014-2049

Box 1.1. Key Definitions and Assumptions

The **demographic window of opportunity**, also called the **population bonus**, describes a demographic situation in which the working-age population—between ages 15 and 64—is greater than that of the children and the elderly. Put differently, it is when the number of working-age people is double that of dependent people and the total dependency ratio is below 0.5.

An **aging population** is a population in which the elderly (65 years of age and above) account for 7 to 9.9 percent of the total. See Cowgill and Holmes (1970) (as quoted in Andrews and Philips, 2006).

An **aged population** is a population in which the elderly account for 10 to 19.9 percent of the total. A population in which the elderly account for 20 to 29.9 percent of the total is very aged, and a population in which the elderly account for more than 30 percent of the total is hyper aged.

The total dependency ratio (TDR) is the ratio of the number of dependents 0 to 14 years of age and over the age of 65 to the total population 15 to 64 years of age.

The old age dependency ratio (OADR) is the ratio of the number of persons aged 65 and over (ages when they are generally economically inactive) to the number of persons 15 to 64 years of age.

The Aging Index (AI) refers to the number of elderly per 100 persons below 15 years of age in a specific population.

The **total fertility rate** (TFR) is the average number of children born to a woman during her reproductive years (ages 15 to 49).

Source: Authors based on UN Commission on Population and Development, https://www.un.org/development/desa/pd/

Between 1980 and 2015, Vietnam's elderly population increased at a much faster rate than the other demographic groups, albeit from a low base. The country's population increased from 54.3 million in 1980 to 93.5 million people in 2015. At the same time, the number of older persons (65 years and older) more than doubled, increasing from less than 3 million (5.3 percent of the population) to 6.31 million (6.7 percent of the population). The number of prime-age adults (15 to 64 years) increased from 29.25 to 65.65 million (in percent terms, from 53.8 percent to 70.1 percent), while the number of children declined, from 22.2 million to 21.6 million (40.9 percent to just 23.1 percent).[8]

Projections under the medium-fertility scenario show that by 2049, the number of older persons will increase to 19.6 million and will account for approximately 18.1 percent of the population, turning Vietnam into one of the fastest-aging countries in the world. In 2012, these trends already placed Vietnam in a group of countries classified as having an "aging population." Vietnam is projected to become "aged" in 2026. This pace of aging is one of the fastest in the world (World Bank 2016 and others). France needed 115 years to move between the same points, the United States 69 years, and Japan and China 26 years. In contrast, Vietnam will need only 20 years (Kinsella and Gist, 1995; U.S. Census Bureau, 2008; GSO 2010).

8 Data from GSO projection in 2014. GSO did not provide historical data for 1979. All data are available since 2009. This is based on UN data.

Figure 1.1. Vietnam: Demographic Projections, 1950-2100*

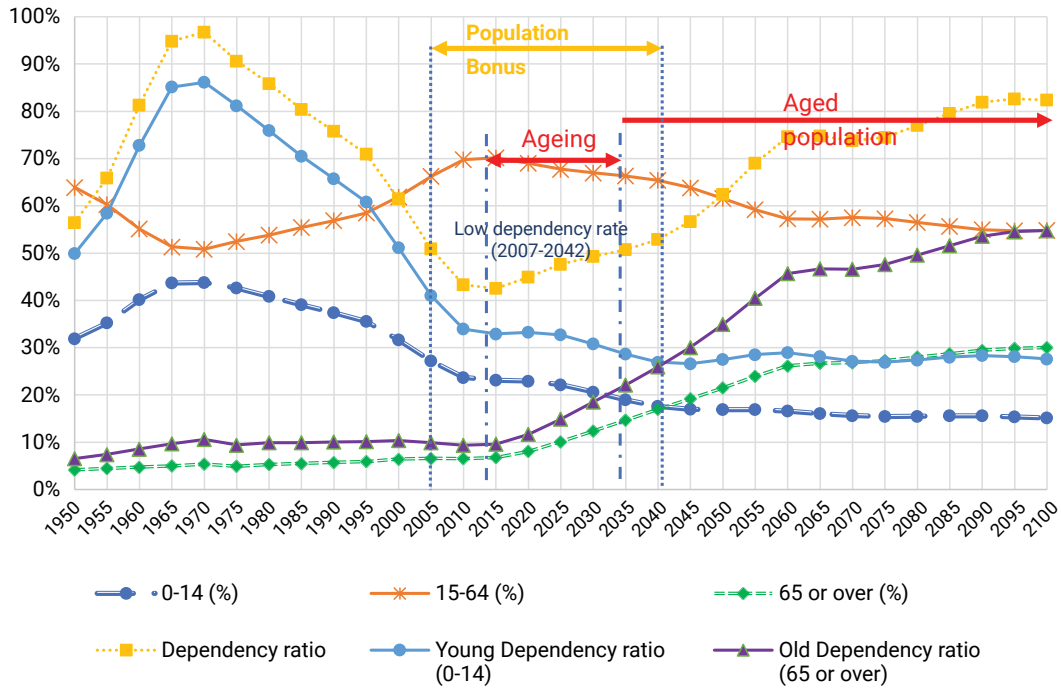


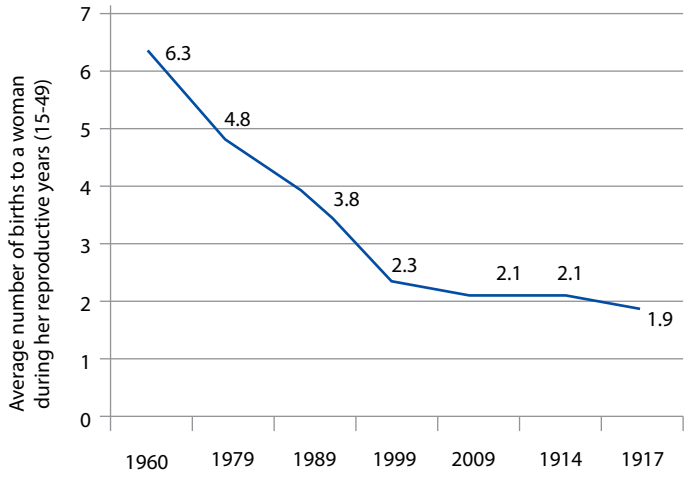
*Figure 1.1 shows that overall dependency ratio (yellow squares) increased until 1970, reaching its peak (of 97 percent), then declining steeply to a nadir (of 43 percent) until 2015, after which it has increased and is project to increase steadily into the future. The youth dependency ratio (light blue circles) drove the patterns of the overall dependency ratio until 2015, increasing until 1970 when it reached its peak (of 86 percent) before declining steeply until 2015 to a value of 32 percent, after which it continued to decline, but more gradually, and is projected to level out around 26 and 29 percent in the future. The old dependency ratio (purple triangles) increased slightly until 1970 to 10 percent, after which it remained steady until 2015, after which it began to rise sharply, which is projected to continue until 2060 when it reaches around 46 percent, after which it is projected to rise more gradually.

These trends are mirrored in relative population shares of each age group. The percent of the population aged 0 to14 (dark blue circles) started at 32 percent in 1950, rising to a peak (of 43 percent) in 1970 before declining steadily; the decline is projected to level off gradually to about 15 percent beginning around 2040. The percent of the population aged 15 to 64 (orange x-es) declined from 64 percent in 1950 to a nadir of 51 percent in 1970 before rising to a peak (of 70 percent) in 2015, after which it began a gradually decline project to reach about 54 percent by 2100. The percent of the population aged 65 and older (green diamonds) hovered between 4 percent and 7 percent until 2015, after which it began to increase, which it is projected to continue into the future; the proportion of this age group in the general population is projected to overtake the proportion of the youth age group (0-14) in the early 2040s.

This extremely rapid aging is the consequence of a number of factors. First, the level of the old-age population (and thus the OADR) has been low in Vietnam for a long period of time. This is due to the low birth rate and high child mortality during the famines that took place from 1940 to 1945, as well as the high adult mortality rates during ensuing conflicts. Second, the post-1945 birth cohorts, who are just now reaching old age, are quite large due to the high fertility rate of that period. Third, because fertility fell rapidly in the 1990s, the cohort of people entering the working age is quite small.[9] Both the population bonus and aging reflect socioeconomic trends, public policies, and individual responses, which have led to declining fertility rates, a drop in age-specific mortality rates for all age groups, and an increase in life expectancy. Each of these aspects is described in more detail below.

9 UNFPA Vietnam. Towards a Comprehensive National Policy for an Ageing Viet Nam. Available at https://vietnam.unfpa.org/en/publications/towards-comprehenstive-national-policy-ageing-viet-nam

Figure 1.2. Vietnam: Total Fertility Rate



Source: based on General Statistics Office of Vietnam (GSO) 2014

Declining fertility rate. The total fertility rate (TFR) was between 6 and 7 children per woman until the early 1960s and began to decline gradually in mid-1960s. Specifically, the TFR came down from 6.3 in 1960 to 4.8 in 1979 and continued declining, reaching near-replacement fertility levels at the turn of the century (Figure 1.2). The TFR fell below the fertility replacement level in 2006 and has continued to fall. Within this overall decline, the rate experienced some fluctuations, slightly increasing between 2001 and 2004 to 2.23 and between 2011 and 2010 to 2.10. The latest available data for 2016 shows the TFR standing at 2.09.[10] This circular decline in the TFR is linked to general economic development and urbanization as well as implementation of the 2001-06 population and family planning strategy,[11] which aimed to drive the TFR below the replacement level (World Bank 2016).

GSO projects that the fertility pattern will change, shifting from an *early fertility pattern* to a *late fertility pattern* in 2020.[12] In terms of the resulting TFR, GSO projects that under the medium-fertility scenario, the trend of decline will continue until reaching 1.85 in 2044 and thereafter remain unchanged to 2049.

Increasing life expectancy. Life expectancy at birth was 73.4 in 2016, representing an increase of 5.2 years since 1999 and 8.6 years since 1989. Life expectancy for males was 70.8 years, lower than that of females at 76.1 years. The largest drops in age-specific mortality among the population that drove these trends occurred with respect to infant mortality and mortality among those 64 years old and above (GSO 2016). In fact, the infant mortality rate (IMR) declined from 45 infant deaths per 1,000 live births in 1988-89 to 36.7 in 1999. In 2005, the IMR was 17.8 and subsequently declined further to 14.5 in 2016. The Millennium Development Goal of an IMR of 14.8 was achieved in 2015. GSO projections indicate that life expectancy will continue to rise, driven by access to better health services.[13]

10 General Statistics Office of Vietnam. Major findings of the 1/42016 Time-point population change and family planning survey. Available at https://www.gso.gov.vn/default_en.aspx?tabid=515&idmid=5&ItemID=18742

11 Target 1 of the 2001-2010 Population Strategy: "Maintaining stably the trend on fertility decline in order to achieve the fertility replacement in average for the whole country as of 2005 in general, for the isolated/remote or poor areas as of 2010 in particular, aiming at the population size, structure and distribution appropriately with the social economic development as of 2010." (Vietnam Commission for Population, Family and Children 2003.)

12 General Statistics Office of Vietnam. Vietnam Population Projection 2014-2019. Available at

13 General Statistics Office of Vietnam. Vietnam Population Projection 2014-2019. Available at https://vietnam.unfpa.org/en/publications/viet-nam-population-projection-2014-2049 and UNFPA Vietnam. Towards a Comprehensive National Policy for an Ageing Viet Nam. Available at https://vietnam.unfpa.org/en/publications/towards-comprehenstive-national-policy-ageing-viet-nam.

Table 1.1. Vietnam: Projections of Life Expectancy

	2014-2019	2019-2024	2025-2029	2029-2034	2035-2039	2039-2044	2045-2049
Male							
Vietnam	**70.6**	**71.1**	**71.6**	**72.1**	**72.6**	**73.1**	**73.6**
Urban	73.3	73.8	74.3	74.8	75.3	75.8	76.3
Rural	69.5	70.5	71	71.5	72	72.5	73
Female							
Vietnam	**76**	**76.5**	**77**	**77.5**	**78**	**78.4**	**78.8**
Urban	78.7	79.1	79.5	79.9	80.3	80.7	81.1
Rural	74.9	75.4	75.9	76.4	76.9	77.4	77.9

Source: General Statistics Office of Vietnam. Vietnam Population Projection 2014-2019. (GSO 2016), available at https://vietnam.unfpa.org/en/publications/viet-nam-population-projection-2014-2049

1.3. Key demographic patterns across sub-groups

1.3.1. Aging among specific population age groups

Vietnam's working-age population is aging over time. According to the GSO 2014, most of the working-age population (15-64 year old) in 2014 was in the younger prime-age group, which is below 30 years old. In fact, 39 percent of the prime-aged cohort were less than 30 years old, and 28 percent were over 45 years of age. GSO estimates that the working-age population will be aging steadily over time so that by 2029 the young prime-aged group will make up 30 percent of the entire prime-aged cohort while share of the age 45 and over will increase to 36 percent. These trends will continue and by 2049 the share of workers aged 45 and over will increase to 41 percent and more than 70 percent of the working-age workforce will be above 30 years old.

Among the elderly, the fastest growth in population is projected to occur among the oldest old. The percentage of those age 80 and above among the population age 60 and above increased from 7.8 percent in 1979 to 19.8 percent in 2014. The share peaked in 2014 and is projected to decline in the next 15 years, a trend which can be explained by the conflict that occurred during the late 1960s and early 1970s.[14] The oldest old population will start to increase again in 2029, and by 2049, about 15.9 percent of the population age 60 and above will be in their eighties.

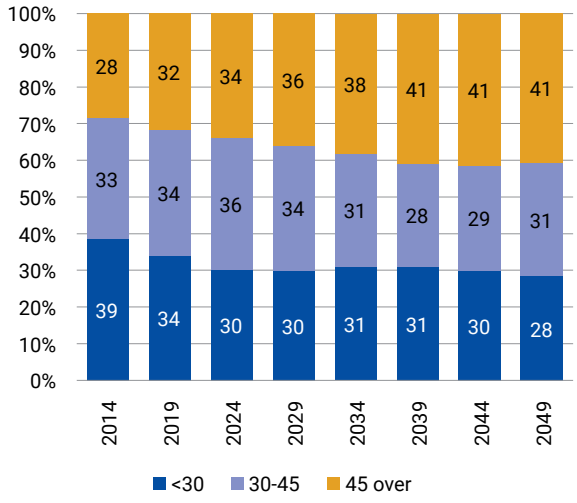
1.3.2. Gender differences

Increasing gender differences can be seen in demographic outcomes, particularly at the younger end of the age distribution. While the overall ratio of males to females in Vietnam is 97.3 males per 100 females, deeper differences can be seen at the two tails of the age distribution. For children 0-4 years old, the ratio has been increasing and now stands at 111.2. While the ratio varies considerably, out of 63 provinces and cities, 24 had a high sex ratio above 110 for children 0-4 years of age. This relatively recent demographic phenomenon has been caused primarily by an imbalanced sex ratio at birth (SRB). This is a very troubling trend, which some observers link to the steadily increasing access to affordable sex-determination and sex-selection technology that allows couples to pursue their desire for one or more sons.[15]

14 General Statistics Office of Vietnam. Vietnam Population Projection 2014-2019. Available at https://vietnam.unfpa.org/en/publications/viet-nam-population-projection-2014-2049 and UNFPA Vietnam. Towards a Comprehensive National Policy for an Ageing Viet Nam. Available at https://vietnam.unfpa.org/en/publications/towards-comprehenstive-national-policy-ageing-viet-nam

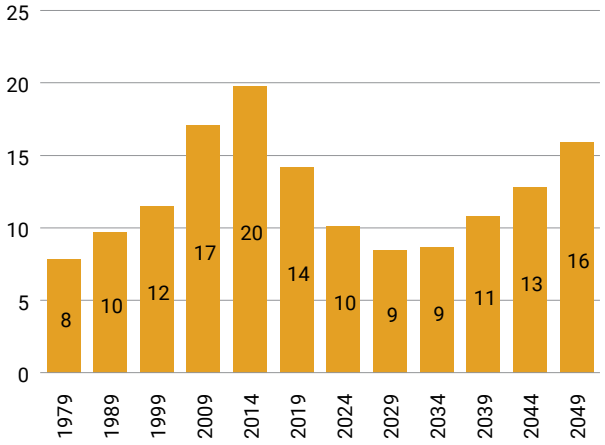
15 UNFPA. Recent Change in the Sex Ratio at Birth in Viet Nam. Available at: https://www.unfpa.org/publications/recent-change-sex-ratio-birth-viet-nam. The newly released results of the 2019 Population and Housing Census (see https://vietnam.unfpa.org/en/news/results-population-and-housing-census-2019) show that the SRB remained high with 111.5 boys per 100 girls. The SRB in the Red River Delta was the highest (115.3 boys per 100 girls) while the lowest SRB was in the Mekong River Delta (106.9 boys per 100 girls).

Figure 1.3. Vietnam: Population Projections, 2014-2049



Source: GSO 2016.

Figure 1.4. Vietnam: Projected Proportion of "Oldest Old" (80 Years Old and Older) Among Population Aged 60 Years Old and Older, 1979-2049 (in percent)



Source: GSO 2016

Greater gender differences can also be seen at the older end of the age distribution. The proportion of females in the population age 60 and older is higher than males, and this discrepancy increases with age. In 2019, the percentage of females in the population age 60 and older was 58.3, while the percentage was 69.2 in the population age 80 and older.[16] An increase in the ratio between elderly females and males with age is a common observation elsewhere in the world, as well. It is driven by the higher mortality rate for males compared to females of the same age for the population over 65 years old, and discrepancies in life expectancy increase with age. The 2015 GSO shows that life expectancy at 60 years of age is 19.3 for males and 24.8 for females.[17]

Notably, the proportion of females among the elderly is relatively high in Vietnam compared to other countries. The proportion of females in the population age 60 and older in Vietnam was the highest among the ten ASEAN countries in 2000 and 2010.[18] This pattern is explained by the higher male mortality from the conflict that occurred over 35 years ago. This is particularly true for the population age 80 and above, which had a sex ratio of 52 in 2014. GSO projects that the percentage of females among the older population will decline after 2020.[19]

1.3.3. Geographic and ethnic differences

Vietnam's significant internal migration affects the geographic patterns of aging. International migration is negligible compared to the size of the national population and therefore is not a significant contributor to the population change in Vietnam. Instead, internal migration from rural to urban areas and from less- to more-developed areas are the key factors affecting Vietnam's population trends. Notwithstanding a higher TFR

16 General Statistics Office of Vietnam. Vietnam Population Projection 2014-2019. Available at https://vietnam.unfpa.org/en/publications/viet-nam-population-projection-2014-2049

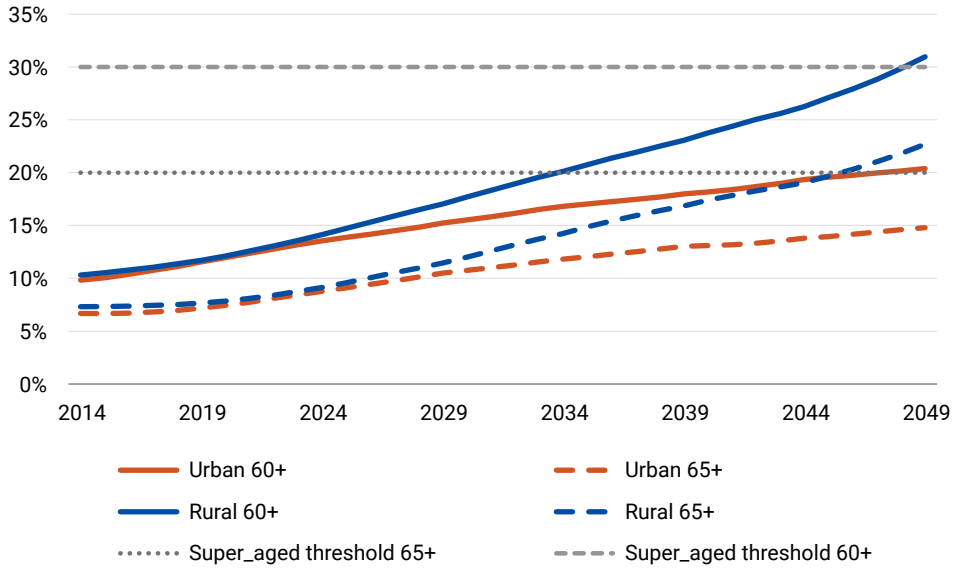
17 General Statistics Office of Vietnam. Major findings of the 1/42016 Time-point population change and family planning survey. Available at https://www.gso.gov.vn/default_en.aspx?tabid=515&idmid=5&ItemID=18742

18 UNFPA Vietnam. TOWARDS A COMPREHENSIVE NATIONAL POLICY FOR AN AGEING VIET NAM. Available at https://vietnam.unfpa.org/en/publications/towards-comprehenstive-national-policy-ageing-viet-nam.

19 UNDESA. (2017). World Population Prospect: The 2017 Revision. New York. The newly released results of the 2019 Population and Housing Census (see GSO 2019) show the following female-to-male ratios for the 60-69 year old, 70-79 year old, and 80+ year old were 124, 146, and 191, respectively.

and lower life expectancy in rural areas,[20] the proportion of older persons in the population is relatively similar in urban and rural areas.[21] GSO projects that from 2030 to 2049, the proportion of older persons will triple in rural areas and double in urban areas compared to the levels today,[22] which will mean that the proportion and number of older persons in rural areas will surpass those of urban areas (See **Figure 1.5)**. The higher proportion of older population in rural areas can be explained by the large number of young adults moving out of rural areas to pursue education or better employment opportunities.

Figure 1.5. Vietnam: Projection of Elderly share of the Population, Urban and Rural Areas, 2014-2049



Source: GSO 2016

Demographic outcomes vary across different regions of the country. The Southeast region has the highest share of the population ages 15-64 (at 72.8 percent), and it has a large migration inflow of young people. The Northern Midlands and Mountains and the Central Highland regions have the highest fertility rates as well as the highest proportion of children ages 0 to 15 (28.4 and 29.5 percent, respectively). The Mekong River Delta and the Red River Delta have experienced low fertility and a large migration outflow, and these regions have the highest proportion of the population age 65 and older (6.5 percent and 7.8 percent, respectively). The North and South-Central Coast region has had a high level of outmigration, resulting in a very high proportion of the population that is age 65 years and above (up to 7.2 percent).

Nguyen Dinh Cu (2009) report that there appears to be a U-shaped relationship between the aging index and provincial GDP. Poorer provinces tend to have a lower aging index, which is related to the higher fertility rates in these provinces, which in turn are also related to the lower urbanization levels as well as limited labor market opportunities and access to sexual and reproductive health services and other societal factors. Wealthier provinces tend to have relatively low proportions of seniors, with sources relating this to the higher rates of in-migration, predominantly by young people.[23]

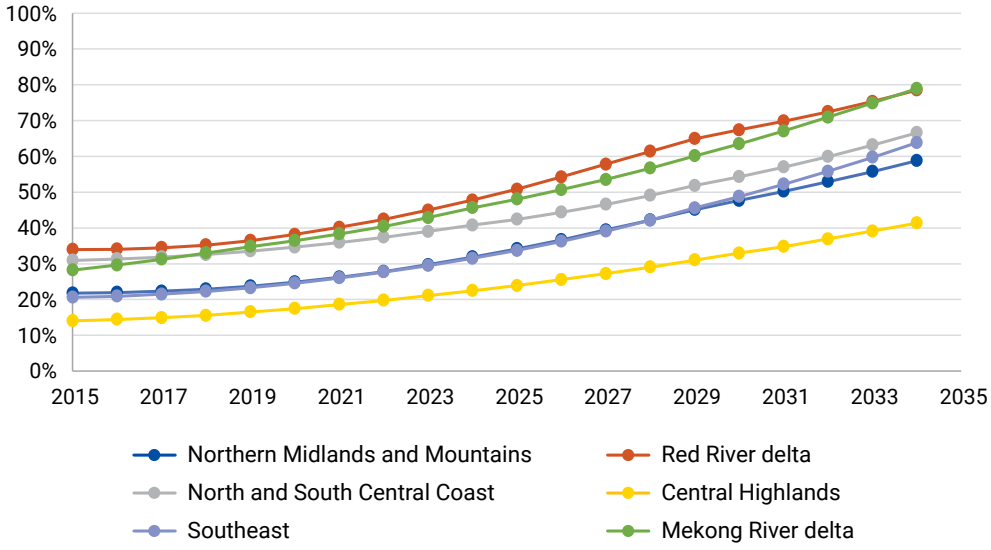
20 Average TFR in rural areas of 2.21 compared to 1.88 in urban areas (GSO 2016).

21 General Statistics Office of Vietnam. Major findings of the 1/42016 Time-point population change and family planning survey. Available at https://www.gso.gov.vn/default_en.aspx?tabid=515&idmid=5&ItemID=18742

22 General Statistics Office of Vietnam. Vietnam Population Projection 2014-2019. Available at https://vietnam.unfpa.org/en/publications/viet-nam-population-projection-2014-2049

23 https://mpra.ub.uni-muenchen.de/81825/1/MPRA_paper_81825.pdf

Figure 1.6. Vietnam: Projection of Aging Index, by Region, 2010-2035



Source: GSO 2016.

Differences in demographic outcomes are also pronounced across ethnic groups.[24] The Mong ethnic group has the highest TFR, which stood at 3.65 in 2010. The Mong ethnic group also has the highest proportion of children under 15 years of age in the population—in fact, this age group accounted for 42.5 percent of the total Mong population in Vietnam in 2010. At the opposite end of the spectrum is the Kinh ethnic group, with the lowest TFR at 2.02. The proportion of children under 15 years old among this group was 23.1 percent in 2009. In terms of patterns of mortality, the Mong ethnic group has the highest mortality rate and the lowest proportion of people age 65 and above at 3.2 percent. The Kinh ethnic group has the lowest mortality rate and the highest proportion of people age 65 and above at 7.5 percent.

Table 1.2. Vietnam: Selected Demographic Indicators by Region, 2016[24]

Region	Share of		Aging index (percent)	Total Fertility Rate (TFR)	Crude death rate	Infant mortality rate	Life expectancy
	65 years old and older in 2016	15 -64 years old 2016					
Northern Midlands and Mountains	5.6	28.35	35.4	2.63	7.56	21.46	70.9
Red River Delta	7.8	25.59	62.5	2.23	7.42	11.46	74.6
North and South Central Coast	7.2	25.89	54.8	2.37	7.53	16.05	72.8
Central Highlands	4.0	29.49	28.4	2.37	5.18	24.01	70.1
Southeast	4.7	22.50	44.7	1.46	5.04	8.49	76
Mekong River Delta	6.5	24.19	54.4	1.84	7.04	11.18	74.7

Source: Authors, based on GSO 2016

24 This is based on UNFPA 2011 "Ethnic Groups across Vietnam: An analysis of key indicators form the 2009 Vietnam Population and Housing Census" , https://vietnam.unfpa.org/sites/default/files/pub-pdf/Ethnic_Group_ENG.pdf. At the same time new data will become available soon, as the General Statistics Office (GSO) in coordination with the Committee for Ethnic Minority Affairs (CEMA) is preparing for the 2019 Survey on the Socio-economic Situation of 53 Ethnic Minority Groups.

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Chapter 2: AGING AND WELFARE

2.1. Introduction and Summary

The demographic window of opportunity contributed to the spectacular growth which in turn has both been broad-based and led to reduced poverty in Vietnam. During this transition, Vietnam is managing to protect its elderly, as evidenced by the fact that poverty among the elderly has declined continuously over a number of years. During the time period considered in this report, older generations benefited the most relative to the other age groups. There is also no evidence that older people are left behind in other, non-monetary indicators of welfare, such as access to water and sanitation and ownership of assets. Individuals, families and the state have all contributed to improvements in the welfare of older people.

While the overall progress in improving the welfare of older people is significant, some groups have been left behind: the oldest old, especially in rural areas; the elderly with little education; and the elderly without children. Vietnam is experiencing significant economic mobility, and the middle class is growing, but unevenly, with faster growth in urban areas and with both younger and older groups being underrepresented in the middle class. Economic stability is highest among prime-age adults, who also accumulate the most assets, especially in urban areas. Access to clean water and improved sanitation, meanwhile, has increased across the board, with especially significant improvements in rural areas and no evidence that older adults have been left behind.

Sources of support among the elderly include instrumental and financial support from family, with co-residence remaining an important social structure for providing such support. However, elderly co-residence in Vietnam has declined over time as families become smaller, incomes rise, and children migrate elsewhere. Higher rates of co-residence in urban areas probably at least partially reflect rural-urban migration trends among younger groups. Meanwhile, public support has become increasingly significant as expanded social protection programs have benefitted all groups. Access to contributory pension, social pension and other social assistance programs are high among older groups, with important differences between rural and urban areas, while access to social health insurance has increased significantly across the board, especially benefitting the youngest and oldest age groups.

This chapter is structured as follows. The next section discusses patterns of poverty and trends in economic mobility in Vietnam, describing patterns among subsections of the population. The following section looks at examining non-monetary indicators of welfare and asset accumulation patterns across age groups. Then the chapter examines patterns of educational attainment and employment across the population, including distinctions between genders and ethnic groups, as well as post-retirement income. The discussion then moves to examine living arrangements and informal support for the elderly in Vietnam, followed by patterns of access to social support, including pensions and health care insurance.

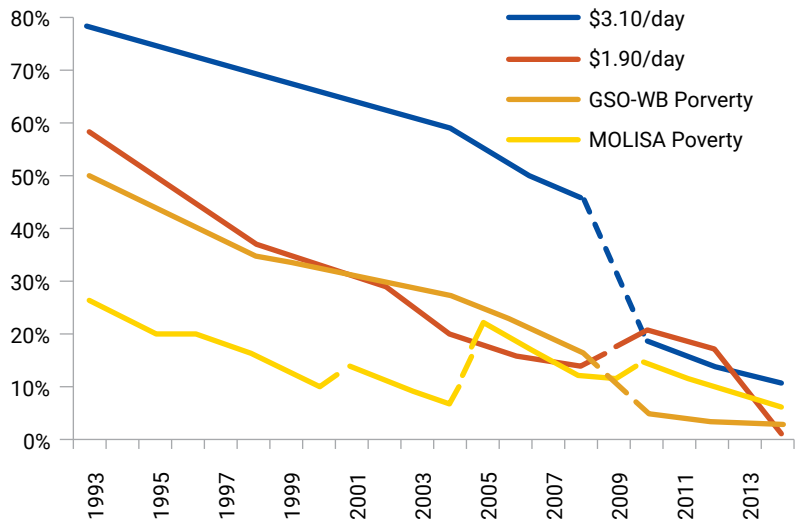
2.2. Poverty and economic mobility[25]

Absolute poverty has fallen sharply in Vietnam over the last two decades, benefiting all generations. As shown in **Figure 2.1**, poverty rates in Vietnam have been declining for several

25 Poverty and welfare analyses presented in this report are based on 2010, 2012, 2014 and 2016 VHLSS. Poverty rate is calculated based on the National GSO-WB definition of poverty line. Economic vulnerability is defined based on the international poverty line. Economically vulnerable have per capita consumption between $3.2-$5.5 per day, economically secure consume $5.5-$15 per person per day and middle-class live on more than $15 per person per day. See Vietnam Poverty Update Report 2018. Climbing the Ladder: Poverty Reduction and Shared Prosperity in Vietnam. World Bank. for further information.

years. This progress has been broad-based and achieved with only a modest increase in measured inequality. Vietnam's Gini coefficient rose from 32.6 in 1993 to 34.8 in 2014, a low rate compared to other countries in the region, such as China or Thailand, which have rates in the mid- to high-40s.

Figure 2.1. Vietnam: Poverty Rates, 1993-2014



Source: Vietnam Poverty Update Report for 2018 (World Bank, 2018)

During the first half of the 2010s (between 2010 to 2016), older generations benefited the most relative to the other age groups. While the national poverty rate declined from 20.6 to 9.3 percent, the rate among older people dropped even further, from 14.7 to 4.9 percent for 65-69 years old, from 18.6 to 6.7 for 70-79 years old, and from 23.3 to 8.5 percent for those age 80 and above (Table 2.1). By 2016, the poverty rate for prime-age adults (those between 15-34 years of age) was significantly higher than the rate for older groups. (See Annex 2.1 for a definition of the national poverty rate for Vietnam.)

Table 2.1. Vietnam: Poverty Headcount Rate by Age and Cohort, 2010-2016

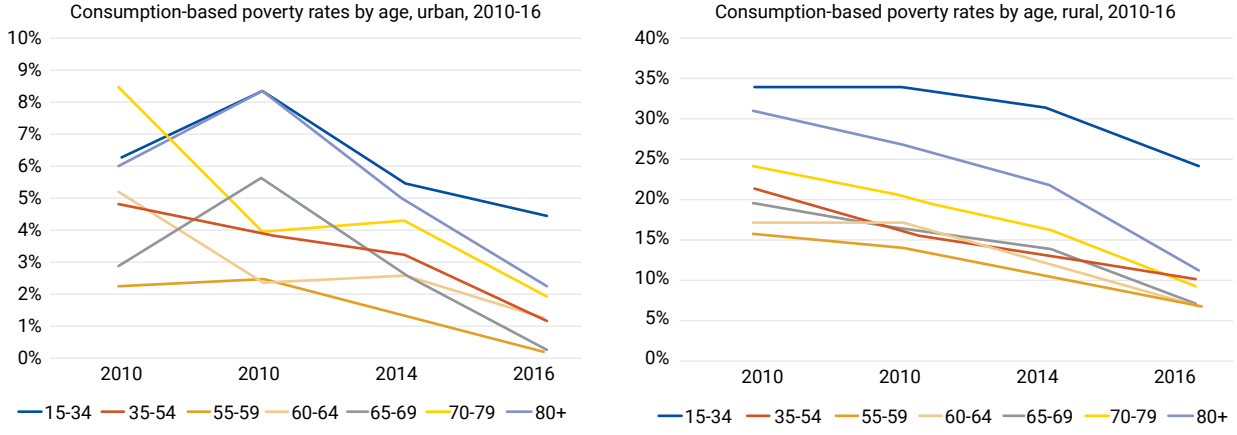
	2010	2012	2014	2016	Change, 2010-2016 (in percent)
Vietnam	20.6	17.3	14.3	9.3	55
Urban	6.2	5.3	4.0	1.8	71
Rural	26.3	22.1	18.6	12.5	52
Age					
15-34	26.7	27.6	23.1	19.1	-28
35-54	16.7	12.7	10.1	7.3	-56
55-59	11.4	10.5	7.1	4.7	-59
60-64	13.1	13.0	8.9	5.2	-60

	2010	2012	2014	2016	Change, 2010-2016 (in percent)
65-69	14.7	13.2	9.8	4.9	-67
70-79	18.6	15.2	12.0	6.7	-64
80+	23.3	21.1	17.3	8.5	-64
Cohort (in year 2010)					
20-30	28.7	30.7	27.4	24.5	-15
31-40	23.1	18.7	15.6	12.5	-46
41-50	15.4	11.7	8.5	6.9	-55
51-60	12.1	10.5	8.0	4.6	-62
61-70	14.5	13.1	10.1	5.3	-63
71+	19.6	17.8	13.9	7.3	-63

Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Incidence of poverty across cohorts of individuals for the 2010 to 2016 time period shows similar patterns of a greater decline in poverty among older cohort. The older cohorts (61 years and older in 2010) experienced the most significant decline in poverty rates, while the younger cohort (20-30 years of age in 2010) had the smallest decline in poverty through 2016. The younger prime-age cohorts (31-50 years of age in 2010) experienced the second-lowest declines in poverty, while the mature prime-age cohort (51-60 years of age in 2010) had the lowest incidence of poverty and was also among those experiencing the fastest declines in poverty. The cohort that was over 71 years of age in 2010 experienced rapid declines in poverty but overall remained among the poorest cohorts.

Figure 2.2. Vietnam: Poverty Rates by Age Group and Urban vs. Rural Areas, 2010-2016



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

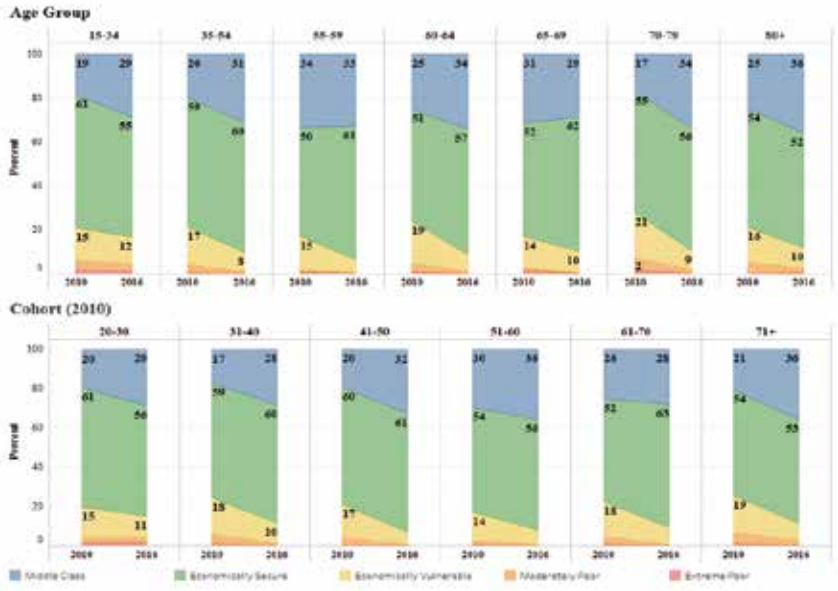
Poverty among older groups has declined relatively rapidly both in urban and rural areas, narrowing there the differences in poverty rates between those below age 65 and those age 65 and above. In urban areas, the gap in poverty rates between older (over age 65) and younger (below age 65) groups virtually disappeared between 2010 and 2016, thanks to a sharp reduction in poverty among the older group. It actually reversed in rural areas, with the older group's 28 percent poverty rate in 2010 dropping to 9 percent in 2016, while the younger group's 18 percent rate in 2010 only fell to 11 percent in 2016. Moreover, in rural areas, the oldest old (age 80 and above) experienced the most significant decline in poverty between 2010 and 2016 (**Figure 2.2**), although its overall poverty rate remained second-highest after the youngest age group (ages 15 to 34). In both urban and rural areas, poverty is now concentrated among younger adults and the "oldest old."

The rural-urban difference in poverty remains significant and is more prevalent among younger and older adults than for prime-aged adults. While the gap in poverty rates between rural and urban areas has decreased considerably—from 20 percent in 2010 to around 11 percent in 2016—it remains large. The gap between urban and rural poverty rate for those below age 65 was 12.94 percent in 2010, the gap for those age 65 and above was 21.23 percent. By 2016, the urban-rural gap for those below age 65 decreased to 9.78 percent, and it decreased to 7.72 percent for those 65 and above. Within each year, the rural-urban divide is most extreme in the two tails of the age distribution: the younger cohort (ages 15-34) and the oldest old (age 80 and above).

Extreme poverty is low in both urban and rural areas, and the risk of being in extreme poverty is higher for younger adults than for older adults. Across urban and rural areas, extreme poverty is very low, while moderate poverty and economic vulnerability are more prevalent in rural areas (**Figure 2.3** and **Figure 2.4)**. In urban areas, the percentage of people in extreme poverty is below 1 percent, except for the youngest cohort and age group. In rural areas, 5.1 percent of the youngest cohort still experiences extreme poverty, about 3.5 times more than the rate in urban areas. The gap between urban and rural outcomes is also staggering among the moderately poor, with differences up to a factor of 6, and the economically vulnerable classes, with differences up to a factor of 2.

These results are consistent with earlier studies showing that older people are not among the groups at the highest risk of extreme poverty. Giang Thanh Long and Wade Donald Pfau (2009) and Giang Thanh Long and Phi Manh Phong (2016) used various definitions and measures of poverty, such as poverty thresholds to show poverty status, poverty vs. near-poverty, and GSO versus Organization for Economic Cooperation and Development (OECD) measures to examine the relative position in the poverty distribution of older people in Vietnam. The authors used the Vietnam Household and Living Standards Survey (VHLSS) 2002-2014 and 2012 Vietnam Aging Survey (VNAS) to show that older people are under-represented among the extreme poor and poor and are over-represented among the better-off (VWU 2012). (See note 2 in the 2.10 Annex for further information about VHLSS data collection.)

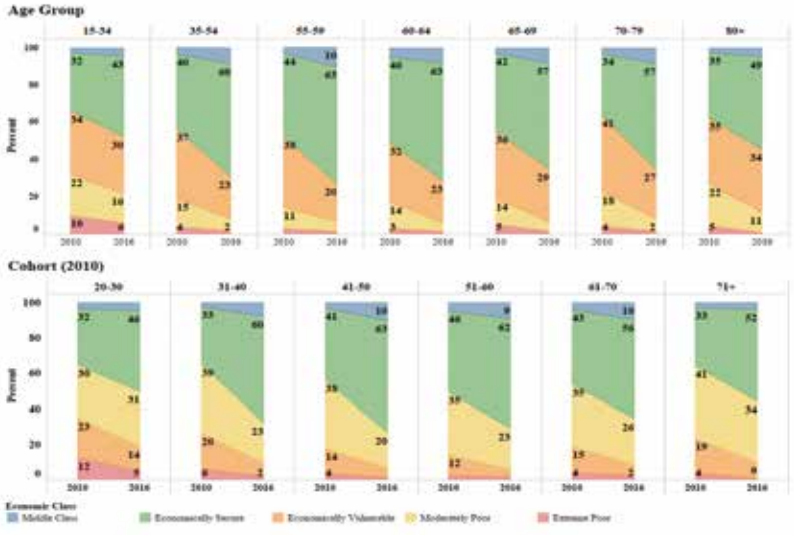
Figure 2.3. Vietnam: Economic Class by Cohort and Age Group in Urban Areas, 2010-2016



Source: Authors' calculations from VHLSS 2010, 2016.

Economic vulnerability in urban areas is more prevalent among younger adults compared to older adults, while economic vulnerability in rural areas is more prevalent among both younger adults and the "oldest old." In urban areas, the probability of being economically secure is high for those near retirement age (ages 55-64) and the "mature" old (ages 65-69). These groups also have the lowest percentage of economically vulnerable as well as extremely poor. The youngest adult group (ages 15-34) has the most extreme poverty and the most economically vulnerable. Cohorts around retirement age (those ages 51-60 and 61-70) are the most economically secure while also having the least percentage of population in extreme poverty. (See 2.10 Annex for information about how economic class is defined and calculated in Vietnam.)

Figure 2.4. Vietnam: Economic Class in Rural Areas by Cohort and Age Group, 2010-2016

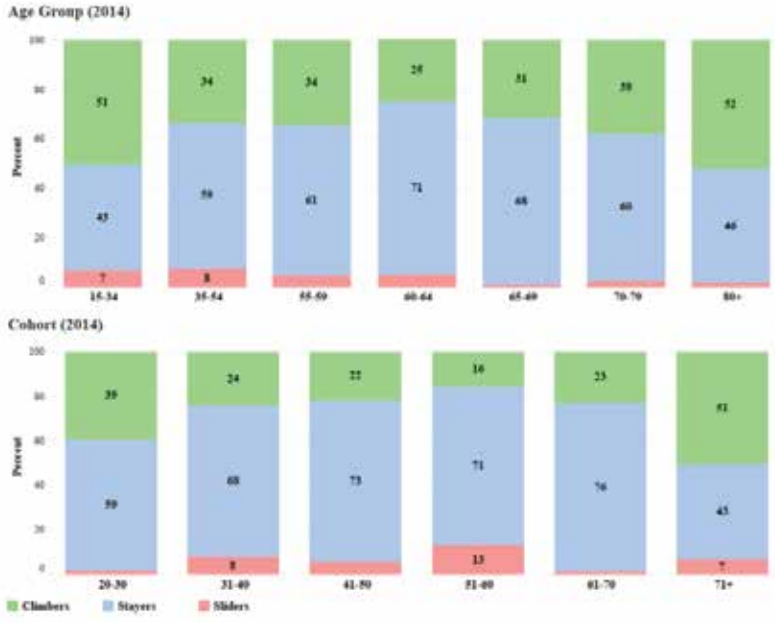


Source: Authors' calculations from VHLSS 2010, 2016.

Vietnam's middle class is growing in both urban and rural areas, although growth in urban areas is significantly faster. **Younger adults are underrepresented among the urban middle class, while among the rural middle class, young adults and the oldest old are underrepresented.** The near-retirement age cohort and group have the highest percentage reaching the middle class. While rural areas experience a gap of about 3 percent in having the middle-class status across different age groups and cohorts, urban regions have a gap that is up to four times larger, with up to a 12 percent difference between the middle-class status across different age groups. Although the probability of being in the middle class for younger urban adults increased dramatically between 2010 and 2016, this group is still underrepresented.

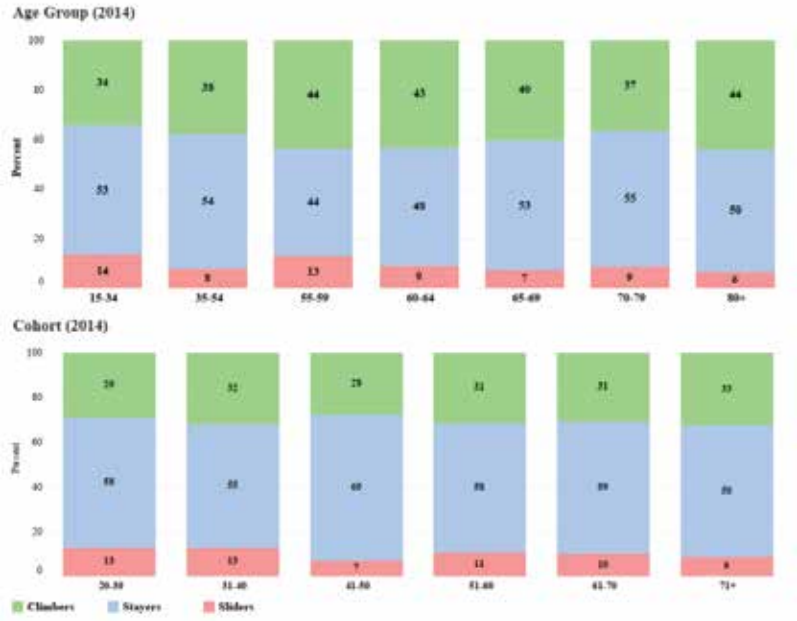
Similar to the patterns presented above, there is evidence of significant upward economic mobility in Vietnam, yet, overall, in both urban and rural areas, the majority of people across all cohort and age groups remained at the same economic level in the 2014-2016 period. **(Figure 2.5** and **Figure 2.6**). Across all age groups, about half of the population remained in the same economic categories (the "stayers") between 2014 and 2016, while the percentage of population moving up the economic ladder (the "climbers") ranged from 24.8 to 52.0 percent in urban areas and from 34.0 to 43.9 in rural areas. The population groups who fell to lower rungs of the ladder (the "sliders") ranged from 1.1 to 7.5 percent in urban areas and from 6.4 to 13.5 percent in rural areas. Overall, similar to the patterns presented above, all cohorts in urban areas are faring better than those in rural areas.

Figure 2.5. Vietnam: Economic Mobility in Urban Areas, 2014-2016



Source: Authors' calculations from VHLSS 2014-2016 panel households' data.

Figure 2.6. Vietnam: Economic Mobility in Rural Areas, 2014-2016



Source: Authors' calculations from VHLSS 2014-2016 panel households' data.

In terms of economic mobility, both in urban and rural areas, prime-age adults are the most economically stable group. The degree of economic stability and mobility among the different age groups vary between urban and rural areas. In urban areas, economic stability peaks with the 60-64 age group. Economic mobility progressively increases for groups younger and older than this group, with the youngest adults and the oldest adults showing the most upward mobility. At the same time, downward mobility (shown by the "sliders") is also more prevalent among younger cohorts as well as mature prime-age adults. In rural areas, the 41-50 age group is the most economically stable, with downward mobility more prevalent among younger prime-age groups and upward mobility more prevalent among mature prime-age groups.

Importantly, comparing economic mobility of older adults with that of other age groups, there is no evidence that the oldest cohorts are left behind. In fact, both in urban and rural areas, the oldest cohorts showed the highest upward movements compared to the other age groups. There is also no evidence that the older cohorts are at a disadvantage in terms of downward movement. Most older adults, like other age groups and cohorts, remain at the same economic level. At the same time, comparing the economic mobility of older adults across urban and rural areas, older cohorts (age 61 and above) in rural areas experience economic setbacks 3 to 7 times more often than their counterparts in urban areas. These overall results are broadly consistent with the 2011 Vietnam Aging Survey (VNAS) data, which showed that about 50 percent of individuals over age 60 living in urban areas and about 42 percent of those living in rural areas thought that their life had not changed. About 26 percent of older adults thought that life was worse or somewhat worse (VWU 2012).

One group that has less upward mobility and more downward mobility is the younger rural cohorts. Given the high out-migration from rural areas, it is possible that those younger people who stay do not have the nessesary skills or other means to migrate, or they may have family obligations to stay.

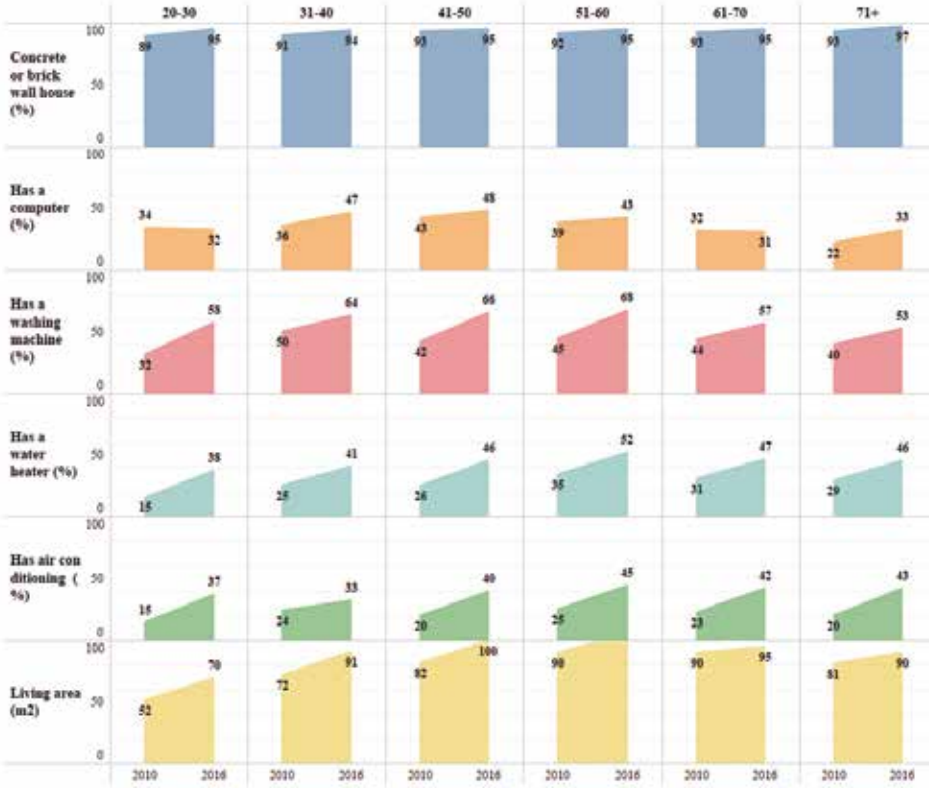
2.3. Ownership of Assets and Living Conditions

Vietnam has achieved an overall improvement in important welfare indicators, including the accumulation of assets. Trends in poverty reduction and economic mobility are mirrored in patterns of assets ownership. These improvements have benefited all and underscored the country's progress in improving the quality of life in both urban and rural areas. (See 2.10 Annex for further information about the calculation of living condition indicators and asset owernship.)

Consistent with the life-cycle theory, the accumulation of assets between 2010-2016 was faster for the age 20-30 and age 31-40 cohorts compared to older cohorts. Asset accumulation typically follows the life cycle, and the ability to accumulate assets is very important during the working lives of individuals, as older adults tend to spend down their assets and savings. As shown in Figure 2.7, middle-aged cohorts tend to have more valuable assets. For example, living area for these cohorts increased by 25 to 35 percent in both rural and urban areas, compared to around 20 percent for the country as a whole. Similar trends are observed for ownership of concrete houses and other assets.

Some evidence also points to spending down of assets at older ages, although the evidence is mixed. Figure 2.7 shows that for the oldest cohorts (age 71 and above) in urban areas, the living area was at the same level as the country average in 2010 but was below average in 2016. The trend is similar in rural areas, with the living area for the oldest cohort not too far below the national average in 2010 but significantly less than the average in 2016. This holds true for the percentage of older households with air conditioning, as well.

Figure 2.7. Vietnam: Living Conditions Indicators by 2010 Cohort in Urban Areas, 2010 vs. 2016



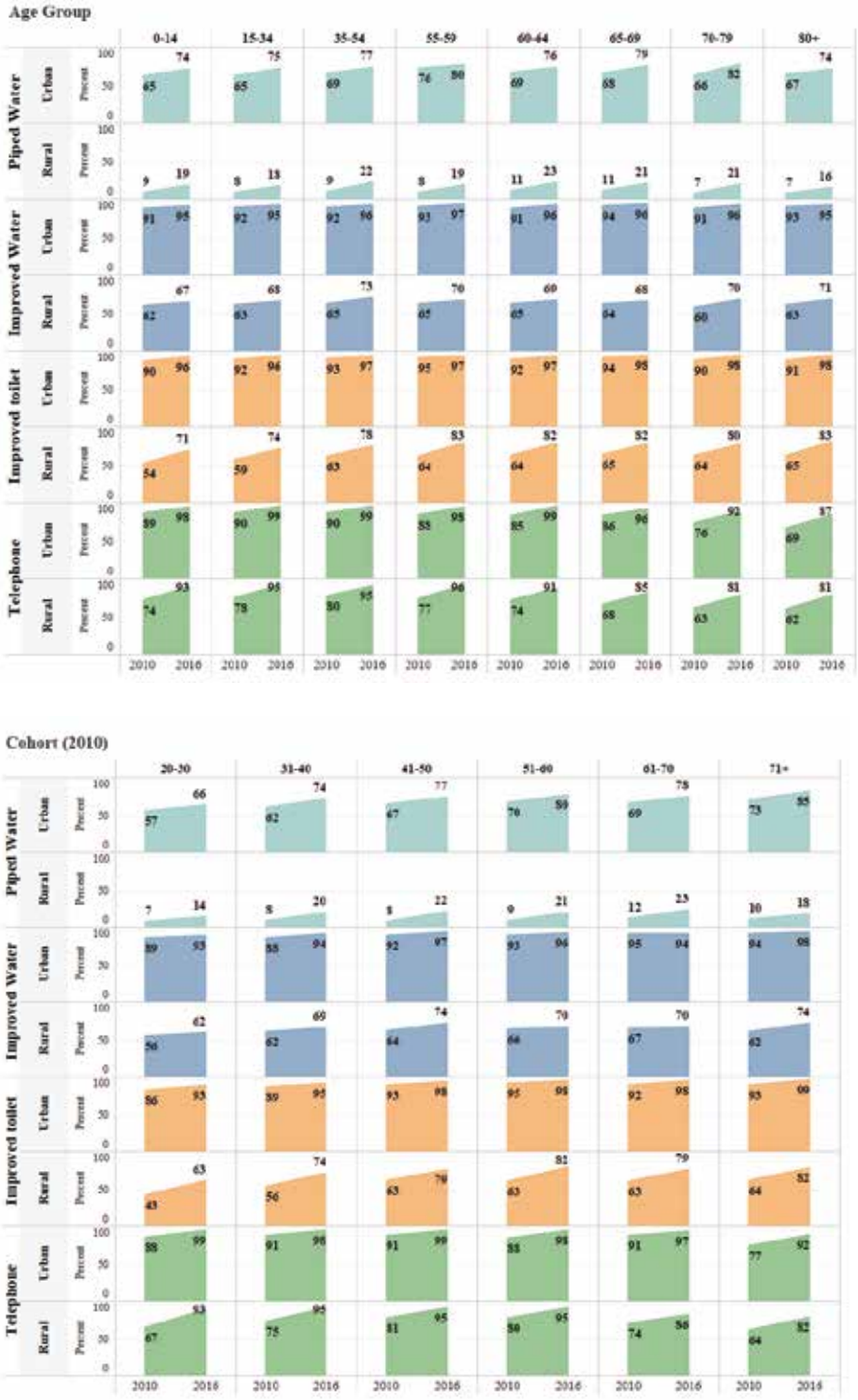
Source: Authors' calculations from VHLSS 2014-2016 panel households' data.

While urban and rural areas show similar patterns of asset accumulation over the life cycle, the overall level of assets is lower in rural areas. In both areas, prime-age adults (ages 35-64) have the largest incidence of asset ownership. In particular, adults in the age 41-50 cohort in rural areas and the age 51-60 cohort in urban areas have the largest living areas, better houses, and more air conditioners, washing machines, and heaters. (Although individuals in rural areas have less assets in general.) Younger cohorts in rural areas also seem to have accumulated less assets from 2010 to 2016 than their counterparts in urban areas.

In both urban and rural areas, age-related consumer tastes can be seen in the patterns of assets ownership, with younger people more likely than their older counterparts to own "technology - intensive" assets. In particular, younger people more likely to own computers and telephones as compared with their older counterparts. Since younger cohorts have more access to technology from a young age, and given the fast-growing adoption of technology in Vietnam, a higher share of the younger age groups owns computers or phones. In contrast, in terms of air conditioners, washing machines, and water heaters, asset ownership reaches its peak at prime-working age and declines slightly thereafter.

Patterns of access to safe water and sanitation also demonstrate Vietnam's progress in improving quality of life, while simultaneously underscoring the gap between urban and rural areas. There is no evidence that older cohorts are left behind. Overall access to improved sanitation and improved drinking water has risen significantly. (See **Figure 2.8**). While rural areas have enjoyed the boom in better living standards with more access to piped water, improved water, toilet, and telephone service, the changes vary across ages and cohorts. The rate of change is faster among younger age groups and cohorts compared to older ages, but not compared to the very old groups. While access to water and sanitation has improved for both urban and rural households, the gaps between them have widened over time. For example, the gap in access to improved toilets between rural and urban households widened by around 20 percentage points.

Figure 2.8. Vietnam: Trends in Nonmonetary Welfare Indicators by Age Group and Cohort, 2010-2016



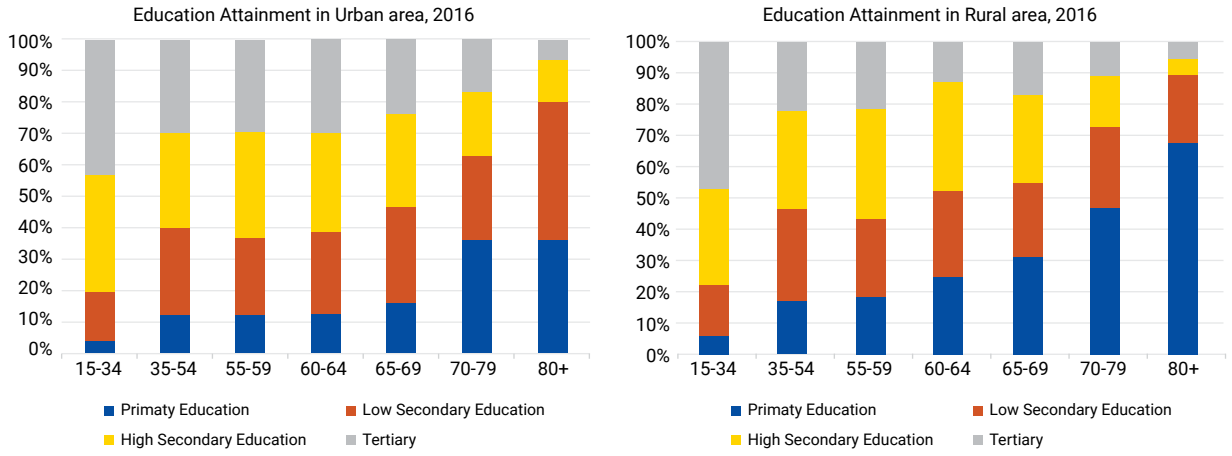
Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

2.4. Education and Employment Patterns

The massive investments in education that Vietnam has made over the last 30 years is manifested in differences in educational attainments across age groups. By 2016, the rate of young people 15-34 years of age with higher secondary education and above was near 80 percent in both rural and urban areas. By contrast, the rates of completion of only primary education are increasing by age. Over 60 percent of those over age 80 have only completed primary education, compared to less than 10 percent of those between 15-34 years of age. The lower secondary education completion rate is comparable across all age groups. (See **Figure 2.9**).

Both in urban and rural areas, younger workers have considerably higher incidence of tertiary education completion. Looking across age groups, younger adults (15-34 years of age) have the highest rate of tertiary completion in rural and urban areas. Compared to the extremely old group (age 80 and above), younger adults had almost 12 times more people attaining tertiary education in rural areas and 5 times more in urban areas in 2016. The rate of increase in tertiary education completion differs between rural and urban areas, with an approximately 8 percent increase in rural areas and a 5 percent increase in urban areas in the 2010-2016 period. Cohort groups show a similar pattern: the tertiary completion rate of the younger cohort (ages 20-30) increased faster in rural than urban areas (10 percent versus 5 percent change) from 2010 to 2016. Similarly, the percentage of the younger cohort holding tertiary degrees was 10 times higher than that of the extremely old cohort in rural areas and almost 4 times higher than the extremely old cohort in urban areas in 2016.

Figure 2.9. Vietnam: Education Attainment by Age Group in Rural and Urban Areas, 2016



Source: Authors' calculations from VHLSS 2016.

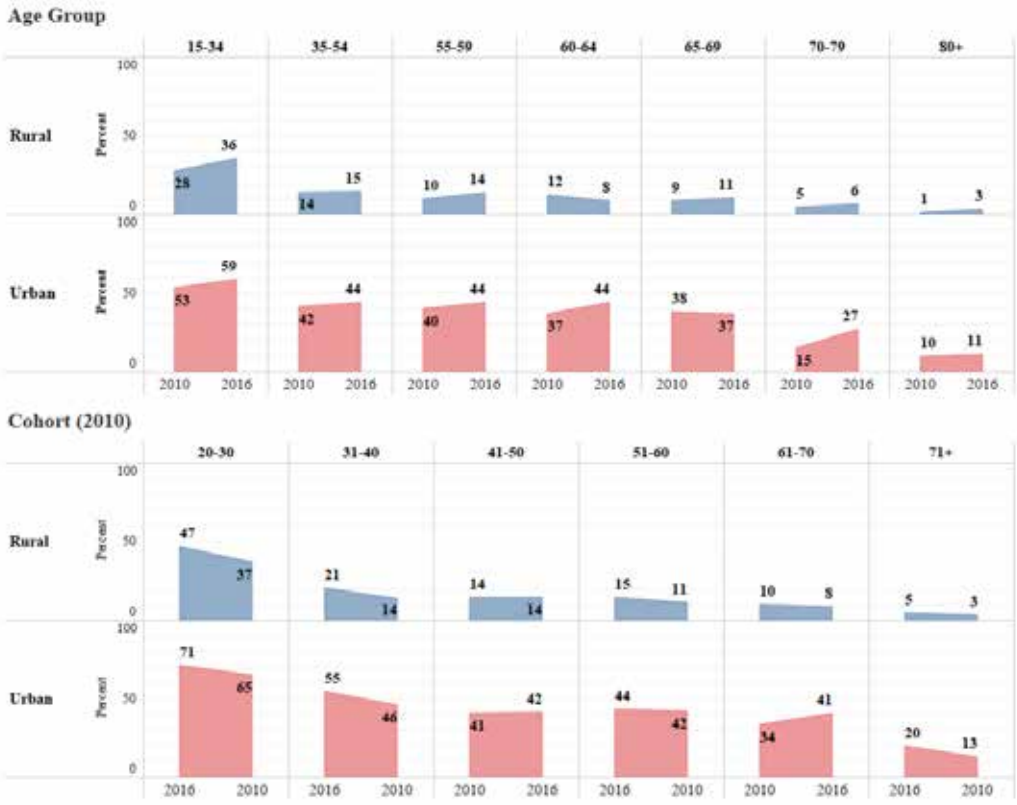
Notably, even prime-age workers (the 35-54 age group and the 31-40-year-old cohort) continue to pursue tertiary degrees. The rate of tertiary completion among prime-age workers increased steadily from 2010 to 2016. (See **Figure 2.10**.) However, the change was more significant in urban areas than rural areas. In particular, among the 35-54 age group, tertiary degree completion increased by only about 1 percent in rural areas, compared to an increase of about 3 percent in urban areas in the 2010-2016 period. Similarly, among the age 31-40 cohort, tertiary education completion rates increased by approximately 7 percent in rural areas and by 9 percent in urban areas over the same timeframe.

Earlier studies showed that there are significant correlations between lower rates of poverty among the elderly and education and family size (Giles and Huang 2015, World Bank 2015). Authors

showed that poverty among the elderly in Vietnam is negatively correlated with education and number of children. As expected, those with a high school education or above are less likely to be poor in old age, particularly in rural Vietnam. Elderly people with more children and more educated children are also less likely to be poor. With household size declining, there may be a concern that having fewer children may cause more elderly parents to be poor. However, the positive effect of children being more educated is expected to more than compensate for the decline in the number of children. Indeed, while family size has fallen noticeably in Vietnam, the average education level of adult children has increased, corresponding to a decline in the likelihood that parents will be poor in old age.

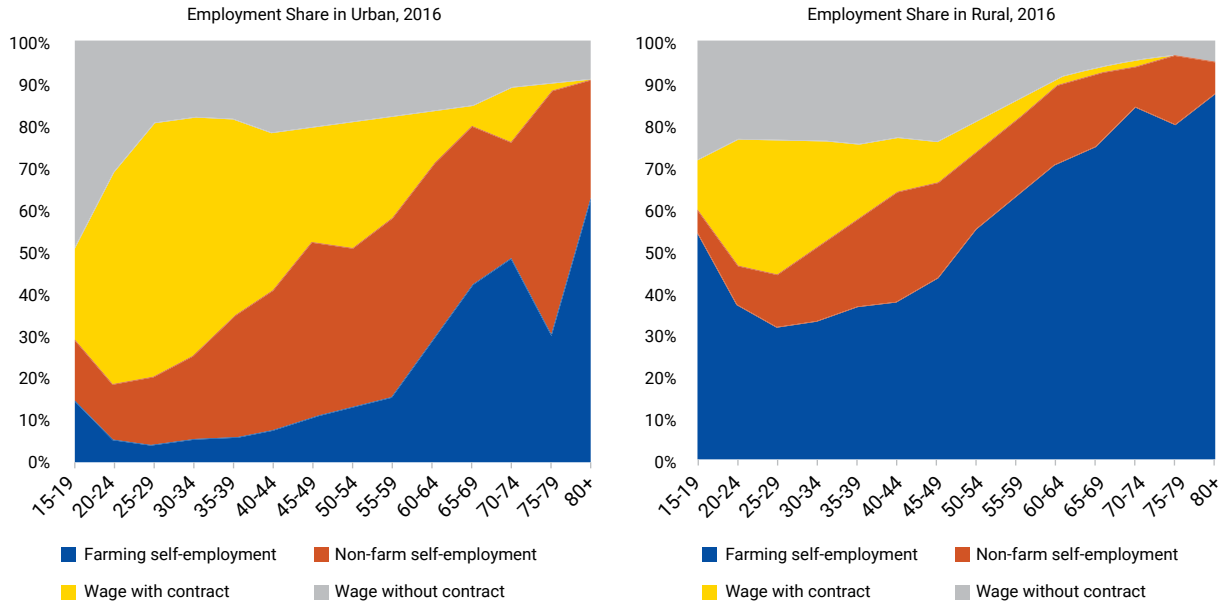
Employment differs across age groups, reflecting patterns similar to those in educational attainment. A large share of older workers, who entered employment before the economy's structural transformation began, have worked in farming all their lives and were still principally employed in agriculture in 2016 (Demombynes and Testaverde 2018). Thus, agriculture employment remained high among older cohorts, while wage jobs were more common among younger groups. As shown in **Figure 2.11**, informal employment (wage earnings without formal contracts) was the most common source of jobs for the very young (ages 15-19), followed by wage jobs with contracts. Both farming and non-farming self-employment were small but still significant sources of employment for younger workers. For workers in their twenties, however, wage jobs with contracts accounted for a larger share of employment, while farming made up a tiny share. As Vietnam prepares to enter its aging phase, these patterns show that "future older workers" are different from "current older workers."

Figure 2.10. Vietnam: Tertiary Completion Rates by Age Group and Cohort, 2010-2016



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Figure 2.11. Vietnam: Employment Share in Urban and Rural Areas, 2016



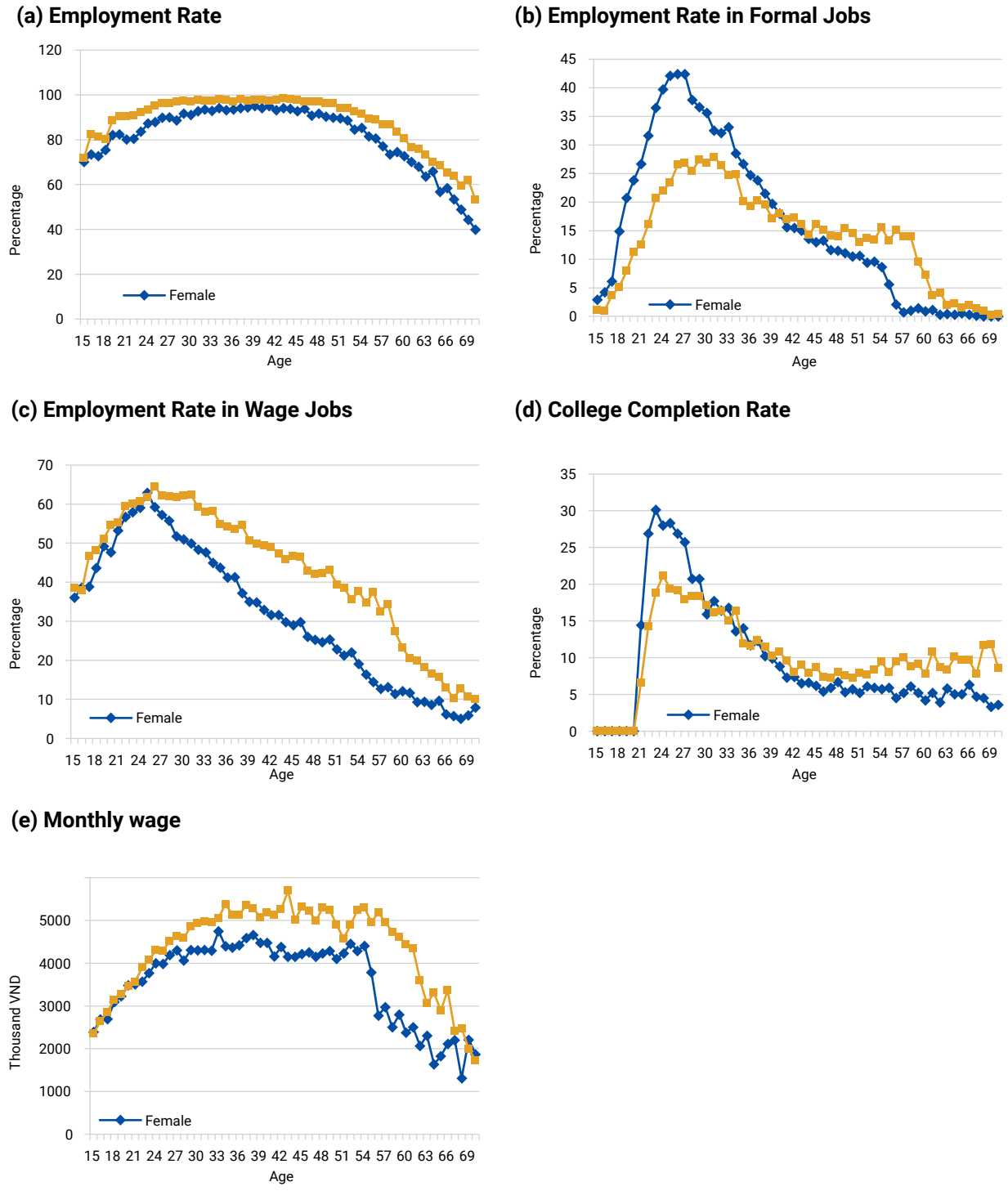
Source: Authors' calculations from VHLSS 2016.

The share of informal sector workers remains high. Overall, around 76 percent of all workers and 55-60 percent of non-agriculture workers are employed in the informal sector (Cunningham and Pimhidzai 2018). In part, this reflects the fact that Vietnam remains a predominantly rural country, with 65 percent of the population living in rural areas in 2017 (WDI). However, such high non-agriculture informality rates—especially following a time of rapid urbanization—suggest that informality is high even among the urban population and that the urbanization process is not significantly contributing to bringing down these rates. Informal employment has a number of implications for workers, including lower wages on average relative to contracted workers (Cunningham and Pimhidzai 2018). Furthermore, government social protection (SP) programs that are attached to formal employment—such as unemployment insurance or pensions—by default exclude the vast majority of the population that is informally employed.

Earlier studies did not find any strong evidence of a relationship between employment and poverty among older people. Older people may work to keep out of poverty, or they may be poor even if they continue working. Results from regression models generally show no relationship in Vietnam, in either urban or rural areas, between poverty status and the number of elderly employed or the total hours they work (Giles and Huang 2015).

Gender disparities in the labor market are very prominent in Vietnam, with notable differences in the employment patterns of men and women. Overall, the employment rate of men is higher than that of women, although the differences are not large, (See **Figure 2.12**, Panel a). At the same time, women are more likely to have formal jobs, thus receive contributions toward their pensions. This holds true for younger women and could be potentially explained, in part, by higher rates of female enrollment in secondary and tertiary school, with women under age 30 having completed college at significantly higher rates than their male counterparts, even as completion rates have risen for both genders (Panels b and d). Middle-aged and older women, however, are at a disadvantage in this respect and also in terms of employment in wage jobs, where men's advantage is present for middle-aged and older women, but not for younger women (Panel c). Gender wage differences are more prominent for mature workers, as compared to their younger counterparts.

Figure 2.12. Vietnam: Gender Disparities in Labor Market Outcomes by Age



Source: VHLSS 2014 and 2016

Women face notable disadvantages in terms of housework requirements and wages. Women's responsibilities for housework are a significant contributor to their lower employment rates relative to men. Indeed, the overwhelming majority of women between ages 20-49 who do not work cite housework responsibilities as the reason why they don't work (**Figure 2.13**). For men, the primary reason for not working between ages 35-49 are disability and inability to find employment. Meanwhile, the gender wage gap (Figure 2.12, Panel b above) is largely a function of differences in the types of work that men and women pursue. By post-secondary school, women tend to cluster in fields of study such as management, education, and health, whereas men pursue education in higher-earning fields such as IT and science (Cunningham and Pimhidzai 2018). Furthermore, men are more likely to reach management positions than women, compounding the wage disparity within industries.

Unpaid care work appears to be a critical impediment to economic opportunities for women, particularly among ethnic minorities. A recent World Bank study, *Drivers of Socio-Economic Development Among Ethnic Minority Groups in Vietnam*, concludes that societal prejudices internalized by women themselves—particularly their traditional housewife role—affect their participation in non-agricultural economic sector activities, for example by lowering their propensity to seek work in cities or abroad. Furthermore, Nguyen (2018) and Le (2015) have shown that gender stereotypes affect households' economic decision-making, with the bulk of agricultural labor falling on women. Along with a lack of transportation, this means that women, already burdened with childcare, are not able to establish and maintain social networks to the same extent as men, especially outside the village. Furthermore, young couples working far from home often leave their children under the care of grandparents. This situation creates unpaid care work that often falls on women over age 45, thus depriving them of nonagricultural work opportunities in the labor market outside their locality.

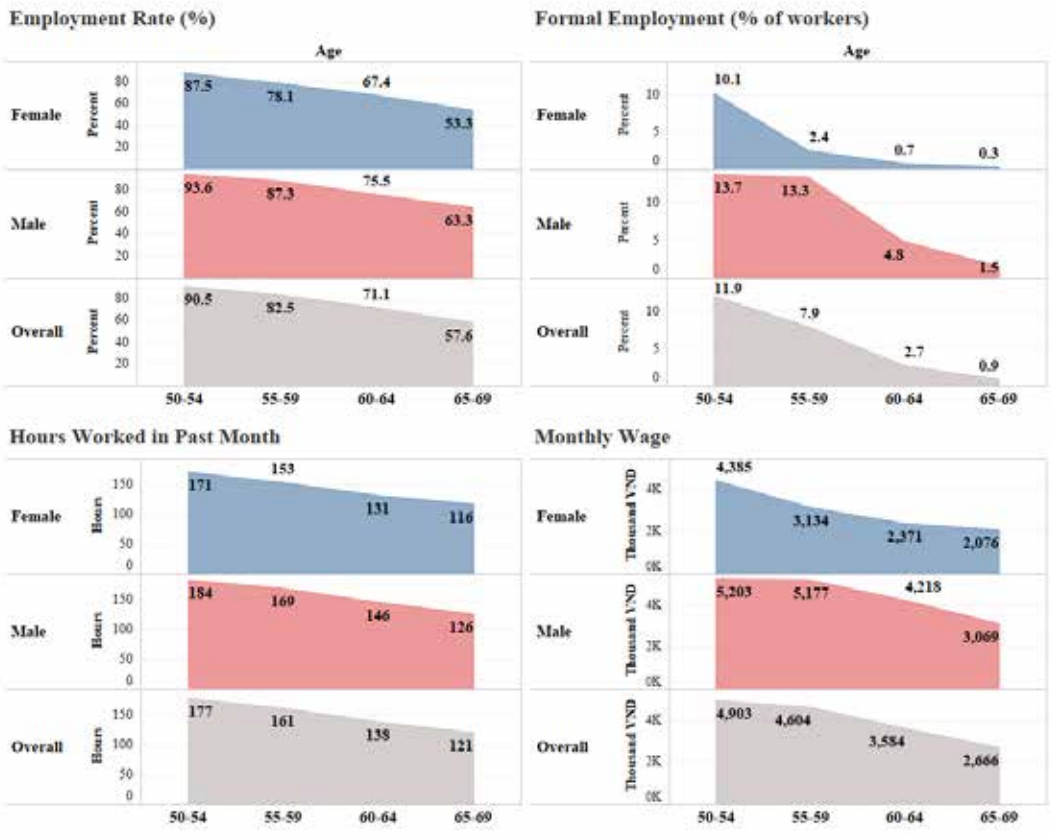
Figure 2.13. Vietnam: Men's vs. Women's Reasons for Not Working, by Age

Source: Authors, based on VLSS 2010-2016

The labor supply of the retirement-age population is consistent with the hypothesis that the formal pension system affects workers' decisions to leave the labor force early. Workers in formal jobs retire much earlier and at higher rates than workers who do not receive a pension, as seen by the substantially lower employment rates of formal workers when they hit retirement age. The employment rate for men continues to be higher than that of women for all age groups, and employment rates for both genders drop consistently as workers age. Although 90.5 percent of workers were still employed at ages 50-54 in 2016, the share dropped to 57.6 percent for workers ages 65-69 (**Figure 2.14**). Similarly, wages and number of hours worked also decline for older workers.

The share of older workers in formal jobs is lower than that of middle-aged workers. The share of women working in formal jobs drops from 10.1 percent of those ages 50-54 to 2.4 percent of those ages 55-59, whereas the share of men working in formal jobs drops from 13.3 percent among those ages 55-59 to 4.8 percent among those ages 60-64 (**Figure 2.14**). Notably, the share of men working in formal jobs is almost unchanged between ages 50-54 and 55-59, even as the employment rate of their female co-workers drops as they hit retirement, reflecting the lower retirement age for women. These patterns also suggest that the statutory retirement age in formal jobs for both men and women for both men and women is a significant driver of their decision to stop working. At the same time, the data do not capture the share of people employed in formal jobs who shift to other forms of employment, such as self-employment, after retirement. This, coupled with the fact that employment rates remain high in the informal sectors (where there is no retirement age or pension to encourage retirement), demonstrates that many retirement-aged men and women are capable of continuing to work past their respective retirement ages.

Figure 2.14. Vietnam: Retirement-Age Worker Employment Trends, 2016

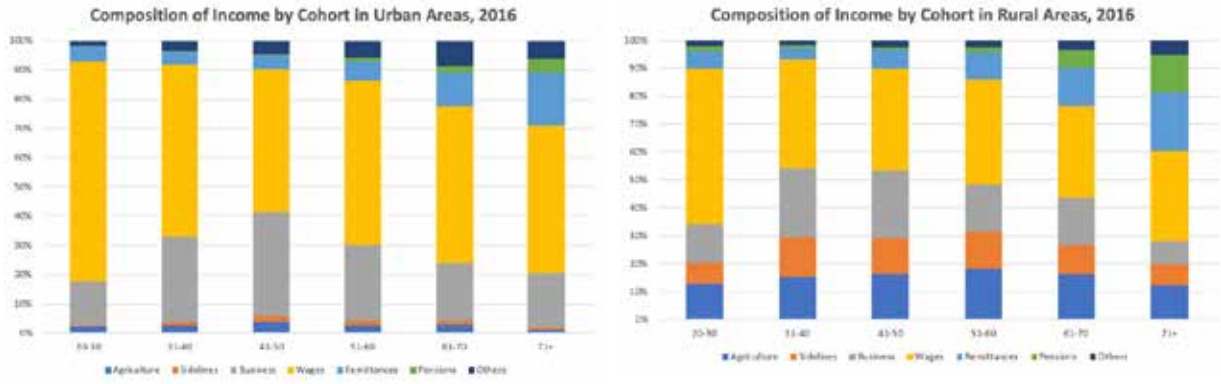


Source: Calculations based on VHLSS 2016

Employment patterns among the population are reflected in the structure of income in households. In urban areas, wages are the main source of household income for all age groups, although the importance of wages as a household income source declines as workers age (**Figure 2.15**). The same pattern is observed in rural areas. Wages are also a significant source of income in rural areas and similarly become less important as workers age. In both urban and rural areas, labor income—which excludes transfers such as remittances and pensions as well as investment income—represents about 70 percent of total income.

Business income is highest among prime-age workers (31-50-year-old cohort) in both urban and rural areas. While wage income is the primary source of income across all cohorts, business income varies by cohort and is largest for prime-age workers. In urban areas, prime-age urban cohorts derive a larger share of their income from business income compared to those in rural areas. At the same time, households with individuals in older cohorts (71 and older) continue to derive income from business activities, with almost 20 percent of income derived from business activities for this group in urban areas.

Figure 2.15. Vietnam: Composition of Income by Cohort in Urban and Rural Areas, 2016



Source: Authors' calculations from VHLSS 2016.

Private and public transfers are considerably more important for older groups, with private transfers being significantly larger than public transfers. The role of transfers, both public and private, is relatively small in Vietnam, although private transfers are larger in rural areas. Across all cohort groups, the oldest cohort (age 71 and above) experiences the highest rate of transfers in the form of pensions payments and also in terms of private remittances receipt. The percentage that pension transfers contribute to total income is higher in rural areas at more than 10 percent, compared to less than 5 percent in urban areas. Private transfers or remittances are highest in the oldest cohort. The share of remittances is similar across urban and rural areas, at almost 20 percent of income among the oldest cohort (age 71 and above).

These results are broadly consistent with data from the 2011 VNAS. Self-reported data from 2012 VNAS provides information on the most important sources of income for daily expenses among the elderly (VWU 2012). About 32 percent of older people said that support from children was the most important source, 29 percent said income from work, 16 percent said retirement benefits, 9 percent said social assistance allowances, and 14 percent said other support (such as savings and support from family and friends). According to the VNAS 2011 data, only 10.4 percent of older people have savings. Approximately 68 percent of those who save do so for emergencies such as sickness or disease, about 10 percent save money for children, and about 8.5 percent save in order to take care of themselves. One-third of older households have debts, which are primarily due to business

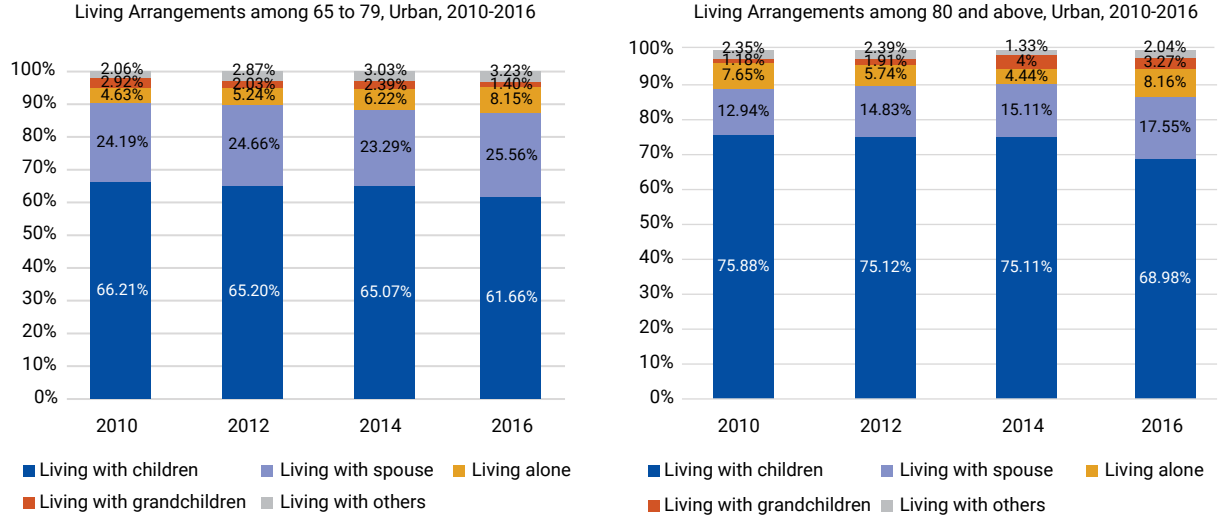
investments. Additional important sources of debt include building a house and health care loans. Very few older households borrow money to purchase housing equipment or to hold a wedding or funeral.

2.5. Living Arrangements and Access to Informal Support

A number of studies showed that elderly co-residence in Vietnam has declined significantly over time as families become smaller, incomes rise, and children migrate elsewhere (i.e., see Giles and Huang, 2015, IPS 2016, and MOH and HPG 2018). Notwithstanding this decline, in Vietnam as in other East Asian and Pacific countries, rates of co-residence are considerable both for 65-79 and 80 and above age groups (Figure 2.16 and Figure 2.17). Co-residence for the older age group (80 and above) is greater than that for 65-79 age group, as living with adult children can provide the elderly with instrumental and financial support. At the same time co-residence with spouses is more prevalent among 65-79 age group as compared with the 80 years and older, reflecting higher mortality among older age group.

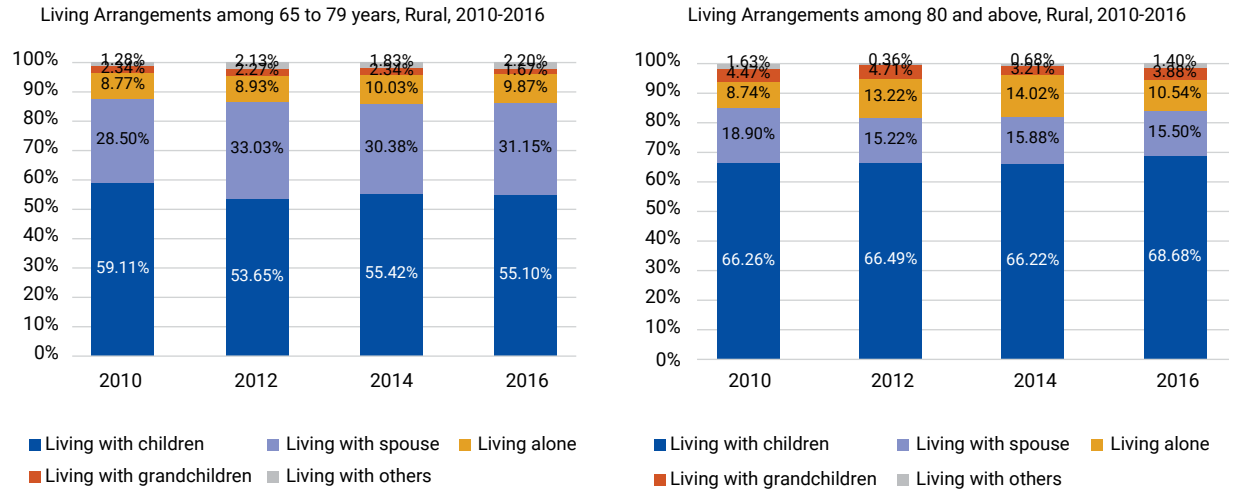
Evidence from VHLSS 2010-16 shows that this decline continued in the first half of 2010s for both 65-79 years old and 80 and above age group both in urban and rural areas. In fact, in urban areas, the incidence of living alone among the 65-79 age group doubled from 4 to 8 percent between 2010 and 2016. The incidence of living alone among the 80 years old and above age group increased only slightly over this time period, but their incidence of living with spouses increased as the share of the total. In rural areas, the incidence of living alone increased slightly for both 65-79 and 80-years old age groups. Overall, co-residence in Vietnam is slightly more common in urban as compared to rural areas and is more common among women than men in rural areas (not presented here). The relatively lower rates of co-residence in rural areas may reflect the large-scale migration of Vietnam's young people to the cities, reducing the number of adult children in rural areas with whom older people can live.

Figure 2.16. Vietnam: Living Arrangements Among the Elderly, 65-79 years old and 80 years old and older, Urban Areas, 2010-2016



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Figure 2.17. Vietnam: Living Arrangements Among the Elderly, 65-79 Years Old and 80 Years Old and Older, Rural Areas, 2010-2016



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Overall, the absence of co-residence does not imply that the elderly do not receive assistance with daily tasks. VWU (2012) reports that about 36 percent of older people needed and received assistance, while about 27 percent needed but did not receive assistance. Spouses are the primary providers of assistance, followed by daughters, daughters-in-law and granddaughters.

2.6. Assess to public programs

The expansion of social protection programs over the last 15 years has benefited all age groups, including older people. Significant coverage expansion—primarily through a broadening of coverage to the elderly, people with disabilities, and orphans—has been undertaken in response to the "Socialization" policy drawbacks and lowered income support related to the privatization of energy and changes in pricing.[26] The social protection system has begun to transition from a last-resort source of income support for people who cannot work and do not have family support toward a system that provides a broad safety net to the wider Vietnamese population.

The Vietnam Government's Social Policy and Social Protection has four pillars. The pillars are: (i) social assistance, including regular allowances, social care centers, and emergency assistance; (ii) social insurance, including pensions and health insurance; (iii) employment; and (iv) minimum basic services, including housing, energy, and education allowances. In 2017, the Government approved the Master Plan for Social Assistance Reform and Development (MPSARD), which identifies strategies for making the social assistance system more comprehensive and effective at addressing vulnerability and exclusion. The Government also set out specific goals for expanding the coverage of existing social assistance programs, including expansion of benefits for the elderly, people with disabilities, children in need (orphans, abandoned children, severely disabled children, and specially disadvantaged children), and people facing emergencies or difficult circumstances. In addition, the Government proposed the phased introduction of a policy to provide cash transfers benefiting infants and young children below the age of four. Three of the largest programs are discussed below. (See note 6 in the 2.10 Annex for further information about how access to each of these programs is defined.)

26 See Chapter 4, Annex 4.1 and Chapter 7 for more information on "Socialization" policy.

2.7. Social Assistance

The rate of access to social assistance programs is highest among the oldest age groups (above age 80) and cohorts (above age 71) and is higher in rural areas compared to urban areas. Across all age groups, the share of population receiving some social assistance benefits is greater in rural areas than in urban areas. This is especially pronounced among rural children ages 0-14 and rural adults ages 60-64, who received some kind of social assistance program at rates more than three times those of their counterparts in urban areas. (See Figure 2.18.)

The receipts of social assistance more than doubled from 2010 to 2016 for most age groups age 65 and above. Almost half of the oldest old (age 80 and above) received some form of social pension payment both in urban and rural areas in 2016. These results are driven by the inresese in the receipt of social pensions and are consistent with Giang and Pfau (2009b) and Giang and Hoang (2013).[27] (See **Figure 2.18**)

Earlier studies showed that poverty among the elderly in Vietnam is negatively correlated with receipts of transfers or social pensions and despite their relatively small size, both public and private transfers are important drivers of poverty reduction. Some evidence indicates that public transfers crowd out private transfers in Vietnam, but only significantly among poor households with adult children who are migrants (Giles and Huang 2015). Governments seeking to expand public transfers to the elderly should consider how such transfers might displace, or crowd out, private transfers from adult children and other family members. In general, the elasticities of private transfers to increased transfers from other sources (including social pensions) suggests that the evidence of crowding out is fairly weak. In Vietnam private transfers typically decline by 15 percent or less in response to higher transfers from other sources, especially for households above the poverty line. This holds true regardless of whether the adult children are migrants or not (adult children who are migrants tend to offer significantly higher support to elderly parents than adult children who are non-migrants). However, in Vietnam (and to a lesser extent in Thailand), a very different pattern is observed for households below the poverty line. Among poor households with migrant children, higher transfers from other sources lead to a nearly 40 percent decline in private transfers. Among households without migrant children, the decline is much less but still significant. Such findings reflect the important role that remittances from adult children play in supporting the elderly.[28]

27 Giang and Pfau (2009b), Giang and Hoang (2013) provided ex-ante evaluations, while ILSSA (2015) provide ex-post evaluations on the impact of social pension on the poverty of OP households. Their analyses showed that social pension was limited to those aged 60-79 due to strict means-testing regulations, while that for those aged 80 and over was almost universal. For the ex-ante evaluations, the studies implied that (i) social pension played a significant role in reducing poverty for older people, (ii) expanding social pension coverage (lowering eligible age, and increasing benefit level) would help to reduce elderly poverty substantially, and (iii) focusing on rural OP would reduce poverty at the highest rate, given limited budget.

28 Indeed, in Vietnam, private transfers from adult children who are migrants are more than double the level of transfers from adult children who are not migrants (Giles and Huang 2015).

Figure 2.18. Vietnam: Access to At Least One Social Assistance Program (Broad*) by Age Group and Cohort 2010-2016

* "Broad" definition includes social pensions and other transfers to vulnerable groups (Decree 136), cash transfers to mitigate the rise of electricity prices on poor households (Decision 28/60), education-related cash transfers poor students and ethic minorities.

Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

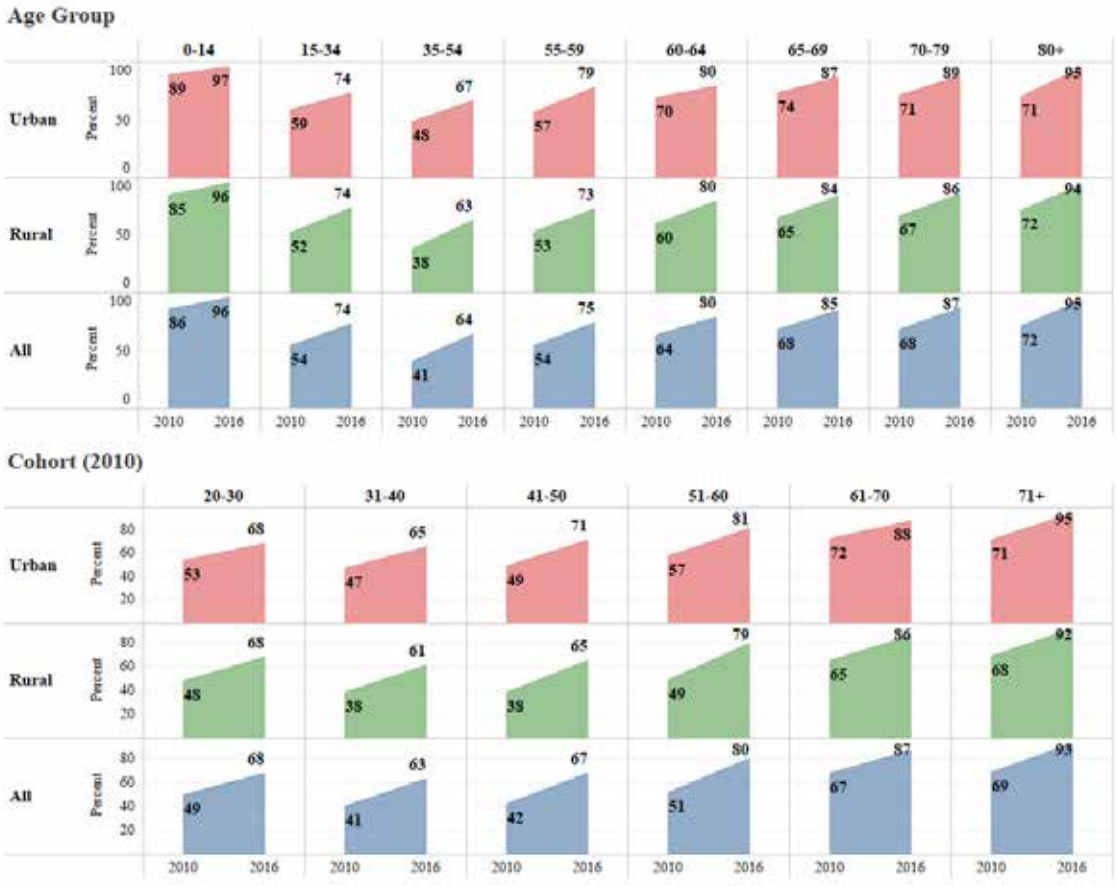
2.8. Health Insurance

Access to social health insurance (SHI) expanded significantly between 2010 and 2016, with the highest rates of increase among the youngest and oldest age groups. By 2016, access to SHI reached about 95 percent for the 0-14 age group as well as for the 80 and above age group, an increase of about 10 percent and 22 percent, respectively. With the exception of the prime-working age groups (ages 35-54) and the youngest age group (ages 0-14), almost all age groups experienced an increase of about 20 percent in SHI access. The rise of SHI among older age groups appears to have been driven primarily by increases in participation in rural areas. Nonetheless, urban coverage rates remained slightly higher overall than rural coverage across all age groups. Cohort groups also show a trend toward increased participation in SHI in both urban and rural areas, with the highest coverage among the oldest old. (See **Figure 2.19**)

These results are consistent with the analysis of SHI participation rates in Giang and Phi (2017). Overall, Giang and Phi (2017) found that the participation rate of the older population has

increased significantly over the second half of 2010, with the eldest older age group showing the fastest increase in coverage. Such results demonstrate the success of recent policies and programs promoting older people's participation in the SHI scheme. Giang and Phi (2017) report that the participation rate of older ethnic minorities also increased substantially, reaching about 90 percent in 2014, primarily due to policy efforts to provide free health insurance to ethnic minorities. Participation rates of both urban and rural older groups increased significantly, with the former having a higher rate of participation than the latter. The most frequently mentioned explanation for this trend is that those living in rural areas have less ability to afford insurance, coupled with barriers created by participation restrictions related to household size that especially affect those living in large households. The participation rate of older people living in poor households was higher than for those living in non-poor households, a result of the rapid expansion of SHI to poor people in recent years (Giang and Phi 2017).

Figure 2.19. Vietnam: Access to Social Health Insurance by Age Group and Cohort, 2010-2016



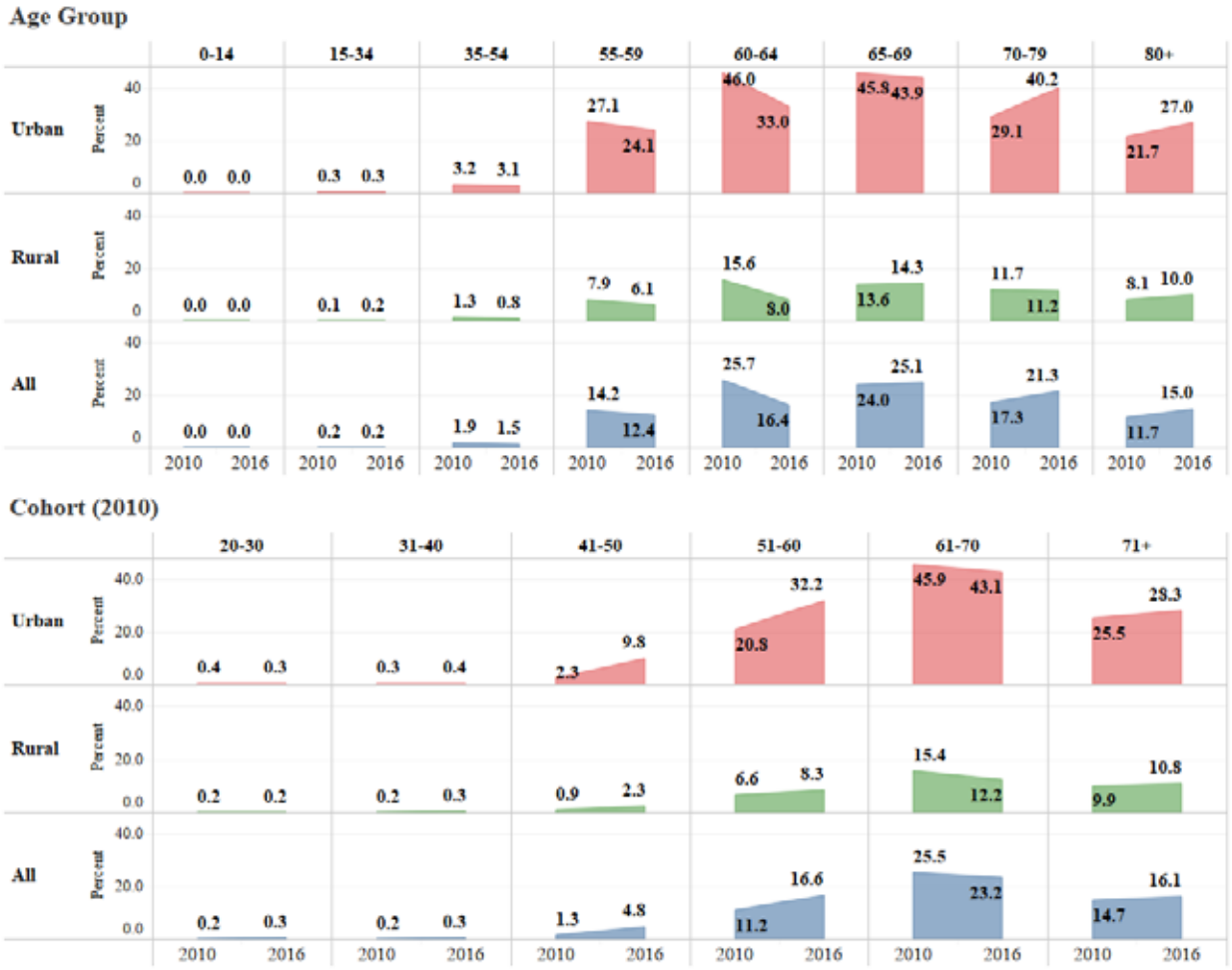
Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

2.9. Contributory Pensions

Contributory pension receipts are high among older groups and differ considerably between rural and urban areas as well as across age groups. In 2016 about one-quarter of people in the 65-69 and 70-79 age groups received contributory pensions and pension receipts were highest among the 65-79 age group. (See **Figure 2.20**)

There appears to have been a precipitous drop in the incidence of contributory pension receipts among the 60-64 age group, and an equally precipitous increase among the 70-79 age group between 2010 and 2016. Almost half of people in the 60-64 age group in urban areas received contributory pension payments in 2010, and this incidence dropped quite perceptibly to a third in 2016. At the same time, contributory pension receipts for the age group 70-79 age group increased substantially, from 30 to 40 percent of the individuals in the age group. These trends, together with the fact that there were some increases in the incidence of contributory pension receipts in the 51-60 cohort and a slight decline in the 61-70, suggest that some individuals who reached retirement age between 2010 and 2016 were less likely to retire from formal jobs with contributory pensions.

Figure 2.20. Vietnam: Access to Contributory Pension Programs by Age Group and Cohort, 2010-2016



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

2.10. Annex Key Definitions

National Poverty Rate. The poverty rate is defined at the household level but presented at the individual level for individuals with particular characteristics (i.e. individuals in a particular age range). Specifically, poverty rate for a particular group (i.e. individuals in a particular age range) is defined as the number of individuals in this group living in households defined as poor divided by the total number of individuals in the group (weighted by household size). This statistic is calculated for each year. Households are defined as poor if their per capita household expenditure is below the poverty line defined by GSO-WB for that year.

Under the definition used by GSO-WB, the poverty line in Vietnam was as follows:

- In 2010: 7,836,000 VND per person per year
- In 2012: 10,456,000 VND per person per year
- In 2014: 11,565,000 VND per person per year
- In 2016: 11,630,000 VND per person per year

Economic Class. Economic Class is defined at the household level but presented at the individual level for individuals with particular characteristics. Households are classified as extremely poor, moderately poor, economically vulnerable, economically secure, or middle class based on their daily per-capita expenditures in 2011 Purchasing Power Parity (PPP) terms. Then, the number of individuals with particular characteristics (i.e. individuals in a particular age range) living in households belonging to a particular classification group (extremely poor, moderately poor, economically vulnerable, economically secure, or middle-class) is divided by the number of individuals with these characteristics living in all households. The resulting ratios are weighted by household size.

The economic classification is determined on the basis of households' per capita household expenditure as follows:

- Extreme poor: consume less than $1.9 per person per day
- Moderately poor: consume $1.9-$3.2 per person per day
- Economically vulnerable: consume ranges from $3.2-$5.5 per person per day
- Economically secure: consume $5.5-$15 per person per day
- Middle-class: who live on more than $15 per person per day

VHLSS longitudinal panel data collection. The VHLSS data collection protocol includes a rolling panel of households, in which 50 percent of the households in one round (e.g. VHLSS 2014) are revisited as part of the sample for the next (the VHLSS 2016 in this case). This survey is a rooftop survey, without any tracking of individuals or split households. The test for the existence of attrition bias due to migration patterns looks at key outcomes for the panel sample against the full sample and finds no evidence of attrition bias.

Assets. Assets and living conditions indicators such as size of living space, housing material, and ownership of private bathroom and kitchen, computers, air-conditioning, water heaters, and washing machines are defined at the household level, and measured and reported at the individual level for individuals with particular characteristics (i.e. individuals in a particular age range). The resulting statistic is a share of people in an age group living in households with the ownership of these assets.

Non-monetary welfare indicators. Non-monetary welfare indicators such as access to piped water, improved water, toilet and telephone service are defined at the household level and measured and reported as the percentage of people living in households which own these amenities. Improved water is defined by the main drinking water supply of the household being from tap water reaching the house from one of three sources: public tap water, a drilled well, or a protected dug well. Improved toilet is defined by a household having a septic/ semi-septic tank, suilabh, or improved toilets with vent.

Social Protection Programs

The VHLSS asks either the head of household or any household member with the most information about the household. This information is reported at the household level.

- Social Health Insurance (SHI) access is defined as the percentage of an age/cohort group that which has had a health insurance card or a free healthcare booklet/card/certificate in the past year. The VHLSS gathers this information for every individual in the household, including children. Information for all household members is reported in section 3, question 9 in VHLSS 2014.
- Pension (contributory) access is defined as the percentage of an age/cohort group that has received pension, unemployment allowances, and one-off severance payments in the past year. The VHLSS applies this question to only respondents aged 15 or older. The VHLSS asks for this information for either the head of household or any household member with the most information. Information for all household members aged 15 and above is reported section 4a, question 27 & 28 in VHLSS 2014.
- The "narrow definition" of access to social assistance programs (not presented) is defined as that any member of a household received at least one of the government subsidies below:
- Decree 136: Households with member aged 80 or older without pension or social security payment; orphans who are studying; single parents raising under-16-year-old children in poor households (Code 106, question 1, section 4d in VHLSS 2014)
- Education aid (including food, accommodation, travel, textbooks, and uniforms): include reduction of and exemption from tuition fees for the poor and policy-based scholarships for students studying (up to high school) in a poor household or living in P135 or in remote areas (Code c and d, question 2, section 8 in VHLSS 2014)
- Electricity support: Poor households (Code a, question 2a, section 8 in VHLSS 2014)
- The "Broad definition" of access to social assistance programs is defined for households with any one of the following programs:
  - Decree 136: Households with member aged 80 or older without pension or social security payment; orphans who are studying; single parents raising under-16-year-old children in poor households (Code 106, question 1, section 4d in VHLSS 2014)
  - Food aid (Code k, question 2, section 8 in VHLSS 2014)
  - Housing support for poor households (Code f, question 2, section 8 in VHLSS 2014)
  - Electricity subsidy: Poor households (Code a, question 2a, section 8 in VHLSS 2014)
  - Education aid (including food, accommodation, travel, textbooks, and uniforms): include reduction of and exemption from tuition fees for the poor and policy-based scholarships for students studying (up to high school) in a poor household or living in P135 or in remote areas (Code c and d, question 2, section 8 in VHLSS 2014)
  - Health support: include support in purchasing health insurance cards and reduction of and exemption from costs of medical checks/treatment for the poor (Code a and b, question 2, section 8 in VHLSS 2014)

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Chapter 3: POTENTIAL MACROECONOMIC AND FISCAL IMPACTS OF RAPID AGING IN VIETNAM

3.1. Introduction and Summary

The growth and fiscal implications of Vietnamese society "becoming old before becoming rich" are likely to be substantial. Vietnam's demographic transition will occur in a fraction of the time and at a fraction of the income level as countries that preceded it, including the advanced industrial countries. Without reforms, long-term growth is projected to slow over the period 2020–2050 compared to the last 15 years by 0.9 percentage points, largely due to the aging of Vietnamese society. Vietnam's aging society could result in major fiscal deficits in the long run, and additional fiscal costs could total 4.6 percent of GDP by 2050 if the coverage of social programs is expanded and service delivery is improved as expected. The best avenue for mitigating the fiscal impacts of an aging society is instituting early reforms that would allow controlling the anticipated increase in per-beneficiary costs while not sacrificing improvements in service quality.

This chapter examines the macroeconomic and fiscal impacts of Vietnam's aging society. It presents five growth scenarios, projected using the World Bank's Long-Term Growth Model (LTGM): a baseline and alternatives assuming higher and lower values for the labor participation rate and growth in human capital. The rest of the chapter details the five scenarios for age-related expenditures, drawing heavily on the World Bank's Fiscal Sustainability Analysis (FSA) model. The chapter concludes with a discussion of how to mitigate the projected impacts on Vietnam's fiscal situation.

3.2. Demographic trends and GDP

Vietnam has posted vibrant economic growth over the past few decades, which is attributable in part to favorable demographic trends, along with strong productivity growth. During the period 1985–2018, per capita income increased eight-fold in Vietnam. It benefited from a rapid increase in the working-age population and a decline in the dependency ratio. This demographic dividend is estimated to have contributed to about one-third of Vietnam's growth during this period, with increases in productivity—supported by implementation of the far-reaching *Doi Moi* reforms—accounting for the remaining two-thirds of the increase in GDP (World Bank and Ministry of Planning and Investment of Vietnam 2016). Over the same period, LMICs (low- and middle-income countries) and HICs (high-income countries) experienced 2.5-fold and 1.7-fold average increases in per capita income, respectively (**Figure 3.1**). Vietnam's stellar growth record supported its graduation from a low-income country (LIC) to a LMIC in 2011 and a remarkable decline in poverty rates, from 53 percent of the total population in 1992 to 2 percent in 2016 (at $1.90/day PPP 2011 international dollars).

These positive trends in demography and productivity were intricately linked to the structural transformation of Vietnam's economy. Agriculture production as a share of GDP declined from 40

percent in 1985 to 15 percent in 2018. Agricultural employment as a share of total employment also declined, from 72 percent in 1985 to 40 percent in 2019. The decline in agrarian employment was more than offset by an increase in employment in the industry and services sectors, which led to a net increase in total jobs and facilitated absorption of new entrants into Vietnam's labor force as the working-age population grew.

While GDP growth in Vietnam continues to benefit from its "demographic dividend," the positive impetus to growth is abating and is projected to turn negative during the forecast horizon through 2050. From 1990 to 2018, almost 25 million Vietnamese reached working age, translating into average annual labor force growth of about 2.5 percent and an almost doubling of Vietnam's workforce. While the working-age population and labor force are projected to continue to expand in absolute numbers for another two decades, the rate of increase is projected to decelerate to a markedly lower pace—to about half of the recent historical average (**Figure 3.2**). Relative to the aggregate population, the size of the working-age population has already peaked. From around 2035, the working-age population is projected to begin to contract slightly through the 2050 time horizon of the study.

Figure 3.1: Productivity and labor force growth, selected countries

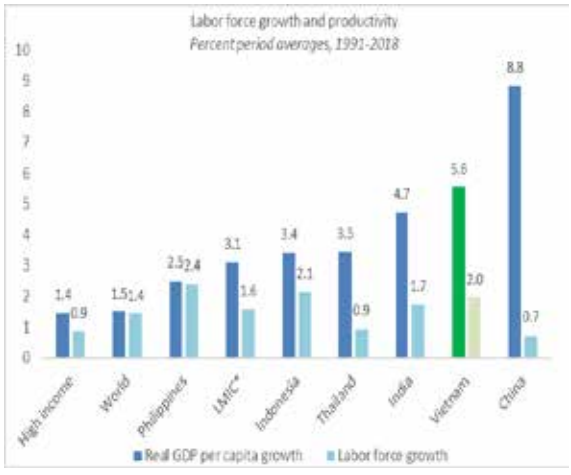
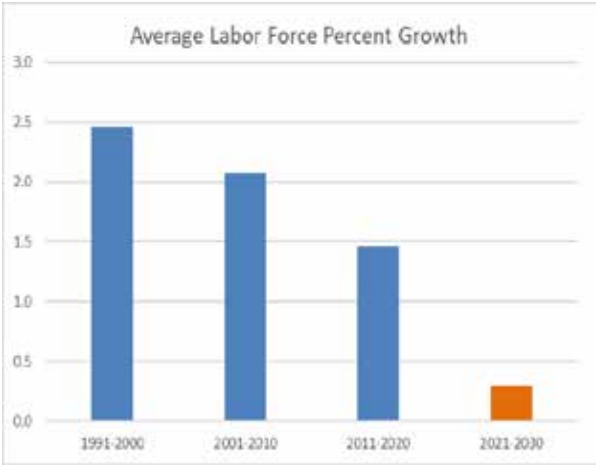


Figure 3.2. Vietnam: average labor force growth (in percent)



Sources: World Bank, WDI, and International Labor Organization (ILO).

*LMIC=Low- and middle-income countries

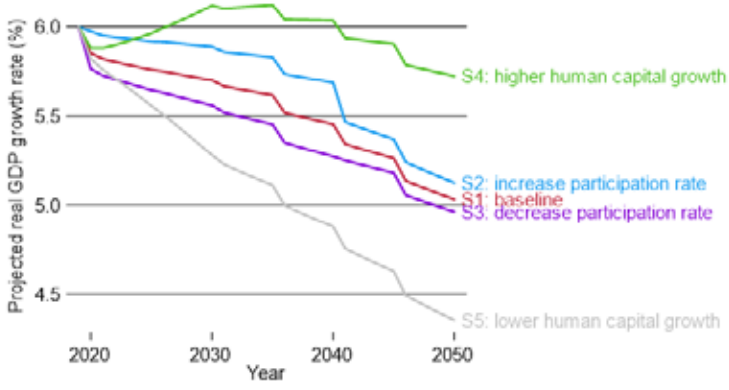
The World Bank's LTGM was used to estimate five growth scenarios for the period 2019–2050. The model's parameters include the deprecation rate, labor share of income, human capital index, total factor productivity, labor market participation, external balance, net foreign direct investment (FDI), and demographics. The *baseline scenario* (S1) projects growth by setting the parameters equal to Vietnam's average values for the most recent 15 years of data or extrapolating historical trends. The *favorable demographics scenario* (S2) is projected using a higher labor participation rate, such that the size of the labor force in 2040 as a share of the total population is roughly the same as it was in 2018, effectively offsetting the decline in the working-age population. The *unfavorable demographics scenario* (S3) is projected using a lower labor participation rate. This scenario is probably more likely than the favorable demographics scenario. Vietnam's participation rate is already high, for both men and women, and labor participation typically falls as incomes rise.

The *favorable human capital scenario* (S4) sets the growth rate for the Human Capital Index 50 percent higher than its current value by 2030. Finally, the *unfavorable human capital scenario* (S5) halves Vietnam's growth rate on the Human Capital Index.

Long-term growth falls under the baseline scenario and in each of the scenarios. The main driver is Vietnam's shrinking labor force, which exerts too much drag for even the favorable scenarios to offset. The baseline shows that long-term growth is projected to slow down over the period 2020–2050 compared to the last 15 years by 0.9 percentage points, largely due to the aging of Vietnamese society as mentioned earlier.

There is limited scope to moderate the shrinking workforce by increasing the participation rate. This path was taken by many members of the OECD, which implemented policies to encourage the population—particularly women—to seek work. However, Vietnam already has one of the highest participation rates in the world (Figure 3.4) for both males and females.[28] This is reflected in the LTGM scenarios—increasing or decreasing the participation rate has little long-term impact (Figure 3.3). As the economy develops, participation rates are more likely to fall than rise as a greater share of the young working-age population remains in education (and thus out of the labor force), people move out of the agricultural sector, and social insurance coverage increases.

Figure 3.3 Vietnam: projected GDP growth rate, in percent, by scenario, 2019–2050



Source: World Bank staff analysis using data from PWT 2020; UN 2019; WDI 2020.

29 The participation rate is artificially high for Vietnam because the numerator (labor force) includes those over the age of 65, while the denominator (working-age population) does not. This discrepancy is pronounced, given the large share of employment and the propensity of farmers to work into old age in Vietnam.

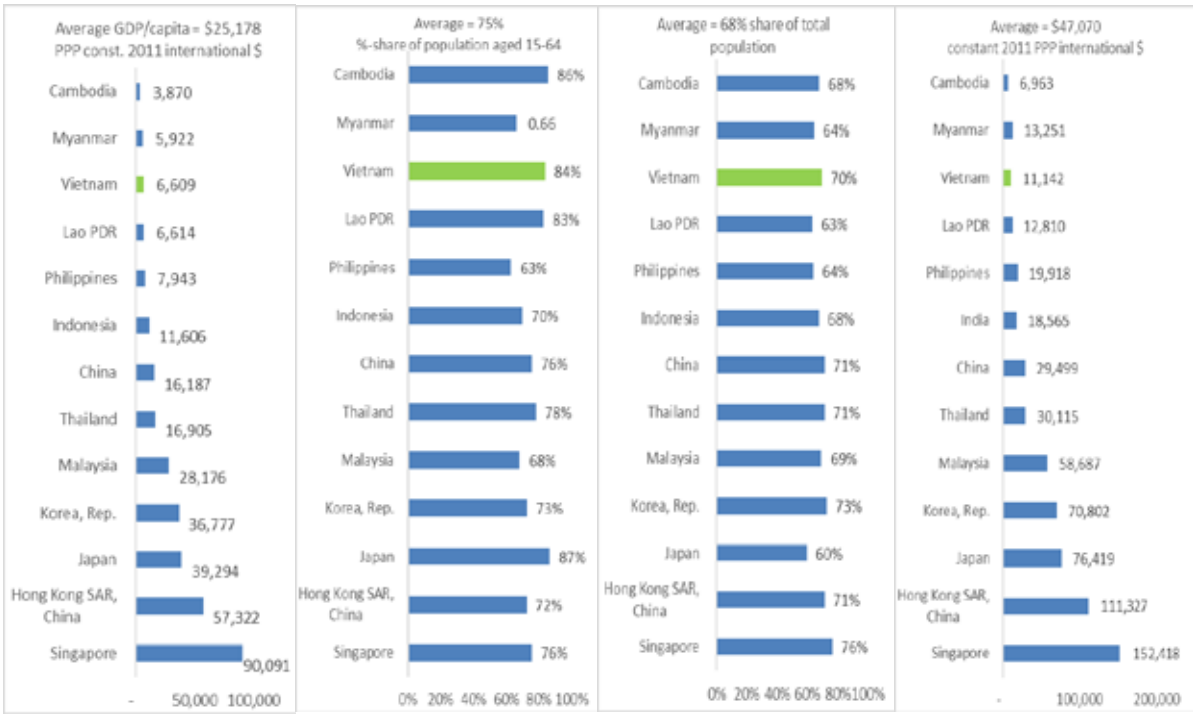
Table 3.1.Vietnam: projected GDP growth
GDP growth and GDP per capita growth (percent annual), by scenario

Scenario			2020	2025	2030	2035	2040	2045	2050
GDP growth	S1	Baseline	5.9	5.8	5.7	5.6	5.5	5.3	5.0
	S2	Higher participation rate	6.0	5.9	5.9	5.8	5.7	5.4	5.1
	S3	Lower participation rate	5.8	5.6	5.6	5.5	5.3	5.2	5.0
	S4	Higher human capital growth	5.9	6.0	6.1	6.1	6.0	5.9	5.7
	S5	Lower human capital growth	5.8	5.6	5.3	5.1	4.9	4.6	4.4
GDP per capita growth	S1	Baseline	4.9	5.0	5.1	5.2	5.1	5.0	4.9
	S2	Higher participation rate	5.0	5.1	5.3	5.4	5.4	5.1	5.0
	S3	Lower participation rate	4.8	4.9	4.9	5.0	5.0	5.0	4.8
	S4	Higher human capital growth	4.9	5.2	5.5	5.7	5.7	5.7	5.6
	S5	Lower human capital growth	4.8	4.8	4.7	4.7	4.6	4.4	4.2

Vietnam could increase the size of the workforce to some extent by increasing the retirement age. The government already plans to raise the retirement age from 60 to 62 years for men and 55 to 60 years for women, effective in 2021. Delayed retirement would expand the size of the working-age population and have fiscal benefits for pension financing as people live longer, assuming it correlates with healthy aging. However, raising the official retirement age would not affect the agricultural sector, which accounts for a large share of the workforce and where the tendency is to continue working well past the retirement age.

Improving labor productivity could help offset changes to the labor supply and the impacts of an aging society to some degree. The United Nations (UN) estimates that labor productivity in Vietnam increased by an annual average rate of 5.3 percent over the period 2001–2012, of which 2.8 percentage points could be ascribed to improvements in intra-sectoral labor productivity and 2.5 percentage points to structural inter-sectoral shifts in employment. Nonetheless, productivity remains low relative to other economies in East Asia (Figure 3.4), and productivity varies markedly by ownership (Figure 3.5) and sector (Figure 3.6). This suggests that there is room for improvement. Given the limited scope for increasing the participation rate, focusing on productivity is also likely to be the best means of counteracting the deleterious impacts of Vietnam's aging society.

Figure 3.4. Decomposition of 2018 GDP per capita into product of employment rate, labor force share of population, GDP per employed worker (labor productivity), selected countries



GDP per capita = employed/labor force X labor force/total population X labor productivity

Sources: World Bank (WDI) and Flochel, et al. 2014.

To improve labor productivity, the government of Vietnam should prioritize the structural transformation of the economy away from agriculture and toward higher value-added sectors. Today, around 40 percent of the population is employed in agriculture. Unlike in other sectors, productivity falls as workers age due to agriculture's heavy physical labor demands. This, in turn, drives down productivity for the entire economy. Vietnam's output structure is already changing following a well-established trend in middle-income countries. Employment in higher value-added sectors, particularly services, is skewed toward younger employees. In addition to generally reflecting higher labor productivity, these are often jobs in which age benefits rather than hinders employee output given the positive returns to experience.

Figure 3.5. Vietnam: productivity by ownership

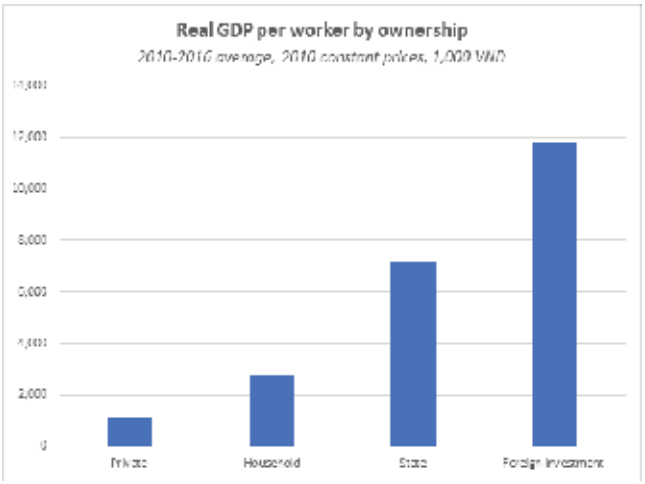
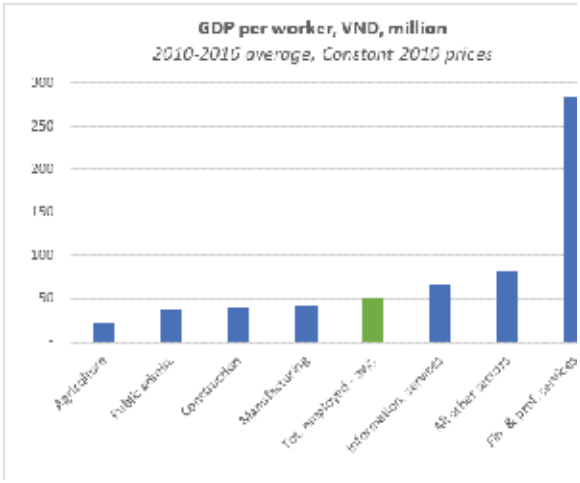


Figure 3.6. Vietnam: productivity by sectors



Sources: General Statistics Office of Vietnam (GSO) and World Bank staff calculations.

Structural transformation is not smooth or automatic. Many countries fall into the so-called "middle-income trap," in which many years of strong growth are followed by an extended period of relatively stagnant per capita income growth. While each country faces unique challenges, the central theme is a struggle to move from accumulation-led growth—which relies on increasing the supply of labor and capital—to a growth model driven by innovation and increasing productivity. Future growth will depend on increased investments in physical and human capital from both the public and private sectors.

In light of the importance of productivity, more formality in the economy should be encouraged regardless of what other policies are pursued. Firms in the formal sector are almost four times as productive per employee as those in the informal sector. Increased formality would have the added benefit of supporting revenue mobilization to help offset the pressures of age-related expenditures.

Human capital development will also be critical for improving labor productivity. The largest share of the working population in Vietnam is between ages 30 to 45, when labor productivity tends to peak. This has the potential to support productivity growth if it induces firms to invest in new technologies, particularly automation. However, older workers tend to adapt to new technology more slowly than their younger colleagues. Increases in human capital development—including lifetime learning—can play a key role in offsetting the decline of labor inputs by boosting labor productivity and addressing skills gaps that business surveys indicate are a key bottleneck.

Improving human capital and expanding educational attainment could have multiple benefits. Higher educational attainment is correlated with higher productivity. Education can also provide individuals the incentive to seek higher-paying work, which could boost labor force participation. In addition, education could indirectly support longer, healthier lives, as it is associated with better health outcomes and lower mortality.

Going forward, higher human capital growth presents the best prospects for Vietnam, with medium-term growth projections higher than near-term growth projections (Table 3.1 and Figure 3.3). Scenario 1 assumes that Vietnam can continue improving its education system and that the results are reflected in economic performance. However, this level of human capital growth is not likely. Vietnam has already posted impressive human capital growth and increasing it to such a degree would rank it far above any other country in the world. Yet even in that scenario, growth in 2050 is projected to be lower than growth today (Table 3.1). The lower human capital growth scenario is

more in line with the rest of the world and would be expected from mean reversion. Just to keep growing at its high historical rate, Vietnam would need to increase its investments in education.

Expanding investments in physical and human capital will require new sources of financing and more capital per worker. The problem will become acute as Vietnam approaches the so-called "missing middle," when concessional financing and development assistance dry up before alternative sources can be fully mobilized (Box 3.1). New sources of financing might come from increased savings or additional FDI, which depend on various factors detailed below. In advanced industrial economies, aging populations have been associated with capital deepening—a higher capital-output ratio. This would suggest diminishing returns to investment, and hence diminishing incentives to invest and save. However, Vietnam is still a lower middle-income country and may escape that pattern. The marginal returns to capital may still be high enough to induce further profitable investments.

Box 3.1. Transitioning out of aid and the end of the demographic dividend

Vietnam is transitioning out of official development assistance (ODA) from multilateral development banks (MDBs), which will put additional pressures on public finances. The country will need to adjust to the changing financing conditions that accompany its recent MIC status—notably, an increased reliance on non-concessional (market-based) financing terms. This fall-off in ODA will compound the demographically driven fiscal challenges faced by Vietnam.

At early stages of development, countries rely heavily on international public sector funds—primarily from MDBs or bilateral donors—which usually have a large concessional component. As per capita income levels rise, access to grants and below-market rate loans falls. The so-called "missing middle" dilemma emerges: as countries graduate to middle-income status and lose access to concessional financing, total public financing generally falls as a share of national income until per capita incomes reach high income levels. This reflects the inability of tax revenues and external private resources—remittance flows and FDI—to offset the fall in ODA.

The transition away from ODA manifests over the medium term and is not a sudden event. Based on the experiences of other countries, Vietnam is likely to experience broad-based changes in its financial flows, including a gradual shift toward higher interest rates and shorter grace periods. There is also a concurrent shift in the composition of financing toward loans and fewer grants—both of which imply a greater debt burden. Transitioning out of aid is typically accompanied by a shift in the allocation of remaining aid flows among sectors, toward infrastructure projects that can generate revenues (with financing on harder terms) and away from social sector projects like health and education, which can lead to increased demands on public service delivery.

Vietnam's public debt is relatively high as a share of GDP for an LMIC and would be worse without the highly concessional terms it has received. This points to the need to carefully manage the process of transitioning to non-concessional terms. Furthermore, in the context of high and rising demands on Vietnam's public finances, there is a risk that interest rates—currently at historic lows—will rise again. Increased spending pressures and higher borrowing costs could lead to higher fiscal deficits in the absence of efficiency gains in public spending or greater tax revenue mobilization.

Vietnam will want to maintain a prudent fiscal policy to ensure that public sector borrowing does not crowd out private sector investment and to ensure enough fiscal space so the government can invest in its development objectives. To sustain GDP growth and avoid the middle-income trap in the context of slowing labor force growth, productivity will need to rise in Vietnam, which in turn requires increased investment in higher value-added activities such as manufacturing and in human capital.

Source: Kharas et al. (2014).

The impact of an aging population on savings is primarily determined by two offsetting effects: compositional and behavioral (Velamuri 2015). The compositional effect is derived from well-established life-cycle theories that posit that young adults borrow, middle-aged adults save, and

senior citizens live off their savings (dis-save).[30] This suggests that an aging population will lead to a lower savings rate. However, the behavioral effect suggests that in anticipation of a longer life, individuals in an aging society will boost savings during their working lives to finance consumption in an extended old age. This suggests that an aging population will lead to a higher savings rate. The net impact of an aging population on savings in an LMIC economy is unclear. On the one hand, a shrinking workforce would lead to a higher capital-to-output ratio and diminishing returns on capital, thus reducing the incentives to invest. On the other hand, an aging population could provide incentives for firms to invest in new technologies.

The government can help meet the economy's financing needs by liberalizing rules related to foreign investment. As Vietnam is a small, open economy, the future path of its interest rates—and hence the return on capital—will be determined primarily by global market trends. Given rapid aging in the G20 countries, the IMF (2019) argues that global real interest rates are likely to remain low for the foreseeable future. This would allow Vietnam to tap international capital markets, supplementing FDI and domestic savings and further boosting aggregate capital formation.

Expanding financial inclusion, along with increased pension coverage, would support financial intermediation and help channel savings into investment. Access to finance remains relatively low in Vietnam, which hampers financial intermediation. Increasing access to finance through bank and non-bank institutions supports financial intermediation through more efficient resource allocation. Similarly, expanding coverage of Vietnam's contributory pension system, which is also relatively low, could help boost savings and strengthen financial intermediation—in addition to providing for a steady retirement income for participants. Supporting financial inclusion through enhanced access to finance and pension coverage could help counteract the dissaving associated with aging.

In addition to the impact on investment (and hence the current account), the domestic savings rate will affect patterns of consumption. Extending the retirement age would boost consumption through an extended period of wage earning, while enhancing the reserves of state pension schemes—both of which would reduce incentives to save in middle age (Flochel et al. 2014). There is a general consensus, particularly in times of slowing global demand and rising trade tensions, that as countries like Vietnam transition to upper middle-income status, an emphasis on investment and export-led growth will need to shift to domestic demand as the primary engine of sustained GDP growth.[31] Still, export- and domestic demand-led growth need not be incompatible (Felipe 2003).

Finally, the incentives for precautionary savings will reflect both the generosity and security of government-provided pensions (Amaglobeli et al. 2019). Generous and well-funded pensions systems would provide workers with confidence that they will not live their retirement years in poverty—although overly generous and under-funded pension and social insurance systems can exacerbate fiscal pressures associated with an aging population. In addition, an aging population will have greater healthcare needs, which will put pressures on both public expenditures and private retirement savings. Investments in public health can assuage fears that retirement funds will be devoured by medical bills and, if translated into healthy aging, can allow older workers to extend their years of employment—which in turn benefit household incomes, tax revenues, and household consumption patterns.[32]

30 E.g., Modigliani (1954 and 1970, etc.) posits that an individual's consumption in any given period is not determined by their current income stream but rather by their expected cumulative income over their entire life.

31 For example, ADB (2011). The Global Economic Crisis and Trade and Growth Prospects in East Asia. ADB Working Paper No 242.

32 Research on China by the IMF notes that fear of age-related health care costs can drive precautionary savings and calculate the for every yuan spent by the government on healthcare, household consumption was increased by 2 yuan (Barnett and Brooks 2010).

3.3. Fiscal policy challenges of an aging population

The aging of Vietnam's population will have significant fiscal implications when relevant programs expand coverage and improve the quality of service delivery. Starting in 2035, fewer workers will mean less revenues generated from personal income taxes, assuming no changes to the tax code or formalization rate. At the same time, a larger elderly population will increase demands on public (and private) healthcare and pension systems. To offset a decline in the quantity of labor, the government will need to invest in education and infrastructure to raise quality, thereby boosting productivity growth and economic competitiveness. Less revenues and more expenditures are projected to increase the fiscal deficit and public debt as a share of GDP. Lower GDP growth and a shrinking labor force could increase the government's debt service costs and limit its capacity to borrow if investor confidence is eroded.

As Vietnam's demographic transition accelerates, policymakers will have to juggle multiple and often conflicting fiscal objectives. Given the more limited fiscal space implied by rising age-related expenditures, the government will need to balance the relative costs and benefits of various spending, such as building a new airport versus expanding pensions to the elderly. In addition to investing in education and infrastructure to boost economic competitiveness, the government will also need to meet the healthcare and social assistance needs of an aging population. An inability to balance these fiscal needs could translate into rising deficits and debts—putting upward pressure on interest rates, potentially crowding out much-needed domestic and foreign investment and threatening the country's macroeconomic stability.

The following projections draw heavily on the World Bank's FSA model and illustrate the impact of aging on four broad expenditure categories: healthcare, education, social assistance, and pensions. Except for pensions, three variables determine the costs of age-related expenditures. The first variable is demographic changes, taken from the UN's World Population Prospects standard projections, which are broken down by age cohort. The second variable is coverage rates, which represent the percentage of the age cohort that benefits from a given program. The third variable is the cost per beneficiary. The total cost of each program is the product of the population cohort, coverage rate, and cost per beneficiary. Pensions are treated differently than all other expenditure categories. Given the long vesting period, future trajectories are more rigid, and only one scenario is presented, reflecting assumed changes in program participants and costs to participants.

For the healthcare, education, and social assistance categories, projections for coverage rates and costs per beneficiary are based on historical trends and the experiences of similar countries. The specifics vary by program (Table 3.2). Projected growth in coverage rates is equal to the average growth rate over the last seven years. Growth plateaus at coverage rates determined by Vietnam's policy goals or rates comparable to the historical experience of countries with similar characteristics. Growth in the cost per beneficiary is determined by setting a premium over GDP per capita growth. Primary, secondary, and tertiary education cost premiums are set at 0.5, 0.75, and 1.0 percentage points, respectively, above GDP growth. All other expenditure categories grow larger premiums over GDP growth each decade—0.5 percentage points for years 2021–2030, 1.0 percentage points for 2031–2040, and 1.5 percentage points for 2041–2050.[33]

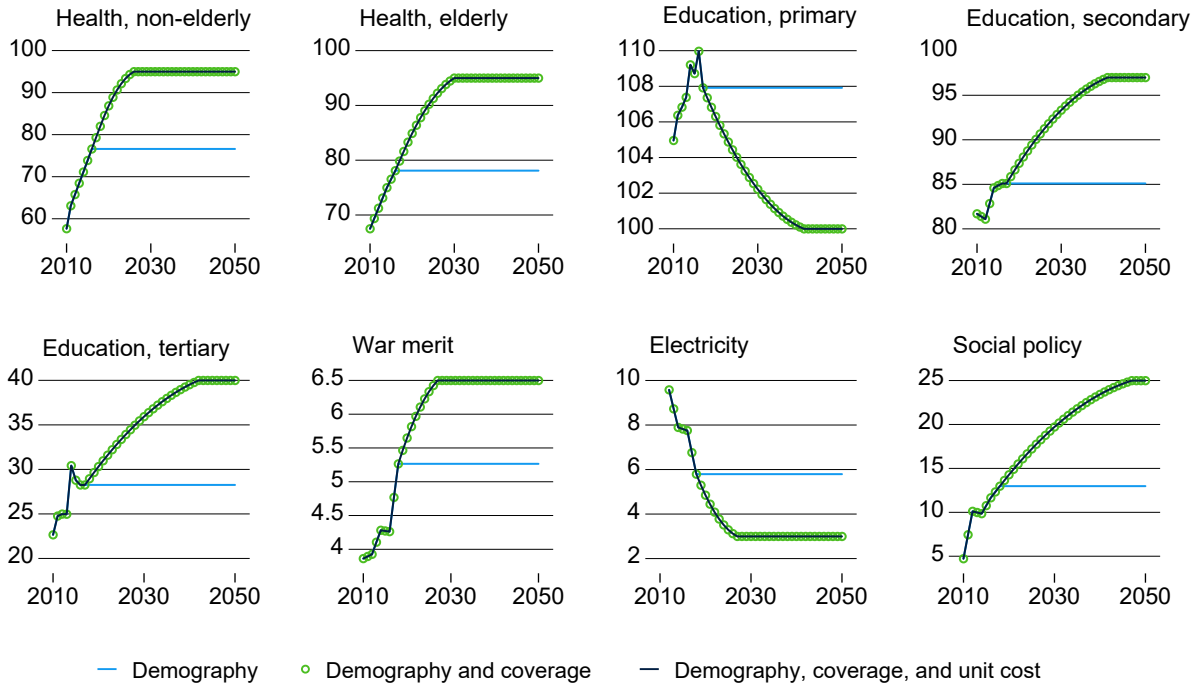
33 Coverage rates and costs per beneficiary for the war merit, electricity, and social policy programs are calculated separately for the non-elderly and elderly populations but are summed, by program, for presentation because of their relatively small fiscal costs.

Table 3.2.Vietnam: projected coverage rates and unit cost, by program

Program	Coverage limit (percent of cohort)	Cost growth (percentage point premium over GDP growth)
Primary education	100	0.5
Secondary education	97	0.75
Tertiary education	40	1.0
Elderly healthcare	95	0.5 (years 2021–2030) 1.0 (2031–2040) 1.5 (2041–2050)
Non-elderly healthcare	95	
War merit	6.5	
Electricity	3	
Social policy	25	
Source: World Bank staff projections.		

Using these variables and parameters, three scenarios are projected for each expenditure category: demography only; demography and increased coverage; and demography, increased coverage, and increased unit cost. The demography-only scenario holds coverage rates and costs per beneficiary constant. The change in total costs is therefore completely driven by demographic changes. The increased coverage scenario incorporates the projected changes (mostly increases) in coverage rates (Figure 3.7). It is meant to show the fiscal cost implications of an increase in the quantity of beneficiaries. Finally, the increased coverage and cost scenario incorporates both the projected changes in coverage rates and costs per beneficiary. It is meant to show the fiscal cost implications of an increase in the quantity of beneficiaries and the quality of services delivered.

Figure 3.7. Vietnam: coverage rates for social programs, projections



Source: World Bank staff projections using data from the Vietnam Household Living Standards Survey (VHSS), UN World Population Prospects, and World Development Indicators.

The fiscal costs associated with each scenario are presented by program in the following subsections. They are shown as additional costs, above those prevailing in 2019, as percent of GDP. In other words, they are the additional fiscal burden that Vietnam faces as a result of demographic changes, expanded coverage, and higher-quality public services. Total fiscal costs across programs are presented in section 3.7.

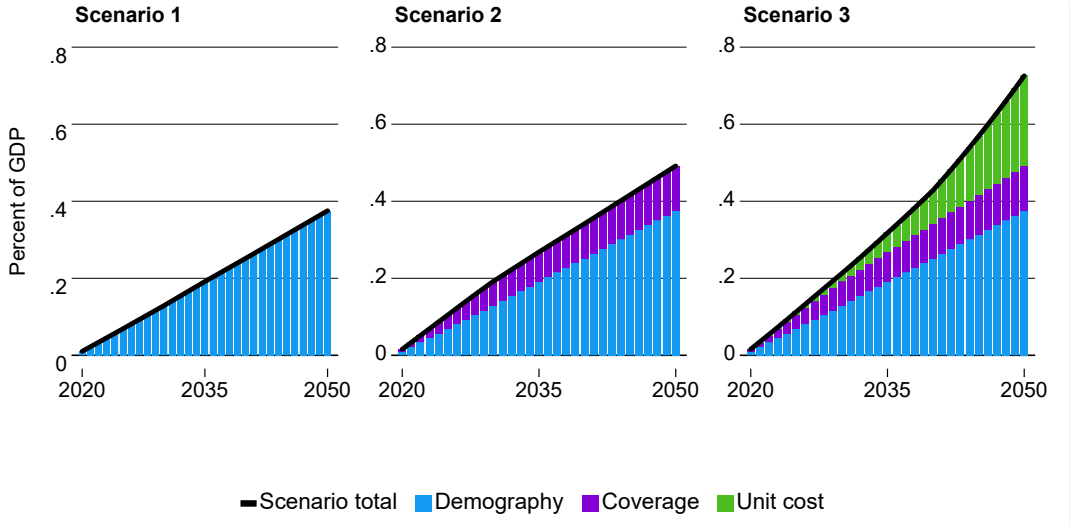
3.4. Healthcare

An aging population will generate fiscal pressures from rising demand for health care services. Healthcare expenditures in Vietnam are comparable to countries of similar income levels, both as a share of GDP and in per capita terms. Social Health Insurance (SHI) covers 87 percent of the population, including most poor and vulnerable groups. Public demand for healthcare will rise over the next decades, reflecting an aging population, an increase in non-communicable diseases, and the rising expectations of a growing middle class.

In the context of fiscal space for health, external financing is no longer a sustainable and reliable source of funds for health spending in Vietnam. Given the projected lack of fiscal space, the Government is looking for complementary private sector solutions. In addition, in line with the long-standing trend of fiscal decentralization, sub-national governments are being required to take on greater responsibility for financing health programs.

Annual expenditure for healthcare for the elderly is projected to increase significantly under all scenarios, driven mostly by demography (Figure 3.8). In 2019, the latest year for which budget estimates are available, Vietnam allocated 5.0 percent of the state budget to health, population, and family planning—roughly 1.4 percent of GDP. The dispersed nature of Vietnam's health system and the paucity of data make it difficult to make definitive projections. However, using the best available data, elderly healthcare is projected to add nearly 0.4 percent of GDP in fiscal costs by 2050 under the most benign scenario, in which only demography is considered. Expanding coverage to 95 percent of the population will add another tenth of a percent. When expanded coverage and better-quality services (reflected in higher unit costs) are considered, the full impact is almost double at more than 0.7 percent of GDP.

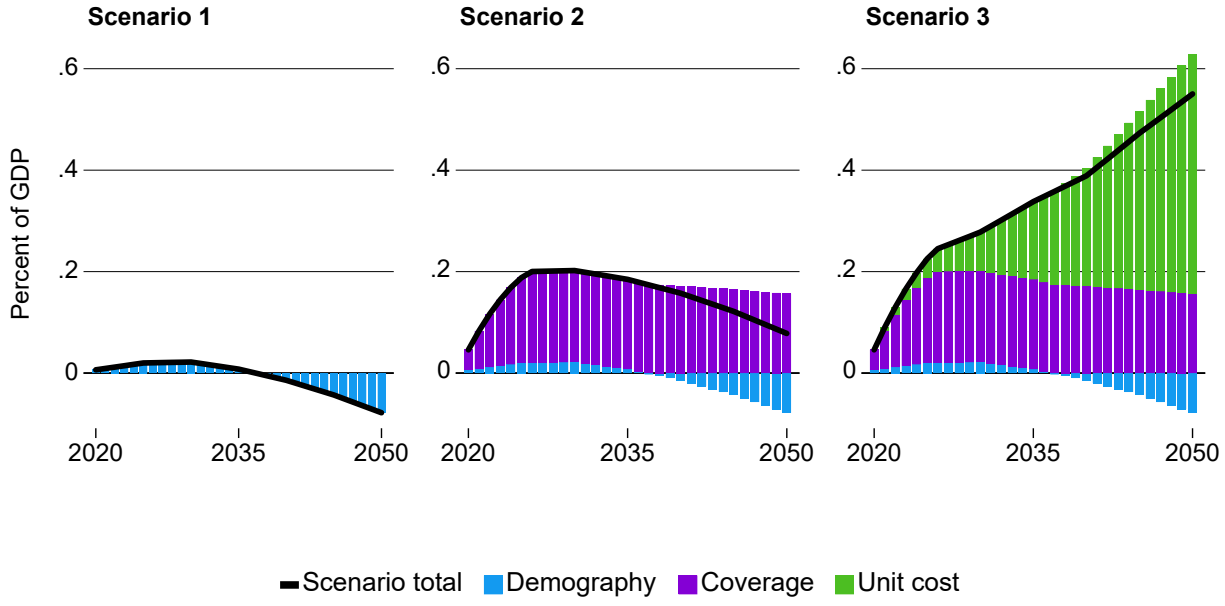
Figure 3.8. Vietnam: health expenditures for the elderly population, additional fiscal costs (percent of GDP), by scenario (2020–2050)



Source: World Bank staff projections using data from the Vietnam Household Survey (VHSS), UN World Population Prospects, and World Development Indicators.

Annual expenditures for non-elderly healthcare are also projected to increase significantly when all potential cost drivers are considered (Figure 3.9). The contrast with healthcare for the elderly is immediately clear. The non-elderly population will shrink as a share of total population, and the contribution of demography to future healthcare costs for the non-elderly is therefore uncertain over the projection period. Instead, costs are driven by expanding coverage in the near term and by higher unit costs in the long term. All told, non-elderly healthcare could consume an additional 0.6 percent of GDP by 2050.

Figure 3.9. Vietnam: health expenditures for the non-elderly, additional fiscal costs (percent of GDP), by scenario (2020–2050)

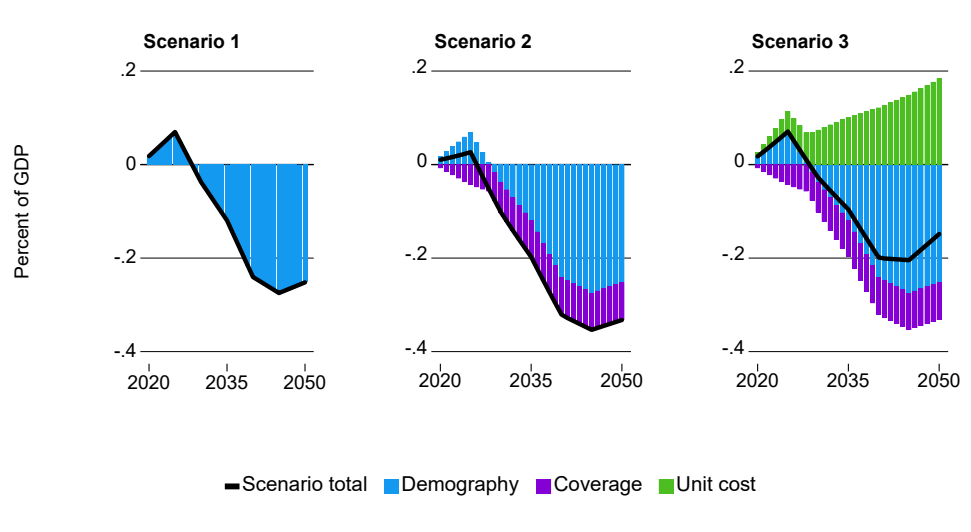


Source: World Bank staff projections using data from the UN World Population Prospects and World Development Indicators.

3.5. Education

Vietnam's school-age population will shrink, but the need to boost human capital will likely lead to increases per-student costs, with the net result that these increased unit costs will offset savings from the decline in the school-age population. In 2019, Vietnam allocated 15.1 percent of the state budget to education and training—roughly 4.1 percent of GDP. Without increases in unit costs, primary education expenditures are expected to fall over the projection period (Figure 3.10). The main driver is a shrinking primary-age population. Yet, unit costs are expected to increase in line with improving educational quality to deliver better human capital outcomes, so overall, expenditures are projected to grow if all cost drivers are considered.

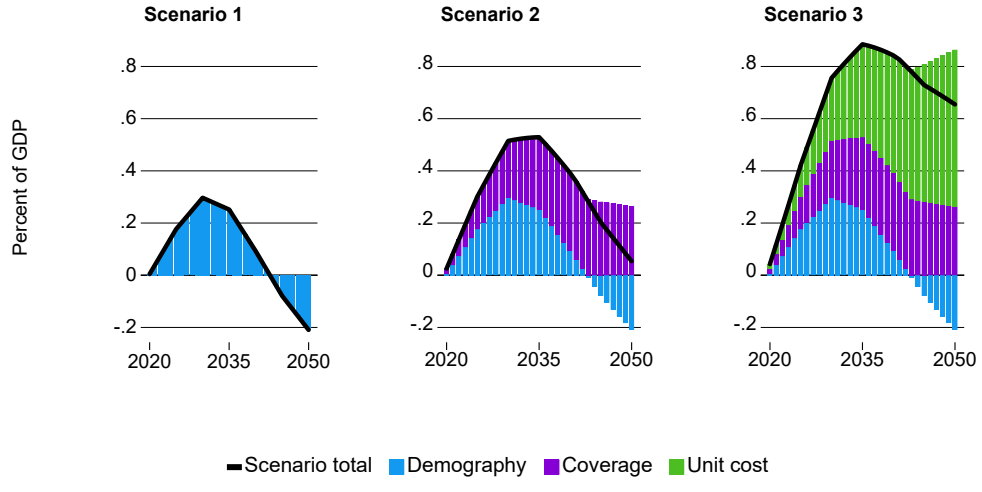
Figure 3.10. Vietnam: Primary education expenditures, additional fiscal costs (percent of GDP), by scenario (2020–2050)



Source: World Bank staff projections using data from UN World Population Prospects, and World Development Indicators.

Secondary education costs are expected to increase significantly over the projection period, if all cost drivers are considered (Figure 3.11). Demography will initially increase costs, but the secondary-school age population will begin to shrink in 2030, and the net impact will be negative before the end of the projection period. Coverage is projected to increase significantly. In 2017, 85 percent of the cohort was enrolled in secondary school, and this is projected to reach 97 percent by 2041. The biggest cost driver is the cost per student. When all three drivers are considered, additional secondary education costs will peak at nearly 0.9 percent of GDP in 2036 before falling again to roughly 0.7 percent of GDP in 2050.

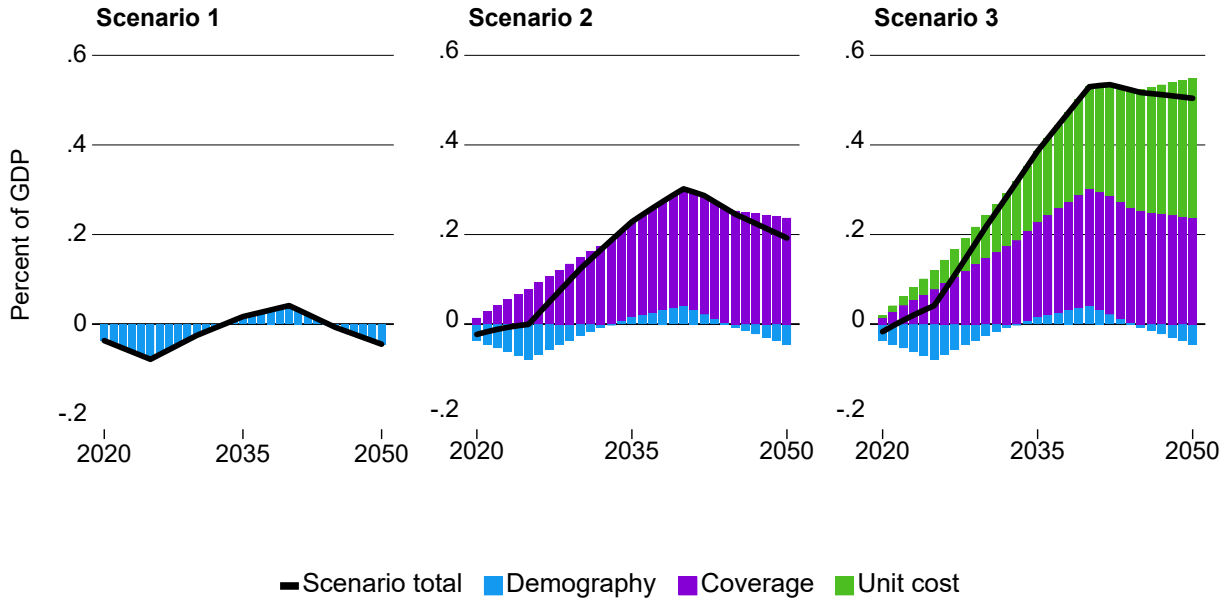
Figure 3.11. Vietnam: secondary education expenditures, additional fiscal costs (percent of GDP), by scenario (2020–2050)



Source: World Bank staff projections using data from UN World Population Prospects, and World Development Indicators.

Tertiary education costs are also projected to increase significantly (Figure 3.12). Demography will have an ambiguous effect. Increased coverage and higher unit costs will contribute roughly equally to additional fiscal costs of nearly 0.6 percent of GDP by 2050. In 2017, 28 percent of the relevant age cohort was enrolled in tertiary education. That number is projected to reach 40 percent by 2042. At the same time, unit costs are expected to grow faster than for either primary or secondary education, reflecting the experience of other countries approaching upper middle-income status. If Vietnam is to sustain growth, it must increase productivity. Investing more in higher education will be necessary to sustain Vietnam's human capital growth and achieve its productivity goals.

Figure 3.12. Vietnam: Tertiary education expenditures, additional fiscal costs (percent of GDP), by scenario (2020–2050)



Source: World Bank staff projections using data from UN World Population Prospects, and World Development Indicators.

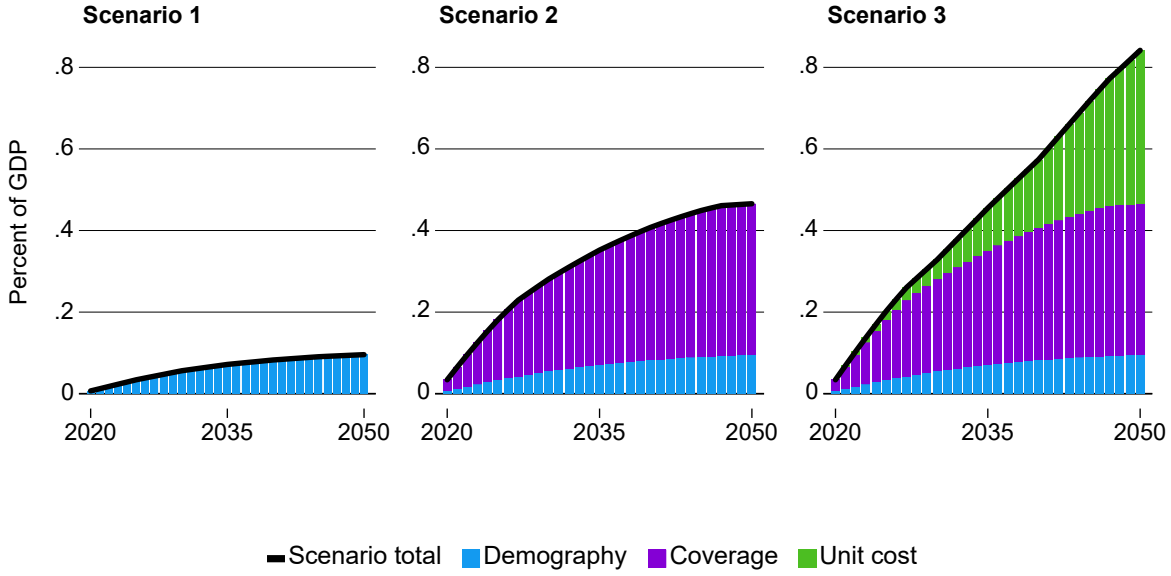
3.6. Social Assistance

The social assistance expenditure category includes three types of age-related social assistance programs: war merit payments, electricity subsidies, and social policy allowances. The programs are projected separately but presented together because of the relatively small fiscal impact of war merit payments and electricity subsidies.

Expanding participation, followed by increasing unit costs, are the biggest cost drivers for the social assistance programs. The impact of demography reflects the steady growth in Vietnam's total population even as it ages, since that is the relevant cohort for each of the programs. Coverage is expected to increase slightly for war merit payments, decline slightly for electricity subsidies, and nearly double for social policy allowances, from 13 percent to 25 percent of the population (Figure 3.13). The initial cost per beneficiary for war merit payments is nearly 3.5 times higher than for social policy. However, the latter will account for most of the additional fiscal costs related to increased participation in the next decades—even with fixed

costs—given how rapidly it is expected to expand. Unit costs are expected to grow more slowly, but by 2050, they will contribute almost as much as expanded participation to the additional fiscal costs attributed to social assistance programs. When all three cost drivers are considered together, they amount to an additional fiscal cost greater than 0.8 percent of GDP.

Figure 3.13. Vietnam: Expenditures on age-related social assistance programs, additional fiscal costs (percent of GDP), by scenario (2020–2050)



Source: World Bank staff projections using data from the Vietnam Household Survey (VHSS), UN World Population Prospects, and World Development Indicators.

3.7. Pensions

Vietnam faces significant and simultaneous challenges to providing sustainable incomes to its elderly population given its rapidly aging population, increasing elderly dependency ratio, and high benefits relative to contributions. Vietnam's extra-budgetary contributory pension, Vietnam Social Security (VSS), operates on a pay-as-you-go basis and does not take in enough contributions to sustain its long-run obligations. The VSS is projected to become cash-flow negative in 2034 and exhaust its reserves in 2042. It has a projected long-run deficit of 2.5 percent to 3.0 percent of GDP for the period 2043–2050. Moreover, it receives a poor rate of return on the government securities it holds. If the government does not resolve the VSS's structural issues before it exhausts its reserves, it will create contingent liabilities for public finances. Chapter 5 discusses issues pertaining to VSS and the potential methods for controlling costs.[34]

3.8. Aggregate fiscal impact

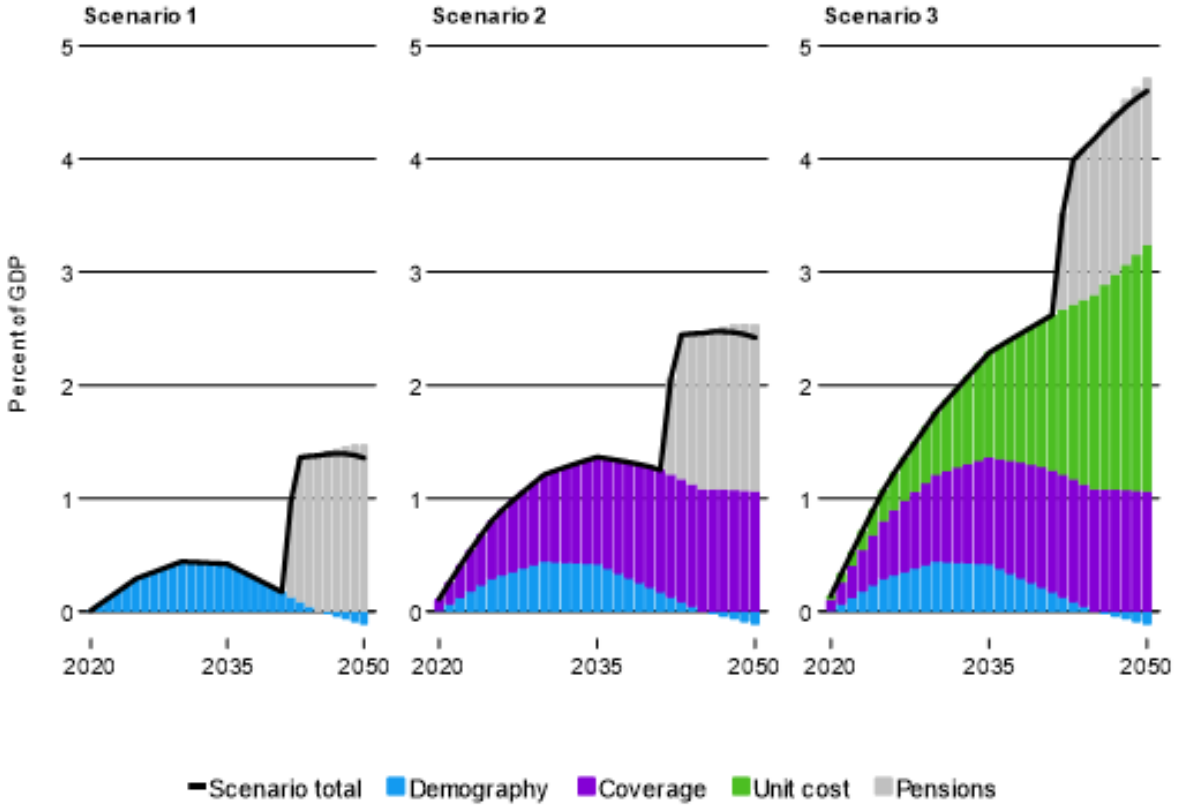
In total, Vietnam's aging society—and the evolution of government programs to accommodate it—are projected to add 1.4–4.6 percent of GDP in additional expenditure. Perhaps unexpectedly, Vietnam will experience a net decline in expenditures if demography alone is considered and pensions are excluded. That is because the programs that are expensive today, namely education, are those for which the relevant age cohort will shrink between 2020 and 2050. However, this view ignores upward trends in coverage rates and the probable increase in unit costs as Vietnam develops, the middle class

34 The additional fiscal costs for VSS cannot be decomposed by demography, participation, and unit costs due to the special nature of the program.

grows, and demands increase for higher-quality services.

Expanding coverage and improving service quality will be the real drivers of future growth in fiscal costs. Projections under the scenario that incorporates demography and expanded coverage show that Vietnam will experience a moderate increase in fiscal costs by 2050 to more than 2.4 percent of GDP above current levels. More than half of this increase is expected to come from pensions, and the rest from expanded coverage in the health and social assistance categories. Under the scenario that incorporates all three cost drivers—demography, expanded coverage, and higher unit costs—Vietnam will experience a significant increase in fiscal costs to nearly 4.6 percent of GDP above current levels. Almost half of that additional cost is expected to come from increased unit costs, mostly in the health and tertiary education sectors (Figure 3.14 and Figure 3.15).

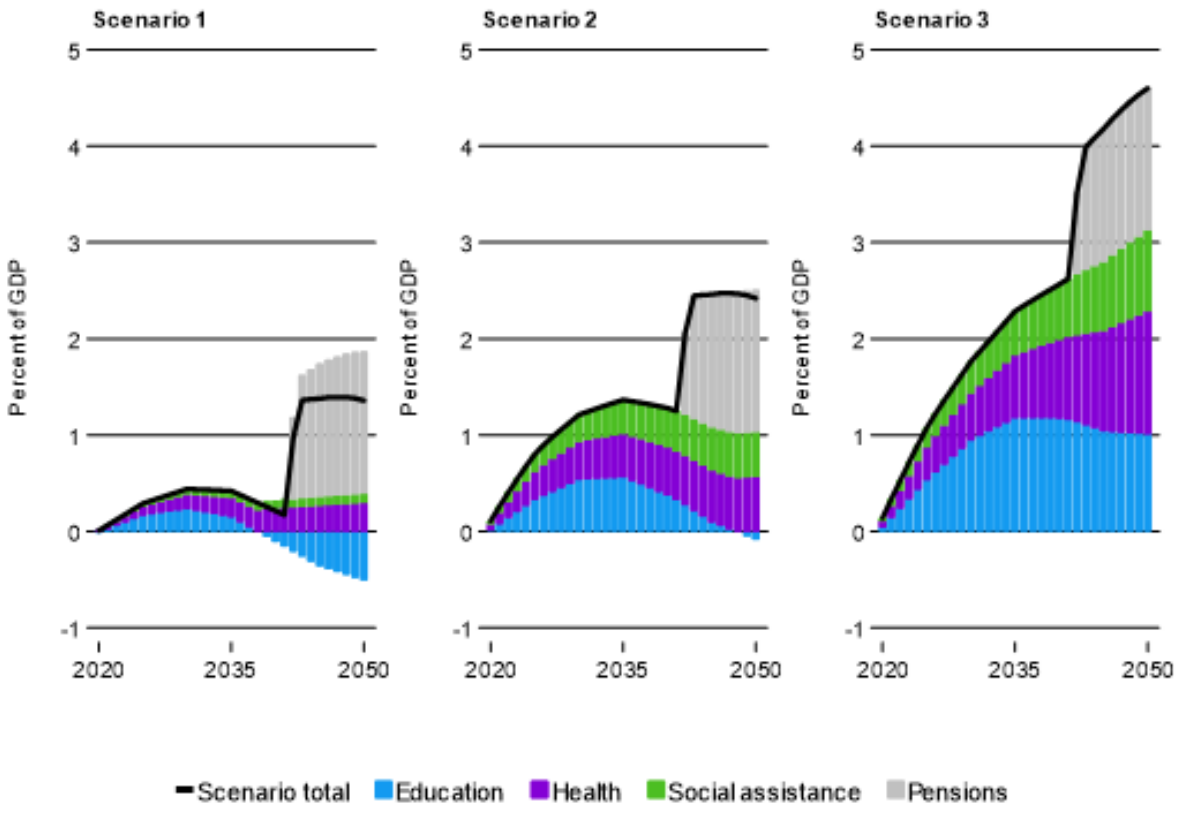
Figure 3.14. Vietnam: aggregate age-related fiscal costs, by cost driver (percent of GDP)



Sources: World Bank staff projections using data from the Vietnam Household Survey (VHSS), UN World Population Prospects, and World Development Indicators.

Note: Additional costs related to pensions cannot be decomposed by demography, coverage, and unit cost, so the total is presented in each scenario.

Figure 3.15. Vietnam: aggregate age-related fiscal costs, by social program (percent of GDP)



Sources: World Bank staff projections using data from the Vietnam Household Survey (VHSS), UN World Population Prospects, and World Development Indicators.

Note: Additional costs related to pensions cannot be decomposed by demography, coverage, and unit cost, so the total is presented in each scenario.

3.9. Conclusions and policy implications

Vietnam is reaching a demographic turning point, as the growth in the labor force that has helped drive GDP growth over the last three decades—the demographic dividend—is waning rapidly. The unwinding of Vietnam's demographic dividend will have significant medium- to long-term macroeconomic implications. Labor force dynamics will affect both GDP growth prospects and fiscal revenues, while the need to improve human capital and support an aging population will increase demands for government expenditures. The extent to which rising productivity growth can buffer the Vietnamese economy from demographic headwinds—and what policies are needed to support productivity growth—will be some of the most important macroeconomic questions facing the country in the medium to long term.

As a share of the total population, the workforce peaked in 2013, although the labor force will continue to grow in absolute terms over the next couple of decades, albeit at a slower pace than in recent decades. As noted earlier, Vietnam already has one of the highest labor force participation rates in the world, suggesting limited scope to offset a decline in the working-age population with a higher participation rate. However, there is scope to increase the available labor force by raising the retirement age or through immigration. The fastest-growing segment of the Vietnamese population is those aged 65 or older, which has important fiscal

implications. Slower labor force growth will have a dampening impact on both GDP and fiscal revenue growth, while an aging population will raise demands for government expenditures, notably for pensions and the provision of health and elder care. The relative changes to the demographic profile translate into a rising dependency ratio, albeit from a relatively low level.

Improvements in labor productivity, public financial management, and public service delivery will be critical in addressing Vietnam's rapidly aging population. Improvements to productivity are more likely to be driven by changes to the output structure of the economy (i.e. inter-sectoral shifts in employment) rather than intra-sectoral labor productivity gains. A key driver will be the release of agricultural workers into higher value-added sectors (which should facilitate increases in formality, which is higher in the manufacturing and services sectors than in the agricultural sector). This, in turn, will require greater private and public investments in human capital. Rising capital intensity (corresponding to a shrinking share of the labor force) should lead to stronger wage growth which, along with a higher retirement age (assuming this is introduced), could support further increases in the labor force participation rate.

The impacts of an aging population will be felt in terms of both fiscal revenues and expenditures and will put pressure on public finances in the absence of timely reforms, particularly in the context of already high public debt. As discussed earlier, as an increasing share of the population enters retirement—and hence no longer earns an income—there will be a commensurate impact on revenues generated from personal income tax. An aging population will also place increased demands on public (and private) healthcare and pension systems. Additionally, with a need to boost productivity, there will be pressures to increase government expenditures on education and infrastructure—exacerbated by Vietnam's status as a developing country, vulnerable to the impacts of climate change. Combined, these factors would add to existing strains on Vietnam's public finances.

Vietnam will need to intensify efforts to strengthen growth outcomes and its service delivery, while meeting rising demands. A wide range of policy options can be pursued to support strengthened growth outturns, public financial management, and public service delivery to help mitigate the potential negative impacts tied to aging. These include policies to (i) strengthen human capital development and labor market reforms; (ii) enhance productivity and capital formation; (iii) improve the business environment; (iv) enhance revenue generation and tax policy, institutional capacity, and efficiency in expenditures; and (v) sustain and strengthen the macroeconomic policy framework to facilitate growth. A number of policy options are discussed in Part II of this report with respect to public sector spending, in particular for pensions, health, and elderly care. These should be complemented by reforms that support human capital development to buoy labor productivity and growth, which would in turn boost revenues. Policy reforms to enhance revenue mobilization will also be critical, such as through broadening the tax base, increasing formality, and shifting to greater reliance on consumption taxes. Expenditure and revenue reforms should also be complemented by measures to strengthen institutional capacity and efficiency in public sector financial management.

Greater liberalization of Vietnam's laws on foreign investments could help raise productivity growth and living standards. This would allow Vietnam to tap international capital markets, supplementing FDI and domestic savings and further boosting aggregate capital formation. More broadly, good institutions and a sound policy framework will boost both foreign and domestic investor confidence and spur investment growth. They are also needed to facilitate productivity growth by supporting an enabling environment to boost human capital development and by facilitating technological and entrepreneurial-driven productivity growth.

Greater financial inclusion and increased pension coverage would support financial intermediation and help channel savings into investment, boosting productivity and growth outcomes (Caprio et al 2001). As discussed earlier, supporting financial inclusion through enhanced access to finance and pension coverage could help counteract the dissaving associated with aging. Increasing access to finance through bank and non-bank institutions supports financial intermediation through more efficient resource allocation, while expanding coverage of Vietnam's contributory pension system could boost savings and strengthen financial intermediation.

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PART II.

Part II focuses on the areas that are key for managing the effects of aging: labor market (Chapter 4), pensions (Chapter 5), health care (Chapter 6), and aged care (Chapter 7). Each chapter analyzes the salient features of the sector in question and presents directions for reforms. Chapter 4 characterizes the increasingly knowledge-intensive labor market in Vietnam, highlighting key factors such as high levels of informality and the age distribution of workers across different sectors and between rural and urban areas. It then dives into important challenges facing the labor market including demand for sophisticated knowledge, gender and ethnic disparities, legal structures, and market incentives, concluding with the outline of a human capital-centered approach to prepare Vietnam's workforce for strong growth. Chapter 5 examines the pension system and the two major challenges it faces: a deep coverage gap and unsustainable finances. It describes the structure of the current pension system and which segments of the population receive pension benefits, and as importantly, which do not. The chapter then delves into expected fiscal challenges to the pension system and introduces policy changes to rebalance the system and address the critical coverage gap. Chapter 6 describes the implications of population aging on the healthcare system, describing how rapid changes in demography, epidemiology and health financing are expected to influence future healthcare demand, health spending and health outcomes. It then describes the political and legal commitments the Vietnamese government has made in the realm of health care and characterizes the strengths and weaknesses of the current health care system in terms of hospital resources and primary care availability and quality. Finally, it describes Vietnam's strategy for health financing and provides an analysis of the distribution and burden health care expenditures. Chapter 7 examines the elderly care system in Vietnam and proposes ways to strengthen the system to meet the country's future needs. The chapter describes the current status and landscape of Vietnam's elderly care system, including legislation and policies that govern the sector, institutional structures, coverage, and financing of elderly care services. It further discusses the role and challenges of informal caregivers, public sector care facilities, and private sector care facilities, both for-profit and non-profit. The chapter outlines good international practice guiding principles for building a comprehensive, efficient, and sustainable system of elderly care, and concludes by providing policy options for Vietnam.

Chapter 4: LABOR MARKET FOR AGING VIETNAM

4.1. Introduction

The broad demographic trends described in Part I of this report show that Vietnam is still experiencing a demographic window of opportunity. Vietnam has benefited strongly from the "demographic tailwind" since *Doi Moi,* and although the share of the working population began to decline in 2014, in absolute terms, the size of the labor force will continue to grow until 2042. These trends are in contrast to neighbors such as Thailand or China. The number of potential workers (ages 15-65) in Vietnam is projected to reach 69.45 million, and its share will fall from 69 percent in 2015 to 64 percent by 2049,[34] thanks to a combination of low birth rates resulting in a rapid decline in fertility in the 1980s and 1990s as well as increased life expectancy. Vietnam will have the largest potential workforce in the developing East Asia region after China and Indonesia, allowing Vietnam to expand its jobs and output. The size of the labor force will decline thereafter.

Box 4.1. The Myth of Less Productive Older Workers

The widespread assumption that older workers are less productive implies that population aging will have a negative effective on overall productivity, with profound impacts on firms' personnel policies and employment choices and countries' labor policies. However, recent robust studies by labor economists have produced important evidence that contradicts this myth, leading to the conclusion that while younger and older workers differ, productivity differences seem to even out. Historically, relating productivity and age has posed several major methodological challenges, including how to measure productivity, how to account for non-age-related factors bearing on productivity such as firm selection processes, and how to determine the appropriate level of analysis. A number of studies using plant-level econometric analysis effectively minimize these challenges. Those with the most convincing methodologies (Aubert 2003; Aubert and Crépon 2007; Malmberg et al. 2008; Göbel and Zwick 2009) have consistently found age-productivity profiles increasing until the age of 50-55 and then flattening off, directly contradicting the myth of decreasing productivity with age. Moreover, those studies using more sophisticated methodologies suggest that relative productivity of older workers is actually higher, though with less confidence. Another significant study by Börsch-Supan et al. (2006, 2010) used a methodology allowing for more precision. They examined a German truck assembly plant comprised of small teams of workers in highly tailored production process typical of manufacturing, with many tasks requiring significant physical strength and agility. Measuring productivity by the inverse of the number of mistakes made in the assembly of a product over a fixed time, they found that overall productivity does not decline for older workers. At the individual level, furthermore, productivity actually consistently increased. This suggests that characteristics such as experience and the ability to work well with a team in tense situations compensate for the loss of physical strength with age.

Source: based on Börsch-Supan, A. 2013. "Myths, scientific evidence and economic policy in an aging world," The Journal of the Economics of Ageing 1-2 (2013), pp. 3-15.

35 The size of the population 15-59 years of age is projected to reach 62.1 million in 2049, and its share will fall from 65 percent in 2015 to 57 percent by 2049. The number of people 60 years of age and above is projected to increase to 26.9 million and account for approximately 25 percent of the population.

However, rapid aging will become a reality in the very near future and will make Vietnam's demographic picture more complex, with implications for the labor market and growth. Aging affects the labor market through pathways such as the quantity of labor available and through its impact on the productivity of the workforce. (Box 4.1) Although empirical evidence on the effect of aging on growth is not fully conclusive, on aggregate, aging in advanced economies has led to a decline in per capita product. For example, in the United States, a 10 percent increase in the population share of those age 60 and above is estimated to have led to a 5.5 percent decline in the gross domestic product (GDP) per capita growth rate, based on data from 1998 to 2010. One-third of this decline is due to the decreased size of the workforce, while the rest is explained by slowed growth in labor productivity. While several other studies show that a higher share of senior people in the workforce leads to lower productivity,[36] Börsch-Supan and Weiss (2016) challenged these findings with strong results indicating increased productivity linked to older workers' characteristics such as their experience and noncognitive abilities. Although the global evidence is inconclusive, it is clear that for Vietnam, proactive policies will be needed to mitigate these effects.

Aging of Vietnam's workforce coincides with other major trends affecting labor markets across the world. First, labor markets are being affected by changing terms of trade. As one of the most open economies in the world (World Bank 2017), Vietnam is expected to be affected. Second, the development of technology has multi-faceted impacts on the labor market, affecting both the demand for and the supply of labor. The effect of technology on aggregate employment and jobs depends on the human capital stock and the extent to which a country can upgrade it to optimize labor market preparation for the needs of a technology-intensive economy. Globally, the rise of the industrial sector in East Asia has more than compensated for the loss of industrial jobs in advanced economies. But not all Asian countries have benefited equally. While Vietnam has seen an increase in the share of industrial employment (rising from 9 percent in 1991 to 25 percent in 2017), in many other countries, it remains stable. The main difference for Vietnam is that the country is credited with bringing highly skilled young workers into the labor market, who—together with new technology—upgrade manufacturing production.

This Chapter addresses the question of how Vietnam can take advantage of its remaining demographic window and prepare to mitigate the effects of aging on the labor market. Vietnam's key economic priority today is to continue to capitalize on the demographic window of opportunity. Policies needed to achieve growth are described in the World Bank 2020 *Vibrant Vietnam, Forging the Foundation of a High-Income Economy*. The World Bank 2018 *Vietnam's Future Jobs: Leveraging Mega-Trends for Greater Prosperity* (Cunningham et al. 2018) provided a compelling outline of how labor market and related policies can harness global trends, and the World Bank 2019c *Making Growth More Inclusive* report focused on the potential for Vietnam to speed up the accumulation of human capital. This chapter reiterates and expands on these points, with a particular focus on human capital accumulation and labor market reforms.

This chapter is structured as follows. The first section describes key features of the current labor market in Vietnam, including its very high employment rates, increase in knowledge-intensive jobs, rising education levels, and high demand for better trained workers. It then examines market segments more closely, starting with characteristics of the urban labor market, which has high informality and large numbers of younger workers, and the rural labor market, which has been massively reorganized in recently decades with

36 For example: Tang and MacLeod 2006, Gordon 2016 and Wasiluk 2014.
J. Tang and C. MacLeod. 2006. Labour Force Ageing and Productivity Performance in Canada. *Canadian Journal of Economics*. 39(2) pp 582-603.
R. Gordon. 2016. *The Rise and Fall of American Growth: The U.S. Standard of Living Since the Civil War.* Princeton: Princeton University Press.
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the growth of manufacturing jobs, resulting in age-based segmentation of the market. Challenges for the current labor are then discussed, including the rise of jobs requiring sophisticated knowledge and skills, gender and ethnic disparities in the labor market, restrictive employment legislation, a pension system that discourages older workers from participation in the labor market, and the continued legacy of the *ho khau* system. The second section moves on to policy recommendations focused on positioning Vietnam to best shape its labor force for the strongest possible growth. It describes an approach centered on human capital development and focused on higher education and vocational and technical education sector reform, extending productive working lives, promoting effective and demand-driven lifelong learning. It also highlights the importance of and specific policies for improving ethnic minority outcomes and a segmented rural workforce.

4.2. Key Features of Vietnam's Labor Market

Features of Vietnam's labor market described below attest to the unique profile of its opportunities and challenges. Today, the Vietnamese labor market is in an enviable position, both within Asia and globally. On balance, Vietnam is well-placed to face the future.

4.2.1. High employment rates and the changing nature of jobs

Vietnam enjoys high employment rates, including high female labor force participation. The absolute numbers of workers are still increasing, and 93 percent of adults ages 25-49 work. The gap between women's and men's labor force participation rates is low by global standards. Except among ethnic minority women, female labor force participation rates are high: 79 percent of adult women in Vietnam work, compared to a global average of 49.6 percent and the East Asia and Pacific (EAP) regional average of 61.1 percent (see the World Bank 2018 *Vietnam's Future Jobs: Leveraging Mega-Trends for Greater Prosperity*).

The nature of jobs in Vietnam has changed significantly in recent decades, as workers move steadily into higher-productivity sectors and forms of employment. Whereas 80 percent of the Vietnamese labor force was employed in agriculture in 1986 (at the start of the *Doi Moi* reforms), this share had dropped to 40 percent by 2015. The manufacturing and services sectors have been significant contributors to job creation, with 1.6 million new jobs in manufacturing between 2009-2015. During this same time, 4.7 million more workers found jobs in wage employment, moving out of self-employment on their own farms or household enterprises (Cunningham and Pimhidzai 2018). The export sector—and especially foreign-owned firms—are also important and growing sources of employment, especially for women (Table 4.1).

Table 4.1. Vietnam: Job Distribution, 2012 and 2016 (in percent)

	2012			2016		
	Men	Women	Total	Men	Women	Total
Industry						
Agriculture	41.4	48.1	44.7	39.5	45.3	42.4
Manufacturing, mining	16.5	18.2	17.3	16.7	18.7	17.7
Construction	13.2	1.6	7.4	13.6	1.6	7.6
Automotives	10.3	14.4	12.4	10.6	14.8	12.7
Tourism and transportation	7.7	6.6	7.1	8.4	7.3	7.9
Services	11.0	11.2	11.1	11.2	12.2	11.7
Total	**100**	**100**	**100**	**100**	**100**	**100**
Employers						
Work for own household	50.64	56.99	53.78	45.13	49.44	47.25
Work for other household(s)	25.26	21.92	23.61	29.04	25.35	27.23
Private sector	11.65	8.08	9.89	13.64	10.51	12.1
Public sector	10.48	9.02	9.76	9.49	8.75	9.13
Foreign sector	1.97	3.98	2.96	2.71	5.95	4.3
Total	100	100	100	100	100	100
Main Occupation						
Leaders/Managers	1.5	0.5	1.0	1.8	0.5	1.2
Professionals/Technicians	7.7	8.9	8.3	7.6	9.6	8.6
Clerks/Service Workers	11.9	19.3	15.5	12.6	20.7	16.6
Agriculture/Forestry/Fishery	44.0	50.0	47.0	32.5	38.3	35.4
Skilled Workers/Machine Operators	25.6	12.6	19.2	36.2	22.3	29.4
Unskilled Workers	9.3	8.7	9.0	9.3	8.7	9.0
Total	**100**	**100**	**100**	**100**	**100**	**100**

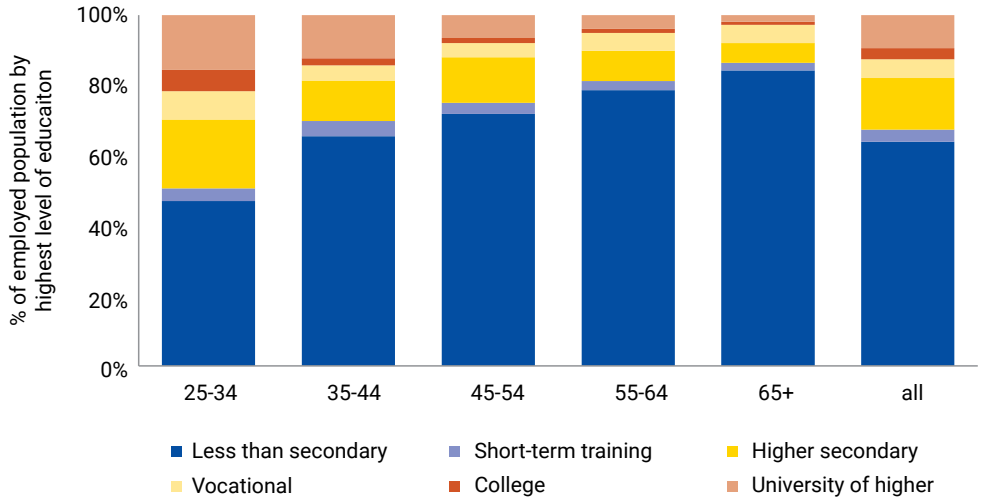
Source: Authors, based on VHLSS 2012 and 2016.

4.2.2. Rising education level of the prime-aged workforce and high demand for skilled workers

While Vietnam appears to have relatively low overall percentages of well-trained labor, major differences in educational achievements can be seen across age groups. Based on 2017 Vietnam labor force survey data collected by GSO, 77 percent of the Vietnamese labor force (ages 15-64) had no more than a lower secondary education, and the share of the workforce with university education or higher was only 9.6 percent.[37] But such low percentages of well-trained labor are largely the consequence of older segments of the workforce having left the education system some years ago. At the same time, as Figure 4.1 shows, there are major differences in educational achievements across age groups, with younger workers having considerably higher rates of university degrees and lower rates of less than secondary degrees (Demombynes and Testaverde 2018, using 2014 GSO LFS). This means that the labor force's level of training is changing fast under the more modern education system.

37 GSO, Vietnam labor force survey, 2018.

Figure 4.1. Vietnam: Distribution of Education across the Working Population, by Cohort and Total, 2017



Source: Calculations based on the 2017 Vietnam Labor Force Survey.

Note: The sample is the working population. The age cohort 15-24 years was not included since those in the sample are, largely, necessarily school dropouts, thus not well representing the behavior of their cohort.

This demand is reflected in labor market returns. From the labor demand side, a 2015 survey of Vietnamese firms found that more than 20 percent of firms believed that the "education level" of the labor force was an obstacle to their firm's operations—more than three times higher than in comparable countries in the region. Today's employers are looking not only for job-specific technical skills but also for socio-behavioral skills such as problem solving, communications, ability to work independently, and teamwork skills.[38] Continuous expansion and an increase in quality of education would imply that future cohorts of the labor force will be better equipped to meet labor market demand compared with the current cohort. Hourly earnings of university-educated workers and college-educated workers are 66 percent and 43 percent,[39] respectively, higher than those of workers who never reached upper secondary school (Figure 4.2). This wage gap could reflect the higher productivity of university workers but given that employers complain of skills gaps in occupations that university workers should hold, it is more likely due to a scarcity of workers with even limited university education.

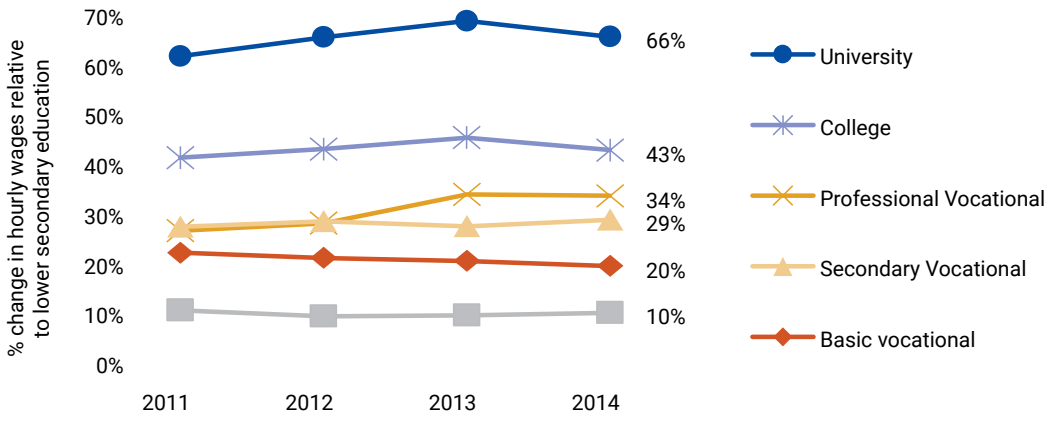
4.2.3. Concentration of younger workers in wage occupations in urban areas

The differences in educational attainment across younger and older workers are reflected in differences in types of employment. For urban workers in their 20s and 30s, wage jobs with contracts make up the largest share of employment, followed by informal wage employment, non-farm self-employment, and a tiny share in farming. Informal employment, or wages without contracts, are the most common source of jobs for the very young (ages 15-19), followed by wage jobs with contracts. Both farming and non-farming self-employment are small sources of employment for younger workers. The employment patterns of older workers who entered employment before the economy's structural transformation began are very different, as a large share have worked in farming all their lives and are still principally employed in agriculture (Demombynes and Testaverde 2018). As Vietnam prepares to enter its aging phase, these patterns attest to the fact that "future older workers" are different from "current older workers."

38 Bodewig et al. (2014) and Cunningham and Villaseñor (2014).

39 Demombynes and Testaverde 2018.

Figure 4.2. Vietnam: Returns to Education, 2011-2014



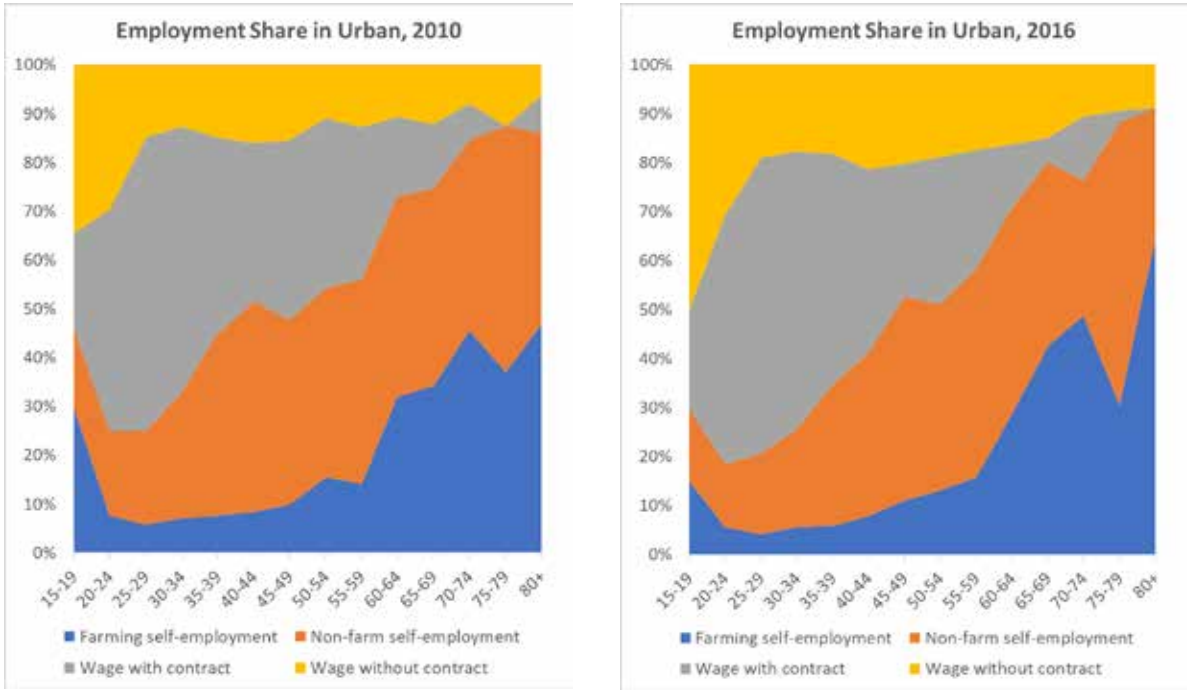
Source: Demombynes and Testaverde 2018

The share of informal sector workers remains high. There seems to be some evidence that the share of employment in urban areas in jobs without contracts, has increased between 2010 and 2016, while the share of wage employment with contract slightly declined. These patterns are especially pronounced for younger and mature workers (Figure 4.3). Overall, around 76 percent of all workers, and 55 to 60 percent of non-agriculture workers, remain in the informal sector (World Bank 2018). Such high non-agriculture informality rates, especially following a time of more rapid urbanization, suggests that informality remains high even among the urban population and that the urbanization process is not significantly contributing to bringing down these rates.

Having an informal job has several implications for workers. Informal sector workers have lower wages on average compared to contracted workers (Cunningham and Pimhidzai 2018). Furthermore, the social protection (SP) programs that are attached to formal employment—such as unemployment insurance and pensions—by default exclude the vast majority of the population that remains informally employed. Although rates of informality are expected to fall gradually with time, social protection programs, if they are to achieve their purpose successfully, must be designed to be cognizant and inclusive of informal workers.

Figure 4.3. Vietnam: Employment Share in Urban Areas, 2010 and 2016

A. Employment Share in 2010 **B. Employment Share in 2016**



Source: Authors, based on VHLSS 2010 and 2016.

4.2.4. The rise of wage work in rural areas[40]

The rural economy has been transformed in recent decades. Four remarkable shifts have taken place: (i) a decline in the rural labor force; (ii) an absolute decline in employment in agriculture, both in rural areas and nationally; (iii) a rise in rural wage work; and (iv) a new predominance of non-agricultural incomes, mirroring a decline in agriculture's contribution to rural incomes. A massive reorganization of the rural labor market is underway, with reallocation of labor from agriculture to non-agriculture activities. The agriculture sector has been consistently losing an average of 4 percent of its workforce annually since 2013 (World Bank 2019a).

Employment in agriculture is declining rapidly, with workers who left the sector being primarily absorbed into other, non-agriculture sectors within rural areas. The size of the agricultural workforce peaked in the second quarter of 2014 and has consistently declined since then. By the first quarter of 2018, close to 4 million people had left their rural agriculture jobs. In just five years, the rural agriculture sector lost more than 17 percent of its workforce, equivalent to an average 3.9 percent annual decline.

As a result, the rural labor market has experienced a massive reorganization. Off-farm employment has expanded rapidly and continues to expand, while agricultural employment is in decline. Agriculture employed an average of 22 million people at its peak in 2013, when non-agricultural employment averaged 14.4 million people. By the first quarter of 2018, almost as many people in rural areas were employed in non-agriculture sectors (18.1 million) as in agriculture (18.7 million). It shows a significant transformation in the composition of rural economic activity within five years.

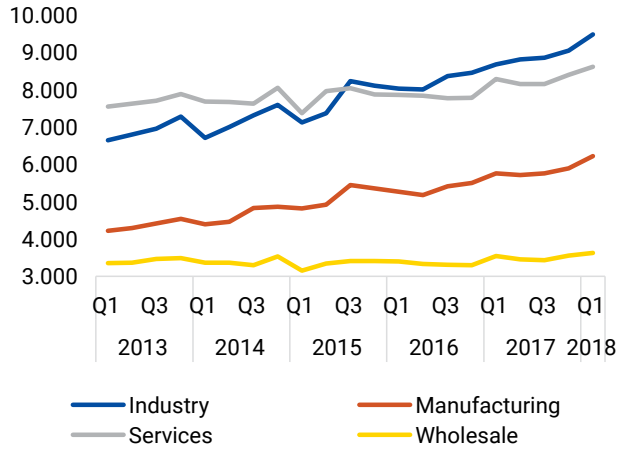
Growth in rural manufacturing jobs largely drove this transformation (Figure 4.4-A). Employment in

40 This section heavily draws from World Bank 2019 Better Opportunities for All: Vietnam Poverty and Share Prosperity Update.

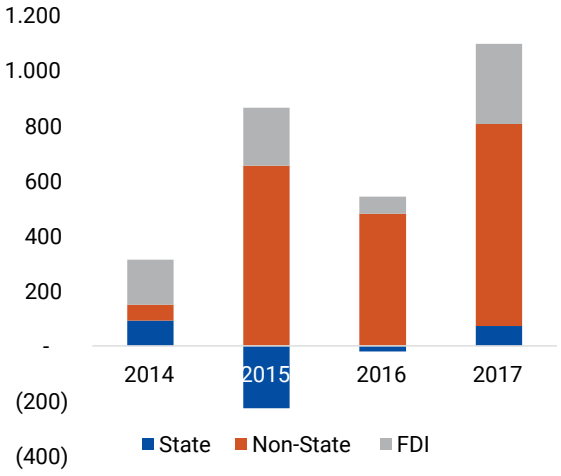
the manufacturing sector expanded at an average of 7.3 percent annually between 2013-2017, contributing to more than half of the net increase in rural non-agricultural jobs in that period. The industry sector as a whole accounted for 75 percent of the net increase in jobs, with additional jobs coming from the construction sector, while the services sector made up the other 25 percent. Employment growth in services was driven by non-retail sub-sectors such as transport, hotels, and catering. While employment in the wholesale and retail sector has been highly volatile, it too has grown consistently since the beginning of 2017.

Figure 4.4. Vietnam: Job Growth Trends by Sector and Ownership

A. Trends in Non-Agricultural Jobs by Sector, 2013-2018



B. Net Job Creation by Ownership, 2014-2017

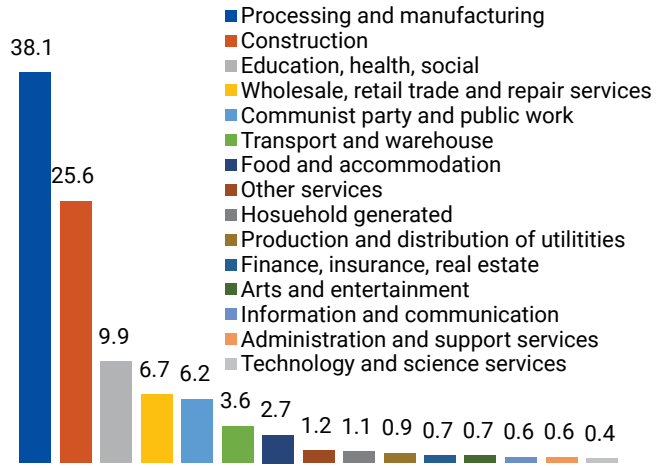


Source: GSO Statistical Database and quarterly labor force survey reports.

All of this job growth was driven by the private sector. This was partly a result of accelerating foreign direct investment (FDI) in rural areas, bringing 11 percent average annual growth in employment in the FDI sector in rural Vietnam since 2012. Employment in the FDI sector started from a low base, so net job creation in the sector has contributed to around 25 percent of rural non-agricultural jobs growth. The domestic private sector therefore contributed the lion's share of new non-agricultural jobs (Figure 4.4-B). despite growing at an average of 4 percent. Meanwhile, employment in state-owned entities broadly declined.

Most jobs are still in low-skilled occupations. Construction workers, factory workers in food and garment processing, and machine operators are the major occupations, accounting for over 80 percent of jobs in the industry sector. Two-thirds of all rural non-farm jobs are in the secondary sectors, such as manufacturing (38 percent) and construction (26 percent) (Figure 4.5). The other one-third of jobs are scattered among various services areas, such as education and health (10 percent), wholesale and repair (7 percent), and the Communist Party and political services (6 percent). Within the tertiary sector, educator is the most prevalent occupation (18 percent of all services sector jobs), followed by sales staff (10 percent) and employees in the transportation system (9 percent).

Figure 4.5. Vietnam: Top Rural Non-Agricultural Jobs, 2016 (in percent)

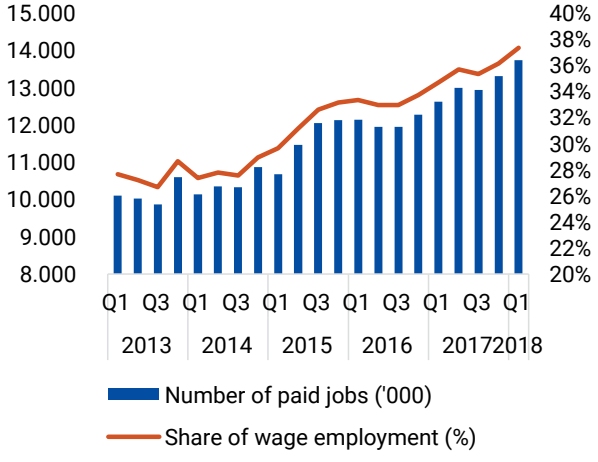


Source: Authors' calculations from the VHLSS, 2016.

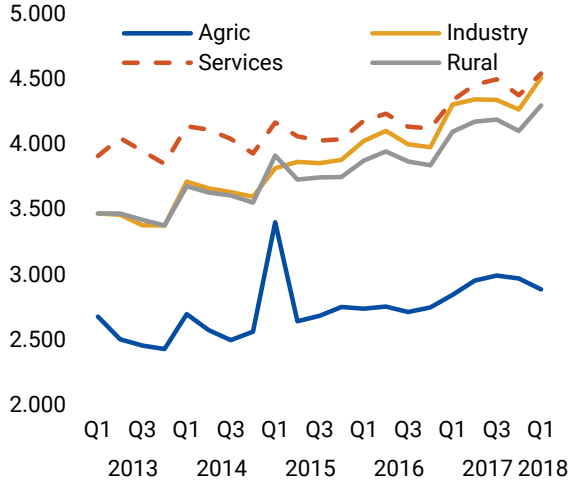
The number of rural wage workers is expanding rapidly, while unpaid work is on the decline. Rural wage employment increased from around 10 million people in 2013 to more than 13 million by the start of 2018 (Figure 4.6). The number of people in unpaid work declined commensurately, indicating a direct shift from unpaid to paid work in rural areas. The share of wage workers in rural areas thus increased by around 10 percentage points to around 37 percent at the beginning of 2018. This trajectory suggests that paid work will become more common than unpaid work within the next decade.

Figure 4.6. Vietnam: Trends in Rural Wage Jobs by Share of Rural Employment and Sector-Specific Wages, 2013-2018

A. Trends in Rural Wage Jobs and Their Share in Rural Employment, 2013-18



B. Trends in Rural Real Monthly Wages by Sector, 2013-18 (VND '000)



Source: GSO quarterly labor force survey reports

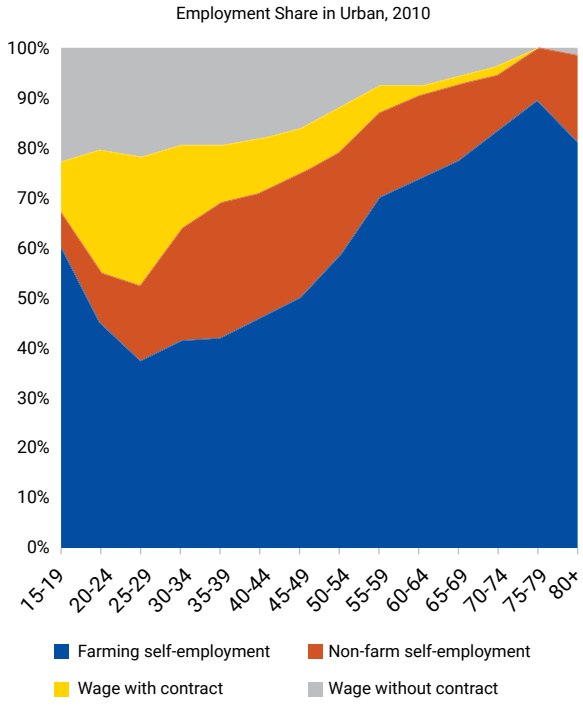
Real wages have increased across sectors. Real wages in rural areas increased by 21 percent in the period 2003-17 (Figure 4.6-A), about 2 percentage points faster than the increase in the national average wage rate. Wages in the industry sector increased by 26 percent and the services sector by 12 percent, partly due to slower wage growth of state employees of 7 percent compared to 25 percent for the FDI private sector and 27 percent for the domestic private sector (Figure 4.6-B). This increase has been maintained. Rural wages grew by more than 6 percent in 2017 across all sectors.

4.2.5. Age-based segmentation of the rural labor market

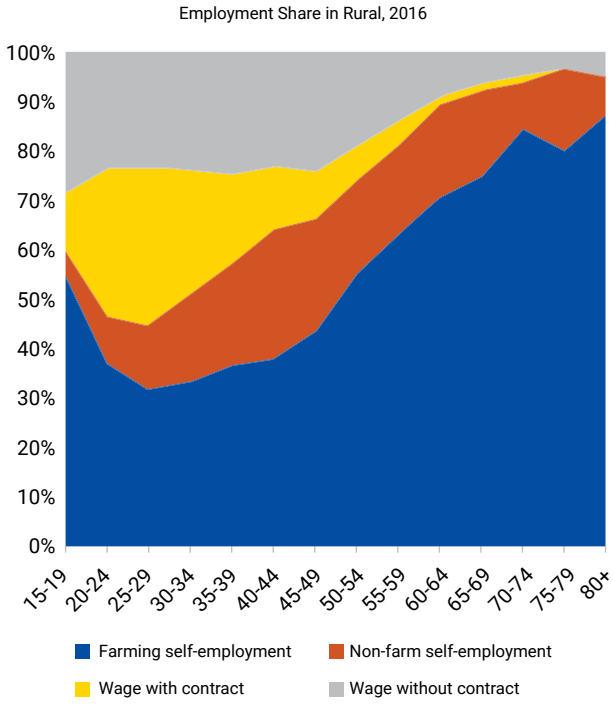
Age-based segmentation of the rural labor market in Vietnam is significant, with the agriculture sector being dominated by older people and a fast-growing non-agriculture sector employing the younger generation. Households are holding onto their farms, as farming remains integral for food self-sufficiency and as a diversification strategy. This has resulted in farm work being assigned to the older generation, most of whom have no education, while younger family members seek non-agricultural jobs (World Bank 2019a). Thus, agriculture will remain the only source of employment for a significant population demographic. At lower levels of education, workers above 45 years old are 20 percentage points less likely to be in a wage job than 26-35 year old, with 54 percent of the labor force over age 45 with low education employed in non-wage work (Figure 4.7). The gap only narrows to about 10 percentage points for those with tertiary qualifications (World 2019a, based on VHLSS 2016). This is consistent with the life-cycle theory of labor supply, which expects the young to be more proactive than the old (MaCurdy 1981).

Figure 4.7. Vietnam: Employment Share in Rural Areas, 2010 and 2016

A. Rural Employment Share, 2010



B. Rural Employment Share, 2016



Source: Authors

The changing demographics of the rural labor force could lead to sharp declines in land utilization. Older age groups remaining in agriculture are unlikely to be able to fully utilize the land but will likely hold onto it to keep their land user rights in the absence of other forms of land security. Agriculture potential will likely be undermined further by sub-optimal land use choices among those (mostly poorer) households[41] remaining in agriculture. Land ownership structure and security,[42] along with agriculture financing,[43] drive agricultural land-use patterns.

The outflow of youthful labor has immediate consequences for agriculture. First, the reduction of disguised unemployment boosts labor productivity in the sector as redundant workers leave agricultural labor. Soon, however, labor shortages in the sector are expected to become a constraint. Since there will be fewer people, it will be necessary for existing workers to do more, creating strain on an already overworked working-age population and putting pressure on some workers, such as women with young children, to withdraw their labor from non-agricultural wage employment to agriculture instead.

Meanwhile, rural off-farm jobs will likely continue to diversify into manufacturing and services. Limited geographic mobility has led to a diversification in the employment portfolios of rural households such that wage earnings—not agricultural earnings—are the main source of income for rural households, with the exception of ethnic minorities. The relaxation of *ho khau* regulations may speed up urbanization, but existing food chains, significant agricultural product exports, and proactivity by rural municipalities will form the basis for significant jobs upgrading in rural zones.

41 In most cases, poor households do not allocate their land for different agricultural purposes in line with the suitability of the land in their areas. Differences in agricultural incomes between poor and non-poor households in mountainous areas, for example, can be explained by the poor making far less income from perennial crops than the non-poor.

42 Households with land-user certificates and those with larger amounts of land are much more likely to cultivate industrial and perennial crops. When that land is fragmented, households opt instead to use it mostly for cereals.

43 Households tend to rely more on their current incomes to finance agricultural activities, which then determines how much of their land they devote to non-traditional crops.

4.2.6. The rise of new occupations with more sophisticated skills profiles

The top-growing occupations overwhelmingly belong to high-skilled categories, especially professionals. Among professionals, a variety of health specialties are represented in the top 10 percent. Paramedical practitioners, nursing/midwifery, and traditional/complementary medicine professionals doubled over the period 2007-2014. However, high growth was still observed among tasks that experts expect to become automated: secretaries increased by 48 percent, and certain categories of elementary workers grew by 49 percent over three years. (Demombynes and Testaverde 2018, using 2014 GSO LFS).

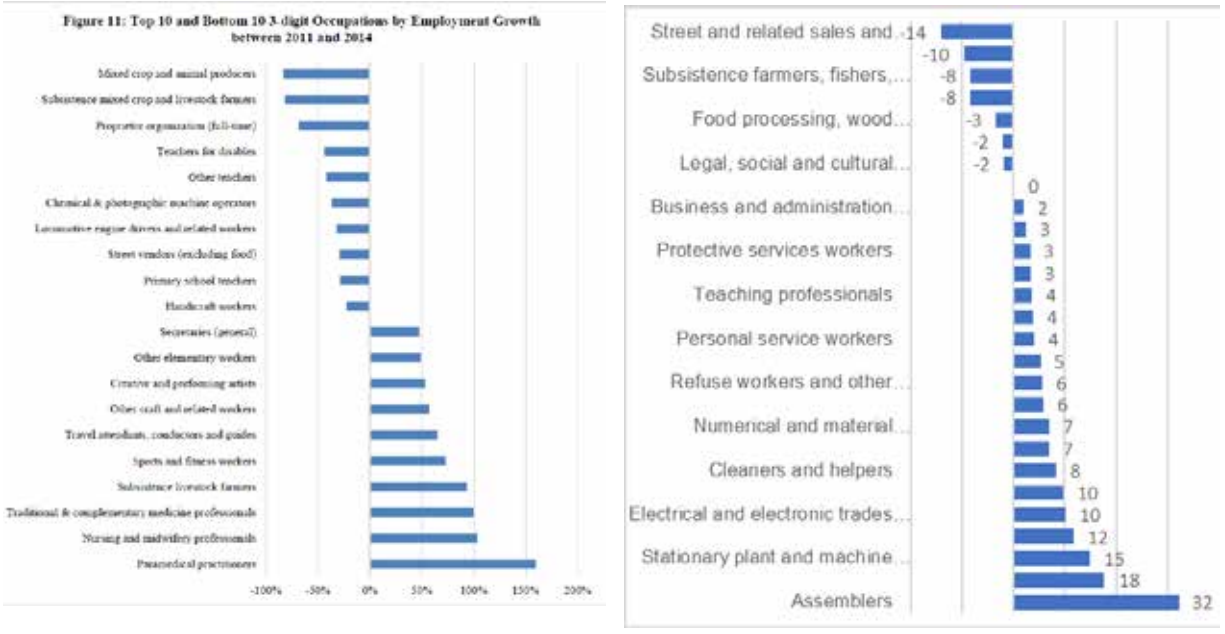
Among the declining occupations, three categories of associate teaching professionals experienced significant negative employment growth. These professions are specific to the Vietnamese labor market and are not defined at the associate professional level in the International Standard Classification of Occupations. This trend may suggest a move toward more specialization in the teaching profession at the primary level and for special needs students. No other professionals appear to be in the list of the top declining occupations, which—with exception of the associate teaching professional job categories—is dominated by low-skilled occupations (Demombynes and Testaverde 2018, using 2014 GSO LFS).

4.2.7. Persistent inequalities in labor market outcomes by ethnicity and gender

The disadvantages of ethnic minorities start early on and continue into the labor market. These groups still fare rather poorly on a range of educational indicators and for all of the indicators at higher levels of education. Ethnic minorities are also less likely than people of Kinh or Hoa

ethnicity to hold wage-paying jobs. In 2014, only 29 percent of working women who do not self-identify as the dominant Kinh or Hoa group held wage-paying jobs, compared with 33 percent of Kinh or Hoa women. More worryingly, disparities between ethnic minorities and the majority appear to have increased slightly between 2007-2014 (Demombynes and Testaverde 2018, using 2014 GSO LFS). Female ethnic minorities are particularly disadvantaged, as they are clustered in lower-paying and less-stable agricultural self-employment roles. In 2014, 59 percent of ethnic minority women were self-employed in agriculture, compared with 33 percent of women from the majority groups.

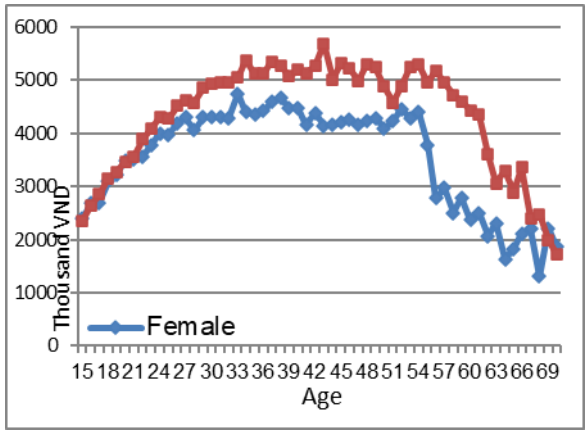
Figure 4.8. Vietnam: Growth in Employment by Occupation, 2013-2015



Source: Demombynes and Testaverde (2018) and Cunningham and Pimhidzai (2018)

Inability to migrate long distances due both to social factors and *ho khau* policies restricts labor mobility both into and out of low-density economies, thus reducing off-farm opportunities for ethnic minorities. In 2016, only 3 percent of ethnic minorities had recently migrated, and those who moved mostly stayed within the same province or region. Poor access to services for people with temporary registration in cities is a discouraging factor (Demombynes and Vu 2016). Married ethnic minority women are most likely to move for a job if they can bring their spouses and families (World Bank 2019a).

Figure 4.9. Vietnam: Gender Disparity in Monthly Wages by Age



Source: VHLSS 2014 and 2016

In terms of differences in labor market outcomes by gender, despite their high participation rates, women are not faring well in several other aspects of the labor market. The gender wage gap persists: women earn 12.6 percent less than men with the same education, ethnicity, and age profile (Demombynes and Testaverde 2018) (Figure 4.9).

The gap can be explained by a number of factors including occupational segregation (women and men are clustered into different occupations), women's preferences that allow for a better work-life balance, the burden of unpaid family care, traditional discrimination in the workplace, and labor laws that limit women's careers options (Demombynes and Testaverde 2018). In addition, Chowdhury (2018) showed that gender-specific preferences in non-monetary job characteristics play a key role in occupational sorting.

In the near future, the demand for women's unpaid work in eldercare of family members will rise. Vietnamese women, who already have high workforce participation rates and spend significant time on housework (Chapter 2), will also likely soon be pressured to provide unpaid eldercare services for family members at higher rates, thus crowding out market work time. If the development of the aged care industry, as is occurring in China, moves forward, it will stem the crowding out of women's market work time, and in addition offer new job opportunities.

4.2.8. Restrictive employment protection legislation

Vietnam's current employment protection legislation (EPL) is considered to be restrictive. With the passage of the Labor Code and Trade Union Law in 2012, Vietnam moved from being a country with moderately stringent restrictions on temporary forms of employment to one that is very restrictive (Schmillen and Packard 2016).[44] In East Asia, Vietnam is second only to Indonesia in the restrictiveness of its EPL (ILO 2015). Strict employment protection rules are one of the primary reasons identified by the OECD that make employers reluctant to hire or retain older workers (OECD 2006), and it appears to hold true for many developing Asian countries.

Vietnam's strict EPL regime could be one of the primary reasons why so many workers remain outside the regulated labor market. While quantifying the effects of very restrictive EPL is difficult, a growing body of evidence from the East Asia and Pacific (EAP) region and beyond shows that they are often associated with lower levels of employment, especially of women, new entrants to

44 Schmillen and Packard 2016.

the labor market, and unskilled workers (Heckman and Pages 2004; OECD 2004; Perry et al. 2007; Koettl, Montenegro and Packard 2012; World Bank 2014). These same groups tend to be among the first to be laid off or blocked from entry altogether when labor costs rise (Lustig and McLeod 1996). Evidence from countries around the world also demonstrates that more restrictive EPL raises the share of self-employment and decreases dependent employment in low- and middle-income countries (Addison and Teixeira 2001; Betcherman, Luinstra, and Ogawa 2001; Haltiwanger, Scarpetta, and Vodopivec 2003).

4.2.9. Early retirement/pension policies discourage labor market participation

Employment rates, hours worked, and wages decline as workers age. While over 90 percent of individuals ages 50-54 are employed, this share drops to below 60 percent for workers ages 65-69 (Table 4.2). While the employment rate for men continues to be higher than that of women for all age groups, employment rates for both genders drop consistently as workers age. The number of hours worked and wages also decline for older workers. In 2014, the median hours worked in a normal week were 35 for farming and 48 for non-farm self-employment and wage employment (Demombynes and Testaverde 2018, using 2014 GSO LFS).[45]

Workers in formal employment retire earlier and at higher rates than other workers. Employment rates of workers in formal jobs drop substantially when they hit the age at which they can claim pensions—age 60 for men and age 55 for women, according to Article 54 of the Law on Social Insurance. The share of women working in formal jobs drops from 10.1 percent of those ages 50-54 to 2.4 percent of those ages 55-59, whereas the share of men working in formal jobs drops from 13.3 percent among those ages 55-59 to 4.8 percent among those ages 60-64 (Table 4.2). These observations suggest that the retirement age for men and women in formal jobs is a significant driver of their decision to stop working. However, these data do not capture the share of people formerly employed in formal jobs who shifted to other forms of employment, such as self-employment, after retirement. This, coupled with the fact that employment rates remain high in informal sectors where there is no retirement age or pension to encourage retirement, suggests that a large share of retirement-aged men and women are largely capable of continuing to work past their respective retirement ages.

45 In urban Vietnam, hours of work for elderly still working (primarily the self-employed) tend to decline little then drop off sharply at age 65, in contrast to the more gradual decline in hours worked in other EAP countries. In rural Vietnam, the decline in work hours exhibits a steeper slope, and hours worked tend to be well below those of other countries. These trends are to be expected as workers succumb to sickness and disability, as reflected in the growing share of workers of both genders who reported those factors as their primary reasons for not working as they get older (World Bank 2016).

Table 4.2. Vietnam: Retirement-Aged Worker Employment Trends, 2016

		Age 50-54	Age 55-59	Age 60-64	Age 65-69
Employment Rate	Women	87.5	78.1	67.4	53.3
	Men	93.6	87.3	75.5	63.3
	Total	90.5	82.5	71.1	57.6
Formal Employment (percent of workers)	Women	10.1	2.4	0.7	0.3
	Men	13.7	13.3	4.8	1.5
	Total	11.9	7.9	2.7	0.9
Hours Worked in Past Month	Women	170.8	152.9	130.8	116.4
	Men	183.8	168.5	146.2	125.5
	Total	177.3	160.8	138.3	120.7
Monthly Wage (thousand VND)	Women	4,385.1	3,134.4	2,371.0	2,075.8
	Men	5,203.0	5,176.7	4,218.4	3,069.3
	Total	4,903.1	4,604.2	3,583.8	2,666.4

Source: Authors' calculations based on VHLSS 2016.

These trends indicate that the current pension laws encourage skilled workers to leave the labor force before their productive work lives have ended. High labor participation rates among workers age 65 and above in Vietnam suggests that many people are well able to work beyond the low retirement ages of 60 years for men and 55 years for women. However, workers who are eligible for pensions tend to retire when they are eligible for pension receipt, even though they tend to work in more knowledge-intensive, less physically taxing sectors. Thus, the existing retirement age policy in Vietnam is likely pushing people out of the labor force when they are still productive participants.

The socio-economic profiles of pension recipients show that they are overrepresented in urban areas and are significantly better off compared to others in their age groups. Pensions recipients make up high shares of the highly educated retirement-aged population. For example, among women ages 65-69 in 2016, 70 percent of those with a technical degree are pension recipients, as are 92.6 percent of those with a post-secondary degree (Table 4.3). Pension recipients are also more urban, with 40 percent of men and 38.1 percent of women ages 65-69 in urban areas receiving pensions, compared to 16 percent of men and 9 percent of women of this age group in rural areas. Finally, the share of pensioners is also higher among the Kinh ethnicity relative to ethnic minorities (Table 4.3).

Table 4.3. Vietnam: Socio-economic Characteristics of Pension Recipients, 2016

	Women			Men	
	Aged 55-59	Aged 60-64	Aged 65-69	Aged 60-64	Aged 65-69
Ethnicity					
Kinh	12.3	13.1	20.9	17.6	25.2
Ethnic minorities	5.4	7.0	8.3	9.5	9.8
Highest education level					
< Primary	0.2	0.6	2.0	0.8	2.0
Primary	1.4	3.7	8.2	2.5	4.2
Lower-secondary	5.6	8.4	21.3	8.3	18.1
Upper-secondary	16.4	24.6	33.4	20.2	24.4
Technical degree	51.6	59.6	70.0	41.7	58.7
Post-secondary	71.7	80.4	92.6	70.8	83.5
Urban/rural					
Rural	4.4	5.9	9.0	9.3	16.0
Urban	25.6	25.3	38.1	31.4	40.0
Total	**11.5**	**12.5**	**19.7**	**16.9**	**23.7**

Source: Authors' calculations based on VHLSS 2016.

A low retirement age has several important negative consequences. The first is the direct expense of pension payments over an average of 15-20 years to a greater share of the population. Indeed, the social insurance program, under which both pensions and survivor benefits are funded, will face revenue shortfalls by 2023, according to the Ministry of Labor, Invalids and Social Affairs (MOLISA). The second cost is the lost output of skilled working-age workers who have ceased work while they remain productive contributors to the economy. This is especially problematic since workers who are eligible for pensions are de facto employed in formal enterprises, which often comprise the most productive segments of the economy.

Furthermore, the lower retirement age for women results in a faster decline in the female workforce than in the male workforce. Early retirement for women can also cut short their careers, decreasing their prospects for training for and promotion to senior management positions (Adams et. al. 2002; World Bank 2012). Gender-based differences in retirement age can create disparities in lifetime earnings, pension benefits, and retirement savings (Levine, Mitchell and Phillips 1999). Lifetime earnings differences are aggravated when wage gaps between men and women are significant to begin with, as is the case in Vietnam. However, extending working lives for women may prove difficult if care for grandchildren and elderly parents is viewed as their responsibility and no market-based solutions are available.

4.2.10. Vietnam's permanent registration system Ho Khau

The *ho khau* household registration system was designed at a time when the state played a stronger role in economic and social management. The system was designed as an instrument for public security, economic planning, and control of migration. During 1975-1986 when the economy was centrally planned, *ho khau* was instrumental in distributing the national in-kind production to individual households. The use of *ho khau* also expanded to many public services relating to

citizenship, health, education, and registration of business, land and property, vehicles, etc.

Although the system has become more flexible over time, it remains a major determinant of labor mobility, a source of inequality of opportunity, and an effective tax on internal migration (World Bank and Ministry of Planning and Investment of Vietnam 2016). Concerns persist that *ho khau* limits the rights and access to public services for those who lack permanent registration in their place of residence, which has important implications for the country's socioeconomic development and modernization. More than 5 million internal migrants do not have permanent registration where they live, and as a result, they face barriers in accessing employment opportunities, social protection, education, and other public services. For those who wish to move, less access to urban services and lower wages for people with temporary registration in cities are discouraging factors (Demombynes and Vu 2016; World Bank and Ministry of Planning and Investment of Vietnam 2016). Without local *ho khau*, migrants face numerous difficulties in applying for jobs, accessing credit, registering businesses and vehicles, buying or renting housing, and signing up for medical insurance. The World Bank 2018 *Vietnam's Future Jobs: The Gender Dimension* report (Cunningham et al. 2018b) identified *ho khau*, which restricts family migration, as one of the reasons for poor labor force participation of ethnic minority women, who prefer to migrate with their families. The risks and uncertainty for migrants to urban areas created by the *ho khau* system is also a reason why they may hesitate to transfer agricultural land-use rights to other farm households in the countryside.

The current government made a historic announcement in October 2017, saying it would phase out the *ho khau* system over the next years. Relaxation of the *ho khau* is likely to facilitate increased urbanization and help ethnic minorities. It will be replaced by a new citizen registration system which gives every citizen a unique identification number at birth. The announcement was positively received by the public, with an expectation that public services will be more accessible for all regardless of the place of permanent residence registration.

4.3. Policies to Prepare for an Aging Workforce and to Improve Labor Market Outcomes

As Vietnam's population ages, it is the shift to higher value-added output—rather than increased output based on current output structures—that is likely to drive Vietnam's medium- to long-term growth potential. In other words, the primary risk to Vietnam's future productivity is the current structure of Vietnam's labor force, which is heavily deployed in occupations requiring physical labor. About two-fifths of the active labor force is employed in physical-labor-intensive agriculture.

Vietnam's output structure is already changing, following a well-established trend in middle-income countries, with younger workers leading the way. Major shifts in the labor force include the fact that younger workers are more likely to work outside of agriculture and that employment in higher-value sectors such as services is skewed toward younger workers. In addition to generally reflecting higher labor productivity, these are often jobs in which experience benefits employee output. Furthermore, in both urban and rural areas, younger workers are concentrated in wage occupations, while older workers are overrepresented in informal jobs and in agriculture as discussed earlier. In general, younger workers start out in the informal sector, but by middle age, their participation in the formal labor market increases. This is important, as firms in the formal sector are almost four times more productive per employee than in the informal sector (Demombynes and Testaverde 2018). Increased formality also has the added benefit of supporting revenue mobilization to help offset pressures on expenditures tied to aging.

These trends, however, do not go far enough to create the strongest possible growth for Vietnam; in light of vulnerabilities created by its demographic features, responding to the

challenges and opportunities posed by aging and by technology and automation will be particularly important. Not only is the share of older adults in the total population increasing, but so is the share of mature workers in the pool of working-aged adults. Between 2010-2016, the share of mature workers aged 40 to 55 years old rose from 7.54 percent to 10.61 percent and is projected to continue to increase. This trend has various implications for the labor market, including more difficulty for this cohort to learn new technologies. This makes Vietnam's labor force particularly vulnerable, because once people have become unemployed, training is less likely to help them get back into work unless it is linked to other strategies such as work placements, and this is especially true for people in their 40s and 50s.

At the same time, the valuable skills offered by mature workers should be recognized. Mature workers are more likely to possess such skills as advanced cognitive skills (critical thinking, problem-solving), socio-behavioral skills (creativity, curiosity, teamwork), and skill combinations that are predictive of adaptability such as reasoning and self-efficacy. Globalized and automated economies put a high premium on human capabilities that cannot be fully mimicked by machines, including abilities such as persistence and determination which have economic returns often as large as those associated with cognitive skills. The steadily increasing demand for nonroutine cognitive and interpersonal skills suggests that they are highly valued in the face of technological changes, globalization, and structural changes. Such skills, unlike narrow job-specific skills, are transferable across jobs, and when possessed by large segments of a workforce, create an aggregate labor force that is flexible and valuable to globally relevant firms.

A range of policy measures and behavioral responses can help prepare Vietnam for the structural decline in the working-age population. These include measures to affect the quality of future workers and, to a lesser extent, the total size of the labor force because of the high labor force participation of both men and women. A key insight from global experience is that labor market policies to address rapid aging are not just about old people but require policy interventions across the life cycle.

4.3.1. The Central Role of Human Capital (Education, Skills, Innovation and Health) for Vietnam's 21st Century Economy

A number of studies have shown that significant increases in human capital may be sufficient to offset the effects of population aging on aggregate productivity. Human capital consists of the knowledge, skills, and health that people accumulate over their lives that enable them to realize their potential as productive members of society (World Bank 2019). Contemporary literature emphasizes the centrality of human capital in sustaining long-term economic growth and development (Romer 1990 and 1993). One seminal study found that differences in human capital investment can explain up to 80 percent of cross-country variation in per capita GDP (Mankiw et al. 1992). Bloom, Prettner, and Strulik (2013) show that under plausible production function specifications, increases in education and health investments, in part spurred by declines in fertility rates, raise worker productivity enough to compensate for declines in labor supply. This is bolstered by findings from Lee and Mason (2010), who show that the effect of spending on education is strong enough to offset the adverse effects of population aging.

Vietnam has already made important progress in building its human capital. The country is ranked 48th out of 157 countries and territories on the human capital index (HCI),[46] second in ASEAN behind Singapore. Vietnam's success in creating a quality primary and (lower) secondary education system is globally recognized, as demonstrated by its performance on internationally comparable standardized tests: Vietnamese 15-year-olds

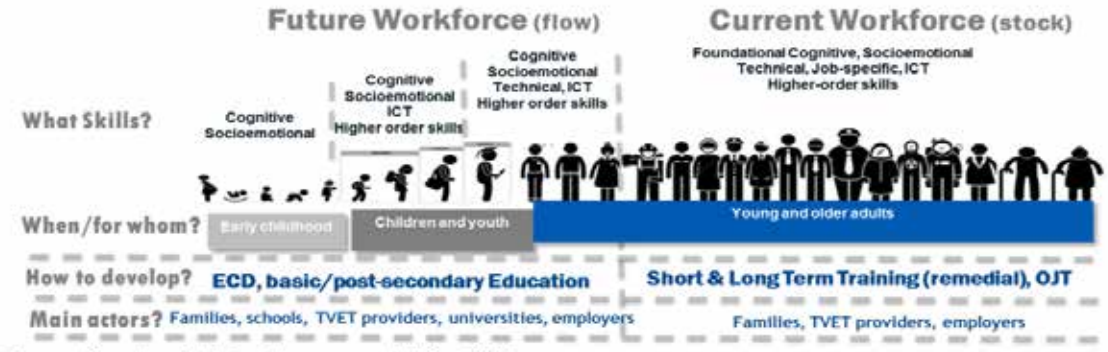
46 The World Bank's Human Capital Index (HCI) combines three components related to survival, learning, and health into a measure of productivity. A Vietnamese child born today will be 67 percent as productive when he/she grows up as he/she could be if he/she enjoyed complete education and full health.

outpaced the average OECD adolescent in the 2012 Program for International Student Assessment (PISA) tests of language, math, and science. More remarkably, nearly one in five Vietnamese students from the most socioeconomically disadvantaged households were in the top quartile of test-takers worldwide.

However, much more remains to be done. Evidence indicates that Vietnam's educational quality may be slipping: its ranking for the perceived quality of its higher education systems in the Global Competitiveness Report 2017–2018 fell by one place to 84 out of nearly 140 countries surveyed. Meanwhile, Vietnam ranked only 120 for the quality of its management schools, its lowest ranking across all index subcomponents (ADB 2018). With the importance of higher education to future workforces, and in particular the kinds of cognitive and socio-behavioral skills emphasized in management schools, this is cause for concerted action.

Human capital investments are most effective when structured in sequenced "windows of opportunity" during which specific skills are developed over workers' lifespans. This structure takes best advantage of optimal stages during which skills are most effectively acquired and of dynamic complementarities created between particular skills during their formation. In Vietnam, this will be especially important given that much of the current workforce does not have skills adequate to meet labor market demand trends and extending the productive working lives of the current workforce is an essential component of preparing Vietnam for its demographic transition. Equipping this workforce with skills to enhance their productivity into the future even at older ages is critical.

Figure 4.10. Windows of Opportunity in Workforce Skills Development



Source: Based on Valerio, Venegas, and Arias 2016.

Rethinking skills development will thus mean both developing a broader range of skillsets (Box 4.2) and providing learning modalities over a lifetime.

Box 4.2. Skills for Future Workforces

While countries may differ in the specifics, education and training systems need to ensure a range of skills for their future workforce, including foundational cognitive and socio-emotional skills, technical or job-specific skills, and higher order skills.

Cognitive skills comprise functional literacy and numeracy—the ability to write, read, and comprehend text as well as perform basic math operations—as the foundation for learning and acquiring subject knowledge. They have been the traditional focus of school curricula and assessments of student learning and academic achievement.

Socioemotional skills refer to beliefs, attitudes, and behaviors that allow individuals to manage themselves and to manage relationships with others, regulate emotions, set goals, accomplish tasks, and deal with frustration and conflict. Referred to variously as soft skills, life skills, noncognitive skills, and personality traits, this skillset is comprised of beliefs about intelligence, self-regulation, perseverance, pro-social behavior, empathy, and curiosity. There is growing evidence of their importance for success in school, work, and other life outcomes and of the need for interventions to teach them both in and out of school.

Technical and job-specific skills are those required to perform specific tasks in jobs.

Higher order skills include critical thinking and problem solving associated with thinking about thinking and learning about learning.

Source: World Bank 2019b

Vietnam's current skills development model is centered around learning while young in an intensive school-based process. To expand beyond this its skills development system needs a larger set of actors and mechanisms to support adult learning modalities over the course of the lifetime. If these issues are addressed, Vietnam's labor force can develop the fundamental skills needed to offset the soon-to-be shrinking labor force as the population ages.

Aided by human capital development and by the generation and application of knowledge, technological progress could prove to be the central driver of long-term productivity growth for Vietnam. As discussed above, a shrinking labor force amplifies the economic importance of more knowledge-intensive work and high labor productivity. The falling size of the workforce may indeed encourage and help align Vietnam's future jobs with labor-saving technology. If Vietnam's workers can harness technology to do the low-value added tasks, the smaller labor force can focus on the higher-value tasks.

Investments in the earliest years of life are often most critical and cost-effective. Nutrition interventions, which are important because proper early childhood nutrition shapes cognitive abilities for the entire lifetime, are most effective during the first 1,000 days of life (from the first day of pregnancy until the child's second birthday). Undernutrition during this period could lead to extensive and largely irreversible damage to physical and cognitive development. Ethnic minorities in Vietnam are at particular risk for inadequate early childhood nutrition. Improving nutrition for ethnic minorities requires a multisectoral approach, involving access to a high-quality diet, effective maternal and childcare services, and access to water and sanitation and personal hygiene. Vietnam already has a good set of policies, but stronger enforcement could make a difference, for example: (i) Decree 100/2014/ND-CP on ban of advertising of breast milk substitutes for children up to 24 months and (ii) Decree 09/2016/ND-CP on food fortification regulating mandatory food fortification with micronutrients.

Box 4.3. Reforming Vietnam's Nationally Targeted Programs to Close the Gaps in Human Capital Disparities for Ethic Minorities

Closing the gaps in human capital disparities for ethnic minorities requires reforming the Nationally Targeted Programs (NTPs), investing in cost-effective human capital interventions, and facilitating transitions away from low-productivity farm work. Evidence suggests that smart human capital investments for ethnic minorities would focus on improving nutrition, access to quality secondary education and beyond, and transitions to good jobs. Under the current NTPs, provinces tend to allocate more spending to infrastructure. The next generation of NTPs can address this shortfall by ring-fencing budget for human capital interventions, while deepening synergies with infrastructure investments.

To improve the efficiency of human capital investments for ethnic minorities, high-level champions and coordination across programs at different levels of government and pooling or integrating resources across line ministries and agencies should be encouraged. One specific recommendation to improve nutrition programming is to reconvene the high-level national intersectoral nutrition steering committee with appropriate representation by provinces with high stunting rates and/or designate specific agencies to monitor and evaluate nutrition-specific and nutrition-sensitive outcomes vis-a-vis allocated resources.

Strengthening the incentive mechanisms for local decision makers to prioritize investments in poorer communes is important. The budgeting process should account for higher unit costs as well as lower capacity in remote and poorer communes and ensure that provinces targeting the poorest communes are rewarded with adequate financing. The worse-performing ethnic minority groups and the 16 very small minority groups comprising less than 10,000 people will require more resources to help them catch up to the others.

A results-based funding mechanism, paired with more effective monitoring, would ensure a closer linkage between allocated budget and outcomes. Budget reporting and accounting requirements at the local level can be strengthened to ensure equitable distribution of resources and assess efficiency and effectiveness in achieving household-level outcomes. Over time, budget allocation should incentivize provinces to improve utilization of nutrition-specific and nutrition-sensitive interventions, enroll more students, offer full-day schooling to more children, rationalize the teacher/health workforce, and initiate administrative reforms to achieve human resource efficiency gains.

Besides including poverty and income targets, the monitoring and evaluation framework for the NTPs should be strengthened by using more rigorous mechanisms for measuring not only outputs but also outcomes. This can be done by adopting external mechanisms for measuring such outcome impacts, for example through surveys by the Government Statistics Office (GSO). Critically, the MICS survey on which three of the sub-components of the HCI rely was last conducted in 2013/14, and now more than five years later, there are still no plans to implement another MICS survey (or Demographic and Health Survey, which could collect similar information). An immediate opportunity is the upcoming National Nutrition Survey 2019, which currently lacks funding to oversample ethnic minorities. A more reliable, comprehensive, and up-to-date tertiary education management information system is also needed. Data should allow for disaggregation not only by ethnicity, but also income, geography, and gender to ensure different dynamics can be analyzed.

Importantly, ethnic minority communities should be consulted to ensure that programs are culturally and linguistically sensitive to their needs. Involving ethnic minorities in the design of interventions and including mechanisms for incorporating feedback during implementation increases the chances of success. In order for interventions to reach ethnic minorities, literacy constraints, language preferences, gender norms, and cultural values should be considered. Program managers and service delivery staff in health, education, and social assistance provision will need capacity building in cultural competencies to better serve the needs of ethnic minorities.

Source: World Bank 2019, Making Growth More Inclusive.

To build human capital, efforts should concentrate on interventions with strong evidence of cost-effectiveness. This includes consideration of the factors that most significantly shape human capital throughout the life cycle. Furthermore, human capital investment decisions should account for disparities among groups, in part because investments in the more disadvantaged

groups can lead to large marginal gains in human capital.

Conditional cash transfers (CCTs) and behavioral change counseling to mothers and families are important demand-side interventions for building human capital. Vietnam has already committed to improving grassroots health service delivery, including maternal and child health services. CCTs could be a complementary measure to help stimulate the demand side, incentivizing households to utilize these services and providing them with sufficient income to invest in the health of their children. Currently, registration and enrollment for social assistance transfers that include education and health remain relatively low among ethnic minorities, while payments are not conditional and are often irregular (Dutta 2018). Providing cash to targeted, vulnerable families while requiring them to enroll their children in school is likely to increase demand for better-quality education services. Demand-stimulating programs such as CCTs should work hand-in-hand with improving the supply and quality of services, which could be financed through a reformed Nationally Targeted Program (NTP) (Box 4.3).

4.3.2. (Higher/Tertiary) and TVET Education Sector Reform for the Future Workforce[47]

Building worker skills for today's and tomorrow's jobs will require radical reforms to Vietnam's higher education and training systems. A world-class tertiary education system, comprised of technical and vocational education and training (TVET) institutions and universities, requires a commitment to quality and relevance, a credible accountability mechanism, the ability to leverage technology to leapfrog in the areas of both learning and research, and sustainable, results-based financing. Tertiary education institutions will need to focus not only on the skills development of the pipeline of workers but also on upskilling of the current workforce. With rapid technological development, job transitions throughout working lives will become the norm, requiring workers to learn new skills. A system of lifelong learning can prepare adult workers for these expected impacts of technological changes on the labor market. Adult workers needing to learn job-related skills quickly will create higher demand for modular, competencies-based training. Training providers, in turn, will need to be more responsive to the diverse age and experience profiles of workers experiencing job transitions.

While Vietnam's spending on education overall is comparable to wealthier comparator countries, its contribution to tertiary education is insufficient for a country with ambitious goals. In 2015, excluding tuition fees, higher education received only 0.25 percent of GDP, 0.8 percent of total government spending, and 5 percent of total government spending on education. Today only 17 percent of government spending in Vietnam went into tertiary education, which is the least of all countries in the EAP region. The allocation to tertiary education is low because the government allocates a large proportion of its budget to lower education levels. As a result, Vietnam's public funding of tertiary education as a share of GDP is low while tuition fees (private contributions) as a share of unit cost in public institutions is high (Table 4.4). The high level of private spending on tertiary education reflects the government's "Socialization" policy that encourages cost-sharing as a student progresses through the education system (Annex 4.1 has further information about the "Socialization" policy). However, this effectively limits access to and availability of higher education and research institutions. To help the economy and labor force transition toward more technological intensity and higher productivity, levels of public funding on par with competitor countries are needed at the tertiary level.

47 This section draws from World Bank 2019 *Making Growth More Inclusive.*

Table 4.4. Public and Private Funding for Tertiary Education as a Share of GDP for Selected Countries, 2017

		Public Funding as a share of GDP (in percent)		
Tuition Fees as share of unit cost in public institutions (in percent)		<0.5	0.5-1	>1
	>40	**Vietnam** Mongolia	Chile	
	20-40		South Korea, Thailand	China, Indonesia, Malaysia
	<20	Peru	Argentina, Brazil, Colombia, Mexico	
Source: Salmi (2017)				

Increasing resources should therefore be a top reform goal to improve Vietnam's tertiary education system. Furthermore, reforms should be designed to: (i) guarantee a minimum threshold of transferable cognitive skills, which are the best inoculation against job uncertainty; (ii) incorporate more general education in tertiary programs to increase the acquisition of transferable higher-order cognitive skills; (iii) promote development of universities as "centers of innovation"; and (iv) bridge TVET with general tertiary (World Bank 2019). However, creating world-class research universities is an expensive endeavor, and concentrating resources in these universities—which admit only a small share of the population—should not come at the expense of adequate support for others. The key is to ensure balanced development of the entire education system.

Although TVET is generally not viewed very favorably by Vietnamese students and parents, neglecting it would be counterproductive. First, technical skills, which are emphasized in vocational training, still form the primary skillset desired by employers and remain the best skill level match for most jobs in Vietnam. Even in economies as developed as Germany and South Korea, more than half of the labor force has solid technical school training; Germany's vocational training system is not only very highly respected worldwide but also a cornerstone of its economic strategy. Second, Vietnam's existing vocational education system already boosts earnings. Those who complete post-secondary vocational education earn a wage premium of 34 percent compared to 10 percent for those who only finish non-technical secondary school. Even secondary vocational school graduates earn more than standard secondary school graduates, suggesting that the job market values low-skilled technical workers more than low-skilled general education workers. Third, the employment rate of graduates from TVET institutions is around 80 percent, with higher levels for secondary technical and professional institutions (82 percent) and short-term vocational degrees (85 percent), compared to general college institutions (VET Department General 2018).

Greater efforts are needed to expand access to TVET and improve quality. Expanding access to Vietnam's TVET system will require further increases in funding, as the current supply of places offered in TVET institutions is inadequate to meet the needs of the workforce. Investments are also needed to improve quality and streamline governance (ADB 2018). Another area of focus should be in the upgrading, expansion, and co-financing of technical short courses, which are one of the most viable forms of adult learning for most of the workforce.

The public sector can play several roles in expanding and improving the current system. First, the public sector should work with the private sector to identify market-demanded skills that the private training sector cannot fill and incentivize the provision of such courses. Second, the public sector can incentivize the creation and

maintenance of central platforms for storage of information about short-term training courses for access by workers and firms. Third, the public sector can provide monitoring information on short course quality via the central platform. Fourth, learning grants could be provided for people to use throughout their lifetimes to upgrade skills, drawing from the model provided by Singapore's SkillsFutureCredit program.

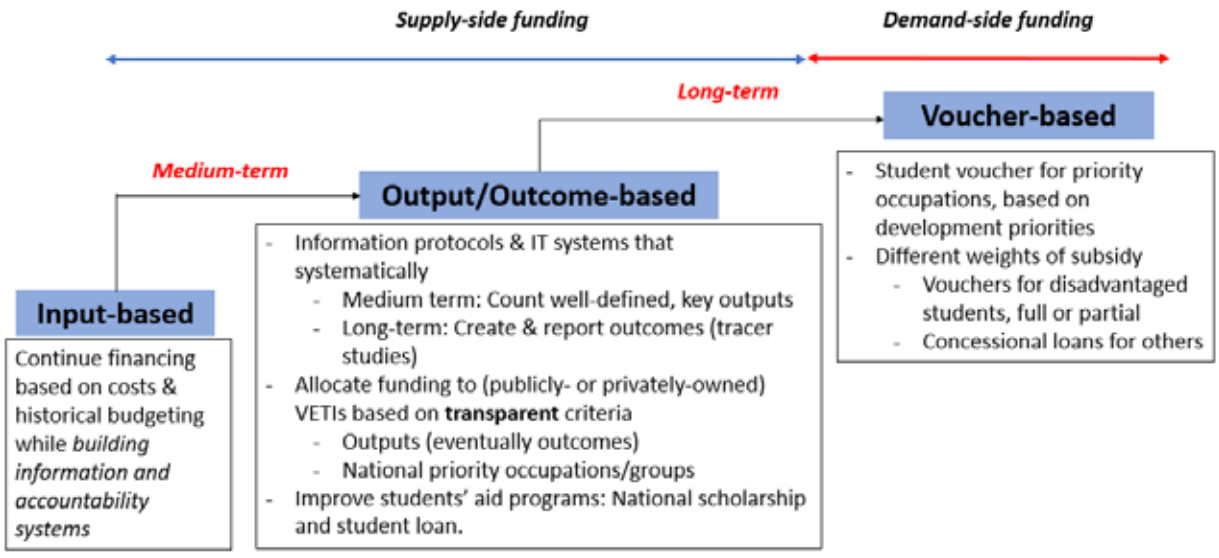
A reformed tertiary education system should have clear results-based targets. These targets could include (i) for improvements in access and equity: overall gross enrollment rate and equity index (including educational attainment of highest versus lowest income quintiles as well as tertiary education access rates of different demographic groups); (ii) for quality: proportion of accredited programs internationally and nationally, student satisfaction; (iii) for relevance: student employability, employer satisfaction, availability of shorter, module-based training programs that respond to reskilling needs; (iv) for research: volume and impact of publications; and (v) for innovation technology transfer: volume of patents and start-ups.

To increase the overall coverage of tertiary education equitably, more diversification is needed within the education system. This includes developing more cost-effective, non-university options (TVET institutions); promoting good quality private tertiary education institutions by allowing equal access to compete for government-funded service and/or research contracts; scaling up cost-effective alternative modalities, including open university and massive open online courses (MOOCs); promoting closer linkages with the world of work; undertaking administrative reforms to implement the current incentives that are provided by law for better tertiary education-private sector engagement; and articulating policies to build bridges and pathways to allow for transfer between VET institutions and universities.

Given the high private and social returns to tertiary education, expansion of financing to post-secondary education is warranted. In accordance with the government's "Socialization" policy agenda, some level of cost recovery can be implemented while ensuring that tertiary education is expanded equitably, sustainably, and with quality. Tertiary education student financing reform to optimize effectiveness and access requires a transition from input-based to output/outcome-based (especially income-contingent student loans) and finally to voucher-based mechanisms (Figure 4.11). Income diversification for educational institutions in the form of continuing education modules, research and consultancy contracts, production of goods and services, and fund-raising with alumni, firms, and philanthropists should be considered.

Building a demand-driven system will require establishing the institutional conditions for a well-regulated market of private and public providers that deliver training services with the close involvement of employers. Successful systems require a high degree of coordination and partnership between government agencies and the private sector, as well as giving businesses a strong voice in determining training policy. The government provides the oversight by monitoring data on program quality, encouraging autonomy and accountability, and ensuring efficiency and a results orientation in government financing. Building demand-side buy-in from employers is a key challenge. The United Kingdom and some other European countries provide useful models via sector employer councils, while East Asian countries have established independent apex training authorities with strong partnerships with employers and other stakeholders, such as Singapore's Institute for Technical Education. The government can contract private providers to deliver training services to workers in transition.

Figure 4.11. Model for Transition of Student Financing Results-Based and then Demand-Based System



Source: World Bank 2019, *Making Growth More Inclusive*

Importantly, the public tertiary education system cannot solve this problem alone; industry involvement is needed to address workforce skills challenges. As of 2015, only 22 percent of firms reported that they provide formal training to their employees,[48] despite the fact that nearly half of the respondents said that skills shortages negatively affect their businesses. The respondents reported that when they do train, most instruction is limited to job-specific technical skills. Industry development of formal skills development would be an important way to close the gap between the demand and supply for skills within their existing workforces (World Bank Group 2017a).

Closer cooperation with the private sector can also incentivize technology transfer, by providing more dedicated funding for applied research (e.g., matching grants), capacity building to set up technology transfer and enterprise linkage promotion offices within tertiary education institutions (and/or within relevant line ministries), and clear definition of intellectual property and revenue distribution. Technology can also be harnessed to improve skills development itself—for example, introducing more sophisticated adaptive learning using big data to transition toward a model of personalized learning that identifies a student's place in the learning process then progresses with them as they gain more competencies.

4.3.3. Extending productive working lives with comprehensive, cross-sector policies

Extending productive working lives requires comprehensive interventions in many areas and technology will play an important role in this. Some older individuals who want to work are too sick, while some face challenges such as obsolete skills, shifting labor market, employer discrimination, and homecare burdens in caring for frail elderly and grandchildren. ADB (2018) argues that there will be more technological solutions for aging labor markets which would play out through such channels as improving health and longevity, transforming work and the workplace, and transforming the labor market function (Box 4.4)

48 World Bank. 2016a. *Enterprise Survey 2015:Vietnam, 2014-2016*. https://microdata.worldbank.org/index.php/catalog/2664

Box 4.4. Aging, Technology, and Labor Market

The first pathway for technological intervention is via health and longevity. Advances in medical science and biotechnology improve general physical health and provide more effective and affordable medical treatment for disease. Healthy workforces are more productive, and improved longevity with health extends working lives. One cross-country analysis found that a 1 percent improvement in adult survival translates to a 2.8 percent increase in labor productivity. Another study found that improved health status of seniors significantly improves work capacity, estimating that the equivalent of 11.1 million workers' worth of untapped work capacity exists among people in Japan ages 60-79. Examples of these interventions include biotechnology, automated diagnosis, surgery and therapies; integrating wearable devices and medical equipment into the internet of things; and health-related big data analysis.

The second pathway for technological intervention is in the transformation of work and the workplace. Automation and increased use of artificial intelligence, machine learning, and cloud computing shifts employments patterns in ways that allow more seniors to remain in the labor force and allow companies to retain talent over the retirement age. Routine, manual task-related jobs have decreased, and non-routine tasks have increased in workplaces where advanced technology is adopted. These shifts favor older, experienced workers less able to perform manual labor but require training to ensure that the workers can interact with technology effectively. Furthermore, collaboration tools and cloud platforms allow for flexible and remote work (which better suits the needs and preferences of older workers), with significant productivity gains. Examples of these interventions include industrial robots, automation, artificial intelligence, machine learning, and remote/telework platforms.

The third pathway for technological intervention is in human resource development and labor market function. Innovative technology for improved delivery of education and skills training can help seniors prepare for new jobs and roles. Furthermore, significant scope for improvement exists in the areas of employment placement services, as labor market matching technology can make job placement more efficient. In addition, within the workplace itself, improved ergonomics in indoor air quality, acoustic quality, and adequate illumination adapted to seniors' needs improve productivity. New technologies can go even further by augmenting physical strength as well as visual, hearing, dexterous, and cognitive capacities. Examples of these interventions include remote and virtual education and training, human resource and age diversity management, cloud-based matching services, and ergonomic and human function aiding devices at the workplace (adaptive technologies).

Source: ADB (2018).

The foundational policy for extending working lives is health improvements, as health status plays a central role in workers' decisions about the optimal age to retire (Lumsdaine and Mitchell 1999; Stock and Wise 1990). Numerous studies have demonstrated a strong empirical link between health (measured either as self-assessed status or with incidence of chronic illnesses and disability) and withdrawal from the labor force among older adults (Aranki and Macchiarelli 2013; Alavinia and Burdorf 2008; Kalwij and Vermeulen 2007) (Box 4.5). Poor health makes job tasks more demanding (especially for manual workers) and decreases an individual's productivity, which may result in lower earnings; therefore, the attractiveness of staying in the labor force declines. Deteriorating health reduces an individual's expected remaining years of life and results in higher time demands for resolving health matters, both of which may stimulate the worker to refrain from further participation in the labor market and increase the utility of leisure (Gameren 2010). In Vietnam, 53 percent of older people age 60 and over reported health issues as the main reason for not working (Vietnam Women Union (VWU) 2012 using VNAS 2011).

To improve health of older workers and extend their working lives, Vietnam will need to reorient its health system toward coordinated long-term prevention and early treatment. A range of interventions aimed at improving health of older workers is described in Chapter 6. Long-term prevention and early treatment are important because these interventions can also teach individuals how to take responsibility for managing their own care, compared to scenarios in which they only contact with the health care system is in times of emergency. Many disabilities associated

with old age are acquired over time, and if treated early, their impact on the individuals' function can be minimized or delayed, see Chapter 6.

The gender gap in labor force participation is larger among mature workers and complementary interventions aimed at developing childcare and elderly care will help to gradually close it. Such policies would be an effective measure to offset the structural decline in Vietnam's working-age population. While the gender gap in labor force participation is considerably lower in Vietnam than in EAP countries such as the Philippines and Indonesia, women in urban areas, in particular, remain less likely to be in paid work outside the home (World Bank 2014). In addition to the direct efforts in the labor market such as efforts to close the gender pay gap, it will be vital to improve the functioning of childcare and eldercare services, both of which have significant effects on female labor force participation (Thevenon 2013). With respect to childcare, public investments are likely to be necessary, whether directly into subsidizing childcare services or through other channels such as extended-day kindergarten and primary school services (as Vietnam is already extending the kindergarten day).

A range of public policy initiatives directly related to the labor market can also be implemented. The most economically and demographically advanced countries employ a mix of strategies to extend the productive working lives of older workers who wish to work. Such initiatives include job search services focused particularly on older workers; vouchers for employers who hire older workers; retraining schemes targeted at those whose formal education took place significantly far in the past; provision of wage subsidies that effectively lower the cost of employing older workers; subsidies or grants to encourage training to raise older workers' productivity and help them acquire new skills; subsidies that incentivize employers to make suitable workplace adjustments to improve not just employability but also workability; financial incentives to encourage appropriate wage-setting practices to reflect individual performance rather than age or seniority; and improved flexibility in jobs, including expanding part-time and home-based work (see World Bank 2016).

The appropriate wage-setting practices to reflect individual performance rather than age or seniority could be contemplated now (Box 4.5).

Box 4.5. Seniority Wage Systems

Labor costs that rise steeply with seniority or age are one of the main types of barriers identified in the OECD which make employers reluctant to hire or retain older workers. Under seniority-based systems, age or length of service—rather than level of performance—are the most important (if not the only) determinants of pay and promotion for employees. They are most often used in government and with unionized jobs.

A pay scale based on seniority has some advantages over a performance-based scale: they are generally easy to administer since they are formula-driven with little variation and can eliminate any perceptions of favoritism since every employee is treated identically. They tend to produce a stable workforce of loyal employees with relatively low employee turnover and create a cadre of highly experienced incumbents in a job for those performing the same job over several years.

The downside is that they are generally incompatible with a strategy to develop a high-performing workforce, as there is no financial incentive for an employee to do anything more than the minimum required for acceptable performance. Seniority-based pay can also encourage status quo and discourage innovative or creative thinking that might increase productivity by changing how a job is structured or how employees perform the job.

The practice of seniority-based pay partly reflects collective cultural values. Performance-based compensation schemes are preferred in cultures that tend to be high on individualism. Reichel, Mayrhofer, & Chudzikowski (2009) find that collectivist societies concentrate on seniority-based promotion decisions, whereas individualistic cultures are considered to place a stronger focus on an employee's potential for future promotion based on task performance. Vietnam tends to score low on the dimension of individualism (World Bank 20016).

Source: Authors

Another reform for extending working life in the formal sector that could be contemplated now is appropriate retirement reform, notably increasing the retirement age and equalizing it for men and women. Increasing the retirement age has been consistently shown to have a more positive impact on economic growth than raising contribution rates or cutting benefit levels to reduce pension scheme deficits (see Barrel, Hurst, and Kirby 2009; Karam et al. 2010). Furthermore, as discussed earlier, evidence comparing formal and informal labor force participation suggests that the formal retirement age is a major driver of people leaving the formal workforce. These interventions could also delay retirement of spouses since retirement decisions are often taken jointly.

When reforms aim to extend the working lives of older workers, it is important to address the likely political fallout from fears that it will crowd younger workers out of the labor market. This is commonly known as the "lump of labor" fallacy—so called because it assumes a fixed number of jobs exist—and has been refuted time and again. One relatively inexpensive government response could be the deployment of awareness and communication campaigns explaining that greater participation of older workers does not lead to adverse outcomes with respect to either firm productivity or the employment of the younger generation.

Box 4.6. The Myth of "Crowding Out"

An increasing body of work has shown that participation of the elderly does not crowd out employment of the younger cohort. The assumption of older and younger workers being substitutes might simply not hold given their varied skill sets. Therefore, having both in the labor force could increase productivity, further spurring demand for more workers. OECD (2011a) found a positive correlation between the employment rates of younger and older people across OECD members. Within countries, a strong positive correlation has been found between the employment of 55-64-year olds and 20-24-year olds (Gruber and Wise 2010, as cited in Schwarz and Arias 2014). National experiments in Denmark, France, and many others found no evidence that earlier exit from employment by older adults increases job opportunities for youth (Schwarz and Arias 2014). In China, labor force participation of the elderly increases the participation and wages of the young (Munnell and Wu 2013; Zhang and Zhao 2012). In addition, firms with an age-diverse workforce may have higher productivity than firms with a homogeneous age distribution, as in Denmark (see Grund and Westergaard-Nielsen 2008). Nonetheless, a large degree of unsubstantiated skepticism remains about policies that allow workers to phase or defer retirement.

Source: WB (2016).

Box 4.7. Germany's Model for Ergonomics and Adaptive Technology in the Adaptive Technology in the Workplace

Older workers tend to be a company's most experienced and innovative workers, but companies fail to adapt to their specific needs, often resulting in demotivation that leads to early retirement. Germany has invested in prolonging employees' working lives through a focus on ergonomics and tapping of expertise of older staff. For example, workers who must lift their arms repeatedly are aided by €5,000 exoskeletons (lightweight, metallic structures worn like backpacks that attach to the arms and provide support for repetitive tasks known to cause injuries). Investing in ergonomics is not just about diminishing the effects of a silver-haired workforce but capitalizing on them.

Source: https://www.ft.com/reports/health-at-work

Similar initiatives could be used to help political leaders and policymakers address negative perceptions about the adaptability and productivity of older workers. These perceptions form one of the main barriers identified by the OECD that make employers reluctant to hire and retain older workers (OECD 2006). Negative attitudes about the capacity of older workers affect their employment

prospects, but such concerns are often misguided. A study by Börsch-Supan, and Weiss (2011) shows that the overall productivity of older people even increases slightly. Productivity at the workplace is more closely related to the quality of working conditions and the time over which an individual is employed to do the same tasks. In that respect, it is not age but rather the quality of work and monotony that make workers less productive with time, even at younger ages. Ensuring good and healthy working conditions as well as a variety of tasks is therefore critical for preventing declining productivity (Box 4.5). Employers' misperceptions about the potential productivity of older workers could be changed by disseminating this information and encouraging age diversity in the workplace. Potentially useful examples include initiatives in Australia, Finland, France, the Netherlands, Norway, and the United Kingdom (OECD 2006), where employers are not just being told that they cannot discriminate against older workers through the law, but they are also provided with tools and information for managing an older workforce.

4.3.4. Effective, Demand-Driven Lifelong Learning (LLL)

Continuous lifelong learning has a special place in the arsenal of labor market policies in Vietnam, as obsolete skills are a major problem for the Vietnamese labor force even today. Learning outside school is an important source of skill formation, and a large share of workers learn something new in their jobs daily, particularly among more skilled professions (World Bank 2019). In the United States, post-school learning accounts for as much as one-third to one-half of all skill formation (World Bank 2019).

The significance of informal learning—particularly on the job—is highlighted by new insights into how the adult brain learns,[49] **but these findings need to be incorporated into adult education and training programs (both formal and informal) to make them more impactful and cost-effective**. Rather than focus on training courses within firms, on which Vietnam's employers are notoriously scarce, the most effective measures are likely to be expanded on-the-job training—using learning-by-doing with the assistance of more skilled supervisors, providing regular opportunities to learn something new, and hands-on coaching (Box 4.8).[50] Individual learning schemes are another promising approach that links training opportunities to individuals rather than jobs, although design and implementation are key to their effectiveness (OECD 2019) and will need to be adapted further to the unique ways in which older people learn. Better information on the availability of training opportunities and incentives to participate can enhance on-the-job training. Finally, given the scarcity of data, better measurement of skills acquired on the job and their rates of return would provide firms with the information needed to enhance their investment in skills development.

49 Because of neuroplasticity, the brain continues to change beyond middle age, and although some cognitive functions (such as working memory and mental speed) start to decline as early as age 40, compensation and reorganization of neural pathways can allow a person to maintain high overall functional performance. Indeed, emotional regulation and conscientiousness tend to increase beyond middle age, and the brain gets better at using prior experiences and knowledge to take shortcuts to find solutions. World Bank. 2019. Innovative China: New Drivers of Growth. Washington, D.C: World Bank Group.

50 Bodewig, Christian and Badiani-Magnusson, Reena with Macdonald, Kevin, Newhouse, David, and Rutowski, Jan. 2014. "Skilling Up Vietnam: Preparing the Workforce for a Modern Market Economy." Directions in Development, World Bank. DOI: 10.1596/978-1-4648-0231-7

Box 4.8. Adapting Learning Programs for Adult Learners

Adult learners face different challenges than children and youth learners. Challenges to adult learners include reduced neurological plasticity and increased entrenchment, which make adult brains less adept at noticing and learning from certain types of information, such as written letters or characters. However, these challenges can be addressed by learning strategies adapted to the needs of adults such as repeating new information across multiple sessions (spaced learning) or in different contexts (multimodal learning). Adult learners also respond well to lessons that are engaging, made relevant to their lives and based on their personal learning goals, and include rewards and positive feedback.

Reviews of existing adult literacy programs have found that they are most likely to succeed when they target emerging literacy skills, while more research is needed on why programs struggle to succeed when they target higher literacy levels. The Mexican NEUROALFA program is a notable exception: the program utilized an understanding of adult neurology to design a curriculum that adjusted its teaching method as adult learners progressed and succeeded in advancing students beyond emerging literacy to full reading comprehension.

Several countries in the East Asia and Pacific region have implemented adult literacy programs that are consistent with best practices for teaching adult learners. In Vietnam, Community Learning Centers offered literacy and "post-literacy" classes as part of a national pro-literacy campaign targeting women and ethnic minorities. Teachers in these programs were trained in adult learning methods, and clear goals were set for different learning levels. Furthermore, assessments were made of local community needs and individual participant aspirations, and classes were offered in both Vietnamese (Kinh) and ethnic minority languages. Oxfam supplied pink phones to rural women in Cambodia who attended adult literacy programs, in part to give them an opportunity to practice their literacy skills through SMS text messaging outside of the classroom.

Source: Authors based on Bendini, Levin, and Oral-Savonitto (2019) as cited in World Bank 2019d.

4.3.5. Support to improve ethnic minority outcomes and to segmented rural workforce

Vietnam is experiencing a demographic window of opportunity and it is important to take advantage of it and support groups of workers who are not fairing as well as the majority in the labor market. These are **ethnic minorities and both younger and older individuals in the rural workforce.**

- *Comprehensive approach to improve ethnic minority outcomes, including through supporting their migration prospects*

Reducing the "economic distance" for ethnic minorities is critical to enhance their access to good jobs as well as to maximize the productivity of the greatest possible proportion of the labor force. Higher fertility rates among ethnic minorities mean that their share within the overall population is likely to grow in the context of an aging country. Supporting ethnic minorities' transition to higher-productivity jobs is key, and their transition into household enterprises and wage employment holds particular promise (Cunningham and Pimhidzai 2018). However, these transitions are complicated by the physical remoteness of ethnic minority communities. The Vietnam Jobs Report identified three key entry points to reduce economic distance: (i) integrate lagging areas into the network economy to expand their market potential, (ii) create a secondary economy supporting industries based on regional absolute advantages, and (iii) reduce the cost of migration to increase long-distance migration domestically.

Encouraging long-distance migration domestically will be important to increase access to off-farm opportunities, especially for ethnic minorities and people in low-density economies. In Vietnam, the most cited challenge faced by migrants was housing issues (43 percent), followed by lack of income (38 percent) and inability to find a job (34 percent) among migrants surveyed in 2015 (GSO and UNFPA 2016). Housing issues are particularly difficult for minorities. One set of interventions could be aimed at addressing the social barriers to people's movement, namely unequal access to public services for temporary residents and

inadequate elderly care services in rural areas. (The need to take care of the elderly discourages migration for both men and women and contributes to reverse migration. Adult children with elderly parents in rural Vietnam are less likely to migrate (Jiles and Huang 2018)). Another set of interventions should aim to bridge information asymmetry in labor markets, minimize the role of social networks, reduce job search costs, and increase job matching. An important step would be to create a Labor Market Information System, using specific surveys to identify labor demand, and then produce and disseminate user-oriented, regionally specific, gender-disaggregated information. Another possibility would be to design an integrated job search strategy that builds on private initiatives, directing public resources to incentivize employment of hard-to-employ populations, including ethnic minorities.

Complementary interventions include skills development for ethnic minorities, including entrepreneurship skills to help start new businesses, technical skills to help succeed in wage employment, and life and soft skills to support the pursuit of these livelihoods. To promote improved skills development of ethnic minorities, TVET institutions and universities in areas with large populations of ethnic minorities will need to undertake broader tertiary education system reforms. Private sector support in the form of guidance, technology transfer, and funding may be weak for these tertiary education institutions, thus there is a strong rationale for more comprehensive government support. Targeted support to institutions should go hand-in-hand with results-based accountability. As part of the changes to TVET institutions, reforms can include leveraging new e-learning modules that can be delivered remotely in addition to face-to-face learning. A baseline level of internet connectivity in ethnic minority communities is required, although online/offline approaches are available where internet connections are unreliable.

Active Labor Market Policies (ALMPs) targeted at ethnic minorities could be important tools for both those who decided to stay and who decided to migrate, if specific characteristics of ethnic minorities are leveraged in the design of ALMPs. Given the culture of strong social cohesion within some ethnic minority groups, ALMPs that rely on social networks—such as business development loans to a group of individuals with joint repayment responsibilities—may be appropriate. For ethnic minority groups concentrated in isolated areas, ALMPs will need to consider how to link ethnic minorities to markets. For example, transportation vouchers could facilitate seasonal agricultural wage work in other provinces. Such an intervention was highly successful in Bangladesh (Bryan, Chowdhury, and Mobarak 2014). Digital technologies can shorten the distance between ethnic minority communities and markets through apps and e-commerce platforms that allow those living in remote communities to buy inputs and sell final products into local and even global markets. Women from ethnic minority groups, who tend to be more closely tied to home at a young age (Weimann-Sandig et al 2020), may particularly benefit from such opportunities. Such an intervention would require connectivity, cell phones, and technical assistance to help communities develop and implement business plans.

Public employment support centers are another critical resource, particularly for ethnic minority communities, and improving their quality should be a policy priority. Compared to other job searchers, ethnic minorities have particularly limited information about careers, how to prepare for careers, job vacancies, and their own and their children's options. Public employment support centers can improve the quality of their databases on jobseekers, firms, and vacancies; consolidate information about career, job, and educational opportunities in local areas; and provide career planning and job search assistance services tailored to the language needs and cultural specificities of different ethnic minority groups.

- *Support for a segmented rural workforce*

The overall policies of continued agricultural restructuring, including building on reforms in land policies, will help maximize productivity and

returns for those reliant on farming.[51] Such reforms include strengthening land security, reducing agriculture land-use restrictions, broadening land consolidation beyond rice farming, encouraging a shift toward more farm operator-based agriculture, and reducing reliance on self-financing, including introducing and incentivizing innovations for financing agriculture.

For those older rural workers who have difficulty adapting to the new environment and experience challenges in economic participation, the country's Intergenerational Self-Help Club (ISHC) pilot model has shown to be effective in increasing economic development and income generation among older members of rural communities. Income generation is one of the more important of the activities supporting older people: a revolving fund gives members access to cash or in-kind loans for economic activity. The ISHCs also provide education on activities appropriate for older people to increase their incomes, technology training, study tours, and economic models. A 2015 evaluation by UNFPA found that members of ISHC experienced an average annual income increase of 30.3 percent (UNFPA 2016). Although the scale has been limited thus far, increased investment by the state could increase their impact significantly (see Chapter 7 for more details on ISCHCs).

Younger rural workers who stay in rural areas are more concentrated in off-farm wage work and would benefit from interventions to support rural jobs upgrading that help them move up the value chain and into the knowledge economy. Existing food production chains, significant agricultural product exports, and proactivity by rural municipalities will form the basis for such interventions, linking jobs to local, regional, and global value chains**.** As opportunities open for more efficient linkages of current jobs to value chains or the creation of new, more lucrative jobs in services such as assembly and logistics, skills development will be needed for a more sophisticated rural workforce.

In terms of the overall support for rural workers, skills development in agriculture can help improve earnings and job prospects as much as in any other industry. Skilled farmers are the first to innovate in agriculture, capitalize on emerging market opportunities, and adopt modern technologies. Investment in skills for rural people to move to better-paid occupations outside of agriculture, including related industries such as agro-processing, is also needed. Although food industry jobs generally require relatively low-level skillsets such as literacy, numeracy, and simple technical and managerial training, they are higher-level than those required in agriculture. The share of workers with good skills in the food processing industry in Vietnam is estimated at 54 percent, compared to 30-40 percent in wage work in agriculture. The growing demand for technical, adaptable skills for a variety of new jobs requiring multitasking capacity in the food industry calls for public investment in vocational training, as discussed earlier.

The occupations that pay higher wages are in services and general management and are also associated with higher levels of education. This implies trading out assembly for jobs that manage logistics, marketing, design, and the many knowledge-intensive before- and after- assembly activities. Moving to the service segments of value chains and into more sophisticated value chains will require both greater mastery of some of today's skills as well as an emphasis on knowledge-intensive skills. Well-educated rural young workers with skills in business development and with vocational skills are likely to benefit from the increasing knowledge-intensity of the food system, with significant opportunities in high-value agriculture and associated agro-processing (World Bank Group 2017b).

51 Vietnam's success in the agricultural sector has transformed the country from one suffering from chronic food deficits to the world's second-largest rice exporter. Key policies introduced to tap the growth potential of rural Vietnam include farmland allocations to individual households in the early 1990s and market-based incentives such as commodity trade liberalization (Roberts et al 2006)..

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4.5. Annex: Vietnam Socialization Policies

Vietnam's socialization policy is best understood as a set of incentives and guidance to non-state establishments, private investment establishments, and state financing establishments to undertake activities contributing to social goals. Vietnam's socialization policy mandates Provincial-level People's Committees to prioritize "the socialization of education-training, vocational training, healthcare, physical training and sports, environment, and judicial expertise" as subjects of this policy. The examples include schools, hospitals, recreational centers, sports centers, museums, libraries, etc. Vietnam's socialization policy was adopted in 2008 by Decree 69/2008/ND-CP and amended in 2014 by Decree No. 59/2014/ND-CP; the policies are administered by the Ministry of Finance.

Ministry of Finance Circular No. 135/2008/TT-BTC issued guidelines for implementation of incentives related to the Decree. The scope and conditions specify that non-state establishments - including investment projects, limited liability companies, private financing organizations, and some foreign direct investors - may obtain licenses and operate in the pertinent domains, provided they meet criteria delineated under the Prime Minister's Decision No. 1466/QD-TTg. The principles for implementation direct that such establishments conform with local planning law and be self-financed; direct that the State allot land for their construction and provide financial support for its clearance and necessary infrastructure development; provide for treatment of such private establishments as equal to state establishments; allow establishments to enter into associations to raise capital and develop technology; and define how assets of such establishments are to be treated and how termination of establishments shall be conducted.

Incentives for non-establishments to undertake activities in the domains designated for socialization include preferential rates for the lease of buildings and land, financial support for development of these premises, preferential income tax rates, and credit incentives. The 2008 Circular (No. 135/2008/TT-BTC) gives priority in leasing necessary infrastructure to these establishments and instructs provincial-level People's Committees to facilitate this through building or upgrading State facilities to lease to them at preferential rates and supporting infrastructure development costs. It offers guidance to People's Committees in assessing values for these facilities and determining rental rates, and mandates that Committees make these procedures convenient and clear. Similar guidance is provided for land lease to develop establishments undertaking socialization activities, giving provincial-level government broad authority to determine land allocation and lease structure, while providing for land use tax relief for such establishments. It also mandates that People's Committees provide for refunds to investors who pay resettlement compensation in executing pre-approved schemes and outlining conditions for land recovery in the event of improper use.

Income tax incentives include a flat preferential tax rate of 10 percent on income generated by establishments in the domains encouraged for socialization, and the 2008 Circular also outlines procedures for accounting and documenting such income for establishments. It furthermore delineates that full income tax exemptions shall be offered for new establishments for four years, and 50 percent reduction for five further years. Existing establishments are also eligible for further tax relief and the Circular clarifies how tax law should be applied in those cases. It also describes credit incentives available to these establishments in the form of loans and post-investment support. Such credit incentives are covered by Decrees 151/2006/ND-CP and 106/2008/ND-CP.

Guidelines are also given by the 2008 Circular for capital raising by establishments and how loans may be accounted. It establishes that establishments are raising capital have a responsibility to economic efficiency and proper use of funds, and that their Board Chairmen/ School Councils should be responsible for capital

raising and use. Furthermore, the Circular outlines procedures of handling of assets in the event an establishment closing or being transformed, allowed sources of income, as well as distribution of financial revenues. It also outlines ongoing legal responsibilities of establishments in terms of finances, operations and transparency, as well as the responsibilities of State Ministries, branches and provincial-level People's Committees.

The 2008 Decree and Guidelines were amended in 2014. The scope of the Decree was expanded to include physical training and judicial expertise in addition to the initial domains for socialization. It also revised provisions relating to the construction of material facilities for activities in the domains of socialization, land lease for socialization establishments, and tasks of Provincial-level People's Committees. Specifically, it mandates that relevant Ministries and local governments prioritize investments in infrastructure and construction of facilities to lease to socialization establishments, and guides the financing of such projects and calculating appropriate rental rates. It further mandates that the State lease land to socialization establishments for construction of such facilities with land use tax exemptions, guides how to administer such contracts, and provides for regular review of these policies. Finally, it assigns supervisory and inspections roles to the appropriate government Ministries and provincial-level People's Committees.

The Ministry of Finance's Circular No. 156/2014/TT-BTC offers more specific guidance for the prioritization of projects and calculation of incentivized rental lease fees and issuance of land use rights to socialization establishments. The Circular lays out a specific formula to calculate the range of rental rates, guides setting rental time periods, how to conduct appraisals, and division of responsibility for management. It also instructs relevant government offices to regularly publicize rental rate schedules and encourage establishments' participation. It further guides responsible agencies in determining whether an establishment is eligible to receive preferential land use allocation, rental rates and tax exemptions, how to choose between competing establishments. Finally, it mandates that socialization establishments must be given certification of land use rights and guides the transference of socialization projects.

Sources: Government of Vietnam Circular No. 135/2008/TT-BTC, Decree No. 59/2014/ND-CP, Circular No. 156/2014/TT-BTC

Chapter 5: THE ROLE OF PENSIONS IN AN AGING VIETNAM

5.1. Introduction

Unless there is a major shift in pension policy, the contrast between the pension "haves" and "have nots" will become even starker in the coming decades as Vietnam experiences unprecedented population aging. Since 1995, employees of formal sector firms in Vietnam have joined their counterparts in the public sector as members of the social insurance program managed by the Vietnamese Social Security agency (VSS), an extrabudgetary fund. The 20-year vesting period (the minimum number of years required to qualify for a pension) meant that until 2015, retiring private sector workers received a lump sum payment rather than an annuity, and many continue to do so because they have not met the 20-year rule. One-quarter of the elderly in Vietnam are estimated to have received a contributory pension in 2018. They are fortunate in that they have been able to maintain their consumption to some extent without continuing to work or relying heavily on their children. The opposite is true for more than three-fourths of the elderly, although those over age 80 and a small share of the elderly deemed to be poor receive a small social pension funded by the central government.

Another challenge is that the contributory pension scheme will soon start to run deficits in order to pay what has been promised to those who have contributed. After years of surpluses, reserves will be drawn down and are expected to disappear in less than 15 years. With contribution rates already at relatively high levels, the options seem limited to difficult parametric reforms or transfers from the central budget. While expanding coverage would improve finances in the short run, this would only postpone even larger deficits since the scheme's parameters are inherently unsustainable. Relying on budget transfers would imply redistribution from the majority of the population that does not participate in the pension system to the higher income, formal sector workers who do. The pressure on pension spending will coincide with increasing demands for health spending, which is also affected by population aging.

Although the parametric reforms of the last few years have moved in the right direction, they are far from sufficient to reduce future deficits significantly. A significant reduction in future deficits will require deeper changes of the kind seen in the richer countries of Europe or Japan. This reflects the combination of generous pension promises and the fact that Vietnam's demographics are rapidly converging with the demographics of those countries, albeit at a much lower level of income.

These two challenges—the coverage gap and the unsustainable finances of the VSS pension scheme—are interrelated, and neither is a recent discovery. The imminent deficits of the VSS have been discussed in reports by academics and international organizations for more than a decade. Much of the research on Vietnam's pension system reflects the growing realization that some form of social assistance is the only viable policy option to address the needs of the majority of the elderly who will not receive contributory pensions. The introduction and expansion of the non-contributory

pension is a response, but the program in its current form is too small to have more than a marginal impact.

The ratio of the average VSS pension to the social pension is about 18:1, and more than half of the elderly have neither type of pension. Currently, one-quarter of the elderly receive about 3 percent of GDP in pensions through VSS, while a small share of needs-tested elderly among the other 75 percent receive around 0.1 percent of GDP in social pension transfers. This situation is unlikely to be socially or politically sustainable. Similar discrepancies have already led to large expansions of social pensions in other developing countries including China, Korea, and Thailand.

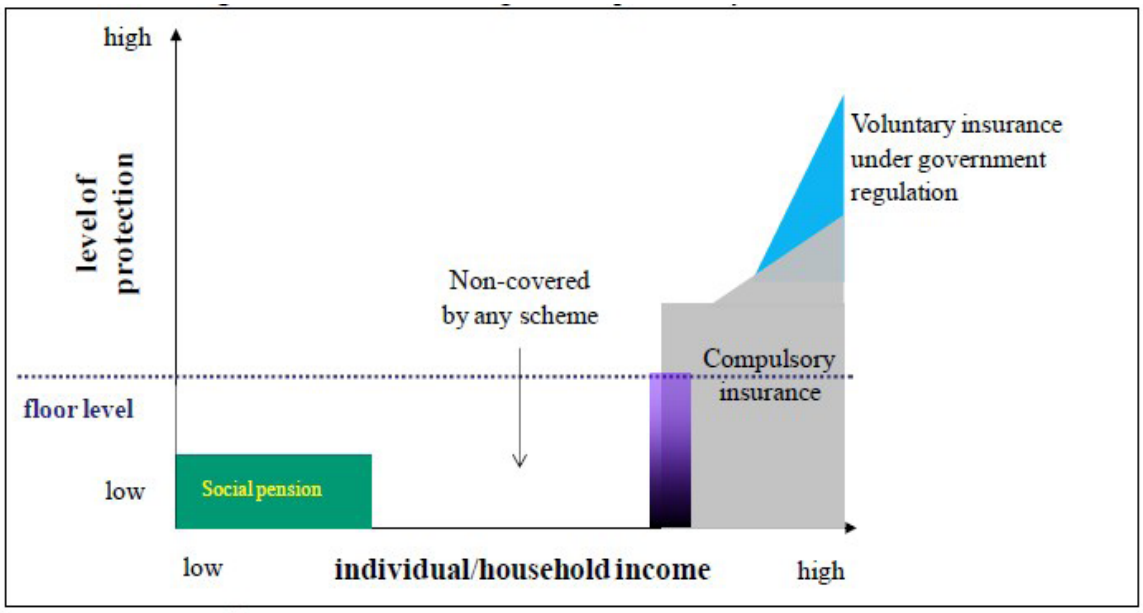
This chapter is structured as follows. The next section briefly describes the current pension system and compares key indicators with other countries. Section III reviews the options for addressing the coverage gap. Section IV presents long-term financial projections of the VSS pension scheme and reviews options for reform that would make it more sustainable. The last section summarizes.

5.2. Vietnam's current pension system in international perspective

The pension system in Vietnam includes a non-contributory social pension as well as a traditional defined benefit scheme financed by contributions from workers and their employers. The contributory pension was expanded to private sector workers only in 1995, while the social pension was introduced in 2006. In addition, since 2008, Vietnam has a voluntary contributory scheme aimed at the self-employed. In 2017, around 11.2 million workers contributed to the defined benefit scheme managed by the VSS, while close to 2.8 million people received VSS pensions. Around 1.5 million elderly Vietnamese receive the social pension. Only around 300,000 people in the informal sector have signed up for the voluntary pension program. Although favorable tax treatment for private pensions was introduced in 2013, these pensions have thus far remained peripheral.

Vietnam's pension system has major gaps in coverage. The pace of coverage expansion has been slow and will increasingly struggle to keep up with aging. The people that this system does cover are heavily concentrated in the top 40 percent of the income distribution (because of the focus on formal sector workers), with the social pension protecting the poorest workers and those 80 years old and above. The challenge, as depicted in Figure 5.1, will be to address the "missing middle" of people who remain excluded from any pension scheme. In addition, the figure indicates that even those that do qualify for social pensions do not receive benefits that meet an adequate minimum (floor in the figure).

Figure 5.1. Vietnam's pension coverage gap



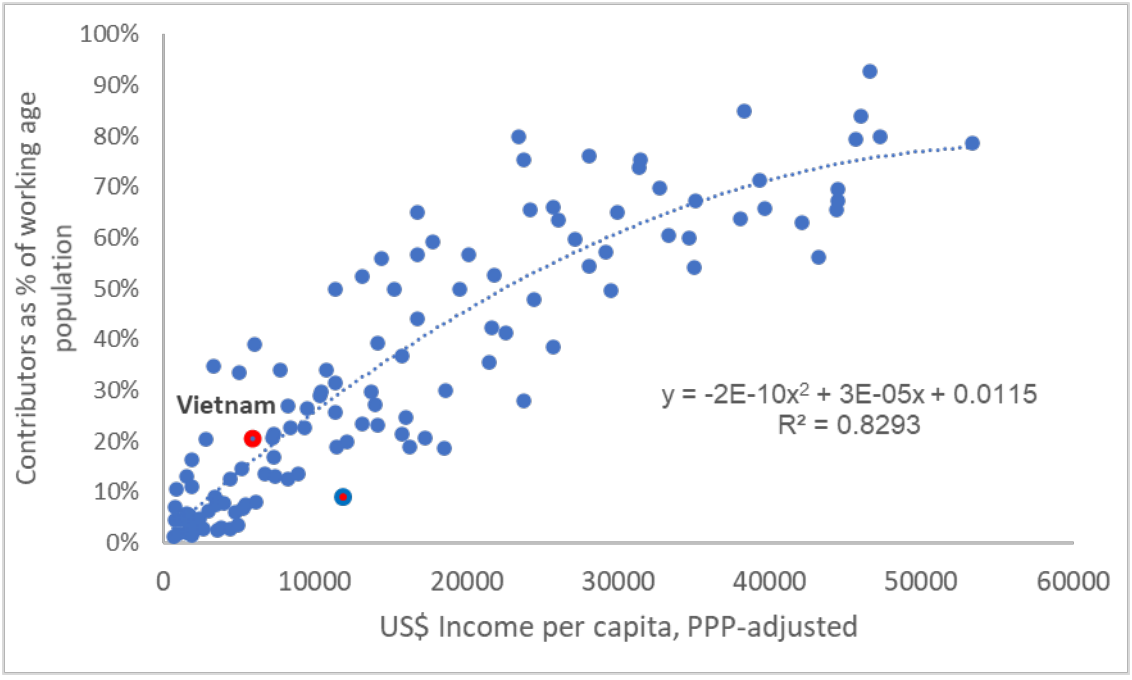
Source: Galian (2014)[13]

5.2.1. Mandatory contributory pensions

Pension coverage in Vietnam appears to be consistent with global patterns. Administrative data shown in Figure 5.2 suggest that the share of the working-age population contributing to the scheme is in line with other countries at the same income level as Vietnam—a function of the size of the informal sector and its correlation with income levels. FINDEX survey data show a likely gender gap in coverage of about 24 percentage points (62 percent of those covered are men, 38 percent are women), which is very similar to the average for developing countries.[52] The same data also show that covered workers are much more likely to be found in the top two quintiles of the income distribution.

52 See Majoka and Palacios (2018).

Figure 5.2. Pension coverage in Vietnam is in line with global patterns



Source: World Bank pension database.

As in other developing countries, coverage has grown very slowly over the last two to three decades. Over the last 25 years, the share of the labor force contributing to the VSS pension scheme has increased by only around 10 percentage points, despite rapid economic growth and changes to statutory coverage. Even under optimistic assumptions, the growth of coverage will be much too slow to address the needs of the rapidly aging Vietnamese population.

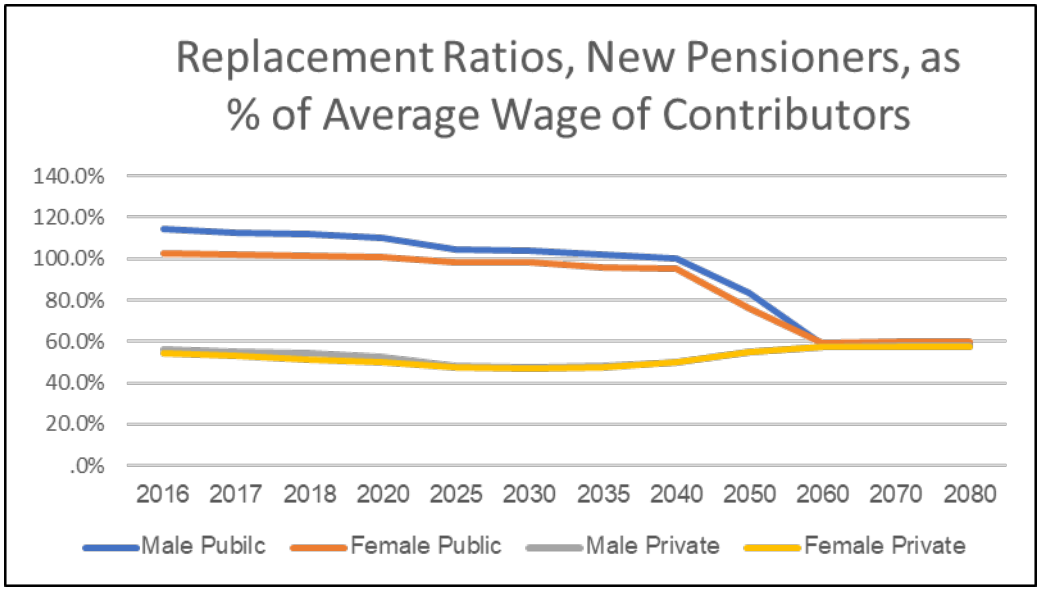
For those who are covered, target benefit levels appear to be high by international standards, although generosity levels differ considerably between the public and private sectors. Table 5.1 shows that Vietnam's accrual rate—the percent of the reference wage that each year of contribution accrues—is much higher than others in the region and globally. However, these numbers hide important differences between the generosity of pensions for public and private sector workers. These differences are due to another parameter in the formula, the reference wage to which accrual rates are applied to generate the replacement rate (the ratio of pension to wage). For private sector workers, the reference wage is based on an average over their entire contribution period, while for public sector workers it is based on the final few years. Moreover, the historical wages of private sector workers are 'revalorized' or revalued by the price index. In a context of positive real wage growth, this makes a huge difference in the public and private sector wages that are used to calculate the pension.

Table 5.1. Accrual rates in Vietnam are high compared to other countries

Region/Country	Average Annual Accrual Rate (in percent)
East Asia and Pacific	1.8%
Vietnam	2.25% (men) & 2.75% (women)
China	1%
Korea	1%
Eastern Europe and Central Asia	1.7%
Latin America and Caribbean	1.2%
Middle East and North Africa	1.6%
High-Income OECD	1.6%
World Total	1.7%

Currently, Vietnam's public sector replacement rates are among the highest in the world and are twice those of private sector workers (Figure 5.3). Although the 2014 reform will phase out this difference over time, it is an extremely slow process which, as shown in the Figure, results in parity only around 2060.

Figure 5.3. Major differences in replacement rates for public and private sector workers



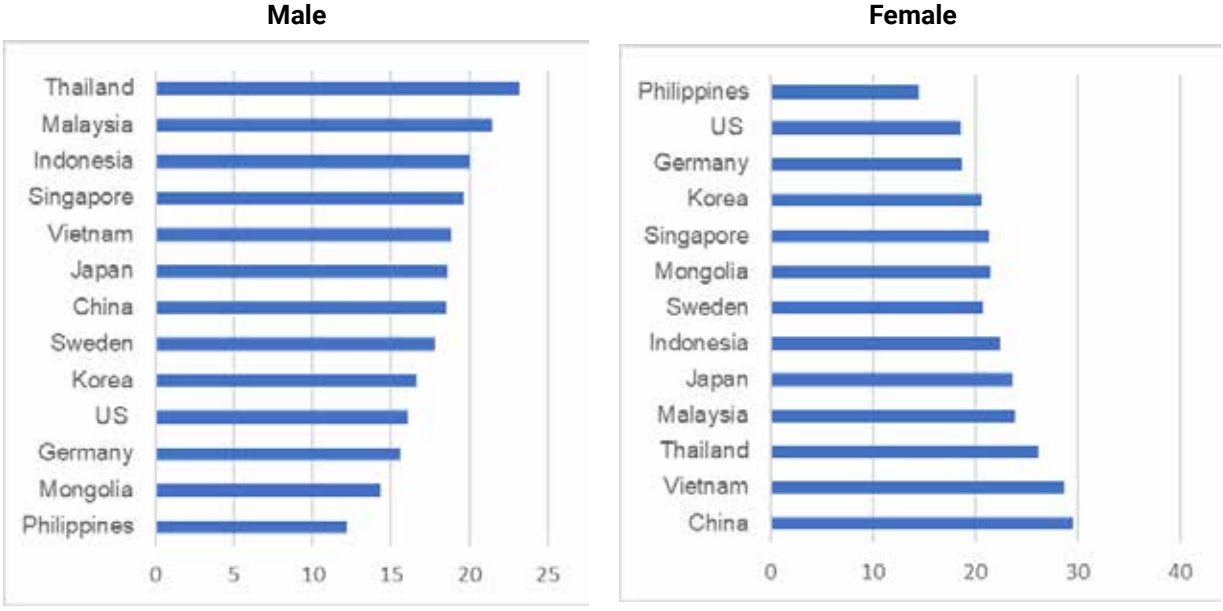
Source: World Bank (2018).

Another important distinction between public and private sector workers is the impact of the vesting rule. As mentioned earlier, the minimum number of years of contribution required to be eligible for a pension in Vietnam is 20 years, which meant that until 2015, private sector workers could only receive a lump sum payment. This continues to be the case for workers who reach the mandated retirement

age of 60 years for men or 55 years for women if they have not reached the minimum number of years of contribution for whatever reason. A very high proportion of private sector workers leave the scheme before qualifying for the pension, with an estimated three-fourths leaving with only a lump sum payment equivalent to 1.5 months of their wage per year of contribution. Much of this may be due to a desire for liquidity, but the lump sum these workers receive is much less than the present value of a pension if they were able to meet the minimum conditions. From a public policy point of view, it means that a significant number of private sector workers will not have longevity insurance despite having contributed to the system.

While life expectancy at birth is often cited when discussing retirement ages, what matters from the perspective of pension system design is life expectancy at retirement age, which is relatively high in Vietnam. Figure 5.4 A and B show that life expectancy at retirement age in Vietnam is high compared to other countries in the region as well as to high-income OECD countries. This is especially true for women, who can expect to live almost 29 years.

Figure 5.4. Life expectancy at retirement age, Vietnam and selected countries compared



Source: OECD (2013).

Vietnam's current retirement ages are quite low by global and regional standards (Table 5.2**), especially as many countries have increased or are increasing their retirement ages and harmonizing these ages between men and women**. Nearly all Europe and Central Asia (ECA) transition countries have increased their retirement ages to 63-65 years, and several OECD countries are already at 67 years or higher. In the EAP region, economies such as Japan, Korea, the Philippines, and Hong Kong SAR, China have already set official retirement ages at 65. Indonesia will increase its normal retirement age for both men and women to age 65 by 2043. While other countries in the region remain at or below age 60, most of these are considering raising these ages. A growing number of OECD and other countries are also linking retirement ages to the increase in life expectancy at retirement, or in several cases are eliminating an official retirement age altogether outside the public sector. An additional problem with low retirement ages is that they are quite inequitable when compared to the eligibility threshold of 80 years for the social pension scheme, since recipients of

the compulsory pension have significantly higher incomes and benefit levels on average than do social pension recipients.

While Figure 5.4 is based on the normal retirement age, the actual average retirement age in Vietnam is lower due to the prevalence of early retirement. Table 5.3 compares the incentives for early and late retirement based on the actuarial reductions or increases in each of five East Asian countries. The Table shows large negative figures for Korea and Japan, reflecting significant reductions in the pension value for each year of early retirement to adjust for the longer duration of pension payment. In the Philippines and Vietnam, retiring early increases the present value of the pension because there is essentially no penalty. Amendments to the social insurance law in Vietnam in 2014 increase the early retirement penalty slightly, but not enough to offset the increase in pension wealth. Japan, which has the highest labor force participation rates in the region, has the recommended penalty and bonus for early and late retirement. It is actuarially fair, symmetric, and therefore neutral to whether someone retires one year earlier or one year later.

Table 5.2. Official Retirement Ages in Selected Countries, 2016

Economy	Official retirement age	Economy	Official retirement age
Korea	65	Indonesia[2]	56, rising to 65 by 2026
Japan	65	Mexico	65
Singapore	62	Brazil	60 (women)/65 (men)
Philippines	65	Lao PDR	60
Thailand[1]	60 civil servants/55 private	Australia	67
Hong Kong SAR, China	65	New Zealand	65
China	50 and 55 (women)/60 (men)	Malaysia	60
Vietnam	55 (women)/60 (men)		

Source: World Bank pension database and WB staff updates.

Notes: [1]Thailand has announced that the civil servant retirement age will be raised to 65 years. [2]Indonesia has legislated an increase in age for the private sector to 65 years, to be phased in by 2026.

Table 5.3. Incentives to retire early are strong in Vietnam

	Normal Age	Early Retirement Penalty	Late Retirement Reward
Vietnam	60	15%	Not possible
Thailand	55	Not possible	1%
Korea	65	-22%	15%
Philippines	65	18%	-17%
Japan	65	-23%	23%

Note: Figures in last two columns refer to annual change in present value of pension payments from retirement until death for early and late retirement. Figures use national mortality rates at relevant ages.

Source: World Bank (2016).

Table 5.4. Pension Contribution Rates in the East Asia and Pacific and Latin America regions, latest year in percent

Country	Employee	Employer	Total
Indonesia	2.00	3.70	5.70
Thailand*	5.00	5.00	12.75
Mexico	1.70	6.90	8.60
Korea	4.50	4.50	9.00
Philippines	3.30	7.10	10.40
Malaysia	11.50	11.00	22.50
Vietnam	8.00	17.50	25.50
Brazil	7.65	20.00	27.65
China **	8.00	16.00	24.00

Source: WB pension database.

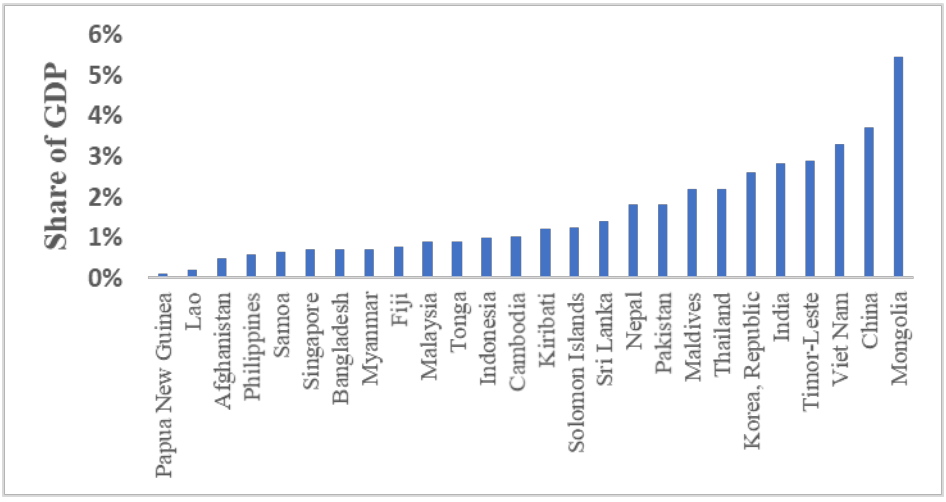
Note: *For Thailand 2.75 percent is contributed by the government.

Note: **For China, this is the maximum rate, and some prefectures have lower rates.

Vietnam also has relatively high contributions for pensions, which could undermine its labor cost competitiveness (Table 5.4). Until recently, the only country in the EAP region with a higher contribution rate than Vietnam was China, although it made a significant reduction in employer contributions in 2019 and is now below Vietnam. Most of Vietnam's neighbors have significantly lower pension contribution levels—in some cases helped by significant public subsidies for matching worker contributions—which poses a potential competitiveness issue for Vietnam in terms of labor costs.

Compared to its Asian neighbors, Vietnam spends a greater share of its national income on pensions (Figure 5.5). As discussed in World Bank (2020), this can be attributed to a variety of policy differences in the region. Several countries such as Malaysia, Singapore, and Sri Lanka have defined contribution schemes or provident funds that do not result in government spending but rather the drawdown of individual pension accounts. Other countries such as Bangladesh, Cambodia, Lao PDR, and Myanmar have not yet introduced mandatory pensions for private sector workers. With the exception of Timor-Leste, which has a very large social pension scheme, the countries spending similar shares of GDP are mature defined benefit schemes—namely, China and Mongolia. They also face similar challenges due to population aging.

Figure 5.5. Public pension spending as a share of GDP, selected Asian countries circa 2015



Source: World Bank (2020).

Vietnam (as well as China) are spending at levels that are in line with their demography based on global patterns, as the vast majority of countries around the world that have chosen the same type of unfunded public defined benefit schemes. This is shown in Figure 5.6 below. However, in the absence of reforms, the imminent maturation of the Vietnamese pension scheme will soon lead to much higher spending so that it will soon be spending significantly above the predicted line.

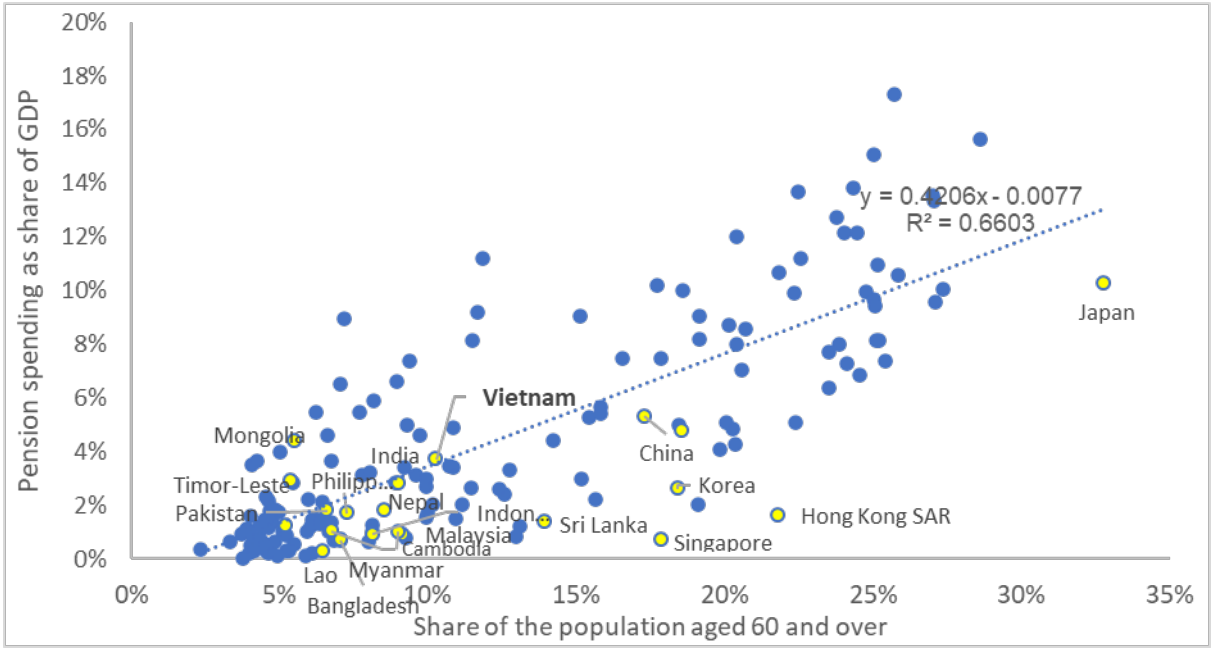
5.2.2. Social pensions

With its relatively low coverage and low benefit level, Vietnam's social pension plays a small role in providing income support to the elderly. Originally, the eligibility age for this categorical cash transfer was 90 years, but it was reduced to 80 years in 2010. In addition to this universal benefit, a strictly means-tested benefit is also provided to those between ages 65-79. The benefit is worth around 6 percent of income per capita and varies depending on certain health conditions.

Figure 5.7 compares Vietnam's social pension scheme to those of other countries on three dimensions. On the Y-axis, it compares coverage using the number of beneficiaries relative to the number of persons age 65 and over. The X-axis measures the relative generosity of the benefit by dividing it by income per capita. The size of each bubble on the chart is proportional to the cost of the program, which is the present value of a simple projection of spending through the year 2040 based on current coverage and benefit levels. Projected cost thus takes into account the differences in demographic aging in each country. The results suggest that Vietnam's social pension plays a minor role in providing income support to the elderly, which is also reflected in the fact that current spending on the social pension is less than 0.1 percent of GDP.[53]

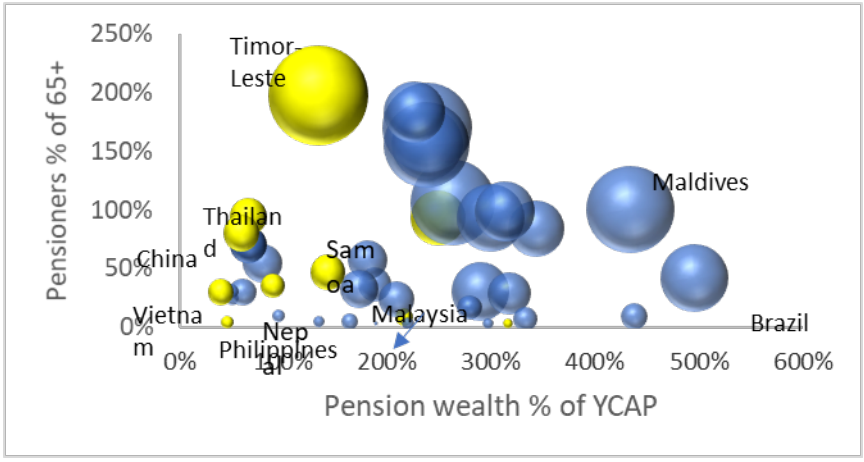
53 Not surprisingly, there is no evidence of any significant impact on poverty among households receiving social pensions, although few rigorous studies exist. Giles and Huang (forthcoming) find that overall pension income (including contributory pensions) reduce poverty only among urban households.

Figure 5.6. Pension spending in Vietnam, taking into account demographic aging



Source: World Bank pension database

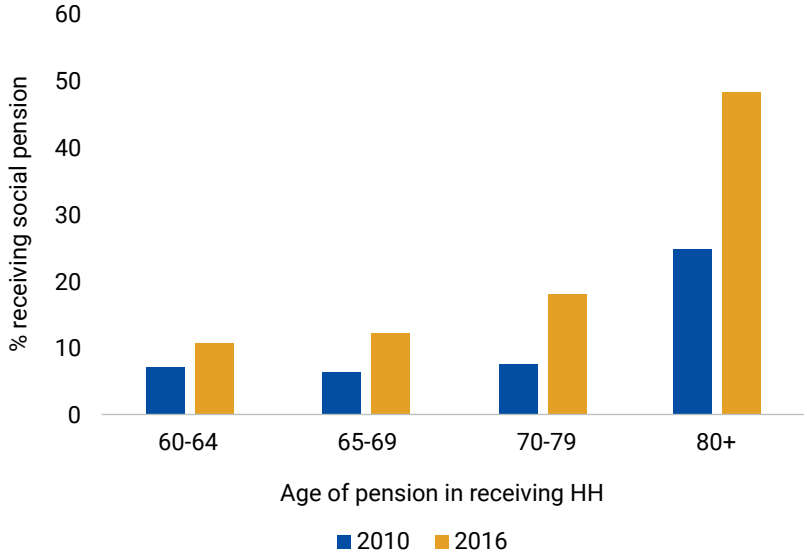
Figure 5.7. Social pensions in Vietnam cover few and have low benefits



Source: HelpAge International and World Bank Pension database.

Coverage has been growing as the eligibility conditions have been relaxed yet less than half of those aged 80 and above in 2016 reported receiving them. Figure 5.8 shows the change between 2010 and 2016 in the share of households receiving social pensions with members age 60 and above. The figure shows a major increase in coverage between 2010-2016, especially for the older cohorts age 70 and above. The largest increase was for households that had members age 80 and over, reflecting the change in eligibility for the universal social pension. These trends were similar for urban and rural households. While including other social benefits raises this figure to about 64 percent, this result suggests that there are major gaps in implementation of the social pension program, at least through 2016 when the latest data are available.

Figure 5.8. Incidence of social pension receipt by age of household member, 2010-2016



Source: VHLSS (2010-2016).

5.2.3. Informal sector pensions

Attempts to expand coverage through special schemes for farmers can be traced back to the 1980s. In 1986, the Ha Tay farmers pension fund was established, covering 67 communes in that province. Another fund for farmers was started in 1999 in 305 of the 325 communes of Nghe An. Both attempts were largely unsuccessful, partly due to the high proportion of contributions needed to cover administrative costs.

The Social Insurance Law of 2006 introduced the voluntary pension scheme at the national level. It went into effect on January 1, 2008. It specified a contribution that would rise gradually from 16 to 22 percent of the minimum wage. This appears to be a large amount for most informal sector workers, and combined with the 20-year vesting rule, led to low take-up.[54]

A growing number of countries are attempting to expand coverage to informal sector workers, but in contrast to Vietnam's approach, most offer some incentives in the form of matching contributions from the government. In China, where more than half of the labor force has joined the voluntary rural pension scheme, the combined central and local government contributions to the individual's pension account have been estimated to be as much as 85 percent of the total. The social pension is linked to the voluntary contributions in that contributors' parents qualify for the transfer. Thailand's government also pays for part of the premium for informal sector workers who sign up for their pension scheme and has managed significant increases in coverage.

To summarize, Vietnam's overall pension system faces a number of problems. First, even though the system consists of three different schemes, the coverage rate of the system remains low, and it is not well prepared to support a rapidly growing elderly population. Second, the system is facing major challenges to being financially sustainable, even though spending levels on pensions in Vietnam are at the global average for its level of development. A third challenge is that Vietnam's relatively high contributions for pensions could undermine its labor cost competitiveness. The next section looks at different ways to address these major challenges to the system. It starts with looking at different ways to expand coverage in Vietnam and provides some estimates of related costs. It then discusses options for improving the

54 Hoa (2010).

long-run financial sustainability of the contributory system.

5.3. Options for addressing the coverage gap

Generally, there are three ways to expand coverage: bring more workers into the formal sector, expand social pensions, or encourage more people to join the voluntary scheme for informal sector workers. The impact of each of these paths is very different. Aside from the obvious differences in financing between contributory and non-contributory schemes, a crucial difference is that the two contributory options will produce pensions only after several decades, while social pensions provide immediate impact and affect current cohorts of older people. Notably, the three approaches are not mutually exclusive.

5.3.1. Expanding contributory pension coverage

The recent history of developing country pension systems suggests that it is not likely that Vietnam's labor market will formalize any time soon. Coverage rates of contributory schemes over the last 25 years have increased only slightly in most low- and middle-income countries, with a few notable exceptions such as Korea. In Vietnam, coverage rates appear to have risen a few percentage points during this period, partly thanks to changes in the legislation that expanded the mandate to smaller firms and partly thanks to better enforcement and compliance. Analysis of the informal sector's reasons for not registering in Cling et al. (2017) suggests that there is some scope for improvement through better outreach.

While efforts should continue toward formalizing and registering small firms and even self-employed people, a large portion of the labor force does not have a regular, monitorable source of income so that a new approach to covering them is needed. If the relationship between coverage rates and income per capita shown in Figure 5.7 above is maintained and Vietnam's current growth rate continues, it may could achieve coverage rates found in Europe and Japan in 30-35 years. By this time, one in three Vietnamese people would be age 60 or over. Vietnam would have lost the race between coverage and population aging, and the vast majority would still have to rely on transfers from their children, their own savings, and social pensions.

5.3.2. Expanding social pensions

Facing this dilemma, it is not surprising that researchers and several international organizations have recommended making social pensions a more important part of the system both in terms of coverage as well as the size of the benefit.[55] The table below shows the simulated impact that an expansion of the existing social pension to a large proportion of the population age 60 and above would have on poverty and inequality. Moving to a universal social pension for this population reduces the share of elderly below the poverty line from 7.1 to 5.3 percent.

While expanding non-contributory pensions or social assistance for the elderly is the only way to address the coverage gap that is now inevitable for the cohorts reaching old age in the next several decades, it implies a large increase in spending. This increase in spending would be significant relative both to the existing social pension and even to overall social assistance spending on all programs. Applying a means-test to the social pension could increase the poverty impact of the same amount of spending or allow for the same impact with less spending.[56] However, strict means-testing is likely to lead to exclusion error, and higher non-contributory benefits could reduce incentives for contributing to the VSS pension scheme.

55 See Castel and Tong (2012),, World Bank (2018b), ILO-UNFPA (2014), Nguyen et al. (2012), and Giang (2011, 2014).

56 See Majoka and Palacios (2018).

Table 5.5. Poverty impact of hypothetical social pension in Vietnam

Indicators	Observed values (estimated directly from VHLSS 2016)	Counterfactual (No social pensions)		Different scenarios: providing 270 thousand VND (social pensions) for different age groups				
				60+	65+	70+	75+	80+
	(1)	(2)		(3)	(4)	(5)	(6)	(7)
Group	*Gini coefficient*							
Total population	0.353	0.354		0.350	0.351	0.352	0.352	0.353
Elderly (60+)	0.356	0.360		0.345	0.348	0.352	0.354	0.356
Poverty line ratios	*% elderly in each group*							
0%-50%	0.8	0.9		0.3	0.5	0.7	0.7	0.8
50%-100%	6.3	6.9		5.0	5.2	5.5	6.1	6.3
100%-125%	7.0	7.5		6.1	6.6	7.1	6.9	7.0
125%-200%	25.8	25.5		24.1	24.8	24.9	25.4	25.7
200%+	60.1	59.3		64.4	62.9	61.8	60.9	60.2
Total	100	100		100	100	100	100	100
Note: expenditure poverty line of WB-GSO								
Social pension is equal 270 thousand VND/month								

Source: Authrors.

Such concerns led Chile to implement a targeted pension offset scheme that included households in the bottom 60 percent of the welfare distribution. This ensured minimal exclusion error, albeit at a greater cost. At the same time, by withdrawing a proportion of the social pension benefit as contributory pension benefits increased, the two schemes were integrated in a way that kept disincentives to stay in the formal sector manageable. This experience, which is described in greater detail in Box 5.1, is relevant for many countries facing similar challenges.

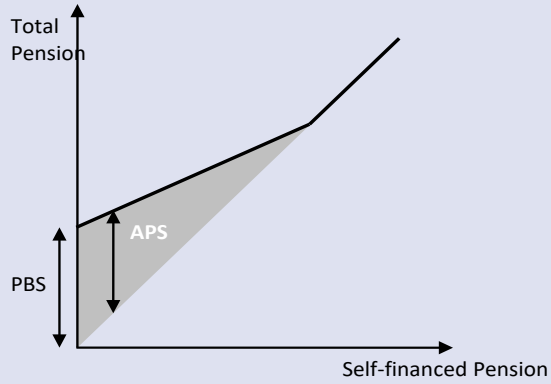
Box 5.1. Chile's solidarity pillar: integrating non-contributory pensions

Chile introduced a non-contributory ("solidarity") pension in 2008 that would complement the existing contributory pension system. In 1981, it had replaced its traditional defined benefit (DB) pay-as-you-go pension system with a defined contribution (DC) system with individual accounts managed by specialized private firms. Two types of non-contributory benefit existed: (a) a social assistance pension targeted at the lowest income quintile of the population, with eligibility precluded if a person had any other source of pension, and (b) a minimum pension guarantee for pension fund contributors who had attained only low balances after at least 20 years of contributions.

By 2006, it was clear that although the system had been very successful in obtaining high real rates of returns for the pension funds, pension levels would not be adequate for a large portion of the population. Most members of the system did not contribute frequently enough to build a large balance. Although the proportion of the labor force that worked in the formal sector was relatively high at around 60 percent, only a minority held steady jobs in the formal sector. Berstein et al. (2006) estimated that around 50 percent of members would receive a pension lower than the minimum pension, and many would not reach the 20 years of contributions required for the pension guarantee. At the same time, many of these individuals would not be poor enough to qualify for the social assistance pension. As a result, low- to middle-income individuals fell into a "coverage gap."

Box 5.1. Chile's solidarity pillar: integrating non-contributory pensions (cont.)

Design of Chilean pension system



Chilean policy makers faced a trade-off between providing income protection and reducing incentives to save. The new solidarity pillar had to be designed to be compatible with incentives to contribute to individual accounts. Since neither the existing social assistance pension nor the minimum pension guarantee provided adequate income support to alleviate poverty in old age, policy makers decided that the new pillar would replace both programs.

To maintain some incentives to contribute, the benefit was designed not as an absolute minimum floor guarantee but as a minimum pension for individuals with no contributions plus a top-up for individuals with contributions. The amount of the top-up would be reduced depending on the level of the contributory pension. The reduction was designed so that the total pension (the sum of the contributory and non-contributory pensions) would always be increasing along with the balance accumulated in the individual account.

Operationally, the new solidarity pillar was composed of two benefits: (a) the basic solidarity pension for individuals with no contributions and (b) a solidarity pension supplement, which is the top-up for individuals with some contributory pension. In other words, the new solidarity pillar was designed as a minimum pension benefit with a clawback, see above.

Source: World Bank (2016).

5.3.3. Expanding pension coverage for informal sector workers

Several analysts have identified features of the current design of the voluntary pension that discourage take-up by informal sector workers, even if they have an interest in saving for old age. An analysis of the FINDEX survey data found that only about 18 percent of Vietnamese adults chose to save for old age in 2017, lower than the median for a sample of more than 140 countries but similar to the median for non-OECD countries. A cross-country regression analysis revealed a strong correlation with income level, both within and across countries. Interestingly, financial inclusion also appears to have a large and significant effect: individuals with bank accounts were much more likely to report having saved for old age. This suggests that the low rate of financial inclusion in Vietnam is likely to reduce saving for old age. Finally, there is clear evidence of a crowding out effect whereby higher public pension spending is associated with a lower propensity to save for old age. This finding, which is consistent with the empirical literature on the impact of public pensions on savings,[57] suggests that reforms to reduce future spending and make the contributory scheme more sustainable could lead to higher rates of saving for old age.

57 For a review of the literature, see Karam et al. (2010).

A number of countries have attempted to convince informal sector workers to contribute to a pension scheme. This is usually a stand-alone scheme designed for this group of workers, and most offer a financial incentive, often in the form of a matching contribution from government. This type of arrangement was implemented in India between 2009-2014 and is ongoing in China and Thailand. The results have been mixed, with relatively low take-up in India and somewhat more in Thailand. Only China, where the subsidy is very high, has had high rates of participation. Notably, the evidence for India is consistent with the FINDEX survey analysis in that take-up is higher at the higher income levels. This raises an important policy question: should the subsidy for contributions be targeted? If not, it is likely that those in the non-poor informal sector who have some capacity to save for the long term will be the main beneficiaries of the policy, and the lower-income groups will continue to be excluded.

The recent experience with expanding health insurance coverage in Asia, including Vietnam, is instructive here. Lessons from this experience are summarized in Box 5.2. Realizing that achieving universal health coverage was not possible if coverage depended on being in the formal sector, many countries have started paying the premium on behalf of the poor and sometimes for the near-poor. Like Vietnam, China, India, Indonesia, and the Philippines all finance these premia from the central budget, allowing them to achieve very high coverage rates.

Box 5.2. Achieving universal coverage: Lessons from health insurance

The experience with expanding health insurance coverage in East Asia holds lessons for pension policy and shows that universal coverage is feasible. The unprecedented increases were based on policies that recognized the futility of relying exclusively on payroll tax-based financing and eligibility. Instead, a large part of the population, typically starting with the poor, was subsidized—i.e. their premiums were paid by the government to the social insurance fund.

Most countries with social health insurance systems covered here subsidize the contributions of select segments of the population, especially the poor and vulnerable, through transfers from general revenues to the health insurance fund. Referred to as progressive universalism, this approach provides coverage and integrates the poor (who might otherwise not have been able to afford premium contributions) into pooling arrangements. Indeed, the World Bank's Universal Coverage (UNICO) series of 24 country case studies has shown that many countries have identified and integrated the poor and vulnerable as an early and critical step in their path to UHC. In the East Asia region, China, Indonesia, Philippines, and Vietnam combine social health insurance systems (with mandatory payroll deductions for civil servants and the formal sector) with general revenue financing of the insurance premiums of the poor. This approach is built upon the health insurance logic of pooling health risks and contribution payments, but by guaranteeing a defined benefit package to those who would not otherwise contribute, it effectively removed the link (found in contributory social insurance) between being able to contribute oneself and being entitled to a benefit package.

This approach toward achieving universal health coverage has not yet been attempted for pensions. There are clear parallels but also important differences. The main common element is the use of general revenues to pay part of or the entire premium or contribution for a segment of the population. Decisions such as whether enrolment is automatic, the degree of subsidization, and the eligibility criteria are also common design choices. With pensions, it is possible to define a minimum benefit in monetary terms, while for health, a package of services and possibly co-payments would be specified. In some sense, determining the monetary amount is easier than the medical package and is much easier to cost.

Source: World Bank (2020).

A similar logic can be applied to pensions and the cost of following this approach can be estimated. In the extreme, a pension contribution could be made for every adult regardless of whether they worked in the formal or informal sector (or worked at all).[58] The contribution amount would

58 See Anton et al. (2013) for an example of this kind of proposal in the case of Mexico.

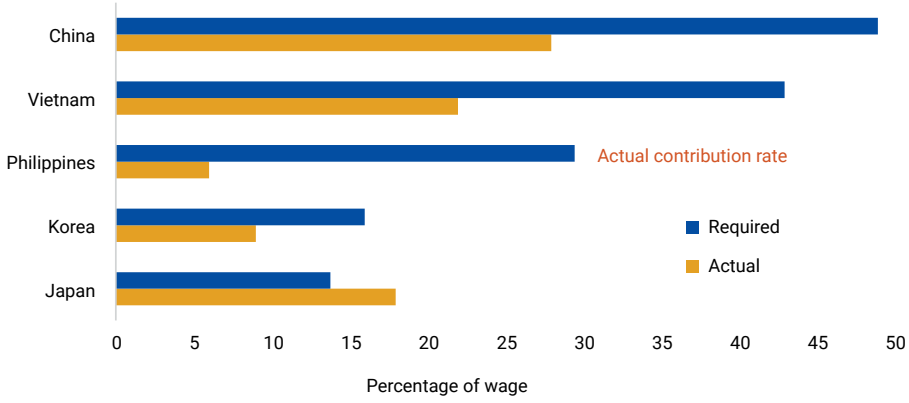
be calculated to achieve an acceptable minimum pension level.[59] A more limited version would make contributions only for informal sector workers or even just poor informal sector workers. The degree of the contribution subsidy could even be differentiated between poor and non-poor informal sector workers.[60]

The amount of the subsidy would be calculated based on a target benefit level, with the goal of providing a minimum consumption level in old age. A young worker who accumulated 35 or 40 years of contributions in this way should receive an actuarially fair benefit (unlike the relationship between contributions and benefits for formal sector workers today) that corresponds to this target. A worker that moved from the informal to formal sector would still participate in the same scheme but would have a higher pension than a worker who was always in the informal sector. The link between coverage and labor market status would be broken as far as the first tier of the pension benefit is concerned

5.4. Options for improving long-run financial sustainability in the contributory scheme

While expanding VSS coverage would temporarily improve the finances of the contributory scheme by increasing contribution revenues, the actuarially fair contribution rate is much higher than the current payroll tax (Figure 5.9). In other words, the parameters of the scheme imply that contributions are less than what is needed to finance benefits. This is a common situation among publicly managed, defined benefit schemes around the world. Almost all of them run surpluses for a few decades while the scheme is maturing but eventually move from partially funded status to pay-as-you-go schemes. Currently, only about 70 percent of contributions are required to finance pension outlays. This, combined with budgetary transfers and interest payments from the investment of reserves, results in surpluses for the next few years. However, these surpluses will turn into deficits within a decade.

Figure 5.9. Actual versus required contribution rates for public pension schemes



Source: OECD (2013) for breakeven contribution rates.

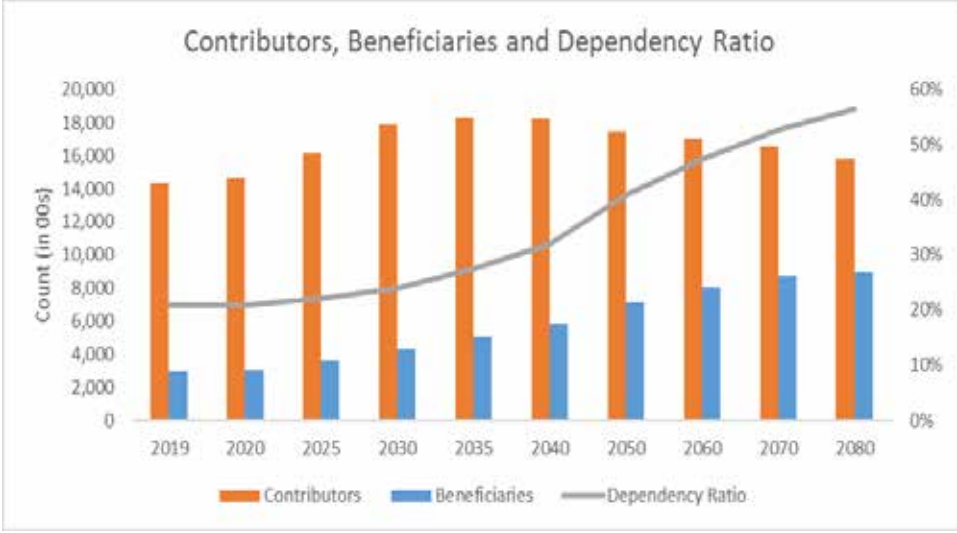
Note: The Japanese contribution rate refers to 2017.

The ratio of pensioners to contributors is projected to increase rapidly in the next two decades. A recent World Bank report[61] projected the changing demographics of the pension scheme as it matured, and these results have been updated to show the number of contributors and pensioners that would be expected over the next 60 years if coverage rates remain stagnant (Figure 5.10). The number of contributors remains relatively constant and shrinks in the long run along with the working-

59 This can be seen as an ex ante mechanism for financing a social pension.
60 See Palacios and Robalino (2020) for an illustration.
61 See World Bank (2018).

age population. The result is a steady increase in the dependency ratio (the number of pensioners supported by each contributor). Without reforms, this ratio ultimately drives the finances of the scheme into deficit.[62]

Figure 5.10. Project number of contributors and pensioners in VSS 2019-2080



Source: World Bank PROST projections (World Bank 2010).

Projections indicate that cash-flow deficits would arise very quickly (by around 2029), and reserves would be exhausted by the middle of the next decade (Figure 5.11).[63] In 30 years, the deficits would stabilize at close to 2 percent of GDP, as spending would rise to around four percent of GDP. Once the reserves are exhausted, the ongoing pension expenditure would become a fiscal liability of the government and would need to be funded through government revenues.

There is some consensus over desirable parametric reforms for existing pension systems. These measures have all been implemented in a range of OECD and ECA countries over the last two decades, but much less widely in EAP. Most apply to the current parameters in the Vietnamese pension scheme:

(i) Moving away from final salary and toward lifetime, revalued average wages as the base wage for calculating replacement rates;

(ii) Using linear accrual schedules;

(iii) Indexing pensions to changes in prices;

(iv) Having minimal vesting requirements;

(v) Linking retirement age changes to life expectancy;

(vi) Equalizing retirement ages for men and women; and

vii) Providing actuarially fair (neutral) incentives for early or late retirement.

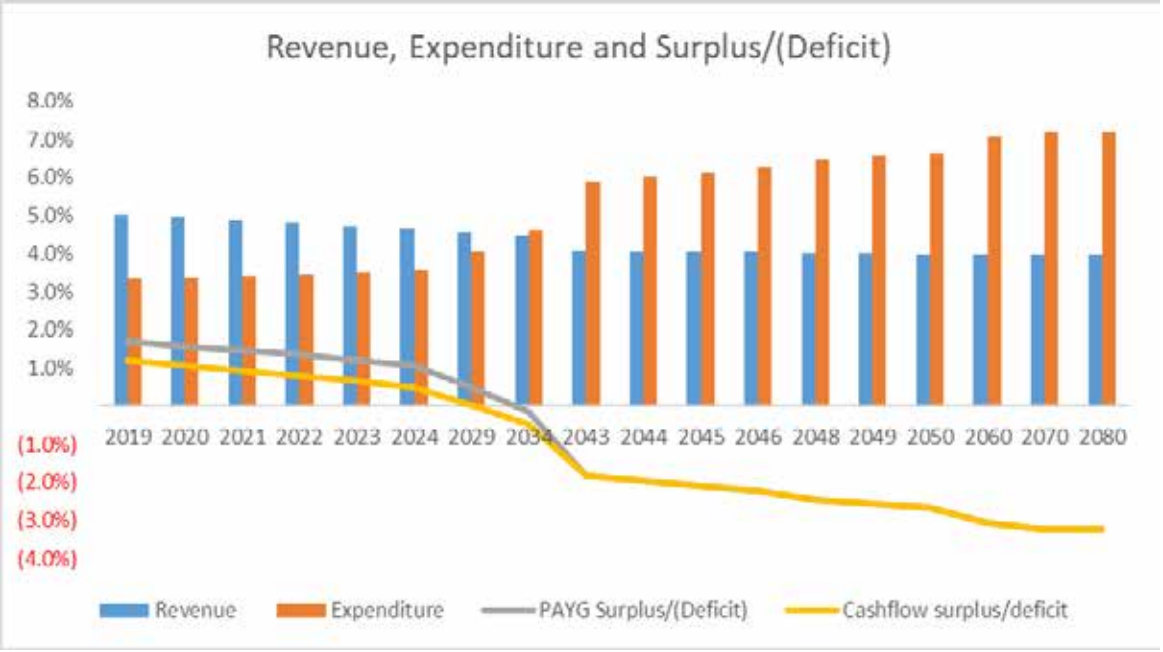
Parametric reforms are not only needed for financial sustainability but are also important for moving toward the goal of equitable treatment across and within cohorts of contributors. For example, as life expectancy continues to increase in Vietnam, the ratio of benefits to contributions increases for future generations unless the retirement age rises. Similarly, the five-year difference between the retirement ages of men and women means that the latter will receive a pension for many more years despite paying the

62 Expansion of coverage under current parameters would delay the deficits, but these deficits would eventually be even larger as each member of the scheme contributes less than he or she receives under current rules.

63 Using a different model and assumptions, Giang and Nguyen (2017) project deficits beginning around 2034.

same amount of contributions.[64] Those who retire early should not get a better deal than those who retire at the normal age or later. Finally, the huge differential between replacement rates for public and private sector workers is another example of how sustainability and equity are well-aligned.

Figure 5.11. Projected spending, revenues, and deficits in VSS 2019-2080



Note: PAYG surplus/deficit includes investment return on reserve.

Source: Authors, based on PROST projections.

Another parameter that can be adjusted is the contribution rate. Compared to other countries, this rate is already quite high in Vietnam as shown in Figure 5.12. At 22 percent, it is significantly higher than in Japan and much higher than in Thailand or Indonesia. In East Asia, only Malaysia, Singapore, and China have higher contribution rates, and as mentioned earlier, the first two are defined contribution schemes (provident funds) that do not face issues of financial sustainability since they are fully funded. The main reason that the Chinese rates are relatively high compared to Korea, Indonesia, or Thailand is that pensions were introduced much earlier in China. China started its scheme in the 1950s, while Korea only started in 1988 and Thailand and Indonesia implemented even more recently.[64]

Raising contribution rates higher than 22 percent in Vietnam would further discourage participation in the formal sector. While the evidence is mixed, a shift away from payroll tax financing and a reduction of rates has been associated with an increase in formal sector employment in some countries.[65] It may also have negative consequences for international competitiveness. Finally, in the face of increasing concern about the impact of automation on employment, there is growing recognition that taxes on labor can exacerbate the effects.[66] In short, there does not seem to be much scope for increasing the contribution rate in order to reduce the predicted deficits.

The high replacement rates for public sector workers relative to their private sector counterparts (as well as to workers in other countries) are

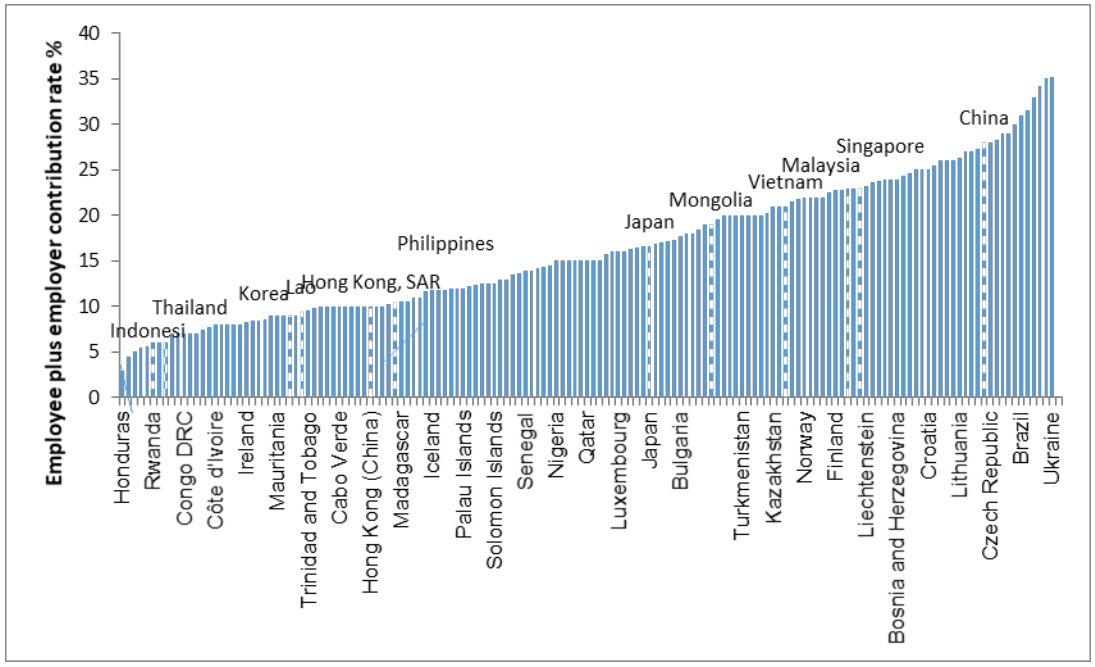
64 See Castel (2009) for a detailed discussion of the rationale for equalizing retirement ages in Vietnam.

65 See Pagés (2017).

66 See ADB (2018).

another example of inequitable treatment, as both types of workers contribute the same share of their wages. While a transition is underway, it is extremely gradual. Again, for reasons of both equity and financial sustainability, the pace of this reform and the convergence of replacement rates should be increased.

Figure 5.12. Contribution rates across countries compared

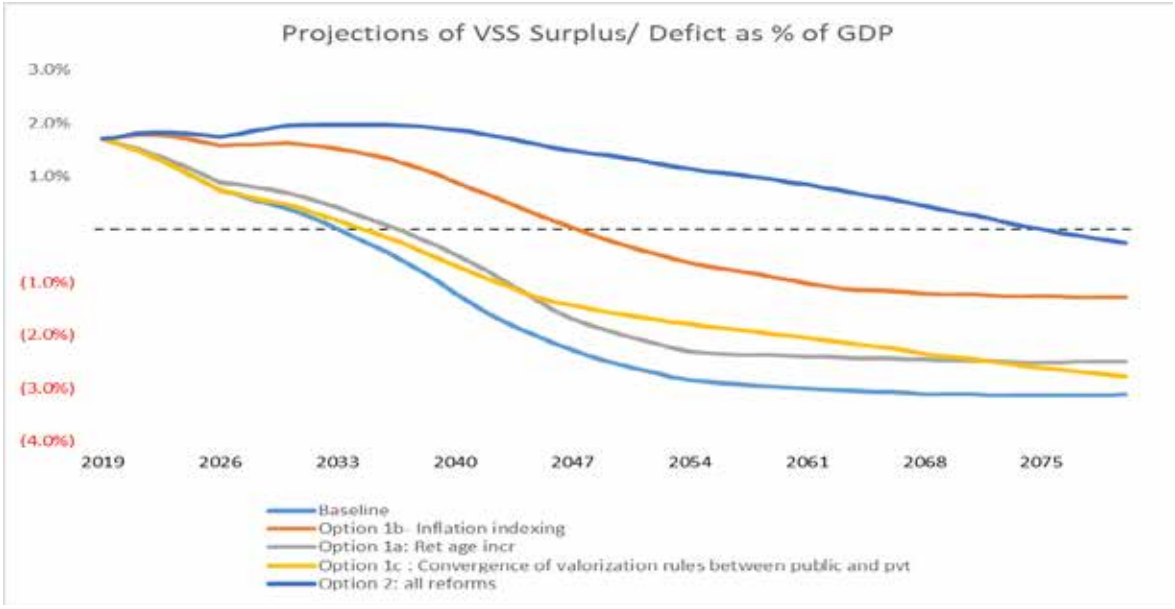


Source: ILO (2018)

The most important change would be to move from the current system of periodically indexing pensions to changes in wages to automatic price indexation. Almost every OECD country has moved to price indexation, with a few exceptions where a combination is used. Price indexation protects the real value of pensions in a sustainable way, whereas wage indexation with relatively high replacement rates leads to deficits in the long run.

Figure 5.13 shows pension surplus/deficits as well as the implicit pension debt under status quo (baseline) and a few parametric reform options. The reform scenarios are described in **Table 5.6**. A gradual increase (three months per year) of the retirement age to 60 years for women and 62 years for men would delay deficits by about 12 years. While an increase to 65 years for both sexes would not delay the onset of deficits very much, it would reduce the long-run deficits by almost a full percentage point of GDP. Finally, a combination of the modest increase in the retirement age and a mixed method of indexation (partly to wages and partly to prices) would delay deficits until 2044. More ambitious reform options, such as moving to pure price indexation, penalizing early retirement, and linking normal retirement age to life expectancy would significantly reduce long-run deficits. These simulations illustrate the difficult choices that lie ahead for policymakers in Vietnam, but they also show that it is possible to change course in time to smooth the transition and avoid a crisis.

Figure 5.13. Projection of pension expenditure (surplus/deficit) over time



Source: World Bank PROST projections.

Table 5.6. Baseline and reform scenarios modeled in Figure 5.13

Scenario	Description	Revenue deficit in:	Reserves exhausted in:	IPD[67] in 2020 % of GDP	IPD in 2080 % of GDP
Baseline[68]	Expenditure under no-reform scenario	2034	2042	188	174
Option 1a: Baseline + retirement age increase to 62M/60F	Increasing retirement age from 60M/55F to 62M/60F, at a rate of 3 months annually	2037	2046	178	159
Option 1b: Baseline + inflation indexation of pension	Changing indexation of pensions from nominal wage growth to inflation indexation	2048	2063	128	123
Option 1c: Baseline + convergence of valorization rules by 2048	Converging public sector pension formula with that of private sector (career avg with inflation valorization)	2035	2044	172	172[69]
Option 2: All the reforms above (Option 1a + 1b +1c)	Increasing retirement age, changing indexation rule, and converging valorization formula	2075	2080	112	115

Note; Implicit pension debt is defined as the discounted present value of spending through the projection period.

Note: All reform options assumed to start in 2020. See Annex 1.1.

Source: World Bank PROST calculations.

67 Implicit Pension Debt (IPD) is calculated as the present value of all future spending.
68 See Annex for details on scheme rules and assumptions made for projections.
69 The IPD in this scenario in 2080 is the same as that of baseline but expenditure in Option 1c. This is because under current rules (baseline), new entrants to the public scheme are supposed to have the same rules as the private scheme.

5.5. Way forward

Without significant changes to pension policy, the unfolding reality of a Vietnam with pension "haves" and "have nots" will become inevitable. Contributory pensions in the traditional form that are linked to formal sector employment cannot win the race between coverage and aging. The result will be two distinct trajectories for older people: the pension "haves" will retire early and live longer and happier lives[70] with smaller declines in their lifetime consumption, while the pension "have nots" will work as long as they can and will live on a combination of their labor income, transfers from children, and social pensions. To paraphrase the Vietnamese proverb, those with pensions will worry about their money, while those without will worry about their bread.

Unfortunately, Vietnam will not achieve its ambitious goal of reaching 50 percent coverage of its formal pension scheme by 2030. The current coverage of around 25 percent of the labor force broadly matches the share of formal sector wage employment, but it is well below the 38 percent share of those with wage employment of some form in 2014 (World Bank, forthcoming). This underscores the challenge of expanding social security participation to the large informal sector, a challenge shared globally by developing countries.

Virtually no country has expanded coverage to the informal sector through a pure contributory route, and Vietnam is unlikely to be an exception. The 2014 Social Insurance Law amendments allow for a matching contribution approach for informal sector workers to incentivize their participation in social security. This is a worthwhile approach, but it is too early to say whether this will significantly expand coverage given the modest matching contribution from government budget. A second strategy would be to gradually lower the age for social pension eligibility from the current 80 years, which is very high. This strategy has already been proposed but not yet financed.

In fiscal terms, the biggest risk will be financial sustainability of the pension system. The formal sector pension system is financially unsustainable. While Vietnam undertook sensible reforms of its Social Insurance Law in 2014, the measures do not go far enough or fast enough to bring the pension system into financial balance. As a result, the pension fund is still likely to enter cash flow deficit in the 2020s. Raising contribution rates even further would likely have a negative impact on labor markets just as pressures from technology and automation began to increase. Higher taxes on labor are also not helpful in promoting formalization of jobs.

In the last decade, several policy changes have moved the Vietnamese pension system in the right direction, but the magnitude of the changes is not commensurate with the unprecedented aging process faced by the country. The introduction and expansion of a social pension and the launch of voluntary pensions for informal sector began to address a coverage gap in 2006-2008. In the case of the social pension, both the size of the transfer and the restrictive eligibility rules result in a program with marginal impact. Informal sector workers have too little incentive to join the voluntary scheme so that it scales up and makes a significant contribution to the future of old age income security in the country.

Reforms that reduce the cost of the VSS while expanding social pensions and subsidized contributions for informal sector workers (much in the same way social health insurance has been expanded in Vietnam) can help address these challenges. Such reforms would rebalance the role of the pension system and begin to address the "missing middle" where neither contributory nor non-contributory pensions currently reach. In doing so, however, careful consideration should be given to avoiding incentives to remain or move to the informal economy. This can be achieved by integrating the non-contributory and contributory elements of the scheme.

The reforms described in this chapter and summarized below envisage a pension system

70 Hoang (2015).

consisting of four parts and are aimed at expanding the budget-financed element of the pension system while making the contributory pension more sustainable. These reforms are linked, since the projected VSS deficits will reduce the fiscal space available to other elements of the social protection system, including social pensions. Options to pre-fund the contributory pensions of informal sector workers through matching contributions would also require additional financing.

The proposed four parts are: (i) a reformed VSS contributory pension for formal sector workers, (ii) an innovative scheme for informal sector workers that draws on budgetary subsidies, (iii) a social pension providing an income floor to those without sufficient formal pension benefits, and (iv) an expanding private pension system for those who can afford to save more. While each reform is important, sequencing will be essential. Simply expanding coverage of the current formal system before making its design financially sustainable may delay deficits in the medium term but will only make them larger in the long run if the underlying system is not designed to achieve financial balance. The four elements of a future proposed pension system are discussed in more detail below.

(1) ***Reform the formal sector contributory system (VSS) to make it financially sustainable*.** This must be completed before the VSS can safely expand its coverage, so as to avoid dramatically increasing long-run deficits. The GoV is planning to undertake another round of pension reform to build on the progress made in 2014. Attaining financial balance of the pension system can be achieved by:

- **Gradually increasing the official retirement ages and closing the retirement age gender gap**. With a rapidly aging workforce, the SP system should be encouraging people to continue contributing to the economy, rather than retire early. Most Vietnamese workers are more than capable of working past age 60, especially as life expectancy and healthy life expectancy are rising. Rural people already often work well into their 60s and even 70s. Steadily raising (by 4-6 months per year) and equalizing the retirement age also makes sense for increasing equity between formal and informal workers, as well as between working men and women. Global experience suggests that increases in the retirement age should be gradual but should implemented as soon as possible.
- **Reducing the financial incentives for early retirement.** Recent reforms introduce procedures that make it harder for participants to qualify for early retirement, but there has been no change in financial incentives. The conditions for receiving these early retirement pensions need to be reviewed carefully, and the benefits for those who retire early should be reduced by at least 6 percent per year to reflect the longer period of time for which payments will be made (rather than the current 2 percent).
- **Reforming the accrual, indexation, and valorization rules.** To overcome the challenge of high average accrual rates despite low absolute pension values, recent measures expanding the base for contributions beyond participants' basic salary (to include allowances, bonuses, and other compensation) are a welcome step. In addition, annual accrual rates should be reduced further to levels more comparable with regional neighbors, even as the absolute level of benefits is either held constant or increased. Similarly, benefits for both public and private sector workers should be equalized on a more accelerated basis than allowed for in the 2014 reforms. Rules for indexation and valorization of past wages should also be more predictable. The vast majority of OECD countries have shifted to automatic price indexation because it is simple to administer, relatively affordable, and protects the purchasing power of pensions after retirement.

(2) ***Reform the existing matching contributory scheme to design a more subsidized and dedicated pension scheme for informal workers, with an aim to increase coverage of the social insurance system*.** Global experience suggests that it is very difficult

to mandate that informal workers participate in the regular formal sector social insurance scheme. Global progress over recent decades in bringing informal workers into fully contributory schemes has been very modest for the most part. While it is difficult to predict with precision, the maximum pension coverage rate Vietnam could expect if it attempts to expand coverage without subsidizing informal worker contributions would be around 35-40 percent of the workforce by the mid-2030s, a period in which the share of elderly population will increase sharply. In contrast to the current purely contributory VSS system, a more effective system for informal workers would use a matched contributory scheme. A successful system would:

- **Create mechanisms for informal workers to conveniently interact with the system during enrollment, contribution collection, and pension delivery**. Systems tailored to informal workers are fundamentally different from those designed for the formal sector, and the points at which they interact with the system have to be easily accessible and ubiquitous across the country. Digital technology will play an important role in enabling facilitated, paperless enrollment, among other functions. Other countries that have created new informal sector pension programs have either created new mechanisms for workers to interact with (India) or added these points of contact to existing networks, such as in retail outlets (Mexico).
- **Provide stronger financial incentives for workers to make contributions toward their pension**. Above all, it is imperative that channels to collect contributions innovate beyond the employer-mediated collection methods used in the VSS system. Instead, a system targeting informal workers should combine a number of financial incentives, including matching workers' contributions using state budgetary resources (a so-called matching defined contribution approach).[71] Contribution rules should also be simplified to acknowledge and accommodate irregular incomes—e.g., several countries with matching defined contribution (MDC) schemes require only flat contributions annually to avoid having to measure incomes of informal workers and to accommodate the seasonality of their incomes. Finally, the various components of this system can be designed to include behavioral "nudges" that encourage worker participation and contribution.
- **Rely where possible on common platforms to identify participants and manage their accounts.** This system would need to be able to track individuals throughout their lives. Furthermore, investments should be made at scale to provide informal sector workers with low transaction costs.

(3) ***Expand the social pension scheme to younger ages to provide an income floor for those without contributory pensions, especially from the informal sector***. Even if expansion of the purely contributory and matched contributory schemes is successful, there will still be a large stock (and probably future flow) of elderly who will not accumulate an adequate contributory pension prior to retirement. To provide some old age financial protection to this group, it would be advisable to lower the age threshold for the social pension from the current 80 years to closer to 70 years. Defining the fiscally affordable level of social pension requires modeling future demographics and different age thresholds and benefit levels. If the social pension is not targeted beyond pension testing, one option is tiered benefits depending on age (increasing benefit at certain ages as in India and Thailand, for example). This could be universal (probably excluding those receiving a formal sector pension, as Thailand does with its social pension) or potentially widely targeted.

(4) ***Expand voluntary private pensions for those able to save for old age above and beyond the VSS contributory schemes***. Since replacement rates for the VSS scheme will need to be reduced to achieve fiscal balance, workers will need to be encouraged and incentivized to save additional funds for their own retirement. To make the current private pension pillar successful, a robust supervisory

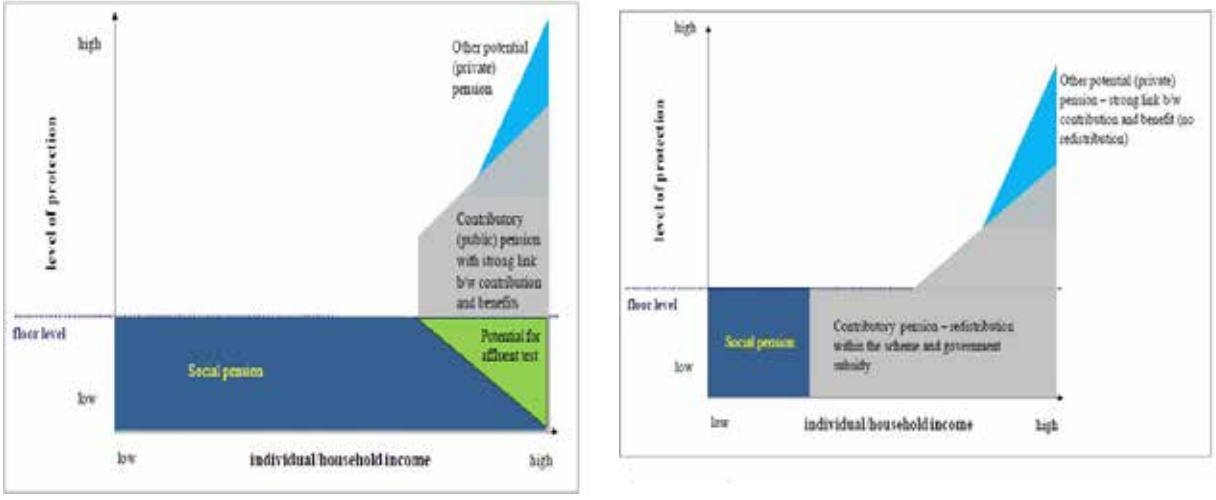
71 See Holzmann et al. (2014) and Holzmann et al. (2020) for global reviews of matching defined contribution (MDC) pension schemes.

model is needed ahead of the launch of the first pension plans. The existing system has some good safeguards such as the use of custodians, but strong supervision by the Ministry of Finance is also essential.

(5) *Improve government capacity to manage pension fund investments*. Over time, VSS should be given the flexibility to invest in a wider range of assets in Vietnam, adding corporate bonds, high-quality equity investments, and overseas assets to its portfolio to ensure that returns on assets can best meet liabilities. As the national pension fund portfolio diversifies, it will be necessary to have an investment governance framework that emphasizes risk management, controlling costs, matching assets and liabilities, and maximizing long-term returns, and that is grounded in an agreed risk-return profile and has well-defined operational policies and procedures on fund management and oversight. It will be important to ensure adequate investment expertise and member representation in governance arrangements and that a clear distinction is made between the tasks of setting overall investment strategies and rules and of managing day-to-day investments.

Policymakers will have to decide how to strike a balance among these four pillars of the pension system, as there will be trade-offs in how spending will be allocated among them. A particularly important decision will concern how best to use the social pension and informal sector contributory pension to support informal sector workers. There is no one "correct" way to build this system, and two alternatives are presented in Figure 5.14.

Figure 5.14. Alternative approaches to wider financial protection coverage for the elderly



Source: Giang (2014), based on Knox-Vydmanov (2012) and Galian (2014)

In order to garner public support for a more ambitious pension reform agenda, policymakers will have to explain both the challenges as well as the urgency of reform. According to one study,[72] 62 percent of Vietnamese respondents thought that the government should bear primary responsibility for "providing income to retired people." However, only 27 percent would be in favor of raising taxes to "provide a basic benefit to those elderly who are in financial need"—the lowest figure among nine Asian countries. At the same time, the Vietnamese respondents were the least likely among the nine countries to support a retirement age increase. These attitudes may help explain the slow pace of reforms and point to the need for a concerted public information campaign.

72 See Jackson, Howe and Tobias 2012.

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5.7. Annex: VSS scheme rules and WB (PROST) assumptions on projections for VSS

PROST projections are based on administrative data provided by VSS as of 2015. Coverage assumptions have been informed by growth in coverage from data received subsequently.

Scheme rules	Private sector	Public sector
Contribution rate	22% (8% employee + 14% employer)	22% (8% employee + 14% government)
Retirement age	60M/55F	60M/55F
Accrual rate	2.3% for first twenty years for males, 2% for each year after 2.8% for first twenty years for females, 2% for each year after	2.3% for first twenty years for males, 2% for each year after 2.8% for first twenty years for females, 2% for each year after
Maximum RR	75%	75%
Vesting period to qualify for pension	20	20
Wage base for calculating pension benefit	Average lifetime earnings with inflation valorization	New entrants have same valorization rules as private sector; existing CS are scheduled to move to lifetime career avg with wage valorization by 2055
Indexation rules for pension	Nominal wage indexation	Nominal wage indexation

Coverage assumption – The coverage of public and private combined in 2015 was 23.5 percent of employed and is assumed to go up to 26.2 percent by 2019 and 30.5 percent by 2035 and averages at 28 percent of total employed in the long run.

Macroeconomic assumptions	2019	2020	2021	2024	2030	2040	2080
Real GDP growth	6.50%	6.50%	6.50%	6.50%	4.42%	2.00%	1.50%
Productivity growth of minimum wage worker	4.50%	4.50%	4.50%	4.18%	3.68%	2.00%	2.00%
Inflation Rate	3.60%	3.80%	3.80%	4.00%	3.05%	3.00%	3.00%
Real investment return	1%	1%	1%	1%	1%	1%	1%

*Real GDP and inflation until 2024 are taken from IMF Article IV, 2019

Options modelled in PROST

I. Option 1a - Change from wage indexation of pensions to price indexation for public and private, starting from 2020

II. Option 1b - Increasing retirement age from 60M/55F to 62M/60F, three months per year, starting from 2020

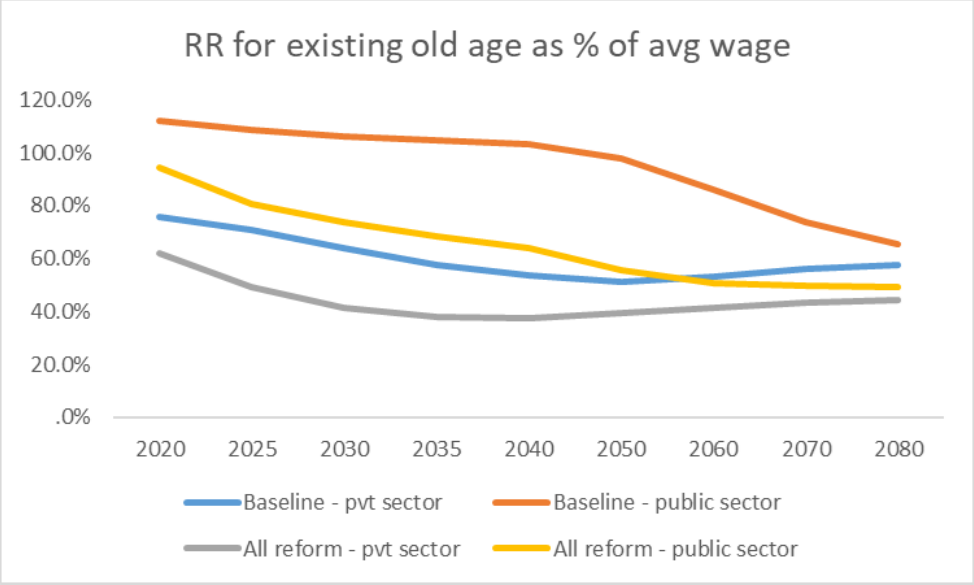
III. Option 1c - Converge formula on wage base, i.e. move public sector formula from five-year average with wage valorization currently to career average with inflation valorization by 2048

IV. Option 2 - all the above

The replacement rate (RR) of the public sector at baseline is significantly higher than that of the private sector owing to different wage bases for calculating pension benefit and differing valorization rules. Over time, the RR for the public

sector at baseline is expected to go down, as new public servants will have the same rules as the private sector. The reform scenario that includes Option 1a, 1b, and 1c will see a rapid decline in RR for both the public and private sectors (sharper for the public sector), owing to changes in indexation rules and the retirement age increase. However, as can be seen in the Figure below, the RR of the public and private sectors will equalize in the long run under the reform scenario.

Figure 5.A1: Replacement rate for an average individual expressed as % of average wage



5.8. Annex: Evolution of Vietnamese Social insurance Legislation

1930s: Social insurance regime appears in Vietnam under French colonial rule, limited to cover only sickness, labor accident, and retirement insurance and applicable only to those working in the French administrative apparatus and army.

1961: Government Decree No. 218-CP of December 27, 1961, expansion of social insurance to workers and state employees.

1980s: Since Vietnam adopted the open-door policy, shifting to a market economy and strongly integrating itself into the international community, its social insurance law has been gradually and substantively improved.

1992: The 1992 Constitution: The State provides the social insurance regime for state employees and wage earners and encourages other forms of social insurance.

1993: On June 22, 1993, the Government issued Decree No. 43-CP (later institutionalized in a chapter of the 1994 Labor Code). This has laid legal grounds for the renewal and reform of the social insurance regime in Vietnam.

1995: The Government issued Decree No. 12-CP of January 26, 1995, together with the Charter on Social Insurance; Decree No. 45-CP of July 15, 1995, together with the Charter on Social Insurance applicable to officers and professionals in the army and police forces; Decree No. 19-CP of February 16, 1995, on the establishment of a system of social insurance agencies in Vietnam.

- Expanding coverage of SI to all employers with more than 10 employees.

2003: The Government promulgates Decree No. 01-CP of January 9, 2003, amending a number of articles of the Charter on Social Insurance to suit the new situation after nearly 20 years of “doi moi” (renewal).

2006: On June 29, 2006, the National Assembly passed the Social Insurance Law which took effect on January 1, 2007 (the first SI law since Vietnam regained its independence in 1945):

- Expand coverage of compulsory SI to all employees from the private sector with labor contracts of 12 month and longer
- Expand coverage of UI to all employees with labor contracts of 12 month and longer
- Expand coverage of UI to all employers with more than 10 employees
- Allow for voluntary social insurance
- Clarify long-term and short-term benefits
- Pension indexing based on CPI and growth rate
- Increase contribution rates gradually: the rate that employers were required to pay for social insurance was increased from 11 percent in 2009 to 12 percent in 2010-2011, 13 percent in 2012-2013, and 14 percent from 2014. The rate that employees were required to pay for social insurance was increased from 5 percent in 2009 to 6 percent in 2010-2011, 7 percent in 2012-2013, and 8 percent from 2014. From the June 1, 2016, employers and employees are required to pay 21.5 percent and 10.5 percent, respectively, for social security (including SI, UI, and HI) in Vietnam. The rate that self-employers were required to pay for voluntary social insurance was increased from 16 percent in 2009 to 18 percent in

2010-2011, 20 percent in 2012-2013, and 22 percent from 2014.

2014: The SI Law was revised, with its changes becoming effective from January 2018. Several important changes in the 2014 law revisions include:

- Social insurance applicable for foreign employees: foreign employees can participate in Vietnam's Social Insurance from 2018, and this is compulsory according to the recent Decree 143/2018/NĐ-CP.
- Expand coverage to employees with labor contracts from 1 month as of January 1, 2018.
- Expand salary base for contribution to other extra payments (apart from base salary and allowances which have already been included). Such extra payments are broadly defined as payments to compensate for working process, working result of the employee (even if the amount of payment is not stated in labor contract, and may be paid regularly or irregularly). However, welfare and benefits such as bonus, innovative incentive, mid-shift meal allowance, and support for petrol, telephone, transportation, and housing for the employees shall be stated separately in the labor contract and accordingly not included as a basis to calculate the SI contribution.
- Undertake some parametric reforms: change in accrual rate for women from 3 percent per year to 2 percent per year after the first 15 years of service.
- A new rate of contribution to the occupational accident and disease insurance fund will be required from employers under Decree No. 44/2017/ND-CP passed on April 14, 2017. According to Decree No. 44/2017/ND-CP, from June 1, 2017, employers have to pay only 0.5 percent of employee's salary instead of 1 percent for contributions to the occupational accident and disease insurance fund.
- Reduction rate for early retirement changed from 1 percent to 2 percent per year of early retirement.
- Reduction in accrual rate for me: each male participant will be entitled to 45 percent for the first 15 years of service. This number will be increased to 16 years if retired in 2018, 17 years if retired in 2019, 18 years if retired in 2020, 19 years if retired in 2021, and 20 years if retired from 2022 onward.
- No lump sum payment for early withdrawal except in some special cases.
- Change in number of most recent years in which salary will be used to calculate average salary for calculating pension (from the last five years to lifetime).
- Change in volatizing past contribution.
- Expansion to the private sector, voluntary scheme, social pension, and the various rounds of parametric reforms.
- Pension fund investment: deposits, buying bank CDs, bonds, etc. in some commercial banks that are ranked as relatively safe by the State Bank of Vietnam.

Under Vietnamese law, social insurance is understood as a substitute or partial compensation for employees' incomes that are reduced or lost due to their sickness, maternity leave, labor accidents, occupational diseases, unemployment, retirement, or death, based on their contributions to the social insurance fund.

The current social insurance regime covers: sickness insurance, labor accident and occupational disease insurance, maternity insurance, health insurance, unemployment insurance, retirement, and survivorship allowance.

CHAPTER 6: HEALTH CARE TO ACHIEVE HEALTHY AGING IN VIETNAM

6.1. Introduction

Vietnam is undergoing rapid transitions—demographic, epidemiological, and in health financing—that will have important implications for future healthcare demand, health spending, and health outcomes. Although the country is still young, the rate of aging is high compared to other countries in East Asia,[73] slower only than in China and Thailand. Life expectancy at birth in Vietnam increased from 51 years in 1950 to 75 years in 2016, but increased life expectancy does not always imply an increase in the number of healthy life years. In 2016, a person in Vietnam living to age 60 was, on average, expected to live another 22.7 years but only remain healthy for 17.2 of those years.[74] Much of the disability in older ages is due to chronic non-communicable diseases (NCDs) and disabilities associated with aging. Efforts are needed to not only extend life but also to ensure health in older ages in a way that is feasible, affordable, and sustainable in the Vietnamese context. Financing of Vietnam's healthcare system is undergoing multiple transitions, from state budget to health insurance, from external to domestic funding sources and from central to provincial sources.

The Government's strong commitment to achieving Universal Health Coverage (UHC) for its population can help protect and improve health throughout the life cycle, but it requires substantial change from the past focus on infectious disease and acute hospital care. Vietnam's recent strategic reorientation toward prevention of NCD risk factors, early detection through screening and chronic disease management, efforts to increase knowledge of the population about their own health and health care, and plans for investing in strengthening primary health care are all in line with what is needed for the health system to respond to population aging and to achieve healthy aging. However, the current configuration of expensive hospital-centric acute care and weak primary health care will require major reforms not only in the organization but also in human resource capabilities, financing, and accountability systems. Given the demographic and epidemiological transitions taking place, maintaining the status quo is not an option.

This chapter analyzes the implications of a growing elderly population on service delivery and financing, discusses service delivery and financing challenges in addressing the healthcare needs of older persons, and presents policy recommendations. The chapter looks specifically at the need for health services, including preventive, promotive, treatment, chronic care, and care for disability. Using the available survey data, it assesses if these healthcare needs are currently being met. It also presents the current and future implications of aging on health expenditures to

73 MOH (Ministry of Health) Vietnam, and HPG (Health Partnership Group). 2017. Joint Annual Health Review 2016: Towards Healthy Ageing. Hanoi: Medical Publishing House.

74 WHO. 2019. Global Health Observatory Data Repository. Healthy Life Expectancy (HALE) Data by Country. http://apps.who.int/gho/data/view.main.HALEXv. Accessed October 2019.

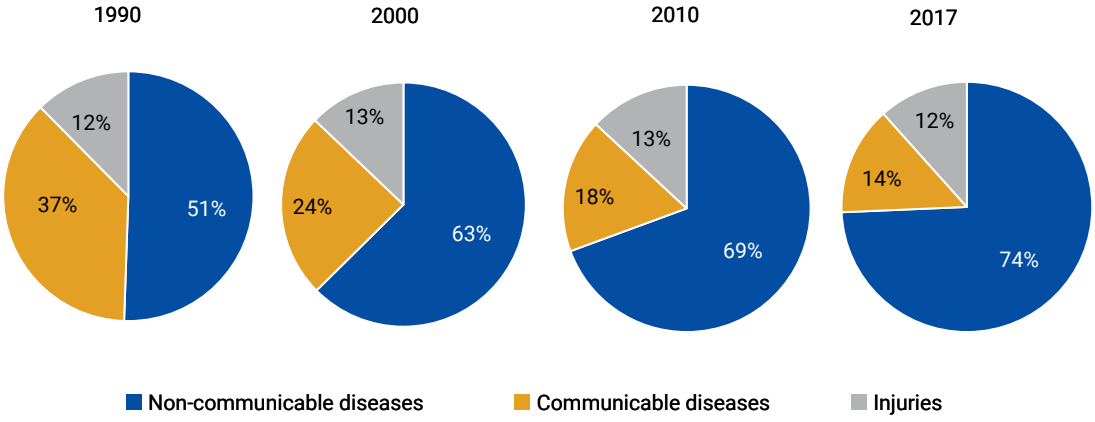
understand the likely pressure from a growing elderly population. The chapter draws heavily from data and key findings from the Vietnam Household Living Standards Survey 2016[72] and the 2019 World Bank study on Health Financing in Vietnam.[73]

6.2. Epidemiological Transition

6.2.1. Patterns of epidemiological transition

Vietnam's burden of disease profile has changed rapidly in the past two decades and is now dominated by NCDs. The NCD share of the disease burden (measured in disability-adjusted life years (DALYs) grew rapidly from 51 percent in 1990 to 74 percent in 2017 (**Figure 6.1**). Burden of disease measured in DALYs among the population age 65 and older accounts for 24 percent of total DALYs lost among all age groups.[74]

Figure 6.1. Burden of disease as percentage of DALYs, 1990-2017



Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018.

The disease burdens from NCDs now occupy seven spots in the top ten ranking of causes of Vietnam's disease burden, and they are rapidly increasing in terms of share of the overall disease burden (Table 6.1). The two most common causes of disease burden are cardiovascular diseases and cancer, accounting for 30 percent of all DALYs in Vietnam's population.

75 GSO (General Statistics Office) Vietnam. 2018. Results of the Vietnam Household Living Standards Survey 2016. Hanoi: Statistical Publishing House.

76 Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group

77 Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://ghdx.healthdata.org/gbd-results-tool.

Table 6.1. Top ten causes of disease burden in Vietnam, 1990-2017

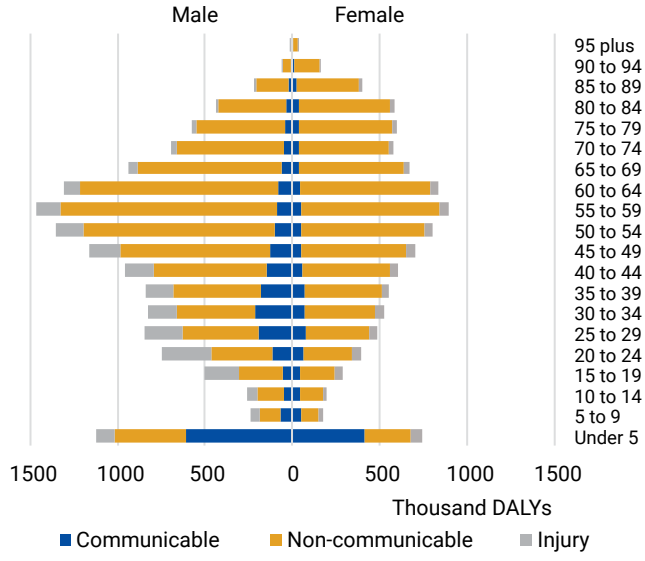
Rank in 2017		Category	(percentage)			
			1990	2000	2010	2017
1	Cardiovascular diseases	NCD	11.7	14.5	15.9	17.0
2	Neoplasms	NCD	6.9	9.4	11.2	13.1
3	Musculoskeletal disorders	NCD	3.6	5.1	6.3	6.9
4	Diabetes and kidney diseases	NCD	3.3	4.3	5.1	6.2
5	Neurological disorders	NCD	3.5	4.7	5.3	5.4
6	Other non-communicable diseases	NCD	7.8	6.7	5.9	5.0
7	Unintentional injuries	INJ	6.7	6.3	5.6	5.0
8	Mental disorders	NCD	3.4	4.5	4.9	4.9
9	Transport injuries	INJ	4.2	4.8	5.6	4.9
10	Respiratory infections and tuberculosis	CD	11.1	7.1	5.5	4.4
	DALYs per 100,000 population		33,766	26,510	25,785	25,809

Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018.

Note: NCD = Non-communicable disease, INJ = Injuries, CD = Communicable disease

Causes of morbidity and mortality change over the life cycle and are substantially different between men and women. Figure 6.2 shows that in the oldest age groups, the burden of disease in women is higher, largely due to the higher number of women than men at these ages. Fewer men survive to older ages in good health due to the burden of disease they face in injuries, communicable diseases, and NCDs while in younger age cohorts.

Figure 6.2. Age and sex distribution of burden of disease by broad cause, Vietnam 2017

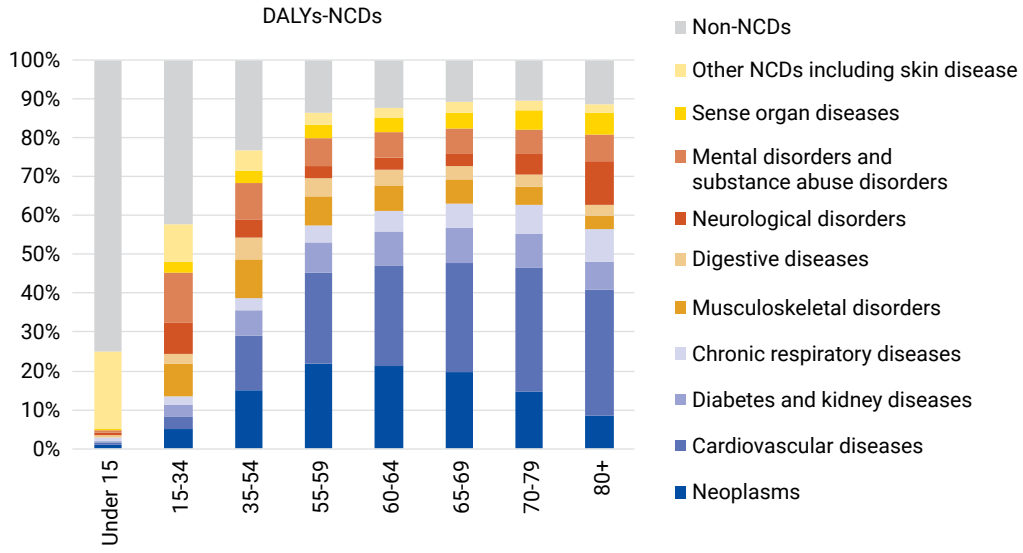


Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018.

The patterns of disease burden also vary by age group, with the NCD share increasing from only about 25 percent of DALYs in children to nearly 90 percent in older age groups (Figure 6.3). Cancer and cardiovascular disease predominate as causes of burden of disease as early as the ages 35-54 cohort, but they account for 40 percent or more of DALYs lost among the groups age 55 and older. Just four disease categories (cancer, cardiovascular disease, diabetes, and chronic respiratory diseases) contribute to about 60 percent of burden of disease for the groups age 55 and older.[78] Co-morbidity and multimorbidity are increasingly common among older age groups, which require integrated care delivery models and more resources.

Among older people in Vietnam, premature mortality contributes more to burden of disease than disability does, and men have higher burden than women (Figure 6.4). Among persons age 65 and older, only 24 percent of DALYs were due to years lost living with illness, with the remainder being years lost to premature mortality.[79] However, musculoskeletal and sense organ disorders are less likely to be fatal, instead burdening older people with disability over long periods of time. Among people age 65 and older, women have a lower burden of disease than men for almost every disease category in the top ten causes of burden of disease, the exceptions being diabetes and kidney disease and neurological disorders for which women have slightly higher burden of disease than men. However, because there are many more women than men living to the oldest age groups, they have a larger absolute need for care to treat these conditions.

Figure 6.3. DALYs within NCDs by age group, Vietnam 2017



Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018.

The main risk factors affecting burden of disease among older cohorts vary considerably by sex. In many types of disease, multiple risk factors are involved, while in other cases, scientists have not yet determined what risk factors lead to the particular medical condition.

The main risk factors affecting burden of disease among older cohorts vary considerably by sex. In many types of disease, multiple risk factors

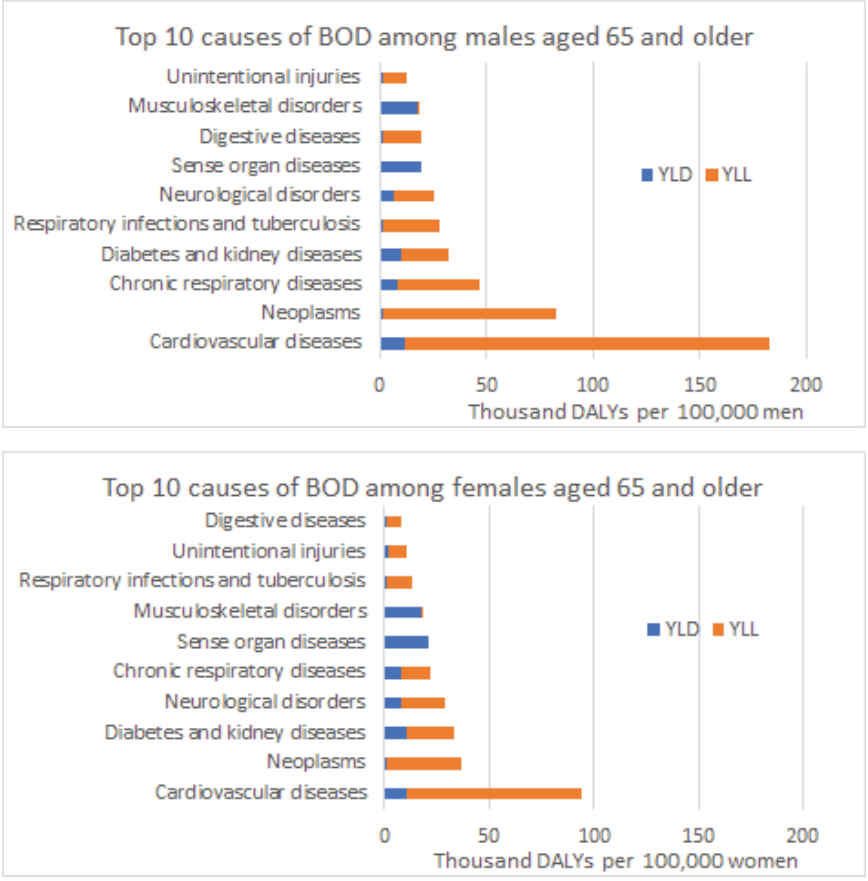
78 Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://ghdx.healthdata.org/gbd-results-tool.

79 Premature mortality is measured in relation to average life expectancy for people in the age cohort.

are involved, while in other cases, scientists have not yet determined what risk factors lead to the particular medical condition. Figure 6.5 shows that behavioral risk factors predominate in explaining burden of disease among men, while metabolic risk factors are the main factor affecting women's burden of disease. Among men, the top five risk factors for NCDs are tobacco, high systolic blood pressure, dietary risk factors, high fasting blood glucose, and alcohol use. For women, tobacco and alcohol use are not in the top five, but high body mass index and impaired kidney function are.

The top ten risk factors for burden of disease vary substantially not only between men and women but also across generations (**Figure 6.4**). Tobacco is the number one risk factor of burden of disease for older men but ranks second among younger men. For women, the tobacco risk factor is related more to secondhand smoking than firsthand smoking and ranks 7th among the older and 10th among the younger cohort. For women, the number one risk factor for both older and younger women is high fasting plasma glucose, a risk factor for diabetes. Dietary risks rank third for both men and women in the older cohort and for men in the younger cohort but rank second for women in younger cohorts. Dietary risks are related largely to a diet high in sodium but low in fruit, whole grains, nuts, and seeds. High systolic blood pressure ranks second in the older cohort and fourth in the younger cohort for both men and women. The top environmental risk factors are air pollution and occupational risks for younger and older cohorts of men and younger women, while for older women, the only environmental risk factor among the top ten is air pollution.

Figure 6.4. Top 10 causes of BOD among people age 65 and older, Vietnam 2017

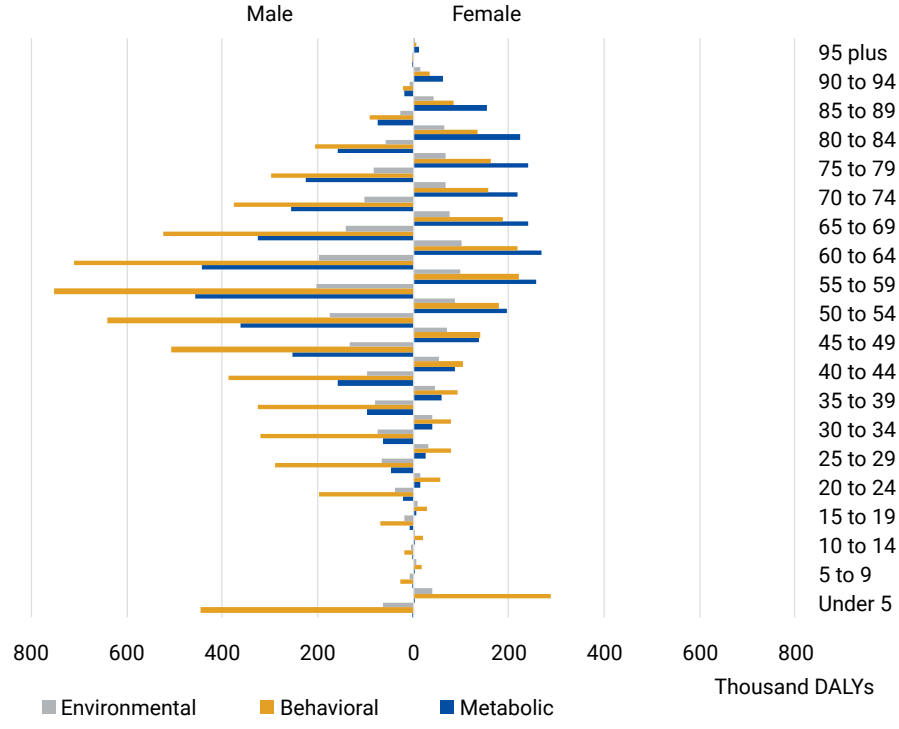


Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://ghdx.healthdata.org/gbd-results-tool.

Note: YLD: Years lived with disease/disability, YLL: Years of life lost.

The key modifiable behavioral risk factors for chronic NCDs are tobacco, alcohol, diet, and physical exercise. Smoking prevalence in Vietnam in 2015 remained high at about 22.5 percent of adults age 15 and older, but 45.3 percent among men and only 1.1 percent among women. Trends indicate that between 2010-2015, smoking prevalence went down in all age groups.[80] Alcohol consumption among adults 18-69 years of age is more prevalent among men (77.3 percent) than women (11.1 percent), with similar differences for daily alcohol consumption and binge drinking.[81] Dietary risk factors are assessed as among the most important factors leading to NCDs. In Vietnam in 2015, 57.2 percent of adults had inadequate fruit and vegetable consumption according to WHO recommendations. Only about 10 percent of adults reported frequent consumption of high-salt processed foods, but most did report adding salt to food while cooking. Physical exercise is an important protective factor for many health problems. In Vietnam, about 20.2 percent of men and 35.7 percent of women ages 18-69 reported levels of exercise not meeting WHO recommendations.[82]

Figure 6.5. Age-sex distribution of broad risk factor categories for burden of disease, Vietnam 2017



Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://ghdx.healthdata.org/gbd-results-tool.

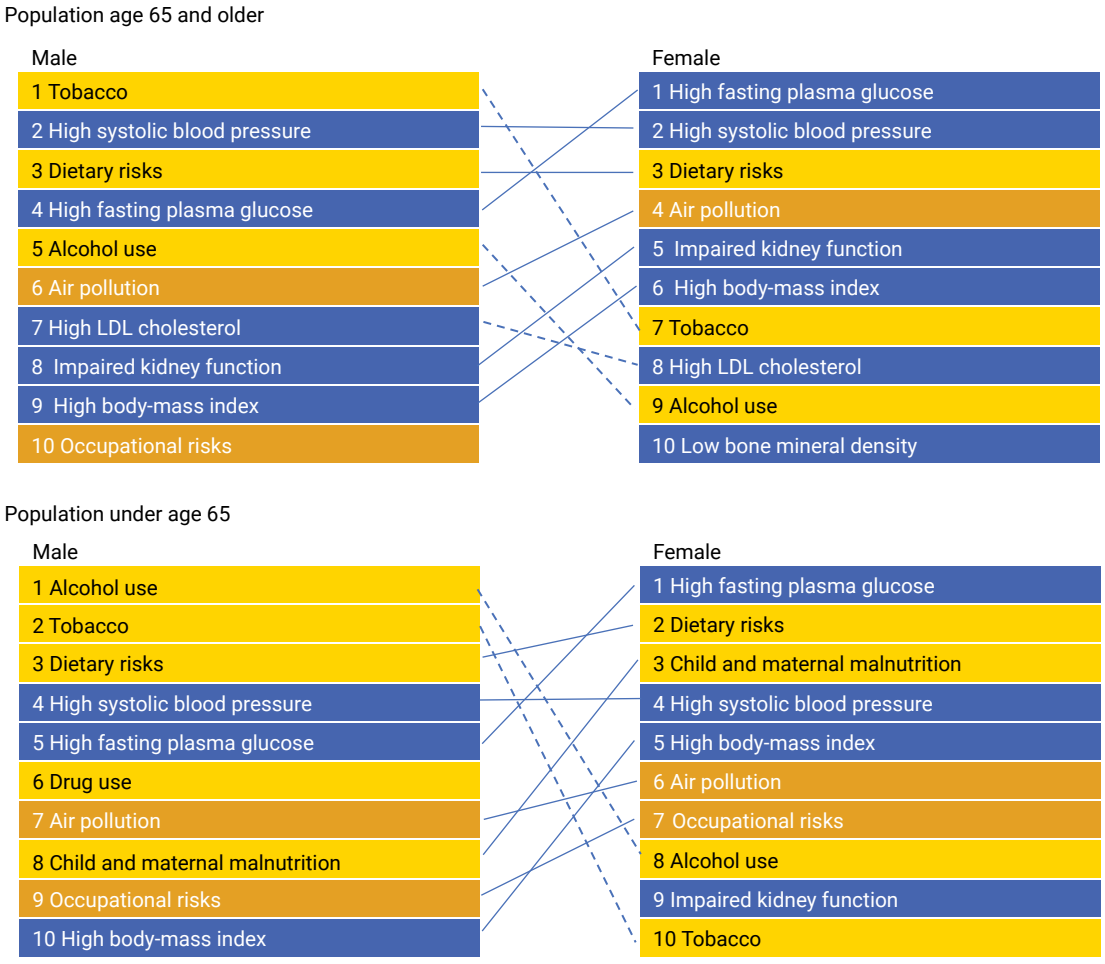
80 Van Minh, Hoang, Kim Bao Giang, Nguyen Bao Ngoc, Phan Thi Hai, Doan Thi Thu Huyen, Luong Ngoc Khue, Nguyen Tuan Lam, Pham Thi Quynh Nga, and Nguyen Thi Xuyen. 2017. "Prevalence of Tobacco Smoking in Vietnam: Findings from the Global Adult Tobacco Survey 2015." International Journal of Public Health, Vol. 62, no. 1, pp. 121-129.

81 Ministry of Health, General Department of Preventive Medicine. 2016. National Survey on the Risk Factors of Non-communicable Diseases (STEPS) Viet Nam 2015. Hanoi.

82 Ministry of Health, General Department of Preventive Medicine. 2016. National Survey on the Risk Factors of Non-communicable Diseases (STEPS) Viet Nam 2015. Hanoi.

Metabolic risk factors associated with NCDs include overweight, high fasting blood glucose, high blood pressure, and high cholesterol, many of which can be detected early and controlled to reduce risk. Overweight and obesity are a growing problem in Vietnam. Overall, 13.9 percent of adults are overweight, and an additional 1.7 percent are obese. These rates increase with age, with 19.6 percent of people ages 50-69 being overweight or obese.[83] Raised blood glucose is an important risk factor and sign of diabetes. In Vietnam in 2016, about 4.5 percent of men and 3.6 percent of women had raised blood glucose or were actually being treated for this condition, rising to 7.7 percent of people ages 50-69. High blood pressure is an important risk factor for cardiovascular disease and other medical conditions. Overall, 23.1 percent of men and 14.9 percent of women have raised blood pressure or are under treatment for this condition, rising to 40.2 percent among people ages 50-69.[84]

Figure 6.6. Top 10 risk factors for burden of disease of population under age 65 and age 65 and older, DALYs, Vietnam 2017



Note: Blue indicates metabolic risks, orange represents behavioral risks, and green represents environmental risks. Solid line indicates same or higher ranking among women than men, while dashed line indicates ranking is higher among men than women.

Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://ghdx.healthdata.org/gbd-results-tool.

83 Ministry of Health, General Department of Preventive Medicine. 2016. National Survey on the Risk Factors of Non-communicable Diseases (STEPS) Viet Nam 2015. Hanoi.Ibid.

84 Ministry of Health, General Department of Preventive Medicine. 2016. National Survey on the Risk Factors of Non-communicable Diseases (STEPS) Viet Nam 2015. Hanoi.Ibid.

Mental health, neurological, and cognitive issues are particularly important and particularly neglected issues for older persons in Vietnam. Alzheimer's disease, dementia, stroke, and other disorders that adversely affect the cognition of older persons make it difficult for them to remain independent and also make them particularly vulnerable to elder abuse, loneliness, and depression. Around 48 percent of older persons reported having problems with their memory, and 69 percent reported decline in memory over the past 12 months. These problems increase substantially with age and are more prevalent among rural than urban residents. Around 36 percent of older persons reported difficulties sleeping most of the time, 16 percent reported frequent lack of appetite, about 10 percent reported being depressed or lonely most of the time. About one-third of older persons reported having no one with whom to share their feelings about being sad.[85]

With growing dependence on others in older ages, older persons are vulnerable to elder abuse. In Vietnam, elder abuse is estimated to affect 11.6 percent (2012) of older persons.[86] Globally, it is estimated that elder abuse affects about 16 percent of older persons (age 60 and older), but both the global and Vietnam figures are likely to be underestimates. Victim characteristics associated with being abused include cognitive impairment, being an ethnic minority, and having a history of being a perpetrator of violence. Mental and neurological disorders and caregiving burdens are associated with caregivers perpetrating elder abuse. Older persons living with others are less at risk of being a victim compared to those who have poor relationships with other people.[87]

6.2.2. Aging leading to progressive or sudden onset of disability

Rapid aging in Vietnam will increase the share of the population affected by disability and difficulty in performing activities of daily living. The rate of disability among people under age 40 is about two to three percent then increases dramatically beyond that age (Figure 6.7).[88] In the group aged 41-64, the proportion of people with disability increases to 6.8 percent, then in the age 65 and older group, it goes up to 40.7 percent having any disability and 24 percent having multiple disabilities.[89] This age pattern has not changed dramatically over the past decade, despite changes in the definitions of disability.[90] The most prevalent forms of disability among people age 65 and older are disabilities in lower and upper mobility, cognition, vision, and capacity for self-care.

85 Vietnam Women Union (VWU). 2012. *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Hanoi: Women Publishing House.

86 Ministry of Culture, Sports and Tourism. 2013. Key Findings from the Viet Nam Domestic Violence Survey 2012. Ha Noi. Cited in Vietnam National Committee on Ageing and UNFPA. 2019. Towards a Comprehensive National Policy for an Ageing Viet Nam. Hanoi.

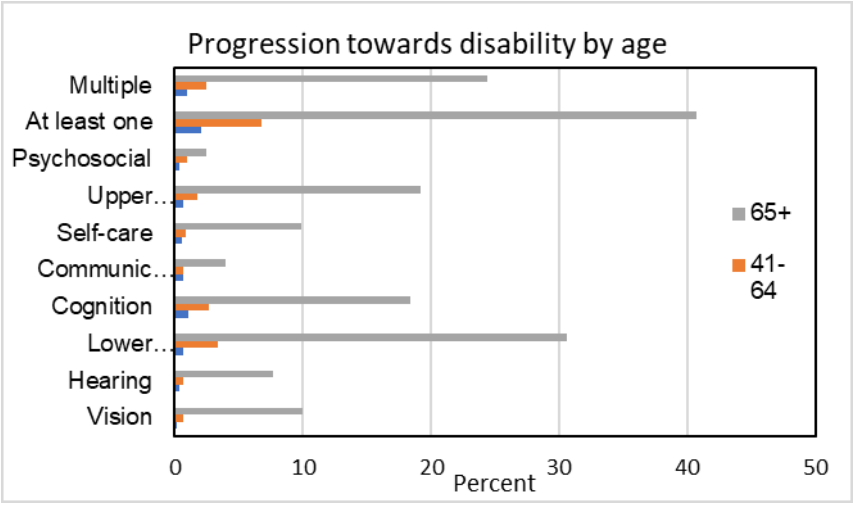
87 https://www.who.int/ageing/projects/elder_abuse/en/

88 Based on the Washington Group Extended Set covering all major domains of disability plus additional domains related to upper body mobility and psychosocial issues, particularly anxiety and depression. See Washington Group on Disability Statistics. 2011. "Washington Group – Extended Question Set on Functioning (WG ES-F)." Version 9, November 2011. http://www.washingtongroup-disability.com/washington-group-question-sets/extended-set-of-disability-questions/

89 GSO (General Statistics Office) Vietnam. 2016. Vietnam National Survey on People with Disabilities 2016. Hanoi: Statistical Publishing House.

90 United Nations Population Fund (UNFPA). 2011. People with Disabilities in Viet Nam. Key Findings from the 2009 Viet Nam Population and Housing Census. Hanoi: UNFPA Vietnam.

Figure 6.7. Disability prevalence by broad age group among adults, Vietnam 2016



Source: General Statistics Office. 2016. Vietnam National Survey on People with Disabilities 2016. Hanoi.

Disability from multiple conditions/illnesses is prevalent among older persons. About 38 percent of older persons (age 60 and over) report at least one difficulty with activities of daily living (ADL), including getting up from lying down (31 percent), toileting or eating (15 percent), and getting dressed and bathing (13 percent). The majority of caregivers supporting older persons with ADLs are family members, with less than 1 percent of older persons reporting care by non-relatives.[91]

Disability in old age is not an inevitable part of aging. Surgeries or rehabilitation after injury or illness can help prevent or lessen disability and help older persons learn how to perform ADLs independently. Appropriate supportive devices can also mitigate the effects of long-term disability for older persons if they can access them. In 2011, while 66.5 percent of older persons reported difficulty with vision, only 46 percent reported using eyeglasses. Around 33 percent reported being hard of hearing, but only 4.5 percent of them had hearing aids.[92]

91 Vietnam Women Union (VWU). 2012. *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Hanoi: Women Publishing House.

92 Vietnam Women Union (VWU). 2012. *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Hanoi: Women Publishing House.

6.3. Health Service Delivery

6.3.1. How health services are organized

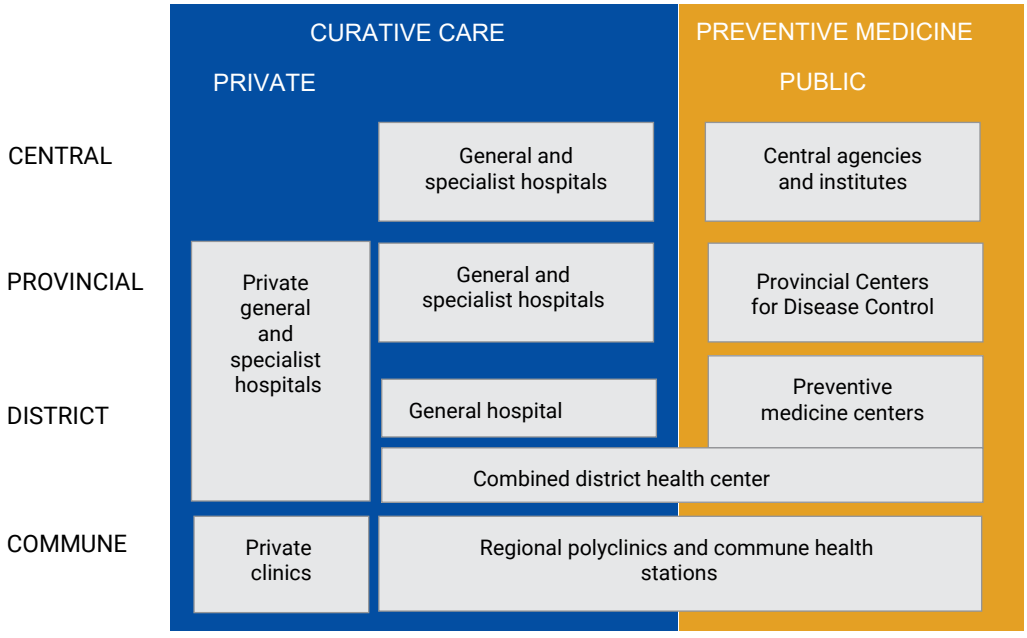
Vietnam has a strong political commitment to Universal Health Coverage (UHC) and primary health care, as seen in international commitments to the sustainable development goals (SDGs) and in top-level strategic documents. Ensuring management of the health and healthcare services for all people are elements of the overall objectives of Resolution 20 from the Sixth Plenary Session of the 12th Party Central Committee on the protection, care, and improvement of the people's health. Vietnam has committed to achieving the SDGs, including those on health. These objectives are to be attained in a mixed public-private healthcare system that prioritizes prevention over treatment and considers the local health system as the foundation for providing UHC.

Vietnam has an extensive network of government and private curative care facilities in all provinces, districts, and communes (Figure 6.8**).** These consist of about 40 central hospitals, 165 provincial general hospitals, 160 provincial specialist hospitals, 679 district hospitals, and about 11,000 commune health stations. The higher the level of facility, the greater the scope of services provided. In addition to the public system, there are about

32,000 private specialist clinics and 240 private hospitals,[93] although private facilities tend to be more concentrated in urban areas than public facilities because purchasing power is higher. By 2018, nearly 100 hospitals at the central and provincial levels had a geriatrics department.[94]

Preventive and promotive healthcare services for all ages are largely provided by and funded by the public sector in Vietnam. Provincial centers for disease control are responsible for running preventive health programs throughout their provinces and often also have clinics to provide services directly to the people. District health centers and commune health stations (CHSs) implement preventive programs at the grassroots level. Vietnam has long relied on vertical, centrally managed preventive health programs for communicable diseases. In the past decade, additional vertical programs have been developed for prevention and control of cardiovascular disease, chronic lung disease, cancer, endocrinology, and mental health. While intervention design and guidelines for specific diseases remain highly centralized, responsibility for and financing of interventions have been devolved to the provinces. In most provinces, NCD screening, prevention, and management activities are provided at district hospital and higher-level facilities and have not yet extended effectively to the commune health station level.

Figure 6.8. Structure of health service delivery in Vietnam



93 Le et al. 2020. Health Public Private Partnerships in Vietnam: Issues and Options. World Bank Group.
94 Office of the Government Announcement number 08/TB-VPCP dated 1 January 2019. Concluding comments of the Deputy prime Minister Vu Duc Dam, Chairman of the Vietnam National Committee on Older Persons at the National Committee Conference reviewing 2018 performance and setting out the 2019 plans.

Social determinants of disease are addressed in Vietnam by multi-sectoral policies. Vietnam imposes excise taxes on tobacco and alcoholic beverages, which reduce the affordability of these products. Policies also restrict the ages at which alcohol and tobacco use are allowed, and strong drunk driving laws have recently been put into place. Clean water and sanitation have long been part of public health measures. Vietnam also has occupational health and safety regulations as well as food safety regulations, although enforcement may not be optimal.

Substantial efforts are being made to strengthen the primary healthcare system through capacity building and investments in CHSs and by promoting the family medicine model. Vietnam's extensive CHS network reaches into the most remote areas of the country and is responsible for providing many primary healthcare services to the population, including immunizations, health education and communication, preventive services, curative care, and population and family planning.[95] The Ministry of Health has recently introduced a project to strengthen capacity building for CHSs to gain the skills needed to better meet the healthcare needs of the population at all ages.[96] Investment funds have been mobilized to renovate or build new infrastructure for CHSs to meet national benchmarks, and by the end of 2016, 76.2 percent of all CHSs met these structural standards.[97] In addition, the family medicine model is being promoted for use in primary healthcare facilities, including commune health stations and private clinics.[98] Family medicine facilities are intended to be the first place for receiving, managing, and providing primary health care, counseling, prevention, health promotion, emergency, and curative care following family medicine principles. Family medicine principles call for comprehensive, continuous, patient-centered, and prevention/promotion-focused services for the population.

Rehabilitation is an important link within the health system, with great potential to facilitate recovery of functional capacity for patients after hospitalization or help those who have lost function simply from old age. Rehabilitation can help prevent disability or help patients retain some independence as they cope with loss of function. Vietnam has 44 rehabilitation facilities, mostly located in provincial capitals. A community-based rehabilitation program was put in place to provide rehabilitation services through the CHSs. Treatment guidelines for rehabilitation[99] cover many diseases of older persons such as Alzheimer's disease, Parkinson's disease, gout, osteoporosis, heart failure, myocardial infarction, stroke, musculoskeletal diseases, and post-surgery recovery, especially after hip replacement.

Hospitals have been the focus of health sector investments in both the public and private sectors. Vietnam's extensive network of general and specialist hospitals exists in all provinces, and general hospitals exist in nearly every district. In the first decade of this millennium, the Government allowed issuing of Government bonds to raise funds for major investments in this public hospital network. Private investments include setting up of private hospitals as well as investments in equipment at public hospitals. Vietnam's hospitals now have the capacity to perform transplant surgeries, open heart surgeries, lithotripsy, gamma knife surgery, and many other high-tech procedures.

Nonetheless, overcrowding of central and provincial hospitals continues to be widespread. Despite concerted efforts to solve this problem, hospitals are still overcrowded. Hospital capacity is highly concentrated in major cities. Tertiary hospitals provide the full range of services from primary care to highly specialized care. Chronic disease management is generally provided in hospitals, rather than at the primary care level. End

95 MOH Circular No. 33/2015/TT-BYT guiding the functions and tasks of commune health stations.

96 MOH Decision No. 1718/QD-BYT dated 8 May 2019 approving the project "strengthening training, technology transfer and professional capacity building in commune-level health facilities" for the period 2019-2025.

97 MOH. 2018. Health Statistics Yearbook 2016. Hanoi: Medical Publishing House.

98 MOH Circular No. 21/2019/TT-BYT dated 21 August 2019, guiding a pilot on family medicine activities.

99 MOH Decision No. 3109/QD-BYT in 2014.

of life care often also occurs in hospitals due to a lack of alternatives such as hospice care or home-based medical care.

Private healthcare provision is rapidly increasing and can play an important role in expanding service and meeting the growing healthcare demands of the population. However, without putting the right regulatory and financial structures in place, private healthcare provision could potentially have a negative impact on equity in health access, quality of care, and financial protection. Therefore, the role of government stewardship to harness public and private healthcare provision through effective regulation and management of the health market is critical to achieve overall health system objectives and meet the growing healthcare needs of the population.[100]

6.3.2. Where do older people from different age cohorts use health services?

Family plays a significant role in providing health care to older persons in Vietnam. Around 95 percent of ill older persons reported receiving care and support during their illness. The main providers of care for sick older persons were the spouse (26 percent), daughter (27 percent), son (22 percent), or daughter-in-law (15 percent). Men relied more heavily on their spouse than women (55 percent versus 10 percent), largely due to men's lower life expectancy. Reliance on the daughter was very high among people age 80 and over and among women, urban residents, and people in the South. Only about 1 percent relied on a paid healthcare worker, caregiver, or neighbor.[101]

In Vietnam, most people with severe illnesses requiring medical care do seek some formal healthcare services but forgo care for moderate and minor ailments. Overall, Vietnamese people sought medical care for about 94 percent of self-reported severe illness episodes.[102] Among the six percent of the population forgoing care when facing illness, the age pattern indicates the lowest rate is found among children (under age 15) and people ages 64–69, with the highest rate among people age 80 and older (Figure 6.9). Lack of health insurance coverage may contribute to forgoing care for severe illness among some age groups, as indicated by the orange portion of the bars representing the percentage uninsured in that age cohort. Forgoing care for less severe ailments is much more common—overall, about 55 percent of persons age 60 and older reported not seeking treatment for their illnesses. Reasons given for not seeking care included lack of money for treatment (52.5 percent), belief that they are not sick enough for treatment (12 percent), and nobody to take them to treatment facility (11.5 percent). Financial reasons for not seeking care are more prevalent among 60-69 year olds and among women, in rural areas, and in the South. Lack of transport is most problematic among the oldest group (age 80 and above), in rural areas, and in the Central region.[103]

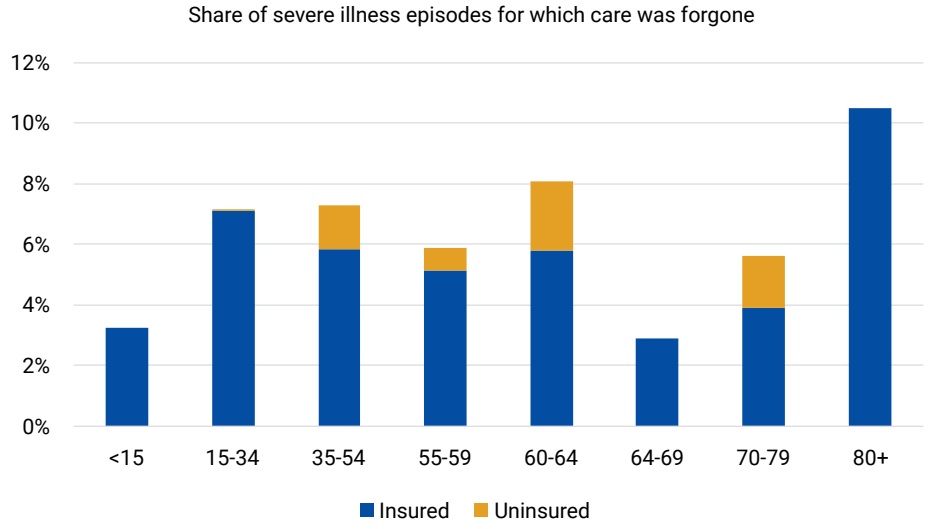
100 Nguyen MP, Wilson A. How could private healthcare better contribute to healthcare coverage in Vietnam? Int J Heal Policy Manag. 2017;6:305–308. doi: 10.15171/ijhpm.2017.05.

101 Vietnam Women Union (VWU). 2012. *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Hanoi: Women Publishing House.

102 Source is VHLSS 2016. Severe illness is defined as illness requiring that the patient stay in one place and be taken care of at the bedside or the patient had to take time off from work, studies or could not participate in other normal activities.

103 Vietnam Women Union (VWU). 2012. *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Hanoi: Women Publishing House.

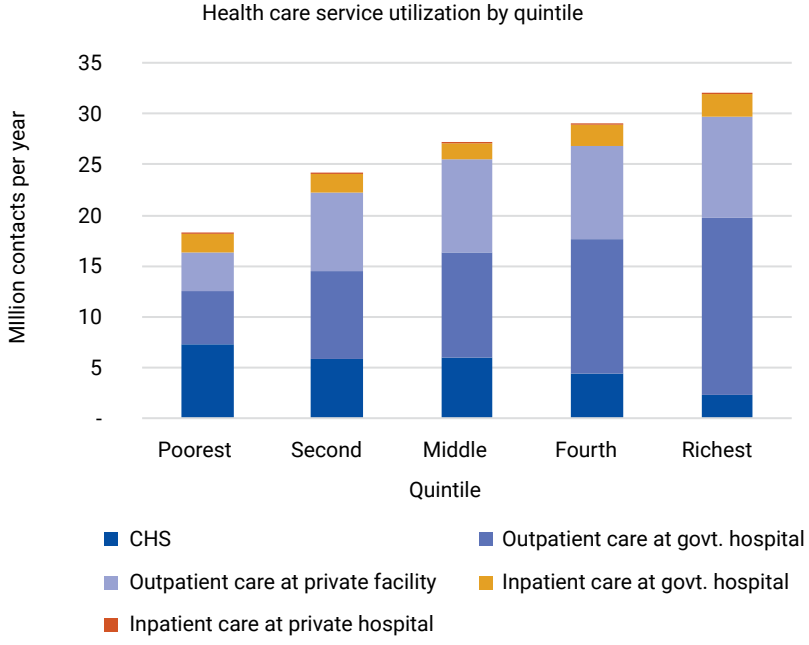
Figure 6.9. Rate of forgoing care when facing severe illness by age group, Vietnam 2016



Source: Author's calculation using VHLSS 2016.

Use of health services is sensitive to people's ability to pay for services. Figure 6.10 shows substantially lower numbers of outpatient contacts with health services among the poorer quintiles, suggesting that they are more likely to forgo outpatient care than better-off groups. A greater share of healthcare contacts among poorer groups are at the CHS. Interestingly, the number of inpatient contacts does not vary substantially across living standards, suggesting that when a condition becomes serious and requires inpatient care, people are obtaining this care, regardless of their level of living standards.

Figure 6.10. Healthcare service utilization by living standards quintile, Vietnam 2016

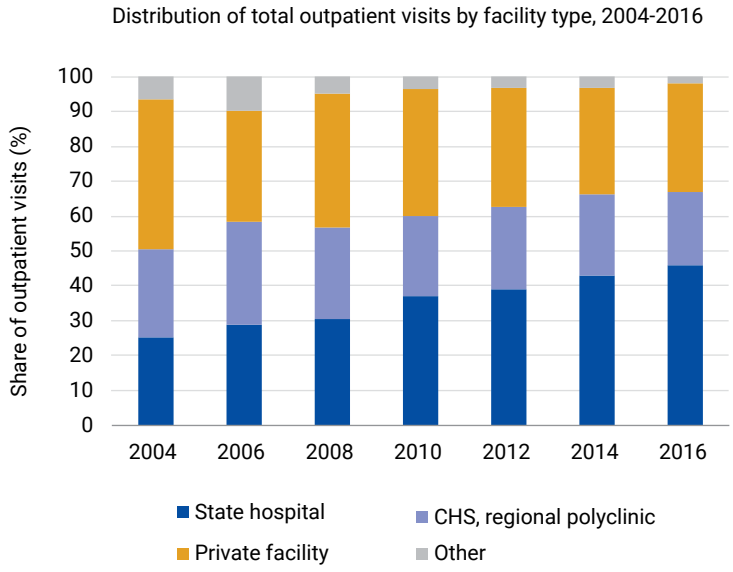


Source: Author's calculation using VHLSS 2016.

Health services utilization in Vietnam relies increasingly on hospitals for outpatient care, rather than primary care clinics. Hospitals are generally a more expensive facility for providing services than primary care and outpatient facilities. They are also generally less accessible for older persons, who tend to have mobility issues. Vietnam's health system has been undergoing a disturbing trend toward increased reliance on state hospitals for outpatient care, with the share of outpatient visits rising from 25 percent in 2004 to 45 percent in 2016 (Figure 6.11).[104] This trend has occurred despite continued growth in the number of private sector facilities and efforts to increase the capacity of CHSs to provide curative care services paid by health insurance.

Analysis of the public-private mix indicates that older age groups are more reliant on public facility services compared to cohorts age 54 and younger. If preferences for private services continue as these cohorts reach retirement ages, a substantial shift toward private services may be seen.

Figure 6.11. High and increasing share in the use of hospital care for outpatient visits, Vietnam 2004-2016

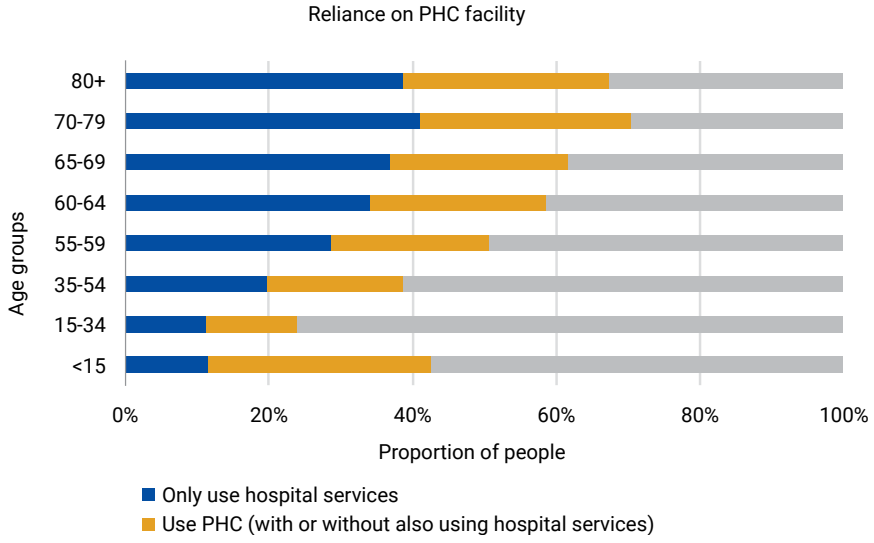


Source: General Statistics Office. Vietnam Household Living Standards Surveys 2004 to 2016.

Healthcare use and reliance on hospital services tends to increase with age. Overall, only about one in five people in the population used primary healthcare (PHC) facilities in the past year (Figure 6.12). In 2016, the proportion of the population reporting use of healthcare services in the past year reached over 60 percent in the age groups 64 years and older. The proportion of people using only hospital services without any primary care contacts also increases with age, reaching nearly 40 percent of the population in the age groups 70 years and older.

104 Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

Figure 6.12. Specialist and primary healthcare (PHC) service utilization, Vietnam 2016

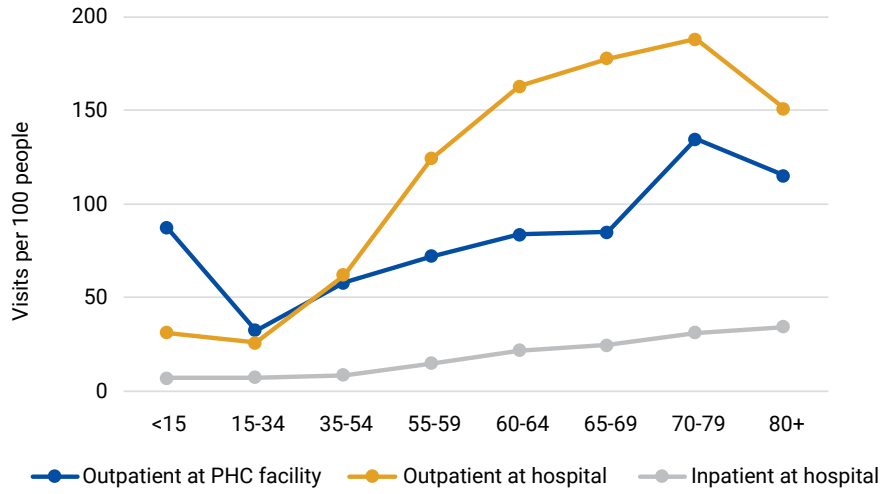


Source: Author's calculation using VHLSS 2016.

Compared to younger people, older persons have a higher frequency of using hospital services, where they can access specialist care. For every 100 people in the age groups 65 years and older, there were 25-37 inpatient stays (Figure 6.13). On average, older persons also had more than one hospital outpatient visit in the past year but only about one outpatient primary care visit. Because the older population cohorts are currently relatively small (only 9 percent of the population), overall older persons (age 65 and older) only account for 16 percent of outpatient primary care visits, 25 percent of hospital-based outpatient visits, and 25 percent of hospitalizations. Utilization of outpatient care dips in the age group 80 years and older, similar to patterns found in Thailand where it has been suggested that the dip may be due to problems in accessing care or in financial protection for the oldest groups.[105] Nevertheless, as the elderly population increases, if health-seeking patterns do not shift, health facilities—and especially hospitals—will face a growing share of clients in older age cohorts.

105 World Bank. 2016. Closing the Health Gaps for the Elderly: Promoting Health Equity and Social Inclusion in Thailand, pp. 10-11.

Figure 6.13. Average visits per 100 population by type of facility and type of care, Vietnam 2016



Source: Author's calculations using VHLSS 2016.

6.4. Health Financing

6.4.1. Trends in healthcare spending

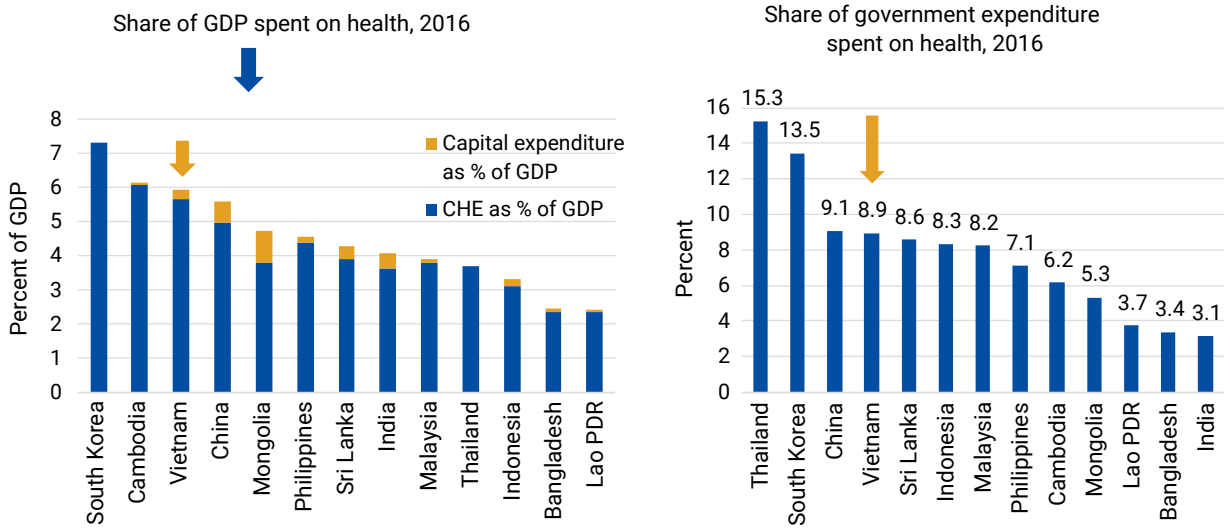
Vietnam spends a relatively high share of GDP on health care compared to other countries. In 2016, Vietnam spent about 5.9 percent of GDP on health (including capital and current spending), equivalent to about USD 128.9 per capita (current 2016 USD). This amount is relatively high compared to regional comparator countries, despite the fact that this is an underestimate for Vietnam because private capital expenditure information is not included in estimates. Health as a share of current government expenditure accounted for about 8.9 percent, which is on the higher end among comparator countries (**Figure 6.14**). About half of Vietnam's current health expenditure comes from public sources and half from private sources, indicating heavier reliance on private funding compared to countries like Thailand and China but lower than in Indonesia or the Philippines (Figure 6.15). A recent analysis found that prospects for additional public financing for health in Vietnam are limited in the short to medium term due to a tight fiscal context.[106]

Vietnam's health financing strategy laid out in Resolution 20[107] prioritizes use of state budget and SHI, but it also envisages greater contributions from people who can afford to pay. The strategy prioritizes government budget spending on preventive medicine, grassroots health care, insurance premiums for disadvantaged groups, and support for hospitals in disadvantaged areas. SHI is envisaged to be the key source of funding for a basic package of curative care services, eventually extending to an essential set of primary healthcare services. People are expected to contribute to SHI and pay for part of the costs of their primary healthcare services and curative care and for services exceeding the basic level of care, including higher payments when bypassing primary health care. The policy also envisages greater accountability and transparency among public providers and public-private partnerships in terms of the services they provide and revenues they collect.

106 Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

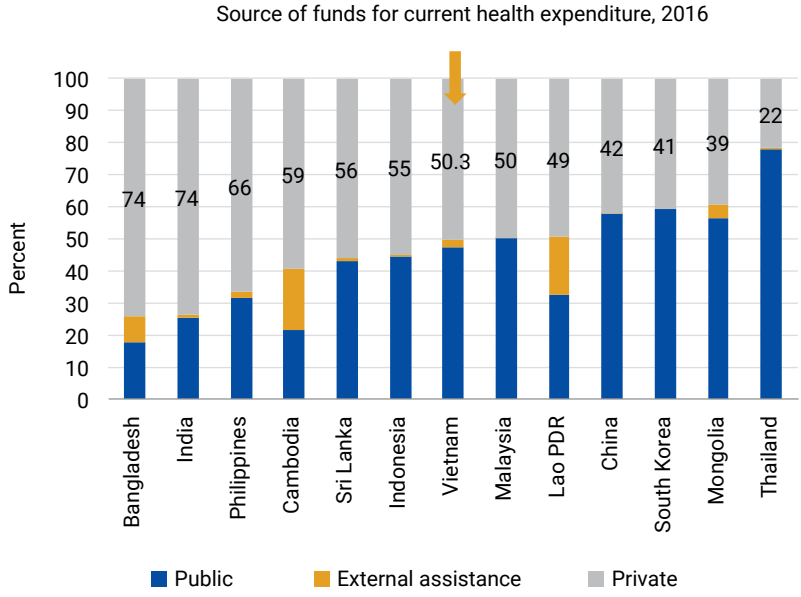
107 Resolution 20 of the Sixth plenary session of the 12th Party Central Committee on the protection, care and improvement of people's health in the new situation issued on 25 October 2017.

Figure 6.14. International comparison of share of GDP spent on health and share of government expenditure spent on health, 2016



Source: WHO. "Global Health Expenditure Database, 2018." Geneva: WHO. http://apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

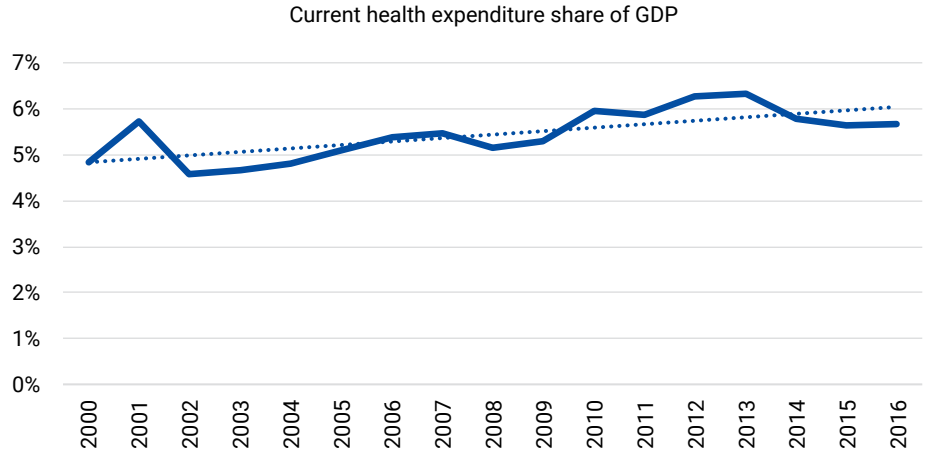
Figure 6.15. International comparison of public versus private sources of current health expenditure, 2016



Source: WHO. "Global Health Expenditure Database, 2018." Geneva: WHO. http://apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

Current health expenditure (CHE) has been increasing at a rate slightly higher than the growth in GDP. In 2000, CHE reached almost 5 percent of GDP, rising to over 6.3 percent of GDP in 2012 and 2013 then declining to 5.8 percent in 2016 (Figure 6.16).

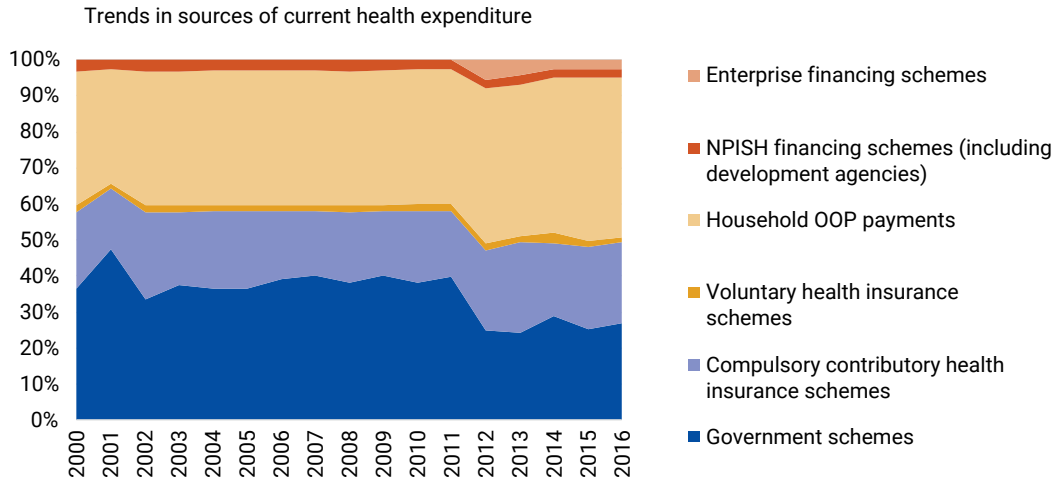
Figure 6.16. Trend in current health expenditure as a share of GDP, Vietnam 2000-16



Source: WHO. "Global Health Expenditure Database, 2018." Geneva: WHO. http:// apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

Trends in sources of CHE from 2000 to 2016 indicate reduced dependence on public sources of health spending and increased dependence on out-of-pocket (OOP) spending. Government budget spending on health care remained stable at about 40 percent of current health expenditure until 2012 when it fell to below 30 percent, and it remained at this level until 2016, the latest year for which data is available (Figure 6.17). This drop in state budget spending on health can be explained by revisions to the hospital autonomy policy (Decree 85/2012) and upward adjustment of government set user fees (Joint Circular number 4/2012/TTLT-BYT-BTC). Under the hospital autonomy policy, hospitals are gradually being weaned from state subsidies and are expected to cover their costs from user fee revenues. The upward revision to user fees is intended to ensure adequate revenues to cover their recurrent operating expenditures, and by 2018, was supposed to incorporate almost all costs including depreciation on equipment and buildings.

Figure 6.17. Trends in sources of current health expenditure, Vietnam 2000-2016



Source: WHO. "Global Health Expenditure Database, 2018." Geneva: WHO. http:// apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

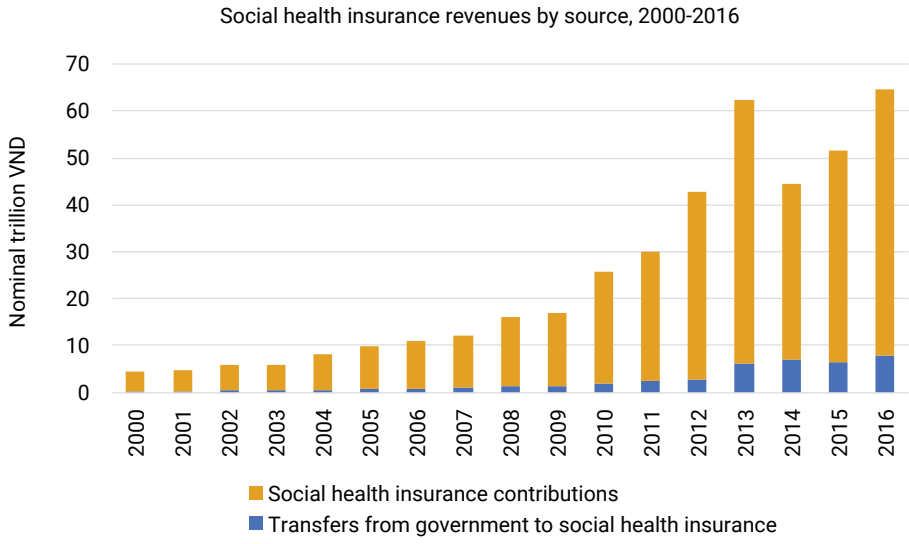
As health insurance coverage increased, the intention was for the insurance fund to bear the bulk of user fee increases, but the social health insurance (SHI) scheme did not fill in the gap left after the government health spending share declined. Instead, the health insurance share of CHE remained steady at around 20 to 22 percent of current health spending up till 2016. The gap in health financing appears to have been met through an increased share of OOP spending, which increased from 37 percent of current health expenditure before 2012 to nearly 45 percent in 2016. The data covered in this figure do not yet include the further revisions to user fees occurring in 2015 (Circular 37/2015/TTLT-BYT-BTC) and subsequently in 2018 (Circular 15/2018/TT-BYT), so it is not yet known whether SHI has been able to improve performance in financial protection for households.

Increases in SHI fund revenues are constrained by low contributions from a majority of members. SHI premiums are currently set at 4.5 percent of wages. For the majority of insured individuals—including those whose premiums were subsidized by the state (e.g., persons age 80 and older, children under age 6) or household members enrolling directly rather than through employment—the premium is set at 4.5 percent of the basic wage (in 2018, the basic wage was 1.44 million VND per month), or equivalent to about 780,000 VND per year. For employed individuals, wages are substantially higher. In the public sector, the average monthly wage in 2018 was 6.69 million VND (basic wage times the average civil servant pay scale coefficient of 4.6). In the private sector, many individuals have even higher monthly wages and therefore pay a higher premium. In 2016, about 45 percent of insured members belonged to the group whose premiums were paid by the state, while another 17 percent belonged to the household insured group—this means a majority of insured members are paying premiums at the lowest rates.[108] Figure 6.18 highlights the problem, showing that while 45 percent of insured members have premiums paid by the state budget, the total amount of funds contributed in 2016 amounted to only 12 percent of total health insurance premium revenues.[109]

108 MOH. 2018. Health Statistics Yearbook 2016. Hanoi: Medical Publishing House.

109 WHO (World Health Organization). 2018a. "Global Health Expenditure Database, 2018." Geneva: WHO. http:// apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

Figure 6.18. Trends in sources of SHI revenues, Vietnam 2000–2016

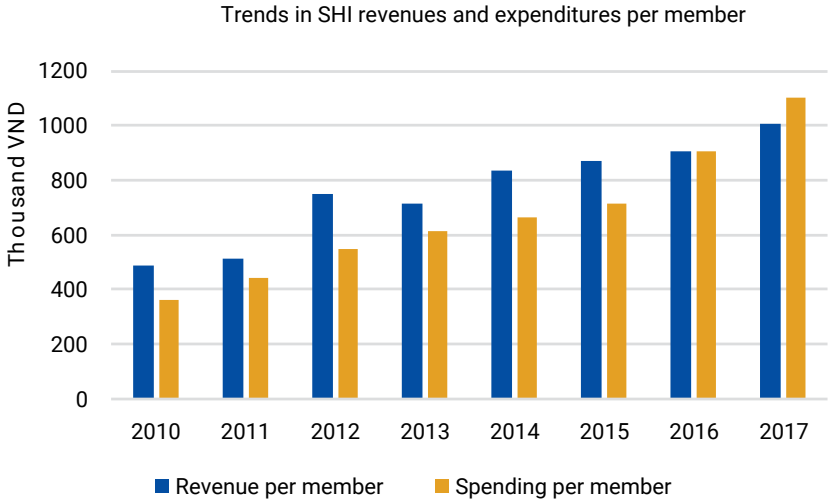


Source: WHO. "Global Health Expenditure Database, 2018." Geneva: WHO. http:// apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

The Government raising of official user fees charged to the SHI fund (and patients) in recent years was not accompanied by an increase in premiums to cover those higher fees, threatening the SHI fund balance. Inflation rates for medical services and pharmaceuticals, which reached 18 percent in 2012, 44 percent in 2013, 30 percent in 2016, and 42 percent in 2017.[110] Consequently, the health insurance fund balance has been put at risk, as seen in Figure 6.19 which shows that SHI fund expenditures have risen more rapidly than revenues, leading to a fund deficit in 2017. As the SHI agency tries to contain its spending by imposing caps on SHI payments to hospitals or imposing greater conditionality on reimbursement of services or drugs, it is likely that the pressures are translating into a greater share of services being provided to patients outside of the health insurance package or additional charges being imposed above what health insurance will reimburse, leading to higher OOP spending.

110 General Statistics Office. Consumer Price Index website. https://www.gso.gov.vn/default.aspx?tabid=628.

Figure 6.19. Trends in SHI revenues and expenditures per member, Vietnam 2010–2017



Source: GSO. Statistical Yearbook 2018 and earlier years. Hanoi: Statistical Publishing House.

Growth in health spending in recent years has been largely due to price escalation, volume increases, and increased intensity (technical services provided) of service provision. Current health spending in 2016 was 7.7 times higher than in 2000,[111] but the population grew only 19 percent from 2000 to 2016.[112] The private sector has grown, but over the past decade, it still has not expanded beyond 30 percent of outpatient contacts and 5 percent of hospital beds, so these factors are unlikely to be driving cost escalation. One important cost driver is prices: from 2000 to 2016, consumer prices for health services and pharmaceuticals increased 4.5 times.[113] In addition, total inpatient episodes nearly tripled, reaching 16,549 admissions per 100,000 people,[114] which is higher than many OECD countries.[115] Intensity of care has also increased rapidly in this period, with total surgeries increasing 2.6 times and value of drugs used per capita increasing 7 times. Intensity of diagnostic use has also increased—counting only local hospitals (excluding central, sectoral, and private hospitals and excluding outpatient clinics), the number of lab tests grew 8 times, x-rays 6 times, and ultrasounds 10 times in the same period. While part of this increase may be expansion to meet unmet needs, the current fee-for-service financial incentives and high health insurance coverage has led to overprovision of unnecessary services and drugs. Greater severity of disease and comorbidities of older persons are likely to exacerbate these trends.

Implementation of provincial budget allocations for primary health care, preventive medicine, and health checkups for older persons is not being monitored through a regular statistical indicator. However, in a 2018 review of health care for older persons, it was revealed that many localities have failed to allocate local budget funds for periodic health checkups for older persons according to the Law.[116]

111 WHO (World Health Organization). 2018a. "Global Health Expenditure Database, 2018." Geneva: WHO. http://apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.

112 General Statistics Office. 2019. Statistical Yearbook of Vietnam 2018. Hanoi: Statistical Publishing House.

113 General Statistics Office. 2019. Statistical Yearbook of Vietnam 2018. Hanoi: Statistical Publishing House.

114 Ministry of Health. 2018. Health Statistics Yearbook 2016. Hanoi: Medical Publishing House.

115 OECD. 2019. Hospital discharge rates (indicator). doi: 10.1787/5880c955-en (Accessed on 17 September 2019).

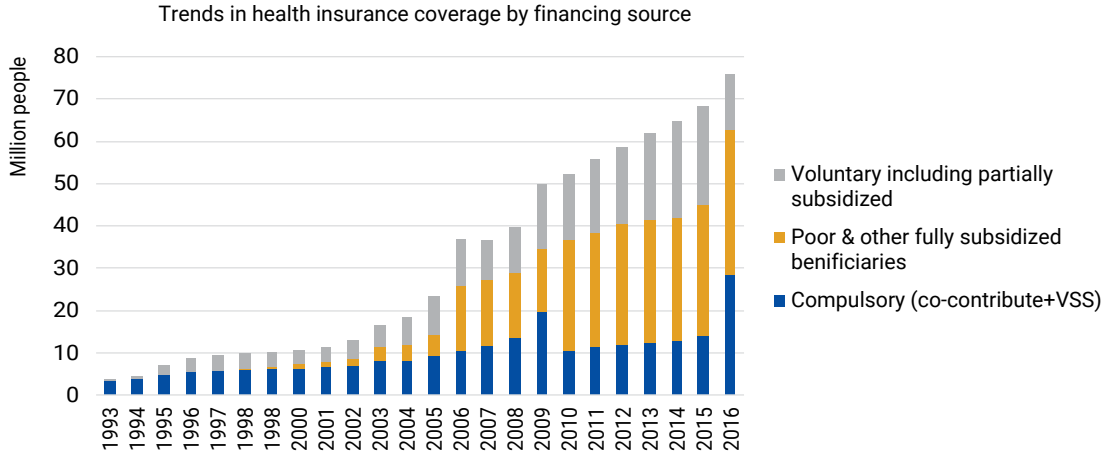
116 Office of the Government Announcement number 08/TB-VPCP dated 1 January 2019. Concluding comments of the Deputy prime Minister Vu Duc Dam, Chairman of the Vietnam National Committee on Older Persons at the National Committee Conference reviewing 2018 performance and setting out the 2019 plans.

While curative care is funded to a large extent by health insurance, preventive medicine and public health interventions are still predominantly funded by the state budget, including funds from external assistance. In 2016, the state health budget spent only about 21 percent on preventive care and target programs, compared to 34 percent on curative care, 21 percent on health insurance premiums, and 22 percent on capital investments. In curative care facilities, only 30 percent of revenues are from direct state budget subsidies, with additional revenues from health insurance and user fees, which are only a minor share of revenues for preventive care facilities. With the high degree of current unmet demand for interventions to reduce lifestyle and metabolic risk factors, changes will be required in the way state budget funds are spent on health care toward greater spending on preventive care. The more recent policy on hospital autonomy and reductions in state direct subsidies to hospitals should free up substantial state budget that could be reallocated to preventive services, but it should be focused on cost-effective preventive and promotive measures.

6.4.2. Financial protection

Vietnam's strategy for health financial protection relies on a combination of health insurance and government budget allocations to ensure that the population can access and use essential curative care services and benefit from public health, preventive medicine, and primary healthcare services. SHI is financed through premium contributions to the SHI fund paid directly by some groups (e.g., employees, schoolchildren, non-poor working people), subsidized by the government budget for other groups (e.g., the poor, elderly age 80 and older, children under age 6), and paid from the social security fund for others (pensioners). The Government has also stipulated that local budgets are to be allocated to pay for annual health checkups for older persons, public health, health promotion, and preventive services.[117]

Figure 6.20. Health insurance coverage trends, 2000-2016



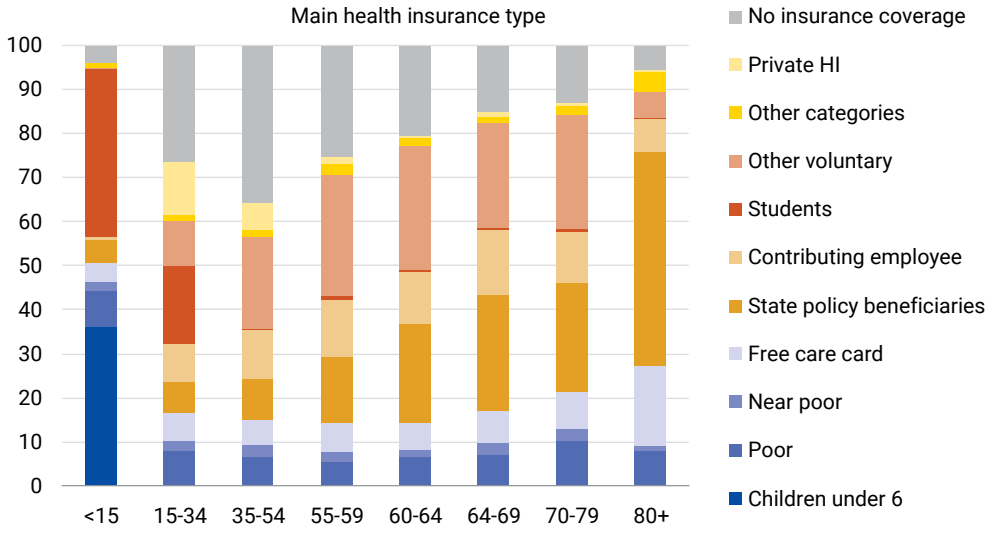
Source: Author's calculations from MOH-supplied data. Most recent years from Health Statistics Yearbooks.

117 Prime Ministerial Decision No. 1387/QĐ-TTg dated 13 July 2016 issuing the list of public services in the field of health and population eligible for state budget funding.

Health insurance coverage has increased rapidly, reaching 90 percent in 2019. Figure 6.20 shows the rapid and steady rise in health insurance coverage starting from 2009, reaching 76 percent by 2016. While the jump in coverage in 2009 was due largely to increases in the population whose premiums were subsidized, in more recent years, coverage has increased mostly through household enrollment. In 2016, a large jump was seen in members contributing through their employment, with a corresponding drop in coverage through household enrollment. By the end of 2018, health insurance coverage reached 87 percent of the population,[118] with reports of coverage reaching 90 percent in 2019.[119] The Government is prioritizing efforts to increase the rate further to 95 percent by 2025 through subsidizing vulnerable groups using local budgets and increasing enforcement for employers to ensure coverage for their employees.

Health insurance coverage varies substantially by age (Figure 6.21) but reaches at least two-thirds in every age group. Survey results in 2016 indicate that health insurance coverage is very high among children under age 15, thanks to subsidized coverage among children under age 6 and partial subsidies for schoolchildren. Coverage drops in the 15-34 age group, but a relatively large share is covered by insurance for students, and the proportion with private health insurance is the highest in this age group (12 percent). The group with the lowest insurance coverage is the group ages 35-54, with over one third lacking health insurance coverage. Health insurance coverage increases steadily as age increases, reaching 94 percent in the group age 80 and older.

Figure 6.21. Coverage of health insurance by health insurance type, 2016



Source: Author's calculations from VHLSS 2016.

In the older age groups, a large share of people have health insurance through household enrollment (usually self-employed farmers), pensions, social assistance benefits, or benefits from meritorious service to the nation. The grey bands in Figure 6.21 above indicate groups receiving health insurance due to poverty or living in disadvantaged areas. This group accounts for about 15 percent of health insurance coverage up to age 64, then coverage increases to about 27 percent in the group age 80 and older. In principle, the implementing circulars for the Law on Health Insurance entitles all people age 80 and older to subsidized health insurance if they do not already have coverage through their pension. Important

118 Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

119 https://baohiemxahoi.gov.vn/tintuc/Pages/linh-vuc-bao-hiem-y-te.aspx?ItemID=14026&CateID=0.

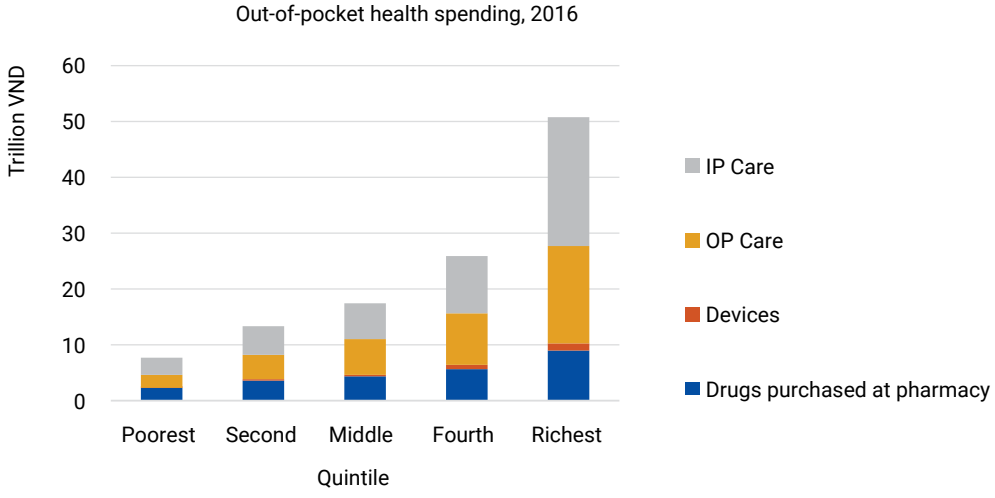
regional differences can be seen in health insurance coverage among older persons, with about one in five older persons (age 60 and older) in the three southern regions lacking insurance coverage, compared to only one in eight in the three northern regions.[120]

Ethnic minority people have higher insurance coverage rates than ethnic Kinh people due to the policy of subsidizing the poor and ethnic minority people in disadvantaged areas. People who report a severe illness in the past 12 months are also more likely to have health insurance coverage.[121]

Despite high health insurance coverage, OOP spending by households continues to be the largest source of health financing in Vietnam. The OOP share of current health expenditure has remained persistently high at just under 40 percent since 2000, rising to 45 percent in 2016.[122] Shifting the composition of health financing from OOP to pre-paid and pooled sources from state budgets and SHI funds is important because it means that the risk of unpredictable and potentially costly healthcare expenditure is spread across the population.

The share of household income that goes to health care has been increasing recently for all income groups except for the rich. Among all income groups, there was a prolonged downward trend in the share of household spending that went to health between 2004 and 2012, from 7 percent to around 5 percent on average. This trend then reversed between 2012 and 2016, with an increasing share of income spent on health for 80 percent of the population in the four lower quintiles but not in the 20 percent richest.[123] The richest quintile spends more than five times what the poorest quintile spends on health care and almost double what the second-richest quintile spends (Figure 6.22).

Figure 6.22. Level of out-of-pocket spending on health by wealth quintile, 2016



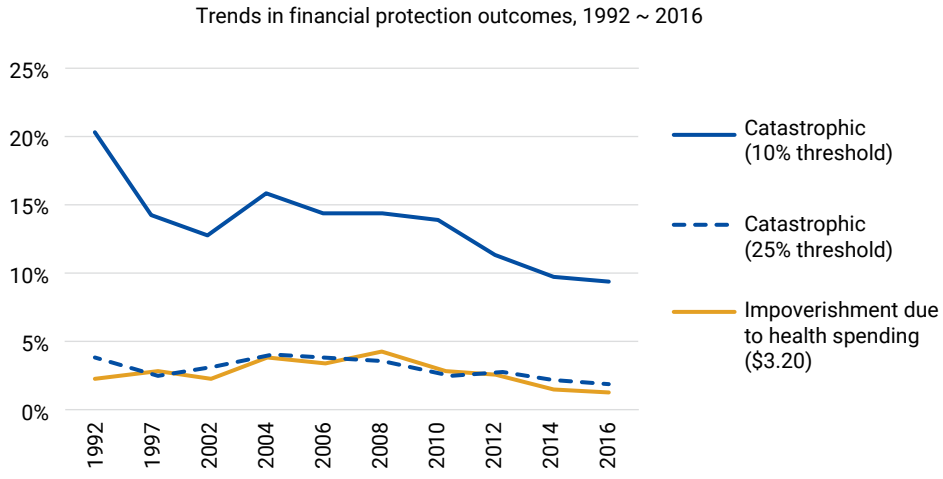
Source: Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

120 Author's calculations using VHLSS 2016.
121 Author's calculations using VHLSS 2016.
122 WHO (World Health Organization). 2018a. "Global Health Expenditure Database, 2018." Geneva: WHO. http:// apps.who.int/nha/database/ViewData/Indicators/en. Accessed August–November 2018.
123 Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

Increases in OOP spending over the past few years have been concentrated among higher-income households, which have more ability to pay and greater utilization of health services. Lower spending among the poorer groups corresponds to fewer contacts with health services (see Figure 6.10 above), possibly forgoing needed care and relying more on CHS services, which are less able to meet population healthcare needs. Inpatient care accounts for a substantial proportion of OOP spending across all income groups, with the richest quintile spending a relatively greater share of their health spending on inpatient care than other groups. Middle-income groups spent relatively more on outpatient care. Drugs purchased from pharmacies account for around 20 percent of OOP spending in all groups.

Vietnam has seen substantial improvement in the financial protection of households against large OOP health spending. Despite the persistence of OOP spending as the predominant source of financing at the system level and the rising share of health spending being borne by households at the point of care, the health financing system in Vietnam has provided significant protection to households against the financial risks associated with healthcare costs. Catastrophic health spending has been declining, reaching 9.50 percent (using a threshold to define catastrophic spending as exceeding 10 percent of household consumption) or 1.79 percent (using a 25 percent threshold) by 2016. Impoverishment due to health spending has been nearly eliminated (1.33 percent) (Figure 6.23). This remarkable finding can be attributed to the above-mentioned high levels of OOP spending concentrated among the rich and lower access and utilization of healthcare services among the poorer groups.

Figure 6.23. Catastrophic and impoverishing health spending, 1992-2016



Source: Teo, H.S., Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

6.5. Challenges for Health Service Delivery and Health Financing

6.5.1. Key health service delivery challenges

Disease prevention, risk factor reduction, and health promotion activities are inherently multi-sectoral and difficult to fund through patient payments. Tobacco, alcohol, diet, pollution, food safety, and fitness require interventions and policies from multiple sectors, which may have conflicting interests. Efforts to raise excise taxes on tobacco and alcohol have faced substantial resistance from industry, and those taxes remain too low to have a substantial impact on tobacco or alcohol use. Pollution control requires substantial

enforcement efforts and incurs higher costs on enterprises, while the beneficiaries of clean air are not organized in a way that can put competing political pressure for enforcement. Food safety efforts have concentrated on industrial producers, because regulating the large number of small producers in agriculture and food processing is an impossible task. At the same time, preventive activities often require behavior change on the part of individuals in the population, which may go against habits, psychological factors, family, preferences, or even economic incentives. Therefore, it is important that the multisectoral interventions mutually support behavior change actions to increase effectiveness.

Development of specialties in higher-level facilities has been prioritized, while availability of basic services at grassroots facilities (CHS and district hospitals) remains limited. Considerable attention has been paid to expanding technical capacity for high-tech services at the tertiary level, particularly in specialist hospitals including oncology, cardiology, orthopedics, and endocrinology. Yet capacity at the primary level is substantially weaker. A facility survey in six provinces representing six regions of Vietnam in 2015 found that CHSs had low availability of basic services to screen, diagnose, and treat diabetes and hypertension. More specifically, only 43 percent of CHSs in the survey reported implementing a diabetes screening program, while 48 percent implemented hypertension screening. Only 48 percent reported management and monitoring of diabetes, and only 16 percent reported dispensing diabetes treatment drugs. Similarly, only 54 percent of CHSs reported managing hypertension, while only 35 percent reported dispensing hypertension drugs. The report also noted that CHSs are only allowed to prescribe drugs for a very limited number of days, which is inappropriate for patients with chronic diseases requiring months of treatment.

A large number of practitioners and facilities at the primary care level still lack medical knowledge in line with national diagnostic and treatment guidelines to screen for, diagnose, and treat diseases common among older persons. The facility survey in 2015 assessed diagnostic accuracy using vignettes. It found that about three-quarters of doctors diagnosed diabetes and hypertension correctly when provided with a history and clinical symptoms. However, doctors failed to ask the full set of medical history questions or perform the full set of clinical examination actions recommended. When prescribing treatment, only 2.1 percent prescribed the fully correct treatment for diabetes, while 28.7 percent actually prescribed harmful treatment. For hypertension, only 4.8 percent prescribed fully correct treatment, and 30.1 percent prescribed harmful treatment.[124] The specialty of geriatric medicine is still new, and few practitioners have in-depth knowledge of the particular challenges in diagnosing, treating, and caring for older patients. But more importantly, few doctors throughout the health system have any professional training focused on the special needs of their older patients.[125]

The only providers allowed to provide home health care for homebound patients, palliative, and end-of-life care are family medicine practices and CHSs with a limited scope of services. The family medicine specialty is still nascent, with few doctors having appropriate qualifications to provide this integrated and continuous model of care. While family medicine clinics are allowed to provide home-based health care, the scope of services they are permitted to provide (in a positive list attached to Circular 21/2019/TT-BYT) is constrained, making it difficult to meet the healthcare needs of homebound, elderly, or end-of-life patients. For example, these clinics are allowed to provide cold compresses but not hot compresses. They can provide nasogastric tubes but not provide food through them. They can provide support transferring to and from a wheelchair, but not support toileting, washing, grooming, or eating.

Practitioners often face overcrowded conditions and lack the time to fully inform their older patients and their caregivers about how to manage chronic

124 World Bank. 2016. Quality and Equity in Basic Health Care Services in Vietnam: Findings from the 2015 Vietnam District and Commune Health Facility Survey.

125 Ministry of Health and Health Partnership Group. 2017. Joint Annual Health Review 2016. Towards Healthy Aging. Hanoi: Medical Publishing House.

medical conditions and prevent exacerbations. The amount of time a doctor sees a patient is very limited and is inadequate to provide advice on disease management. Nurses, who have more time, generally lack training in patient education to make sure they know what to do to prevent exacerbations and to manage their NCD conditions.

Vietnam does not have regulations on provision of hospice care at end of life or advance directives for people at end of life. In many countries, when treatment no longer benefits the patient and the prognosis is not promising, patients can switch to hospice care to alleviate pain and suffering during the process of dying. However, Vietnam has no regulations on this type of practice. In association with hospice care, one would generally have advance directives, which allow patients to decide in advance what care they would like to have or refuse in the case that their health is declining and they may no longer be in a position to make their own health decisions. For example, people can decide that if there is no chance they will recover, they wish to refuse artificial means to keep them alive, such as any kind of treatment, CPR, artificial feeding, ventilation or other measures aimed at resuscitation. Vietnam has not put such policies in place yet.

Despite efforts to ensure rehabilitation services, coverage remains low. In 2015, the delivery of community-based rehabilitation for older persons was very limited, to an estimated only 46,000 people due to lack of funding for training. In the first six months of 2016, the number of older persons with disability, post-trauma sequalae, accidents, stroke, chronic diseases, occupational diseases, etc. receiving community-based rehabilitation was 114,918.[126] The guidelines developed for community-based rehabilitation mainly focus on rehabilitation after accidents or for people born with disabilities, rather than the rehabilitation needs of older persons. In addition, the professions of physical and occupational therapy remain underdeveloped in the training system. The patient referral system tends to neglect the importance of post-hospitalization rehabilitation interventions, instead discharging patients directly from hospital back home, skipping the rehabilitation stage.

Management of chronic disease, particularly hypertension and diabetes, remains relatively weak as evident in analysis of the cascade of care.[127] A substantial share of Vietnam's population has metabolic risk factors for NCDs that have not been diagnosed and are not under treatment. Among people with raised blood pressure (measured in the STEPS survey in 2015), only 43.1 percent have been diagnosed by a doctor, while only 13.6 percent report that their condition is being managed at a health facility. Similarly, among people with raised blood glucose measured in the survey, only 31.1 percent reported that they have been diagnosed, and 28.9 percent reported being on treatment. While both these diseases could be managed at the primary care level, only 19 percent of people with hypertension and 6.2 percent of people with raised blood glucose reported that the facility providing their NCD care is the CHS, while 37.2 percent reported seeking hypertension care and 49.2 percent of people reported seeking care for raised blood glucose at a provincial or central-level facility.[128]

6.5.2. Key health financing challenges

As the population ages, the growing number of older persons with higher frequency of curative care service use and higher tendency to use hospitals is likely to increase overall health spending and the share of GDP spent on health. A recent analysis by WHO using public health expenditure data from EU countries to estimate the resource needs for scaling up the health system to meet the increased needs of an aging population concluded that the resources needed were significant but attainable.[129] For countries with less

126 Ministry of Health. 2016. Báo cáo công tác người cao tuổi 6 tháng đầu năm 2016. Hanoi.

127 The cascade of care, sometimes called the "treatment cascade," is a term that has typically been used for infectious disease detection and treatment (especially for HIV and tuberculosis) but has also recently been applied to NCDs and chronic conditions.

128 Ministry of Health-General Department of Preventive Medicine. 2016. National Survey on the Risk Factors of Non-communicable Diseases (STEPS) Viet Nam 2015. Hanoi.

129 Williams, G., Cylus, J., Roubal, T., Ong, P. and Barber, S. 2019. Sustainable health financing with an ageing population. Will population ageing lead to uncontrolled health expenditure growth? Kobe: WHO Centre for Health Development, Kobe, Japan.

developed health systems, the authors estimated health spending growth using Indonesian population projections as an example of countries with a relatively younger population experiencing rapid aging while increasing health spending to achieve UHC. The projections show that the health spending share of GDP in 2060 would increase at most by 1.7 percentage points in excess of the increase expected based on current expenditure by age patterns.[130] The projections also show the importance of timely policy decisions. The impact of population aging can be mitigated if investments are made before a large share of the population is at older ages, and if scaling up is spread out over time.

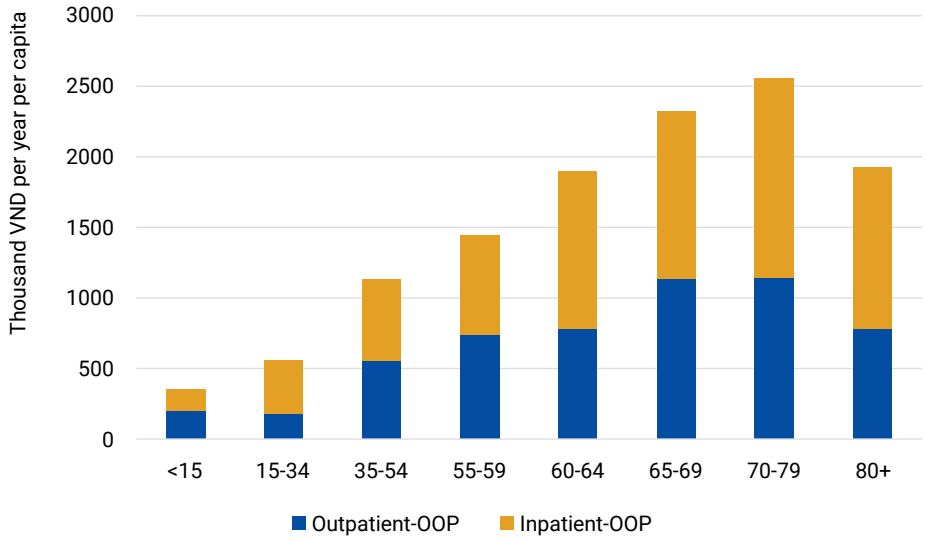
This increased healthcare spending will put strains on different sources of funding. State budget spending will have to increase to cover the subsidized premiums for a growing population of older persons (age 80 and older). Premium rates will likely have to increase to avoid an SHI fund deficit, putting further strain on the state budget. In addition, provinces are mandated to allocate health spending to pay for annual health checkups for older persons at the grassroots level as stipulated in the 2017-2025 Project on Health Care for the Elderly. The biggest strain will come from the expected increase in use of curative care services, which will be driving healthcare spending growth due to population aging and increased use of health services. The sources of funding for curative care include both SHI and OOP payments from households. Controlling annual deficits in the SHI fund will become more difficult with population aging, unless premiums can be increased and patients can be induced to use more cost-effective services at the primary care level. The household financial burden is expected to increase unless measures are put in place to ensure that health insurance provides adequate financial protection from hospitals charging items outside of the insurance package. Among poorer households, these pressures will likely lead to increases in the share of people forgoing needed care. Effective health promotion and disease prevention activities can eventually help relieve the strain, but there will be a substantial lag before their effects are seen.

OOP spending and the financial burden of health care for older persons give cause for concern. Average OOP spending peaks for the 70-79 age group at over 2.5 million VND per capita (Figure 6.24). For households actually incurring health expenditure, the total amount they must pay is substantially higher. The large drop-off in healthcare spending among the oldest cohort is likely associated with drops in utilization of outpatient services (see Figure 6.13 above), which suggests that these patients may not be getting needed care. OOP spending for outpatient services accounts for a high share of overall OOP spending in all age groups starting at 35 years of age. These OOP spending figures include spending by individuals without health insurance, and they reflect the 20 percent co-payment and any additional extra payments made for items excluded from the health insurance package.

Health worker remuneration is higher in curative care than in preventive care and in hospitals compared to primary care facilities. Income of staff in hospitals consists of official salary and supplements as well as redistribution to staff of hospital revenue surplus in excess of costs. Many hospitals also have on-demand wards gathering additional revenues from higher-priced services, which helps boost staff incomes. Many curative care doctors also have after-hours private practices to bring in additional income. In the preventive care sector and CHSs, consisting primarily of government health facilities, the main income source is official salary, since few preventive medicine or primary care facilities can generate substantial income from providing preventive services. Not only does this inhibit people from choosing to work in preventive medicine fields, but it also means that there are few incentives for preventive medicine workers to work harder or more effectively beyond their own public service motivation and ethics.

130 This projection considers the most unfavorable assumptions regarding volume and intensity of services to older persons, higher per capita costs due to the shift to NCDs, as well as the inclusion of long-term care costs into the general health budget.

Figure 6.24. OOP spending for inpatient and outpatient care by age group, Vietnam 2016



Source: Author's calculations from VHLSS 2016.

While health insurance does provide some financial protection, it does not completely eliminate the high costs of health care, and OOP spending in 2016 accounted for 45 percent of total health spending.[131] In almost every age group except people age 80 and older, people with insurance paid higher OOP than people without insurance (Figure 6.25). It is likely that people who choose not to enroll in health insurance happen to be healthier on average or choose not to use more expensive hospital services because they lack financial protection. Analysis of service utilization confirms that insured individuals are using more services—particularly more hospital services—than uninsured individuals. Insured individuals tend to pay a higher share of their OOP on inpatient care, while uninsured individuals pay a high share on outpatient care. This strongly suggests that insurance serves more as an instrument to increase access to higher-level health services than as a financial protection instrument.

The pressure of population aging, the sharp increase in disease burden from NCDs, and a greater demand for high-quality health services will require significant expansion and strengthening of the current healthcare network and greater efficiency in financing.

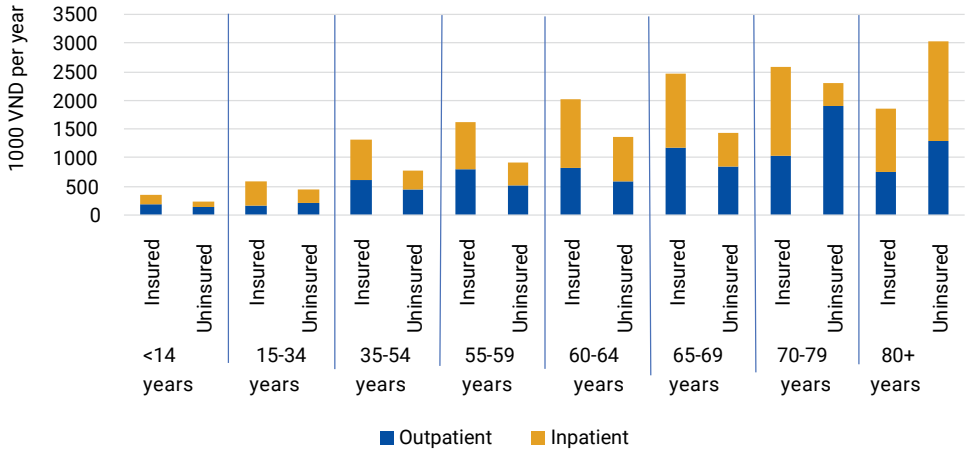
Regulatory and health financing policies fail to incentivize care delivery at lower levels. People tend not to have a primary care provider who acts as a care coordinator to guide them through the system to get effective and appropriate care in line with their needs. Despite higher co-payment rates at higher-level hospitals to discourage bypassing, the effect from difference in co-payments has not been very strong because service prices have been subsidized substantially. However, with user fees now increasingly aimed at full cost recovery, disincentives to bypass are likely to be stronger than in the past.[132] Public hospitals are also encouraged

131 Teo, H.S. , Bales, S., Bredenkamp, C., Cain, J. 2019. The Future of Health Financing in Vietnam: Ensuring Sufficiency, Efficiency, and Sustainability. Washington, D.C.: World Bank Group.

132 In the case of bypassing from the district to higher-level facilities for outpatient care, health insurance will reimburse nothing. In the case of bypassing to the central level for inpatient care, health insurance reimbursement will cover 40 percent of the normal reimbursement share (e.g., for contributing members who receive 80 percent payment from insurance, 80 percent*40 percent=32 percent paid by insurance and 68 percent paid by patient). In the case of bypassing to the provincial level for inpatient care, insurance will reimburse only 60 percent of the normal amount (e.g., 80 percent*60 percent=48 percent).

to raise capital from the private sector (including from their own staff) to invest in new medical technologies and can charge higher fees for use of the private equipment. In addition, the financial autonomy policy allows hospitals to top-up staff incomes from operating surplus, encouraging over-servicing. These factors create powerful incentives for hospitals to offer expensive, high-tech services, some of which may be medically unnecessary but are also interpreted by patients as a signal of quality, further exacerbating bypassing and overcrowding.

Figure 6.25. Differences in OOP or health care by age and insurance status, Vietnam 2016



Source: Author's calculations using VHLSS 2016.

At the same time, the lower levels of care are not yet sufficiently equipped—or enabled through policy and financing—to tackle the shift in the disease burden. On average, only 21 percent of outpatient contacts are at CHSs or regional polyclinics.[133] CHSs are better-utilized in more remote areas, for example in the mountainous provinces where their share in outpatient contacts is well over 50 percent. However, the basic infrastructure, equipment, and competencies are often lacking: in 2016, only 69.8 percent of rural communes met the 2014 national commune health benchmarks.[134] Moreover, those largely structural benchmarks do not provide any assurance that the CHSs are capable of appropriately dealing with specific medical conditions in line with diagnostic and treatment guidelines in close coordination with higher-level facilities. Another challenge is that current provider payment arrangements do not provide the appropriate incentives to CHS health workers. Staff are paid by salary, drugs are provided in-kind from the district hospital, and health insurance reimbursement at the commune level is only for a small set of medical services and is paid on a fee-for-service basis.

Fiscal space for health (i.e. the scope to increase government spending on health) is expected to be modest. Government spending in Vietnam already is high, compared to other countries at similar levels of economic development. It has been estimated that investments in health infrastructure funded by the government and donors combined have only met about two-thirds of the actual need.

Private resources are considered to be critical for filling the investment gap in health care but need to be better harnessed. While significant

133 GSO Vietnam. 2018. Results of the Vietnam Household Living Standards Survey 2016. Hanoi: Statistical Publishing House.

134 Central Steering Committee for the Census of Rural Areas, Agriculture and Aquaculture, Vietnam. 2016. Preliminary Report of the Results of the Census of Rural Areas, Agriculture and Aquaculture. Hanoi: Statistical Publishing House.

expansion in the range of healthcare services provided and increased health service utilization have taken place thanks to the dramatic increase in services provided through private investments, the fee-for-service payment mechanism has created incentives for a higher volume of services that are directly translated into higher revenues and profits for providers. These incentives for hospitals to offer a higher volume of expensive and high-tech services may be resulting in care that is not necessarily medically appropriate and a potential waste of health resources. To mitigate unintended consequences from private sector investment and service provision, careful consideration is needed to create an enabling environment with a strong oversight function of the government for better harnessing private resources and for a more strategic use of public-private partnerships (PPPs) to finance healthcare needs in Vietnam.

6.6. Government Current Policy and Strategies, and Vision for Health Aging

6.6.1. Government policy and strategy response to the aging population

Vietnam's Government and the Communist Party are responding to the demographic and epidemiological transition in high-profile and strategic policy documents. Resolution 20 and Resolution 21 (2017) of the Sixth plenary session of the 12th Communist Party Central Committee provide the main strategic orientation for this response. Resolution 20 recognizes the need to address environmental and behavioral risk factors to health. The document also acknowledges shortcomings in preventive and primary health care and in both the technical and service quality of health care. The orientation this Resolution provides in its long list of solutions includes strategies like raising people's knowledge and awareness to change their behaviors and take responsibility for their own health. It also includes strengthening of primary health care through a family medicine model, health management throughout the life cycle, and strengthening of many elements of preventive and promotive care. There is a strong emphasis on mobilizing private resources, improving quality of care, and addressing disparities. Resolution 21 begins to move population activities away from a narrow focus on family planning toward improving the "quality" of the population, such as promoting the adoption of healthier lifestyles, managing the health of older persons to enhance their years lived in good health, and expanding the geriatric specialty in healthcare facilities. To operationalize these ambitious strategic orientations, the Government of Vietnam has issued action plans (Government Resolution 137 and 139 in 2017) which assign concrete responsibility to relevant ministries and to all provincial People's committees for implementing the various solutions in the period 2018-2020. In turn, each ministry and provincial people's committee issues decisions to implement the Resolution and Action plans.

The health sector has been charged by the Government to place greater priority on primary health care in its policies and strategies. In 2016, the Prime Minister issued Decision 2348/QD-TTg approving a project to develop the grassroots healthcare network in the new situation. This policy acknowledges the need to strengthen the professional capacity and the financial and operating mechanisms of CHSs and district health facilities in order to achieve universal health coverage more generally, as well as to more fully implement other legal provisions on health care for older persons. The project includes reforms to the organization, operations, and finances of the grassroots level as well as investments in human resources development. The policy paints a vision of comprehensiveness, continuity of care, coordination, and integration between prevention and treatment at the grassroots level and integration with facilities at higher technical levels, while ensuring equity and effectiveness.

Even before these policies, the government had begun developing national policies on older persons to respond to the upcoming challenges in multiple sectors, including long-term care and health care. A comprehensive Law on the Elderly came into effect in 2010, stipulating the rights of older persons and defining the responsibilities of

their family and of the State towards them. Box 6.1 describes the legal provisions in the Law related specifically to health care for older persons. In 2011, the Ministry of Health issued Circular 35 guiding provision of health care for older persons, and the Ministry of Finance issued Circular 21, replaced by Circular 96 in 2018, on allocating state budget funds to comply with this law. The National Action Program on Older Persons 2012–2020 provides a more comprehensive, multi-sectoral framework for the current policy direction on older persons, with the current priority to bring into play the role of older persons, improve quality of care for older persons, and mobilize all of society in the care of older persons appropriate with Vietnam's socio-economic situation.

Box 6.1. Healthcare provisions in the Law on the Elderly (2009)

Article 12. Medical examination and treatment

1. Prioritized medical examination and treatment for older persons shall be carried out as follows:
   a) Persons age 80 years and older shall be given priority for medical examination before other patients except for children under age 6, emergency cases, and severely disabled persons;
   b) Treatment beds shall be arranged appropriately for inpatient care.

2. Hospitals, excluding pediatric hospitals, have the following responsibilities:
   a) Organize a geriatrics department or set aside beds for treatment of older persons;
   b) After acute inpatient treatment episodes, rehabilitate health of older persons in the hospital or guide continued treatment and care in the family;
   c) Combine traditional and modern medicine during treatment, provide guidance for grassroots. Facilities to provide complementary and alternative medicine services for elderly patients.

3. The State encourages organizations and individuals to provide free medical services to older persons.

Article 13. Primary health care at places of residence

1. Commune health stations have the following responsibilities:
   a) Implement health communication, disseminate basic knowledge common health care; guide older persons on preventing and treating disease and caring for own health;
   b) Create health management and monitoring records for older persons;
   c) Provide professionally appropriate examination and treatment services for older persons;
   d) Coordinate with higher-level facilities to organize periodic health checkups for older persons.

2. Commune health stations send health workers to provide examination and treatment services in the residence of older persons living alone who have severe illness preventing them from going to a medical facility. Commune people's committee is responsible for supporting transport of such patients to a health facility following requests of the commune health station.

3. The State encourages organizations and individuals to provide examination and treatment services for older persons in their residence.

4. Funds for the implementation of tasks defined in a), b), and d) of Clause 1 and in Clause 2 of this article are to be covered by the state budget.

To implement the National Action Program, the Ministry of Health issued the project on health care for older persons for the period 2017–2025. Its objective is to meet the healthcare needs of older persons appropriate with various stages of population aging through strengthening communication and improving awareness on care, developing healthcare campaigns consolidating the primary care and examination and treatment networks, developing a long-term healthcare model, developing human resources for health, refining policies on health care, and encouraging

society to participate in health care, all with a focus on older persons.

"Socialization" policy and autonomy have created an environment favorable to the mobilization of private resources for health and social services. Vietnam embarked on initiatives to encourage the mobilization of "all possible resources in society" toward key public services to address its resource constraints since the 1990s as part of the overall macroeconomic reforms. In theory, this "Socialization" policy was intended to share costs and responsibilities between the State and "society" for the provision and payment for services. In reality, the government reduced its subsidies, allowing public institutions to collect user fees for services and mobilize resources from the private sector and social organizations. Over the subsequent decades, "Socialization" became an increasingly important policy in the social sectors, simultaneously filling a resource gap and expanding the services available to people.

The orientation of reforms to health service delivery are in line with many of the healthcare needs for an aging population, but they are all at early stages and will require substantial investments and reforms for effective implementation. The most important component is keeping the population healthy from early ages through healthy lifestyles and regular health checkups to detect and treat or manage disease early. Funding for these interventions comes mainly from the state budget, with few incentives for practitioners to focus their efforts on these services. Providing patient-centered curative care for older persons to keep them healthy, to detect and treat or manage chronic diseases effectively close to home, and to provide rehabilitation services to help them recover more fully from illness or to mitigate the adverse effects of reduced function in older ages through rehabilitation services are also essential to a healthy older population. However, the fragmented, hospital-centric health system with little vertical integration and limited time allocated to teaching patients and caregivers how to manage their health will need substantial improvement to become effective.

In an effort to tackle the multiple risk factors for NCDs and directly address the healthcare needs of older persons, the Prime Minister has initiated the Vietnam Health Program for the period 2018-2030.[135] This program moves away from disease-specific interventions toward a more integrated life cycle approach, focused on improving nutrition, physical fitness, information campaigns, and behavior change communication to reduce tobacco and alcohol use and improve diet for the population in all ages. The program also envisages disease screening, health maintenance for older persons at the grassroots level, and other measures (like taxes) to nudge people toward healthier lifestyles (Box 6.2). This program was approved by a Prime Ministerial Decision, in order to ensure coordination of multi-sectoral interventions to tackle these risk factors more effectively.

135 Prime Ministerial Decision No. 1092/QĐ-TTg dated 2 September 2018 Approving the Vietnam Health Program.

Box 6.2. The Vietnam Health Program - Measures to address health care of older persons

The Vietnam Health Program issued by Prime Ministerial Decision 1092 in 2008 includes interventions targeted at different age groups that focus on ensuring appropriate nutrition, increasing physical exercise, health care for preschool and school-age children, control of harm from tobacco and alcohol use, improvement in sanitation and the environment, food safety, early detection and management of NCDs (hypertension, diabetes, and some types of cancer), health care for the people in the community, and health care for older persons and workers. The program includes information campaigns and behavior change campaigns. It calls for localities to use existing resources in their annual budget appropriations and existing programs and projects and to mobilize contributions of enterprises, communities, and individuals to implement these activities. International expertise and resources are also to be mobilized for implementation, and the program is to be monitored and evaluated.

The program includes some activities aimed specifically at promoting the health of older persons, including continuing development of geriatric care facilities nationwide and implementing health care for older persons at the grassroots level and in social assistance centers, nursing homes, and the community. Specific actions include:

- Providing technical guidelines, strengthening training of healthcare workers at the grassroots and other caregivers.
- Implementing long-term care integrated with management of NCDs for older persons in their family and in the community.
- Developing a basic healthcare package for chronic disease and health care of older persons affordable to the health insurance fund and state budget.
- Developing a network of family medicine doctors to provide services to manage chronic disease and provide long-term care for older persons.
- Implementing management of health and periodic health checkups for older persons and ensure that older persons undergo periodic checks of blood pressure, blood tests, and other indicators.

These policy documents lay out a vision and a strategic orientation for addressing the demographic and epidemiological transitions, but many challenges to implementation remain. These challenges are discussed in greater detail below.

While the comprehensive Vietnam Health Program is only in the early period of implementation, making it difficult to assess effectiveness, the basic health system's preconditions for success are weak. The continued lack of intersectoral cooperation and accountability for actions and outcomes may inhibit action by other ministries and localities, especially when they face special interests advocating against these interventions, particularly for alcohol, tobacco, and processed foods. Inadequate monitoring of implementation and outcomes makes it difficult to hold stakeholders accountable and also hinders the ability to reform payment toward performance-based incentives that could enhance effectiveness. Assigning financial responsibility to the state budget for behavior change communication, screening, and other preventive interventions without a clear funding source and with vague calls for social mobilization is unlikely to lead to action.

The vision for strengthening primary health care through family medicine models and health management for the population at the grassroots level has not been matched with the scale of investments needed to ensure capacity for effective service provision. Studies have shown that CHSs and their staff lack technical capacity to provide basic NCD care. The continuing medical education system has not been prioritized, as efforts are focused on pre-service training. Thinking about essential primary care services is not focused on the patient's needs but rather

on individual service items and drugs, although there are protocols for diagnosis, treatment, and management of common medical conditions at the CHS level. As mentioned earlier, a large share of the population continues to rely on hospitals for their primary health care, and hospitals have no incentives to nudge patients back to the primary care level or to support the capacity of primary care providers and strengthen continuity of care across levels of the health system.

While very ambitious, the policies on health care for older persons have been criticized as being quite general and even unrealistic.[136] The policies stipulate interventions such as a long-term healthcare package and periodic healthcare checkups for older persons without concretely defining them in a way that allows them to be operationalized at reasonable cost and for broad geographic and population coverage. The Law sets forth generous rights to state-funded health care for older persons but does not include measures to ensure the funds are allocated to cover the costs, while payment norms for services such as home health care are unreasonably low. The linkages between health care and other factors that affect the health of older persons such as the living environment, personal safety, support for family caregivers, and participation of older people in society are not well-acknowledged in these policies.

The voice of the population—including younger and older persons—to design an appropriate system to meet their needs and to hold the authorities accountable for delivering on this vision has not been adequately operationalized. The resolutions, action plans, and projects are generally designed from a top-down perspective, with inadequate consultation with the population from diverse regions and groups. Dissatisfied patients or clients of preventive and promotive health services do not have adequate mechanisms to address their grievances or questions. Attracting the population back to using primary healthcare services at the primary care level requires really listening to what the people want and expect from these services and taking action to ensure those wants are satisfied. In some localities, it may mean contracting private providers rather than direct government provision.

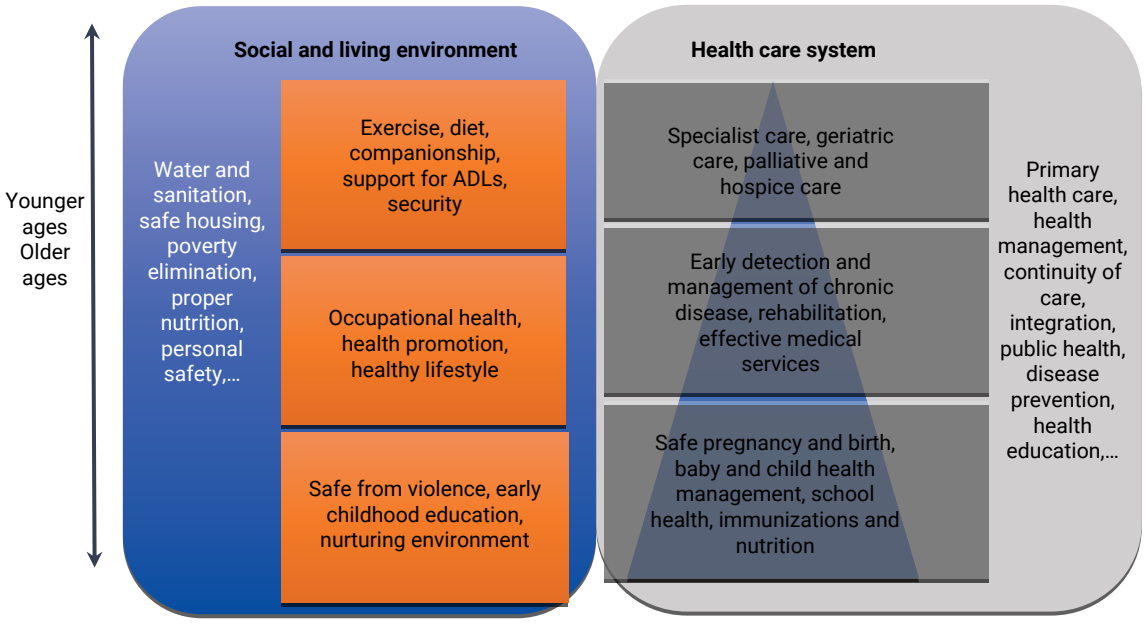
6.6.2. Vision of people-centered integrated healthcare (PCIC) model for Vietnam

For the development of a new medium-term strategic framework to respond to population aging after 2020, the life-cycle approach as well as a rights-based policy should be considered crucial. The vision to ensure continuous improvements in the quality of life of older people requires a double focus on: (i) ensuring the social inclusion of older persons and opportunities to lead a dignified, healthy, active, and independent life free from poverty and abuse and (ii) preparing the younger cohorts to enter their later ages in good health and with a stable financial position.

Vietnam's vision of a framework for healthy aging will require actions not only within the healthcare system but also in the social and living environment (Figure 6.26). Actions must occur throughout the life cycle, from the antenatal period through youth and working ages up until the oldest-old ages. Some elements of this framework are needed at all ages, such as access to effective primary care, health management, and disease prevention, as well as safe housing, hygiene and sanitation, personal safety, and proper nutrition. Other services may be more relevant and need to be emphasized for certain age groups.

136 Luan, T.D. 2016. The Policies on Elderly Care in Vietnam. Vietnam Social Sciences, No.4 (174), pp. 9-14.

Figure 6.26. Vision of people-centered integrated health care to support healthy aging



The three main strategic pillars of health service delivery for healthy aging include:

- Keep people healthy and able/independent throughout the life cycle to ensure the population remains healthy into older ages.
- Strengthen primary health care in the community while shifting away from the specialist- and hospital-centric model of service delivery.
- Strengthen the capacity of providers to provide these new models of care and promote care integration to deal appropriately with the complexities of disease in older people.

Further improvements in the living and working environment can improve health throughout the life cycle and increase the chances of remaining healthy into older ages. Several decades of peace have allowed Vietnam to prosper and have eliminated war as a major cause of death and disability among the population at all ages, but particularly among young men. Vietnam has been very successful at reducing poverty and undernutrition. Safe drinking water and sanitation are widely available. However, substantial work is still needed to ensure health from before birth, through childhood and youth with health literacy training in schools that teaches healthy habits and lifestyles in young ages. Stronger measures are needed to bring smoking rates down and to reduce substance abuse and mitigate its adverse effects. Occupational health and safety measures could be implemented more effectively and broadly to prevent disability and occupational disease, even among self-employed individuals. Food safety and healthy diet can be improved further. Traffic and community safety measures can reduce accidents and injury, preventing eventual disability.

Resolving most health problems of older persons at the primary care level has many important advantages compared to the current reliance on hospital care. Screening for NCDs usually requires at least annual interactions with health services and monitoring of health indicators, but it does not generally require extensive laboratories or imaging facilities. Once chronic diseases are detected, they usually require daily medications and lifestyle changes which are not feasible, affordable, or convenient for most people to obtain in a hospital setting. In addition, hospital settings are designed for acute disease care and do not have the systems in place to ensure continuity of care and integration

of treatment and preventive services (e.g., diabetes medication and diet change counseling). Primary healthcare providers need to have a clear scope of services that they can effectively provide at the primary care level, and when patient needs exceed this scope of services, the provider needs to be able to coordinate care for their patients, transferring patients and patient information to an appropriate facility capable of providing needed services without undue delays.

Hospitals and other specialist care settings need to adapt to the complex needs of older patients, putting the patient's needs at the center of care, rather than a specific medical condition. Geriatric specialists, nurses, and social workers working in general and specialist hospitals can play an important coordinating role to ensure optimal care for older persons with complex health problems requiring services from multiple specialty departments. They can also help families make decisions on whether treatment or palliative care may be the best option. After treatment, they can coordinate to ensure that appropriate follow-up care—including physical and/or occupational therapy—is provided to improve functioning and help maintain independence after discharge or to manage chronic health conditions.

Private sector players, including for-profit and non-profit entities, can fill important gaps in public services to better meet the diverse needs of older persons and their families. Private family medicine providers can help satisfy the growing demand for home healthcare services for bedridden or homebound older persons or for hospice care for patients at the end of their life in better-off families. Non-profit entities can play an important role in finding community-based solutions at low cost, which could be replicated through community or mass organizations to meet the demands of lower- and middle-income individuals. Private sector entities may also be able to provide training for family caregivers facing medical and other challenges in caring for their older persons or provide meals and companionship for older people unable to perform these tasks. Private hospitals, specialist clinics, and pharmacies are already meeting an important share of the healthcare needs of older persons but could become more integrated with public providers to ensure greater continuity of care and integration of preventive and curative care services.

6.7. Recommendations for a Re-configured Service Delivery Platform for Healthy Aging

6.7.1. Recommendations to support the vision for healthy aging

In order for Vietnam to progress toward its vision for healthy aging, the health service delivery platform needs to be re-configured. Key recommendations include: (a) keeping people healthy and able, (b) detecting disease early and mitigating harm from health problems or their treatments, (c) appropriately dealing with the complexities of disease in older persons, and (d) designing a health system that is responsive to the population's needs.

(a) Keeping people healthy and able/independent

Keeping people healthy and independent in older ages requires actions throughout the life cycle to ensure proper nutrition, healthy lifestyles, safe workplaces, and a clean environment. These actions require multi-sectoral involvement, because many of the risk factors for disease and disability are not within the jurisdiction of the health sector to take action. Increasing health literacy among the population is also crucial to achieving this goal.

The Vietnam Health Program lays out a vision to 2030 for actions needed to address risk factors. The design of this program is multi-sectoral and addresses the internationally recognized major risk factors for NCDs. The main challenge is to ensure effective implementation of this very comprehensive program. Many of the preventive measures are not covered by health insurance, and the providers incur costs rather than generate revenues from service provision. As mentioned earlier, many of the measures go against the

interests of enterprises and industries (tobacco, alcohol, processed foods and sweetened beverages, air pollution) who have big wallets to lobby against taxes and regulations. Increasing the awareness and knowledge of the population about risk factors and healthy lifestyles may not be enough to actually induce behavior change, which is why multi-sectoral measures to increase costs of use and restricting access are so important.

Effectiveness in tobacco control requires multiple mutually supporting interventions.[137] Large increases in cigarette taxes relative to initial prices continue to be the most effective policy to reduce cigarette consumption. Enforced comprehensive smoke-free air laws in indoor worksites, restaurants, and bars are the second most effective measure. High-level media campaigns can be effective if well-tested, implemented on multiple media platforms, of large enough scale, and sustained over time. These campaigns are more effective if combined with other interventions that increase visibility and reach. Combining these campaigns with tobacco cessation programs enhances effectiveness. Health warnings, marketing restrictions, and complete cessation policies (including financial coverage of treatment, quit lines, and healthcare provider interventions) have slightly lower levels of effectiveness in reducing tobacco consumption but are enhanced when combined with each other. The least effective measures are simple interventions like healthcare provider interventions alone, active quit lines alone, or financial coverage of treatment alone.

Interventions to ensure a healthy diet include creating coherence in national policies and investment plans to promote a healthy diet, encouraging consumer demand for healthy foods, and promoting appropriate infant and young child feeding practices.[138] As with tobacco use, simply increasing the awareness of healthy diet is not generally adequate to change practices. Additional complementary policies are needed. Trade, food, and agricultural policies can include increasing incentives for producers and retailers to grow and sell fresh fruit and vegetables and for the food industry to reduce saturated fats, trans-fats, free sugars, and salt through reformulation of food products. Measures can also be implemented to more tightly regulate how foods and beverages are marketed to children and to establish standards of healthy dietary practice in pre-schools and schools and in the workplace. Nutrition labeling policies can be changed to increase consumer awareness of harmful and healthy nutritional components in food. The food service industry can be encouraged to offer affordable and healthy foods with appropriate portion sizes. Consumer demand for healthy foods can be boosted by promoting awareness of a healthy diet and by developing school policies and programs to encourage and educate children, adolescents, and adults on adopting and maintaining a healthy diet. Encouraging culinary skills and nutrition awareness for meal preparation can also contribute to healthy eating. Nutrition and dietary counseling at primary healthcare facilities helps raise awareness about diet linked to specific health problems. Dietary influences on health start young, so it is crucial to promote appropriate infant and young child feeding practices through implementing the International Code of Marketing of Breast-milk Substitutes, promoting protection of working mothers, and supporting breastfeeding in health services and the community.

Maintaining Vietnam's low levels of obesity is crucial for reducing NCDs and other health problems, particularly diabetes.[139] Besides measures related to a healthy diet, additional measures to prevent obesity could include taxing of sugar-sweetened beverages (SSBs) and ultra-processed foods, taking into account extensive global experience in taxation design. Front-of-package labeling and related nutrition profiling

137 Levy, D.T., Tam, J., Kuo, C., Fong, G.T. and Chaloupka, F. 2018. Research full report: the impact of implementing tobacco control policies: the 2017 tobacco control policy scorecard. Journal of Public Health Management and Practice, Vol. 24, No. 5: 448.

138 WHO. 2020. Healthy diet fact sheet. https://www.who.int/en/news-room/fact-sheets/detail/healthy-diet, accessed February 14, 2020.

139 Popkin, B., Schneider, P. and Shekar, M. 2020. Chapter 5: Addressing Overweight/ Obesity: Lessons for Future Actions. In: Shekar, M. and Popkin, B., eds. Obesity: Health and Economic Consequences of an Impending Global Challenge. Human Development Perspectives series. Washington, DC: World Bank.

and warning labels have been shown to shift consumption away from ultra-processed foods and beverages. Removing SSBs from schools in feeding programs has been effective in some countries. While increasing physical activity is important to maintain health, there is less evidence about what measures work to effectively increase physical activity.

Alcohol is an important risk factor for burden of disease in Vietnam due to accidents and disease, and measures to control this risk factor are similar to those to control tobacco. [140] Among the most effective measures is raising prices on alcohol through excise taxes and pricing policies. Combination policies are also more effective than individual policies and can include strengthening restrictions on alcohol availability, enforcing drinking age laws, enforcing bans on alcohol advertising, and facilitating access to screening for alcohol abuse followed by brief interventions and treatment. To reduce the risk of accidents, strong enforcement of drink driving countermeasures are particularly effective, such as the new measures included in Vietnam's Alcohol Law.

(b) Detecting disease early and mitigating harm from health problems or their treatments

Screening people in different age groups or risk profiles to detect diseases and/or risk factors early creates opportunities for reversing disease progression or managing it if appropriate interventions and lifestyle changes are undertaken at all ages, but particularly for older ages with the higher burden of NCDs. This type of screening is generally within the scope of health sector activities but can also be provided through schools, the workplace, or even over the internet (e.g., diabetes screening tool) or at non-health establishments (e.g., blood pressure or finger prick blood tests in the community).

The Vietnam Health Program includes targets and measures to ensure early detection and disease management for a number of diseases. For children, it includes screening of childhood health and nutrition problems to be performed through schools and CHSs. For adults, the program envisages strengthening early detection of high blood pressure, diabetes, cardiovascular disease risk through monitoring of BMI, blood pressure, and blood tests on an annual basis and early detection of some common types of cancer through screening exams at the grassroots level. For working people, screening would take place at the workplace and would also include occupation disease detection. For people whose diseases have been detected, the program intends to follow-up with disease management and/or support at the commune level nationwide. A major thrust of the program is to manage the health of each individual at a school, workplace, or grassroots level health facility on a continuous basis, including annual health checkups. The program also envisages some communications activities to increase people's awareness of the need for screening.

The orientation toward early disease detection and continuous health monitoring at the primary care level is appropriate for achieving greater access and greater efficiency, but there are many challenges to achieving the intended outcomes. The population does not yet have the habit of seeking healthcare services while they are asymptomatic, and many are not aware of where to seek effective screening services. Providers lack training and supervision to ensure that they perform the full protocol for screening (including history, clinical exam, lab tests, and imaging) and that they ensure follow-up care and advice, particularly during workplace health checkups and checkups of older persons in the community. Lack of clear evidence-based guidelines to ensure cost-effectiveness of disease screening protocols for many diseases and reliance on patients to pay out-of-pocket for disease screening (except for employer-paid workplace checkups and government-paid CHS annual checkups for older persons) are likely to inhibit take-up of this important health intervention for many people.

140 Siegfried, N. and Parry, C. 2019. Do Alcohol Control Policies Work? An Umbrella Review and Quality Assessment of Systematic Reviews of Alcohol Control Interventions (2006–2017). PLoS one, Vol. 14, No. 4.

(c) Appropriately dealing with the complexities of disease in older people

The healthcare needs of older persons are more complex than those of most younger people. A large share of older persons face NCDs, which require careful daily management and regular contact with health services over long periods of time. Some older persons face multiple chronic diseases, some of which may be ignored by specialists focusing on only one. Prevalence of disability in older persons complicates access to care (bedbound, homebound) and may exacerbate other health problems. Neurological diseases (like dementia and Alzheimer's disease) make it difficult for older persons to manage their own health and daily life. Diseases, disability, pain, and loss of basic functions (like incontinence) often adversely affect the mental health of older persons. Medical treatment of older persons can often lead to other medical conditions or disability, for example muscular atrophy after long hospitalization, adverse drug interactions, or impairment of liver or renal functions. In the final stages of life, when people become very weak, treatment of disease may not improve health and may in fact make older persons weaker, face greater discomfort, and reduce quality of life.

Vietnam's health service delivery system is expanding the network of facilities with training and expertise in geriatric medicine. By 2018, nearly 100 hospitals had a geriatrics department. Efforts are underway to develop the family medicine specialty and incorporate family medicine principles into CHSs and some private practices.

(d) Designing a health system that is responsive to the population needs

The voice of the population– including younger and older persons–in the design of an appropriate system to meet their needs and to hold the authorities accountable for delivering on this vision has not been adequately operationalized. The resolutions, action plans and projects are generally designed from a top-down perspective with inadequate consultation with the population from diverse regions and groups. Dissatisfied patients or clients of preventive and promotive health services do not have adequate mechanisms to address their grievances or questions. Attracting the population back to using primary healthcare services at the primary care level requires really listening to what the people want and expect from these services and taking action to ensure those wants are satisfied. In some localities, this may mean contracting private providers, rather than direct government provision.

6.7.2. Specific recommendations for policy and implementation

The health service delivery and health financing systems need to be reconfigured to implement Vietnam's vision of people-centered integrated healthcare systems. The specific recommendations presented below aim to address existing gaps and challenges in both policy and implementation in order to achieve the vision for health aging in Vietnam.

Policy and Governance

In the area of policy and governance, important reforms include prioritization and legal support for multi-sectoral cooperation and public-private partnerships (PPPs), ensuring effective accountability and oversight, and ensuring policy linkages between health care and related policy areas. An important overarching reform includes changes to primary care delivery priorities and the supporting legal framework.

First, intersectoral cooperation should be prioritized and supported, addressing issues such as pollution, prices on harmful/unhealthy goods and products (such as tobacco, alcohol, and sugar-sweetened beverages), school and workplace health maintenance, health literacy education, and communication. Crucial to the success of such cooperation is strengthening the legal and regulatory framework for PPPs in the health and social sectors. A legal and regulatory framework for private sector engagement and PPPs should be well-integrated into the national and provincial

health policies and strategies as well as the national health sector development plan.

A second important priority is in accountability and oversight. A stronger accountability mechanism should be designed that includes both government oversight and patient/citizen oversight. The mechanism could have responsibility for implementing actions like raising taxes on tobacco as well as for providing screening services to older populations. Another important step is ensuring effective monitoring of performance, implementation, and outcomes across the board. This also includes monitoring provincial and sectoral allocations for preventive and promotive interventions to track spending on key interventions and monitor how effective the interventions are.

A third priority is ensuring policy linkages between health care and other policies that affect the health of older persons, such as the living environment, personal safety, support for family caregivers, and participation of older people in society. The law sets forth generous rights to state-funded health care for older persons but does not include measures to ensure the funds are allocated to cover the costs, while payment norms for services such as home health care are unreasonably low.

Finally, a critical overarching change in healthcare delivery entails creating essential primary care packages focused on patient needs, rather than individual services or drugs. This may include a mix of curative and preventive and social and finance interventions. It may also require changes in other regulations, such as duration of a prescription that can be given at the CHS to fit better with the needs of people with chronic disease.

Health Service Delivery

In the area of health service delivery, building capacity of health workers as well as non-medical caregivers, increasing the scale and effectiveness of public health communication, and creating more effective disease screening and primary health care are all essential steps.

Caregiver capacity building should be tailored for the complementary roles of professional and non-medical caregivers. Capacity-building of health workers (specialists, general practitioners, nurses, occupational and physical therapists, and social workers) should be prioritized so they can more effectively respond to the healthcare needs of older persons in a way that puts the older person at the center of care, including meeting their medical needs while not neglecting their financial, social, self-care, and mental health needs. Meanwhile, caregiving skills of household members and other non-medical caregivers should be strengthened. Support should include training these caregivers to be more effective and giving them respite when the burden of caring for disabled elderly family members becomes overwhelming.

Public communication is a crucial aspect of effective health care. Reforms should boost health communication efforts at all ages and in multiple settings and channels to increase health literacy in the population, including elderly persons and their caregivers, so they are best able to provide the care needed by their elderly loved ones at low cost and in the convenience and comfort of their own residence.

The technical expertise and structure of the primary health care system must be prioritized and strengthened. One key intervention would be to set clear technical guidelines for disease screening that takes into account cost-effectiveness and targets higher-risk groups. The guidelines should furthermore ensure appropriate follow-up for cases requiring further diagnostics or treatment. A second important intervention involves scaling up effective models of primary health care that are being piloted at the CHS and regional polyclinics. This should also ensure availability of chronic disease management at the primary care level, close to the patient's home, to boost the chances of treatment adherence, supported by continuous patient health management records.

Integration and streamlining of the healthcare delivery system is a final critical area of priority. Upward and downward referral networks should be

organized to ensure that patients quickly get to the most appropriate care, including post-discharge rehabilitation services. Second, the integration of curative and preventive services should be improved, ensuring counseling is implemented to educate patients about their medical conditions and treatment and prevention of further episodes. Third, integrating palliative and end-of-life care into care delivery should be done by creating models and ethics regulations for supporting older persons who choose to discontinue futile treatment, including support for their family and caregivers. Finally, programs should be prioritized with a focus on interventions with the highest potential to improve health (NCD, disability focus), and ensuring follow-up supervision and guidance for implementation.

Health Financing

Health financing priorities should include targeted reforms to promote healthy choices, overarching shifts in budget allocation mechanisms and healthworker remuneration, and lowering financial barriers to care for older individuals. Improving health care service provision efficiency should be guided by data, allocate financing appropriately, and guarantee effected communities a voice. Finally, gaps in health financing can be filled through effective and transparent public private partnerships.

One important reform is implementing financial disincentives for consumption of products which promote adverse health outcomes through increased taxes on harmful consumer goods (like tobacco, alcohol, sugar-sweetened beverages) to increase their prices and discourage consumption for health purposes.

An important overarching change would be to reform mechanisms for allocating state budget and holding localities and facilities accountable for use of funds, including possible pay-for-performance modality for implementing disease prevention, health promotion, and PHC services. Furthermore, the health worker remuneration system should be reformed to reduce disparities between incomes of workers in hospitals and those in preventive/promotive/public health and PHC positions. Another step would include measures to reduce financial barriers that are preventing older individuals, particularly poor individuals, from using needed health services. This includes prohibitions on extra billing and balance billing in the use of insured health care services.

Overall improvements to health care service provision efficiency should be guided by using in information in the detailed e-claims data held by Vietnam Social Security (VSS) to enhance the efficiency and effectiveness of medical services. Analysis of the data can reduce practice variation and eliminate unnecessary services and medicines, saving money for both the insurance fund and patients. What is affordable in terms of health care for older persons should be reconsidered and changes made to what is paid by the state budget, health insurance, OOP or other sources. Furthermore, entitlement packages should be defined in an affordable and realistic way that can be provided and afforded at the CHS level. However, it is important to guarantee communities a voice in defining the services they want at their CHS and implement a dialogue that includes explaining what is feasible and realistic.

Financial mechanisms rewarding efficiency are another area of intervention. One potential avenue could be introducing a financial mechanism to reward hospitals that refer patients back to the CHS and the community after hospital discharge, or for chronic disease management, rehabilitation in the community and that help the primary care facilities provide the necessary follow-up. This could be coupled with designing stronger incentives and facilitating providers to provide key services and help patients/clients adopt healthy lifestyles and comply with interventions.

A final measure would include, expanding the scope of private sector engagement through PPP in public service delivery. This should coincide with adapting the legal and regulatory framework and

create an enabling environment to promote PPP in health and social services specifically targeted to the elderly population.

Household and individual level

Government programs and reforms at a systemic level should be supported by programs empowering individuals and households to to take actions to ensure their own health and that of their family members. These include programs encouraging the population to seek care early for health problems and increase knowledge to recognize symptoms and disease in the households. It should furthermore emphasize participation in health care screening and health checkups for early detection of disease. Finally, it should aid caregivers to increase their awareness and knowledge to effectively meet the changing needs of aging individuals.

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Chapter 7: BUILDING A SYSTEM OF ELDERLY CARE FOR VIETNAM

7.1. Introduction and rationale for state intervention in elderly care

Box 7.1. What is Elderly Care?

Elderly care, or long-term care for the elderly (LTC), refers to the range of services designed to support people who are unable to perform physical and cognitive functions, measured through ability to perform activities of daily living (ADLs) and instrumental activities of daily living (IADLs), respectively (Norton 2000).

ADLs encompass self-care activities that a person must perform every day, such as eating, dressing, bathing, transferring between the bed and a chair, using the toilet, controlling bladder and bowels.

IADLs include activities that enable a person to live independently in a house or apartment, such as preparing meals, performing housework, taking drugs, going on errands, managing finances, using a telephone.

Individuals may need LTC due to disability, chronic conditions, trauma, or illness which limit their ability to carry out basic self-care or personal tasks that must be performed each day. LTC refers to family-based care in the home and community as well as institutional care. It is quite distinct from health care in that while health care services seek to change the health condition (from unwell to well), LTC services seek to make the current condition (unwell) more bearable.

Source: Authors

An important driver of aging is longer life expectancy, but a longer life is often accompanied by prolonged periods of frailty and disability. In 2016, a person in Vietnam living to age 60 was, on average, expected to live another 22.7 years but only remain healthy for 17.2 of those years, implying high needs for personal care in those years of poor health (World Bank 2019 citing Xu et al 2018). There are differences by gender: the average number of years lived with disability (YLD)[141] is 11 for women and 8 for men in Vietnam (World Bank 2019). During this time, difficulties in performing activities of daily living (ADLs) and instrumental activities of daily living (IADLs) are very common (see Box 7.1). The Vietnam Aging Survey 2011 (VNAS 2011) found that more than two-thirds of older persons experienced at least one mobility difficulty. Moreover, nearly 38 percent of older persons experienced at least one difficulty in ADLs, and this share went up to 50 percent in the age 80 and over age group.

Worldwide, the majority of elder care is provided by informal caregivers, predominantly family such as the spouse and adult children. This is also true for Asian countries, including Vietnam, as these countries are driven by the Confucian philosophy and tradition of filial piety.[142] Traditionally and today, elder care has been provided by family members. The VNAS 2011 showed that the main persons providing care to elderly people when they needed support in their daily life were family members, especially the spouse (over 80 percent of husbands were cared for by their wives, and nearly 30 percent of wives were cared for by their husbands) and female family members (Giang

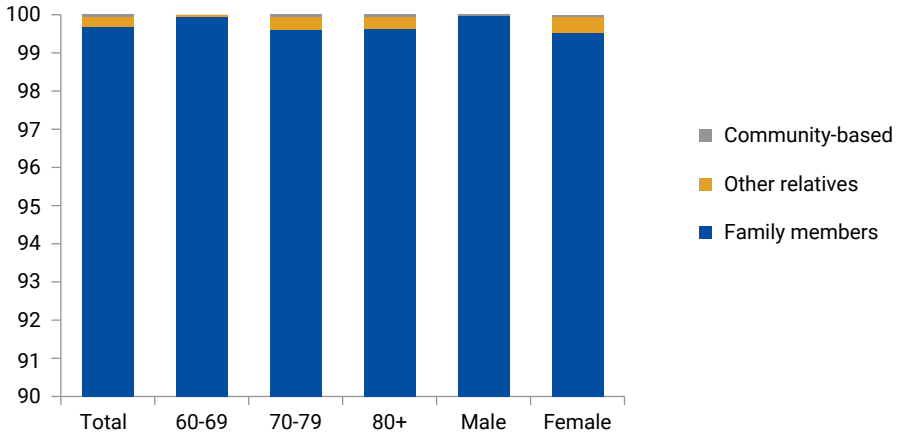
141 The average number of years lived with disability (YLD) is the difference between life expectancy and healthy life expectancy (HALE).

142 In Vietnamese society, filial piety manifests through co-residency, strong family structures, close contacts and proximity to extended family, and family financial support and care for parents (Nguyen and Nguyen 2010). It is also consistent with studies on aged care in Taiwan (Nguyen and Nguyen 2010, citing Wang 2010).

2012). More recent smaller studies suggest that things have not changed considerably since then (Figure 7.1).

This traditional informal family-based (familial) care model is increasingly strained by urbanization, migration, demography, and other economic and social factors. Changes in living arrangements have led to declining rates of co-residence, owing to a number of factors including urbanization, migration of children for work, declining fertility, the transition from nuclear to extended families, and shrinking family size. The average household size fell from 4.8 in 1989 to 3.6 in 2016 (GSO 2016). All these factors reduce the likelihood that adult children live with or in close proximity to elderly parents, which means that adult children are less likely to be well-informed about the wellbeing and care needs of their elderly parents. The share of elderly who live together with their children or grandchildren has steadily decreased from more than 80 percent in 1993, to about 70 percent in 2008, to almost 60 percent in 2016 (Phong and Nam 2019 and Chapter 2). Global evidence from developing countries finds both declining co-residence as countries get richer and lower co-residence among richer elderly across countries. The median co-residence (in a sample of 61 developing countries in the mid-2000s) was over 83 percent for people age 60 and above in the poorest quintile but fell to 64 percent for the richest quintile (Evans and Palacios 2015).

Figure 7.1. Vietnam: Main Caregivers of the Elderly by Age Group and Gender, 2018



Source: MCG Management Consulting (2019)

In addition to the familial model coming under strain, such care provision has large private costs which are borne mainly by women. Across cultures, in the absence of formal elderly care, women in a family are more likely to be compelled or coerced to provide family care. Across the OECD, more than one in ten adults over age 50 provides (usually unpaid) help with personal care to people with functional limitations. Close to two-thirds of such caregivers are women (OECD 2011). Since many family caregivers are of working age, this poses daunting prospects of forgoing income and/or reconciling care and paid work. Multiple examples from OECD countries demonstrate how improvements in the affordability of formal elderly care contribute to women's empowerment by increasing their choices for market work and leisure. Research has also found that the need to provide long-term care to elderly parents carries a high and potentially increasing opportunity cost for those planning to migrate (see Giles and Mu 2007). Across the OECD, as well, high-intensity caregiving without support is associated with a reduction in labor supply for paid work (OECD 2011). Providing

formal elder care options could thus help promote, or at the very least not hamper, the labor market participation of adult caregivers.

If elderly care is not widely available, public and private costs are also incurred through increased expenditures on medical/health care. Another compelling economic argument for setting up a formal elderly LTC system is that savings could accrue from lower public and private expenditures on medical care, thanks to substitution of costly medical care with less expensive social care. LTC could also reduce injuries and thereby lower in-patient and out-patient admissions and hospital stays, which can be substantial. In 1999, medical costs for those over age 75 accounted for 30 percent of the total medical budget of Vietnam.[143] The medical costs of treating caregivers could also be saved—across the OECD, high-intensity caregiving without support is associated with a 20 percent higher prevalence of mental health problems among family caregivers compared to non-caregivers (OECD 2011).

Access to elderly care is part of the social contract in virtually all societies. There are also non-economic, equity and social considerations for developing formal elderly care systems, including the need to support indigent poor elderly, help the elderly age with dignity, and enforce the social contract. Governments channel public financing to LTC not only to relieve family members of informal care work to participate in the labor market but also because long-term care services are not affordable for the vast majority of elderly people in need of care, including indigent poor elderly. Considerations of being in need of care are a critically important part of the social contract, because the availability of elderly care enhances the opportunities of the elderly to live with dignity. Universally, societies direct public resources to help those who do not have the ability to live independently, including the ability to perform activities such as bathing, dressing, self-feeding, attending to personal hygiene, and toileting.

Public policies should not discourage the intergenerational social contract but rather provide a choice to families so they can decide whether to supply elderly care within the family or buy it in the market. The provision of care by family members is a feature of an intergenerational social contract deeply rooted in cultural values, and public policies should not discourage it. What public policies should do is provide a choice so families can decide whether elderly care will be supplied within the family or whether they will seek to buy it in the market. For this, it is necessary to develop the elderly care market that is currently "missing" and strengthen government stewardship, including financing models, to help attract quality private resources to the sector. When markets for elderly care do exist, they are characterized by moral hazard and asymmetric information, in ways very similar to health care markets. Government involvement in elderly care is therefore necessary, primarily in the form of stewardship, including subsidies to qualified recipients. The actual provision of care can be done by a combination of the private formal and "semi-formal" sectors as well as by family members.

Families with frail elderly will be weighing the costs of providing informal care, taking into account both the direct monetary cost of hiring care at home or placing elderly into a facility and the opportunity costs of migration and work. In OECD economies, formal private and public arrangements for provision of LTC emerged in the middle of the 20th century with a shift in living arrangements and an increase in female labor force participation. Having the choice and ability to purchase care in the market is desirable and conducive to the well-being of both care recipients and family caregivers. The government needs to guide and foster the development of a system of formal care provision that offers meaningful and affordable services to families. Vietnam's system needs to keep pace with ongoing changes in demographic and co-residence patterns.

143 Nguyen and Nguyen (2010), citing Nguyen (2009).

This chapter examines the elderly care system in Vietnam and proposes ways to strengthen the system to help meet the country's needs going forward. The chapter first describes the current status and landscape of Vietnam's elderly care system, including legislation and policies that govern the sector, institutional structures, coverage, and financing of elderly care services. It then presents good international practice guiding principles for building a comprehensive, efficient, and sustainable system of elderly care, and provides some policy options for Vietnam, including how to build a market for elderly care and the role played by the state in doing so.

7.2. Vietnam: Legislation and institutional structures governing and supporting elderly care[144]

7.2.1. Constitution, Legislation, and Policies

Vietnam's Constitution, starting from 1946 to the most recent amendment in 2013, recognizes the need for assistance to the elderly who have no support. While the 1946 Constitution first articulated this, amendments in 1980 recognized the explicit need for state support for those without family. The latest revisions in 2013 affirm the need for the state to create equal opportunity and adopt supportive policies (Table 7.1).

Table 7.1. Constitutional Provisions on the Rights of Older Persons in Vietnam

Year	Constitutional Provision
1946	Aged or disabled citizens who cannot work shall get support (Article 14).
1980	Older persons without family support and people with disabilities shall be supported by the state and the society (Article 74).
1992	Children and grandchildren have the duty to respect and look after their parents and grandparents (Article 64). Older persons without family support, people with disabilities, and orphans shall be supported by the State and the society (Article 67).
2013	The State shall create equal opportunities for citizens to enjoy social welfare, develop the social security system, and adopt policies to support older persons, people with disabilities, the poor, and other disadvantaged people (Article 59).

Source: Phong and Nam (2019), citing Ministry of Health of Vietnam and Health Partnership Group (2016) and MOH & HPG (2017).

The primary responsibility for welfare of the elderly rests with their family and is codified in the law, with the government role being mainly to support vulnerable and disadvantaged elderly. The 2009 Law on the Elderly provides general policy direction on various matters but also specifically states that primary responsibility rests with the family. Only the vulnerable and disadvantaged elderly without family support are permitted to live in a government-operated and financed facility or alternatively choose to receive a monthly social allowance if someone in the community volunteers to care for them. The law also stipulates that all Vietnamese age 60 and above should be provided with special treatment and health care. It mandates that those over age 80 will receive a monthly allowance from the Vietnamese Social Insurance fund, and disadvantaged individuals age 60 and over will receive special treatment from a social welfare fund. It also directs the government to give budget priority to medical examination and treatment of aged people, see Nguyen and Nguyen (2010), citing Vietnamese Parliament online 2009.

At the same time, the law encourages development of the market by setting parameters for development of the private sector. The law

144 This section draws extensively from JAHR (2016), unless otherwise specified.

encourages organizations and individuals to invest in elderly care facilities and provides preferential investment policies to encourage it. The 11th Central Executive Committee on social policy issues for the period 2012-2020 emphasizes the need to develop community-based models of care and encourages participation of the private sector in implementing (especially residential models of) elderly care. Various decrees following the "Socialization policy" (Box 7.2), a regulation of "revenue-generated public service entities" and incentive policies for private sector involvement have also been issued. They stipulate that services provided by such units can be determined by the "market mechanism" in such a way as to "ensure full cost or no full cost fees in prices and charges, supported by the state budget." They also recommend creating conditions to establish an equal and competitive operating environment, for organizations and individuals of all economic sectors to participate in the provision of public non-business services.[145] Under the "Socialization policy" social enterprises can receive preferential treatment in land allocation, taxes, and loans. This policy has been applied to provision of education and health services (among other services), but not to the provision of elderly care, so up to date it is not clear whether private social protection centers can register as social enterprises and to receive preferential treatment (MCG 2019).

Box 7.2. "Socialization" in Vietnam: Policy and Practice for the Provision of and Payment for Essential Public Services

"Socialization in the Vietnamese context is best understood as a range of formal and informal policies and practices that have evolved around the provision and payment for and governance of essential services and whose ostensible aim has been to improve the coverage, quality, and efficiency of services."

Vietnam introduced the socialization policy in the 1980s, when the Government was significantly under-resourced to respond adequately to the acute levels of poverty and meet its commitment to universal provision of services. The lack of resources challenged the coverage and quality of public services, prompting the Government to mobilize resources from multiple sources including the private sector, families, individuals, and social organizations. The idea was to share the financial burden with the government and gain an initial footing in financing public services before a more sustainable resource base could be found. "Emanating from the ideals of social solidarity, mutual aid and collectivism, 'socialization' entails assumptions over idealized roles and responsibilities of the state and 'society' in the provision and payment for services."

The Government continued to sustain and deepen its socialization policy through new decrees, including those for specific sectors (Resolution No 05/2005/NQ-CP, Decree No 69/2008/ND-CP, Decree No 59/2014/NĐ-CP, Decree 10/2002/CP-N, Decree 43/2006/ND-CP).

Source: UN SP JPG (2015).

In the last decade, several policies/action plans to guide implementation of the laws related to the rights of older persons have been issued in Vietnam (summarized in Annex X.1). Vietnam's National Action Program for the Elderly for the period 2012-2020 sought to raise the quality of care for older people, develop the social mobilization of care activities, and enhance the roles of older persons in accordance with their potential and level of socio-economic development. The Health Care for the Elderly Project (2017-2025), promulgated by the Minister of Health, recognizes the important role played by the health sector in active aging. The Project has undertaken to deliver healthcare to all older persons who are unable to take care of themselves by 2025. In order to do so, the project proposes to, among other things, strengthen behavior change communication and raise awareness through a "health care for older

145 "Public non-business services" are those with high socialization conditions (see Box 7.2). Decree 141/2016/ND-CP. https://m.thuvienphapluat.vn/van-ban/bo-may-hanh-chinh/Nghi-dinh-141-2016-ND-CP-co-che-tu-chu-don-vi-su-nghiep-cong-lap-linh-vuc-su-nghiep-kinh-te-325310.aspx (translated using google translate)

persons" campaign, reinforce and complete the primary health care and curative care delivery system for older persons, initiate and develop LTC models for older persons, and promote human resources in elderly health care provision.

JARH (2016) report that providers face policies and regulations, which are sometimes not workable or consistent. For example, the Ministry of Planning and Investment regulations on conditions for business registration have not yet added the condition of a license required to provide care services to older persons, as stipulated in legal documents under the Law on the Elderly. As a result, many care settings that provide residential care for older persons have completed their business registration and begun operations but do not have a license for provision of care services for older persons. MCG (2019) identifies the need for more consistent regulations for businesses providing healthcare to the elderly across different sets of laws (Law on Enterprises and Law on the Elderly).

There are still areas where regulations/guidelines/legal documents are absent. First, one area is home-based health services, including the gamut of professional, service, and hygiene standards. The existing Law on Medical Examination and Treatment does not provide a legal basis for setting up private home-based healthcare services to provide the range of medical services needed by the elderly at home. The Law only permits basic home health services or home-based care to be provided by family doctors but fails to provide a concrete list of approved scope of services to meet the comprehensive medical needs of older patients. Second, technical guidance is lacking for facilities providing daycare services for the elderly who are able to care for themselves but just need support in certain aspects of their lives or who are suffering from mild dementia and cannot be left alone (e.g., people with Alzheimer's disease). Third, there are no MOH policy documents guiding the functions, tasks, and organizational structure of the geriatric departments, making it difficult for health facilities to organize and run a geriatric department that meets the needs of elderly. Fourth, another area is downward referral of patients from hospitals to CHSs for continued treatment of patients with chronic diseases who have achieved a stable treatment regime at a higher-level facility. Fifth, legal documents do not provide a clear definition of "unable to live in the community," which is one of the criteria for priority admission to public and charitable social protection centers, see JAHR 2016.

7.2.2. Institutions/Administrative Roles and Responsibilities

At the national level, the Social Protection Department within the Ministry of Labor, Invalids and Social Affairs (MOLISA) has prime responsibility for matters relating to older persons, including drafting LTC and other related policies. It is also responsible for regulating professional standards for service provision and training of caregivers, as well as regulations and standards for residential facilities for older persons. In addition to building competency standards for staff working in social protection facilities (see below),[146] MOLISA is responsible for supporting activities of the Association of Social Protection Establishment Directors, which is responsible for examining, inspecting, and resolving complaints related to the operation of social protection establishments and submitting reports to the Government/MOLISA. MOLISA also stipulates the order, procedures, and dossiers for admission of older persons to social protection centers.

At the sub-national level, the Provincial Department of Labor, Invalids and Social Affairs (DOLISA) is responsible for implementation of national policies, including guiding and implementing the Vietnam National Action Plan and other relevant social protection projects/programs, aggregating data and quantifying the number of older persons to be provided with social assistance, and organizing the development of the network of social protection establishments for older persons. The evaluation

146 Social protection center is the general term used in Vietnamese legislation to refer to residential long-term care facilities for older people, disabled people, orphans, and other groups, in the public, private charity, and private business sectors. Some policy documents use the term social assistance facilities, which includes social protection establishments (residential) as well as social work centers (non-residential).

of applications for setting up social protection establishments and granting of licenses to non-public care settings for care of older persons is also the responsibility of DOLISA or District Labor, Invalids and Social Affairs Divisions, depending on the type of establishment to be established. At the district level, District Labor, Invalids and Social Affairs Divisions have the functions of guiding and examining the implementation of social protection-related regulations.

The Ministry of Health (MOH) is the nodal agency responsible for health-related matters including delivering health care to older people, guiding and organizing health care provision for older persons at health facilities and in the community, as well as guiding the management of chronic diseases. In the field of LTC, MOH is also responsible for providing the license to operate as a family doctor clinic to an enterprise providing home-based medical services to older persons. In addition to granting operating licenses, MOH is assigned to guide the prevention of disease, provision of health care, medical examination and treatment, and rehabilitation for people living in social protection establishments. MOH is also responsible for providing guidance on medical care, physical therapy, and rehabilitation for people with disabilities and mental health problems in social protection establishments. MOH is additionally responsible for granting practice certificates to health workers in establishments that provide medical care for older persons.

The Ministry of Culture, Sports and tourism has an important role in helping older persons access sports, cultural, performance, and tourism activities.

Another important institution at the national level is the Vietnam National Committee on Aging (VNCA). Set up in 2004, VNCA is a multi-sectoral organization tasked with assisting the Prime Minister to direct and coordinate ministries, sectors, mass organizations, and localities in dealing with issues relating to older people. In each province and district, a local working group on elderly affairs is responsible for studying, making proposals for solutions, and directing related organizations to provide care for older persons.

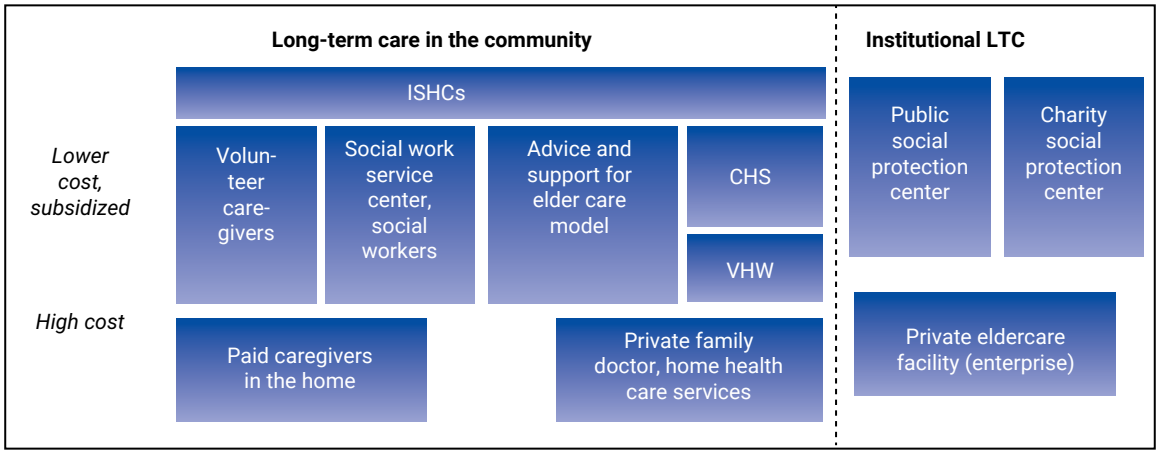
Vietnam has non-government/social organizations involved in developing and implementing LTC for older persons on a small, largely localized, scale. The Vietnam Association of the Elderly (VAE) was set up in 1995 as a social organization representing the aspirations, rights, and legal interests of Vietnamese older people. The VAE is established on a voluntary basis, with a network in all provinces, districts, and communes/wards. The VAE has participated in various activities such as development of policies, implementation of social security, establishment and development of different types of clubs, and providing healthcare and healthcare insurance, all for older persons (Nguyen and Nguyen 2010). The VAE has also collaborated with other NGOs, including the Red Cross Society and Help Age, to experiment in developing care models for older persons. Some religious associations also engage in organizing charity activities and establishing social protection establishments to take care of older persons.

7.3. The Current Landscape of Provision and Financing

The Vietnam System of Health Accounts (SHA) classifies LTC as comprising long-term health care and long-term social care. The health component of LTC relates to health and nursing care for patients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence. Long-term health care normally includes palliative care and long-term nursing care. The social component of LTC includes personal care services (assistance with ADL and IADL restrictions) and services in support of informal (family) care.

As described in the introductory section, most of LTC in Vietnam has been provided by family members/relatives. The small formal care provision that exists relies predominantly on home/community-based care and to a very limited extent on residential care (Figure 7.2), as described in detail below.

Figure 7.2. Vietnam: The Landscape of Elderly Care Provision



Notes:

Social protection establishments (centers) are residential long-term care facilities for older people, disabled people, orphans, and other groups. These could be run by public, private-charity, and private-business sectors. Social work centers are non-residential day centers that provide assistance during the day. The term "social assistance facilities" usually refers to social protection establishments (residential) as well as social work centers (non-residential).

Source: Ministry of Health of Vietnam and Health Partnership Group (2016).

MOLISA (2019) reports that, in total, Vietnam has 418 social protection establishments, including 165 public and 223 non-public (private-charity and private-business) social assistance facilities. This network caters to 42,000 social protection beneficiaries. "Social protection beneficiaries" is a legal term in Vietnam, referring to older persons from poor households, without any close family members to care for them, unable to live in the community, older persons with very severe disabilities, and other disadvantaged categories, including orphans, widows. Among these social protection beneficiaries receiving care from social assistance facilities 10,000 were elderly. Around 2,000 elderly receive care at the residential public social protection centers.

7.3.1. Formal Provision of Elderly Care Services

Home and community-based elderly care[147]

The project for health care of older persons for the period 2017 – 2025 (7618/QD-BYT in 2016), run and coordinated by the General Office of Population and Family Planning in MOH, is the largest provider of home and community services. Under this project, the physical and spiritual health of older persons is supported through various activities carried out by a network of volunteers in the community. One set of activities focuses on training older persons living with their family who are still able to take care of their own health but lack knowledge on how to do so, while others are for the benefit of family members of older people. Services are provided by healthy older persons who have been provided with training and knowledge of health care for older persons. Other activities include providing home-based counseling and care, forming health care clubs for older people, undertaking social visits for companionship and encouragement, updating and recording information, and monitoring and reporting on health services for the elderly provided by local health service staff. Services are provided free of charge, and priority is given to those with minimal family support (beneficiaries are older persons living with their family, having difficulties in mobility, or bedridden and unable to hire home-based healthcare service providers). By 2016, the model of counseling and care supported through

147 This section draws extensively from JAHR (2016), unless otherwise specified.

activities of the volunteer network in the community had been implemented in 370 communes across 32 provinces, see Ministry of Health of Vietnam and Health Partnership Group 2016.

Home- and community-based care is also provided through the Intergenerational Self-Help Club (ISHC). The Government is encouraging the development of ISHC and started channeling public resources into their operations. ISHCs were initially started in 2006 with technical support from HelpAge International and financing from various international organizations (see Box 7.3). They were gradually rolled out by the Commune People's Committees and managed/supported by a mass organization, usually the VAE or Women's Union. The MOH collaborates with ISHCs by providing annual health checkups and other health-related technical support to members.

By the end of 2016, Vietnam had 1,056 clubs operating in 18 provinces with more than 55,000 elderly members (see Ministry of Health of Vietnam and Health Partnership Group 2016). The geographic spread of operationalization seems consistent with the aging index and the distribution of the elderly population for Hanoi, Thanh Hoa, and adjoining areas, MOLISA (2019). At the same time, the other parts of the country, including notably south and central Vietnam, seem to have less coverage of ISHC.

Initial evaluations of ISHC suggest their positive impact on the health, social, and economic participation of the elderly. A UNFPA evaluation found that 84.58 percent of ISHC members surveyed reported improvements in their health (Ministry of Health of Vietnam and Health Partnership Group 2016). An ISMS (2014) evaluation found: (i) improved economic conditions of club members and their families—among ISHC members supported with loans, 75.6 percent reported an increase in income of 30 percent or more; (ii) strengthened community support activities—over 90 percent participated in community activities within the past 12 months, and the average participation in arts and cultural activities of older persons in the intervention group was double that of the control group; and (iii) increased access to health services—periodic health examination at least one time in the past year in the intervention group was double that of the control group. Assessing the evaluation Ministry of Health of Vietnam and Health Partnership Group (2016) recommended better links with local authorities (especially the social protection and health sectors) to provide technical assistance and financial support to paid care assistants in delivering health care to older persons. They also noted that the quality and academic rigor of future evaluations need to be strengthened. Ministry of Health of Vietnam and Health Partnership Group (2016) also pointed out that funding for ISHCs' operations remains in question.

Box 7.3. Intergenerational Self-Help Club (ISHC)

ISHC is a self-help organization with community-based intergenerational members who aim to care for and promote the role of older persons in the community. The ISHC movement in Vietnam was initially started in 2006 with technical support from HelpAge International and financed by various international organizations (e.g., HelpAge, EU, KOICA, UNFPA, Atlantic Philanthropies, Lottery UK) and then continued with Government support.

Each club has five board members and about 50-70 members, with at least five volunteers trained to provide basic care for older persons. Among the 50-70 members, about 70 percent are older persons aged 55 years and older, 70 percent are women, and 70 percent are poor/near poor/with difficult circumstances. Volunteers deliver free-of-charge home-based care/assistance at least twice a week to older persons they support. These activities prioritize disadvantaged older persons with disabilities or illnesses and people without family caregivers. The jobs of volunteers include companionship, providing information, doing housework (cleaning up the house, gardening, washing the dishes, doing laundry, cooking), buying things in the market, helping older persons get dressed, or taking them out for a walk and depending on the status of the person being cared for, the clubs may send one or more volunteers to help. Some capable volunteers also help older persons in personal hygiene, simple exercises, and monitoring of weight and blood pressure. For needs beyond their abilities, the volunteers will report to the Club Management Board for further assistance.

The clubs also facilitate access to health insurance and collaborate with health facilities to provide health check-ups for members twice a year. Some clubs are piloting the provision of home-based medical care services (e.g., guiding older persons to practice rehabilitation exercises and Tai Chi, monitoring of blood pressure, blood glucose, medication compliance). Some clubs have paid care assistants, who are usually retired health workers, funded by HelpAge International.

In addition to personal care, ISHCs also aim to provide comprehensive support to older persons in the fields of income generation/livelihood, social and cultural activities, and lifelong learning.

Source: Authors, based on Ministry of Health of Vietnam and Health Partnership Group (2016)

Some important services for elderly who are "social assistance beneficiaries" are provided in the district social work centers by social workers as well as social workers in health facilities and in the communes. Social workers who are professionally trained, work in communes/wards, districts, and health facilities, in addition to district social work centers. Their work related to older persons includes counseling, therapy for psychological crisis, physical rehabilitation and counseling, and search for and arrangement of other care (e.g., through ISHCs). Social work centers also develop intervention and assistance plans for older persons; take measures to prevent older persons from falling into disadvantaged circumstances, abuse, violence, or maltreatment; and manage users of social work services. Their activities include developing community support programs, establishing a network of social workers and social volunteers, mobilizing resources to assist older persons, and organizing communication activities to raise awareness. However, these services are focused on social assistance beneficiaries and long-term personal care such as support for personal hygiene or eating/drinking is not provided. Thus, while social workers play an important role in the coordination of care, they do not provide assistance for daily personal care. [148]

148 In addition, commune health staff (CHS) and village health workers (VHW) provide primary health care (PHC) services for older persons. CHS tasks related to older persons include monitoring and prevention of NCDs, medical examination and treatment, and rehabilitation in accordance with the authorized level of technical service delivery and scope of professional activities, (Circular No. 33/2015/TT-BYT). VHWs are PHC service providers and their services include community-based health education and communication; detection, surveillance, and reporting of NCDs; participation in the implementation of community health promotion campaigns; care for local patients of some common diseases; and provision of healthcare guidance for older persons and people with disabilities, social diseases, or NCDs at their residence (Circular No. 07/2013/TTBYT).

The high-end segment of the formal home-based elderly care market is developing rapidly with the provision of home-based health and social care services, available to those living in the larger cities. Some private organizations/businesses provide home-based (predominantly medical/health) care services in the larger cities, paid for out of pocket by those who can afford them. Examples include Vina Healthcare Center and Phuoc Thinh Service and Healthcare in Ho Chi Minh City (HCMC) and Vietnam-Australia Family Health Services and Home Care, Medicviet Family Doctor Center, Orihome Elderly Care Center, and family doctor services of the Medlatec company in Hanoi. The service providers include physicians, nurses, rehabilitation technicians, and staff trained in the care for older persons. Similarly, a number of private companies train and dispatch domestic workers who also work as caregivers for older persons in the bigger cities. Examples include Phuong Nam Investment Development Ltd. and Nhan Ai Ltd. These domestic care workers often do not have a medical degree but are trained in skills to provide basic care for older persons, including support for ADLs and housework. Some such providers (Truong Son Youth Volunteer Vocational Training Center, Tam Duc Ltd., and Hong Doan Domestic Workers Center) also provide training to caregivers/family members, in addition to providing domestic care workers for older persons (MCG 2019).

Residential Care

Vietnam has three types of facilities: public, private- charity, and private-businesses, the last of which are developing rapidly (see below). Ministry of Health of Vietnam and Health Partnership Group (2016) and MOLISA (2019) estimated that in 2017 Vietnam had about 50 public residential facilities for older persons nationwide, over 60 facilities run by charities ("non-public" small-scale social organizations or religious organizations), and about 50 registered private facilities. Anecdotal evidence suggests that there are some private elder care facilities which are not on the official list compiled by the MOLISA Social Protection Department and operate as "unlicensed" facilities. It is difficult to estimate the total number of existing facilities because some social protection establishments for older persons are regulated by the Planning and Investment department through issuing a business license, while others (i.e. those set up by religious organizations) are not. Therefore, no single agency has a complete roster of non-public residential elderly care establishments.

Public and charitable residential centers prioritize the admission of (and pay for) social protection beneficiaries, i.e. older persons from poor households, those without any close family members to care for them, those unable to live in the community, or older persons with very severe disabilities. In addition, Decree No. 68/2008/ND-CP allows people who are not social protection beneficiaries but who are unable to live in the family and wish to live in centers to pay or have relatives/sponsors pay for their stay in such centers. At these centers, residential care services include assessment of the initial state and needs of older persons, healthcare, physical rehabilitation, training of daily life skills, organization of cultural, recreational and entertainment activities, and rehabilitation.

Non-public centers receive funding from charitable contributions, and fees paid by older persons' families, as well as from the state budget, if they have older persons who meet the criteria social protection beneficiaries. For older persons eligible for admission, if they are cared for in non-public establishments (charity or enterprises), these non-public centers will enjoy the same assistance payments for their care as public ones (more on this below). Other operational expenditures may be covered by contributions from charities (e.g., from businesses [e.g., VinGroup], religious organizations, Red Cross Society or other organizations), or families of older persons (this is the case in most enterprise-type facilities), see Ministry of Health of Vietnam and Health Partnership Group (2016).

Private providers of residential services are mostly present in Hanoi and the provinces in its vicinity and operate at the high end of the market. MCG (2019) reports that, roughly, about half of all

private residential facilities provide residential care only, while the other half provide a fuller range of services including residential care, home-based care, day care, hour care, and other services such as intensive medical care. Private residential facilities also operate day care centers where older persons are transported to various establishments to receive care while their family members are working. These services are provided largely by nursing homes and are emerging in Hanoi, HCMC, and some other big cities. They include Lotus Japan Nursing home in Binh Duong; Binh My in HCMC; OriHome, Thien Duc, Tuyet Thai, and Javi-Link in Hanoi (see Box 7.4)

Box 7.4. Private Nursing Home Models in Vietnam and Japan

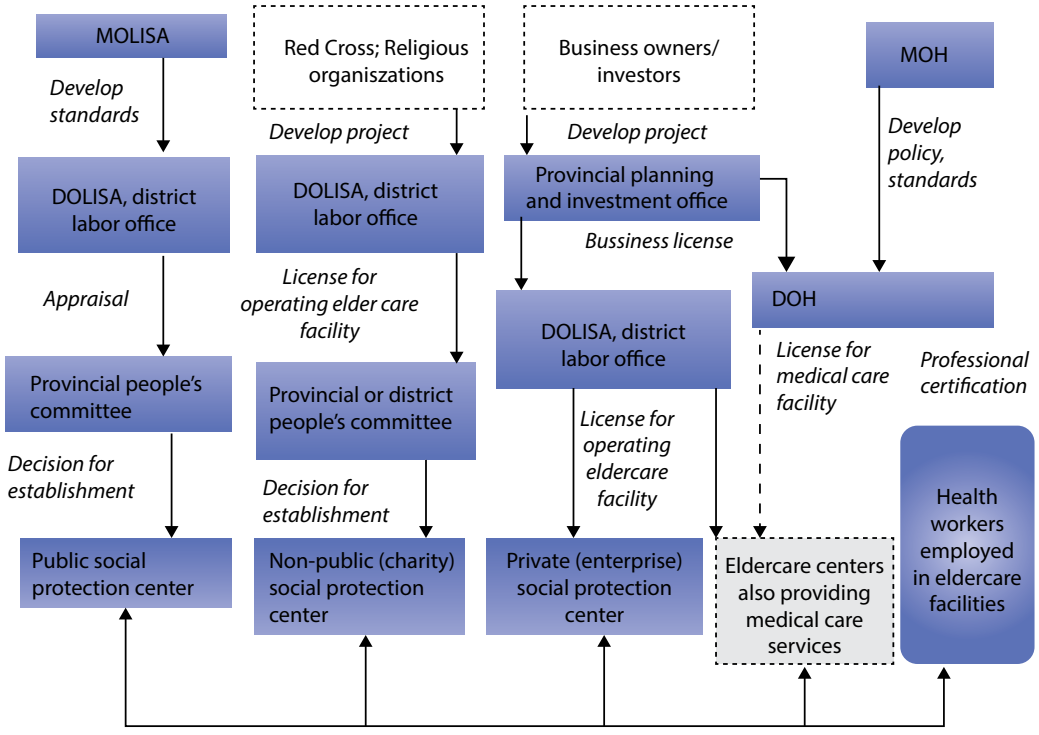
Thien Duc Aged Care Centre is a private nursing home which opened in 2001 and is now in three locations with a combined area of 5.5 hectares in the suburbs of Hanoi. The company plans to expand further around Hanoi, Vung Tau, Da Nang, and Ho Chi Minh City with small facilities, each housing 20 to 30 seniors. It is currently taking care of 352 seniors, using Japanese expertise and rehabilitation programs.

Lotus Japan Nursing home is a private nursing home and it was set up by Japanese conglomerate Tokyu Corp. in 2017 in Binh Duong province, southern Vietnam. The 2,321-square meter site is home to 25 senior residents and 13 nursing staff earning an average of VND 15 million a month (USD 642).

Source: NNA Business News, 2019/5/16 " Vietnam facing nursing home shortage amid slow government support," https://www.nna.jp/english_contents/news/show/20190516_0006

With respect to residential facilities, private enterprises operating in the field of care for older persons must meet the same criteria as public establishments (Decree No.06/2011/ND-CP). Chairpersons of local People's Committees (provincial and district levels) are responsible for making decisions about the establishment of non-public establishments operating within the province and public district-level social protection establishments (Decrees No.68/2008/ND-CP and No.81/2012/ND-CP). The Business Registration Division under the Provincial Department of Planning and Investment is authorized to grant business licenses to enterprises engaged in the care of older persons (e.g., nursing homes or enterprises providing home-based caregivers for older persons) (Enterprise Law and Decree No.78/2015/ND-CP). However, before being allowed to operate, the establishment must have additional licenses depending on the field of business registration (Figure 7.3), Ministry of Health of Vietnam and Health Partnership Group (2016).

Figure 7.3. Vietnam: Mechanism for Establishment of Residential Elderly Care Facilities (Public, Private Enterprise, Charity)



Source: Ministry of Health of Vietnam and Health Partnership Group (2016).

7.3.2. Current financing and costs

Currently, public financing for care is available only for social protection beneficiaries. For such persons, the state will pay the costs for screening and admitting them; assessing their needs for mid-term or long-term care; providing health checkup and PHC; developing care plans; organizing the implementation of care plans; providing shelters, food, clothes and other necessities for living; managing beneficiaries; providing rehabilitation; organizing cultural, recreational and entertainment activities; and delivering healthcare. For those living in a residential facility, the government provides the facility a monthly amount of 1,080,000 VND per beneficiary, in conformity with the prevailing cost norm for care and nourishment (Decree No. 136/2013/ND-CP). This cost norm for care and nourishment is considered low compared to the needs, and public social protection centers typically rely on additional financial support from communities. Finally, social work services provided to older persons who are social protection beneficiaries are covered by the state budget. It also covers the costs of construction and initial procurement of equipment for Social Work Service Centers.[149] Older persons who are eligible for admission to social protection establishments, if they are cared for in non-public establishments (charity or enterprises), these non-public centers will receive the same amount of assistance payments for their care as public ones.

In addition, the government also provides 405,000 VND for individuals voluntarily accepting role of community primary caregiver for older persons without family support, in a poor household, unable to care for themselves, and 270,000 VND to family caregivers of older persons with extremely

149 In addition to support from the state budget, they also have other sources of revenue such as contracts to provide services for domestic and international programs/projects, voluntary contributions from older persons, and support from local and foreign organizations and individuals.

severe disabilities (Ministry of Health of Vietnam and Health Partnership Group 2016).

For those who are not social protection beneficiaries, the primary source of funding LTC is private OOP payments by those using care services. The share of OOP spending for LTC costs is even higher, as health insurance does not cover non-medical services and long-term social care, and there is no LTC insurance in Vietnam.[150] Around 90 percent of most residents' nursing home costs are covered by their children, and the remaining 10 percent are paid for with retirement savings.[151]

The overall costs of formal social care—whether at home, community, or in residential facilities—are considerable. MCG (2019) reports that the average price for home-based (nursing and personal) care services for the elderly is approximately 7 million VND/month (8 hours/day for 30 days/month) and higher for 24-hour care. (See Figure 7.4) Nursing homes can be either charities (0-3.5 mil VND/month) or commercial (6.5-15 mil VND/month), the majority of which charge 8.0 mil VND and above, depending on the degree to which the older person can take care of himself/herself. In general, the prices range from 6 million to 13 million VND/month for basic services (e.g., furnished bedroom, shared living room, laundry, diet, daily acupressure massage, personal hygiene, daily health monitoring, physical activity). Additional services such as tube feeding, endotracheal intubation, care of bedsores, bladder catheterization, and rehabilitation incur additional costs of 5-8 million VND/month. In short, assuming care costs to be about VND 5.5 million/month, only those in the fifth quintile and higher could possibly afford to pay. This is probably why the occupancy rate for private business LTC facilities is about 60-70 percent (MCG 2019).

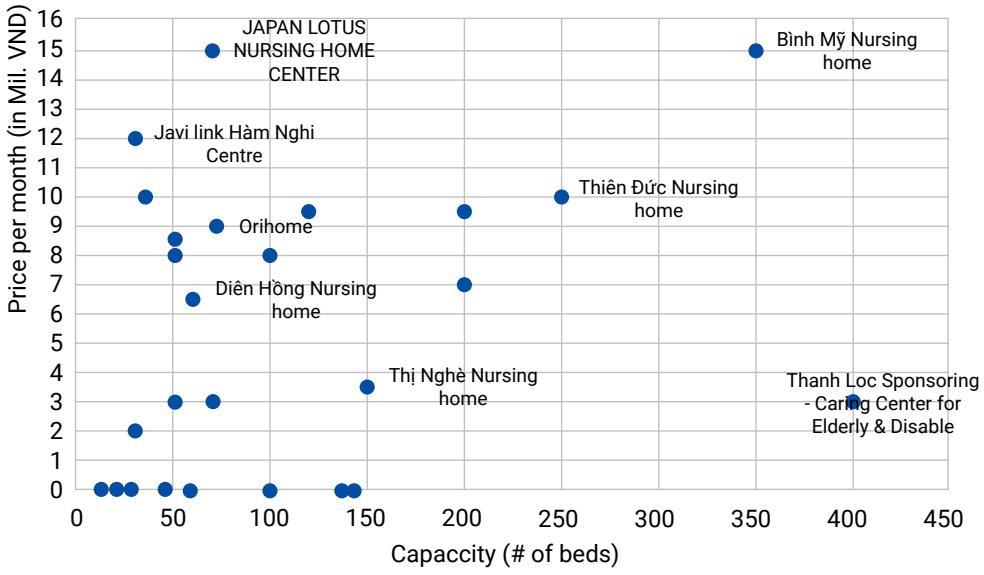
Frail elderly who use private LTC are also facing considerable medical costs. MCG (2019) estimates that the three main cities of Hanoi, Danang, and HCMC the expected annual costs for the elderly (inpatient and outpatient) are around VND 190 million. Home-based health care for the elderly is provided by family doctor clinics and CHSs[152] but is seldom delivered. Private businesses providing home-based health care for the elderly are beginning to be developed in large cities, but MCG (2019) reports that only for families who can afford this service.

150 MCG (2019).

151 https://www.nna.jp/english_contents/news/show/20190516_0006. Vietnam facing nursing home shortage amid slow government support, NNA Business News, 2019/5/16

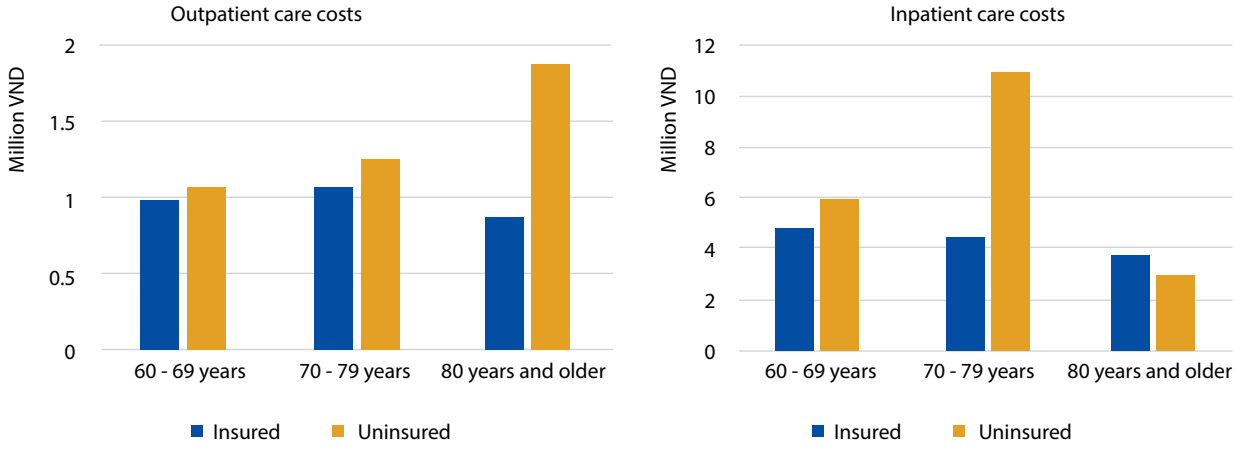
152 Only the elderly with no family are entitled to home-based medical care by CHS staff.

Figure 7.4. Vietnam: Price for Residential Long-term Care



Source: MCG (2019) based on data collected from 26 top-ranked nursing homes in 6 provinces

Figure 7.5. Vietnam: Average Health Costs Paid by Elderly, by Health Insurance Coverage, 2014



Source: Ministry of Health of Vietnam and Health Partnership Group (2016)

Financing for health care for the elderly comes from several sources: the state budget, health insurance fund, out-of-pocket funds, and non-profit institutions serving households. Despite the expansion of health insurance coverage (from 13 percent in 2000 to 87 percent in 2017) and the increase in public spending on health[153] to 6.1 percent of GDP, Vietnam's health financing system still relies predominantly on out-of-pocket (OOP) payments as discussed in Chapter 6. In 2018, OOP spending on health was about 43 percent of total health spending.[154] In 2017, 3 percent of the elderly

153 Health spending has increased significantly over the past 15 years (from 2000 to 2015, public spending on health increased from 12 to 109 trillion VND in nominal terms, or almost threefold in per capita, inflation-adjusted terms. World Bank (2018). Health Financing Study.

154 The share of out-of-pocket expenditure on financing health care was 66 percent in 2000, declining to 48.8 percent in 2012, see World Bank 2019 "The Future of Health Financing in Vietnam" http://documents1.worldbank.org/curated/en/222831563548465796/pdf/The-Future-of-Health-Financing-in-Vietnam-Ensuring-Sufficiency-Efficiency-and-Sustainability.pdf.

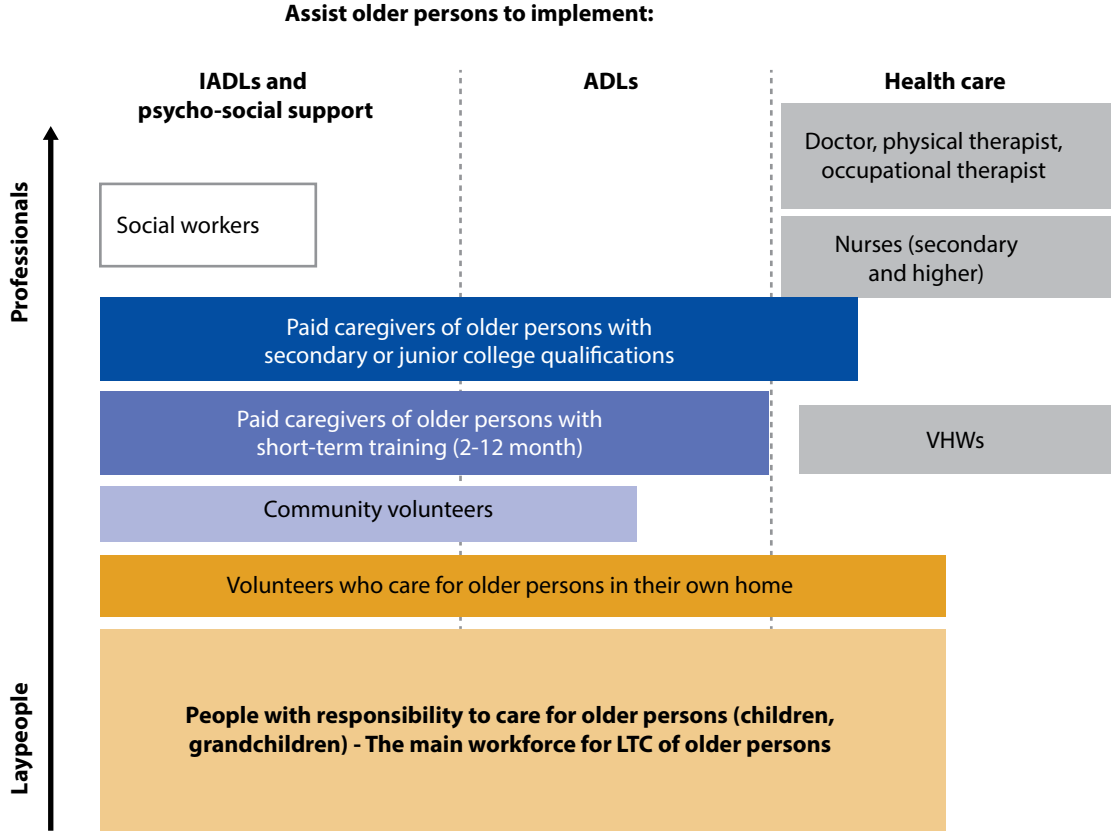
undergoing inpatient treatment were not covered by health insurance, and 16 percent of the elderly undergoing outpatient treatment were not covered by health insurance.[155] (See Figure 7.5)

Private businesses report that investing in elderly care provision entails high costs and high risks. They also report that the return on investment could take 7-15 years, depending on the size of the business, which is not much of an attraction for Vietnamese investors, who still view death as bringing bad fortune. Companies are calling for government subsidies in land leasing and the creation of health insurance for seniors.[156]

7.3.3. The Elderly Care Workforce

In Vietnam, the elderly care workforce comprises family, volunteer and caregivers. As mentioned earlier, the majority of care is provided informally by family, who form the main elderly care workforce. Vietnam also has volunteer caregivers who provide home and community-based care. The formal (paid) professional elderly care workforce includes (paid) caregivers, social workers, collaborators, as well as health workers (e.g., nurses, VHWs, therapists), (Figure 7.6).

Figure 7.6. Vietnam: Elderly Care Workforce, Paid vs Unpaid, and Formal vs Informal



Source: Ministry of Health of Vietnam and Health Partnership Group (2016), and MOH and HPG (2018).

155 MCG (2019).
156 https://www.nna.jp/english_contents/news/show/20190516_0006. Vietnam facing nursing home shortage amid slow government support, NNA Business News, 2019/5/16

The provision of care for older persons in social protection centers or home-based care services is not considered a formal specialized occupation. Instead, these caregivers are often regarded as general domestic workers. Caregivers of older persons usually come from rural areas, do not have any degrees and learn care skills from experienced caregivers, friends, and relatives. In 2009, MOLISA issued a framework curriculum for training domestic care workers, which also covers skills to care for older persons. The framework curricula on domestic work for secondary and junior college training programs last 1.5 years and 2.5 years, respectively, with most training time being spent on practice.[157] The curricula fit well with needs, but very few technical training institutions use these curricula. In non-public social protection centers operating as businesses, the human resources are considered to be better qualified.

Social workers play an important role in the coordination of care but do not provide assistance for daily personal care. The MOLISA-led Social Work Profession Development Project in 2010-2020 sets the protocol for building a contingent of social work officials, public employees, staff, and collaborators. There are three main titles of personnel in the field of social work: principal social work expert, social work expert, and social work officer. Social workers are responsible for screening, classifying, and receiving social protection beneficiaries; assessing their psychophysiology and needs for services; and developing and implementing assistance plans. At the same time, they monitor and review interventions, and support beneficiaries to integrate in the community. They do not provide daily personal care but help older persons access government services and necessary support. Responsibilities for social work collaborators include reception, collection of information, assessment, development of assistance plans, counseling, advice, therapy, mediation, education, persuasion, prevention, implementation of support policies, monitoring, and evaluation. In addition to the MOLISA project, there is an MOH-led project on development of the social work profession in the health sector (2011-2020). This Project aims to create a professional title for social workers in the hospital personnel structure for provision of social work services (e.g., counseling on treatment protocols or preventive measures, reassuring patients) and deliver training in social work to community-based workers (VHWs, staff of mass organizations) who are implementing various health programs.

Vietnam has a considerable training infrastructure to provide elementary, secondary, junior college, undergraduate, and graduate training programs in social work.[158] By the end of 2015, Vietnam had 55 universities/colleges and 21 secondary training institutions with specialized training in social work, of which three provide master's-level and two provide PhD-level training in social work, with a capacity to enroll 3,500 students per year. Hanoi University of Public Health under MOH recently started a bachelor's degree in social work. The aim is to train social workers who are capable of studying, detecting and assisting individuals/groups/communities to address social problems in the field of health and people's healthcare at hospital, community and policymaking levels.[159] In addition, the Social Protection Department (MOLISA) has collaborated with universities and colleges to organize training courses for senior social work managers. There are also short-term training courses for people who wish to take care of people with disabilities and older persons. Participants in these courses are very diverse,

157 The curricula cover psychological and physiological knowledge by age, nutrition, and general health in service of healthcare for family members, handling of emergency situations, and principles for and tasks to be performed in caring for older persons and sick persons in the family. The skills to be taught include developing menus that meet the nutritional needs of each age group, food safety, and caring for older persons and sick persons (including bedridden patients) upon request. For junior college training programs, the skills are extended to tube feeding, support for bathing, dressing, toileting with a bed pan, change of wound dressing, administering oxygen, sputum suction, and rehabilitation for patients.

158 The framework curricula on social work for undergraduate and junior college degrees have been updated by Circular 10/2010/TT-BGDDT to replace the ones developed in 2005. Their contents include general knowledge of social work, psychology, human behavior, gender, community development, and social work for special groups, including a subject called "social work for older persons."

159 MOLISA (2019) (WB/ADB).

including family members, home-based/hospital-based care workers for older persons, and some health workers who have a university, junior college, or secondary degree or certificate and want to learn more skills to care for older persons.

Manpower agencies that place care workers abroad developed their own training programs on care of older persons. A number of manpower agencies that operate in Vietnam to place caregivers in high-income countries (including Germany and Japan) develop their own courses designed to meet the needs of the country that will receive workers.

With regard to adequacy of human resources, "human resources are limited in both quantity and quality in public and charitable social protection centers, and the organizational structure and capacity for providing care to older persons does not meet requirements." The total contingent of civil servants, officials, employees, and collaborators in social work currently is about 200,000 people. This includes nearly 100,000 people working at associations and unions at all levels (civil servants, employees, and workers working in public and non-public social facilities) and over 100,000 collaborators. There are also over 8,000 officials, staff working in "social assistance institutions," of which 1,474 and 919 are in HCMC and Hanoi provinces, respectively. The government has stipulated staffing norms for social protection centers for older persons.[160]

Retention of staff is a big challenge for organizations providing home-based care for older persons. After being trained and gaining skills, many caregivers leave companies or centers to work directly with their clients so they do not have to pay the management fees. It is particularly difficult for not-for-profit centers which charge a low service fee and pay a low stipend to their staff. Therefore, the sustainability of this model for older persons with low income who cannot afford expensive services is in question.

160 MOLISA (2019) (WB/ADB).

While regulations on ethical and professional standards for health and social workers have been issued, none are available for volunteers or professional caregivers. According to the Law on the Elderly 2009, MOLISA is responsible for developing professional standards for and training caregivers for older persons, in collaboration with MOH for healthcare-related aspects. While regulations on ethical and professional standards for social and health workers have been issued by MOLISA and MOH, respectively, there are currently no plans or strategies on training, ethical, and professional standards or other relevant state management documents for volunteer or professional caregivers. There are regulations on character requirements of caregivers but no regulations on the qualifications required. Similarly, while the government relies on civil society organizations for provision of social care services, a systematic training plan for such community-based organizations is minimal, affecting the quality and standards of services and the ability to respond timely to emerging issues (UN 2015).

7.4. Good international practice guiding principles for developing an elderly care system

Vietnam, unlike many of the OECD countries that aged slowly, is "getting old before getting rich." Vietnam will become an aging society at an income level that is one-tenth the level of the United States at a similar point. While Vietnam has strong social/cultural principles of living by the Confucian principles of care for elderly by the family, this traditional informal family-based (familial) care model is increasingly strained by urbanization, migration, demography, and other economic and social factors.

With the government developing provision for the vulnerable and poor and with the wealthy using their own funds to purchase services in the emerging private market, the main burden of familial care falls on the middle class. The situation is similar to that of the pension system in Vietnam, which is missing the middle—further

underscoring the strain placed on the middle class (see Chapter 5).

For all of these reasons, Vietnam will need to develop models of provision and financing of elderly care that are suitable for its particular economic, social, and cultural situation. It would be unwise, for instance, to adopt the LTC systems of high-income countries, which are characterized by high prevalence of institutional care and relatively broad entitlements in terms of coverage and benefits. It would also be unwise to leave provision to the families alone, straining the shrinking labor force with the responsibilities of providing elderly care. This section provides broad principles based on good international practices for Vietnam to use, as it develops its elderly care system based on Vietnam's own strength.

7.4.1. Government stewardship and increasingly private provision of elderly care

Given the magnitude of aging in Vietnam, private provision—with government stewardship—will need to play the main role in elderly care. International experience convincingly shows that a broad LTC market with private provision will not emerge in the absence of government stewardship, but that the benefits of such a market make government intervention and financial support worthwhile. Stewardship functions, in addition to financing, include determining who should have access to publicly supported services, deciding what basket of services different groups should receive, and ensuring quality and safety standards of the services provided.

Some specific features of the aged care market pose additional challenges for government stewardship. In many countries, elderly care markets are "missing" because responding to the revealed private demand alone will not allow a market to develop, as formal aged care services are expensive. There is a wedge between the private demand (also called effective demand) and the need (determined by the degree of individuals' disability or impairment) for care, with the latter usually exceeding the former. Without government subsidies, only high-income individuals will be able to afford purchasing services produced in the market. The poor who qualify are covered by public resources, and the rich are able to pay for privately produced services, but the broad middle class—in the absence of government intervention—will not have access to the services they need and will therefore have to rely on informal provision for aged care. Given the undesirability of this outcome, one of the government's roles should be to foster market development by subsidizing services more broadly to allow for a broad consumer base. The key is to design and administer subsidies that are efficient and equitable.

The government has additional stewardship roles in the aged care market, because in most countries, the providers of LTC services are primarily private entities, and public agencies rarely provide services directly. This situation can be seen across most of the OECD countries, with the exception of Sweden which has public provision of residential care. While government involvement in elderly care (primarily in the form of stewardship) is necessary, the actual provision of care can be done through a combination of the private formal and "semi-formal" sectors, including not-for-profits (e.g., Australia, China), as well as by family members. In China, for example, the government is promoting private operation of both government and privately built facilities (Box 7.5).

Box 7.5. Private and Foreign Companies in the Elderly Care Sector in China

Chinese private companies (including real estate and insurance companies) are actively entering the senior residential market, targeting seniors with mid to high incomes. Local governments are experimenting with various modalities of a "mixed model," and a number of commissioning models are currently being developed in China (see below). At present, management contracts and leasing are the two most common types of public-private partnerships in institutional elder care in China.

Types of Public-Private Partnerships in Institutional Care in China

Types	Description
Procurement	Local municipality purchases beds from the private nursing home.
Management contracts	Private nursing home operators assume management responsibilities (e.g., staffing, supplies, training) for public nursing homes.
Leasing	Operation and management of public nursing homes by private operators. Private operators bear all risks and retain profits but do not assume ownership of nursing homes.
Service contract	Public nursing homes outsource a set of services such as housekeeping, catering, and laundry to the private sector.
Shareholdings	The ownership structure of public nursing homes is changed by selling shares to a private investor.

Aged care is an area with substantial private sector interest, attracting not only domestic but also large numbers of foreign companies to China's market. To facilitate matters, China's government, among other things, adopted a resolution allowing foreign companies to receive government contracts when they serve poor clients ("Resolution number 50"). Companies from the United States, Japan, and France have entered China's institutional care market through partnerships with Chinese firms. Most for-profit providers focus on community care services commissioned by real estate developers, targeted at mid- to high-income seniors and their families. Foreign companies provide home-based care targeting mid- to high-income seniors, with a focus on major cities. For example, Singapore-based "Active Global Ageing" is providing home care delivered by trained nurses, U.S. "Right At Home" delivers caregiving and housekeeping services through university graduate caregivers, and Pinetree offers at-home skilled caregiving to seniors who are semi- or fully dependent.

Source: Yu (2014)

Stewardship is particularly important to help attract private resources to address gaps in the market. In China, the gap in skilled nursing facilities for medium-income seniors was addressed through a "mixed model." The private sector's engagement was encouraged in the mid-tier market by outsourcing the operation of publicly owned facilities to the private sector. In 2013, the national Ministry of Civil Affairs started a pilot reform of public aged care facilities, requiring at least one public facility to be outsourced for private sector operation in each province. In the reform, private operators were selected to manage the public facilities, following due procurement procedures. Many localities also require that a number of beds are available to elderly on welfare at prices equal to the cost of care, thus alleviating the need for the government to develop and manage new public aged care facilities.

Government stewardship is also vital for setting transparent rules and standards that pertain to the services as well as accreditation of providers and public procurement procedures. One concern is that in the absence of effective regulatory oversight, the shift of service provision to the private sector might compromise quality of care (Feng et al. 2014, Liu et al. 2014). As the role of the government shifts from direct provider and supplier to purchaser and regulator, the government

will need to assume responsibility for fostering, monitoring, and regulating the entire elderly care market—public, private, and mixed, and all sub-sectors of this market (home-based, community-based, and all forms of residential care).

Most countries have established procedures for service provider accreditation. This enables regulatory oversight of minimum standards for professional and organizational capacities and resources of care facilities, staff-client ratios, and skills requirements for care staff. Regular inspections (scheduled or unscheduled) are also a common practice. In the United States, nursing homes and home health agencies are licensed by the states but must comply with federal quality standards in order to receive federal funding. Federal regulatory requirements cover a wide range of items, from inputs and structural capacity to care processes such as initial and periodic assessments for nursing home residents and home health consumers. In the United Kingdom, providers have to register with the national Care Quality Commission and meet minimum quality standards in six key areas. The Care Quality Commission also conducts inspections of care providers. It has changed the practice of annual inspections and moved to a risk-based approach in which providers rated as requiring improvement or being inadequate are inspected more frequently than those with a good or outstanding rating. Australia requires residential and home care providers to be formally accredited by the Aged Care Standards and Accreditation Agency,[161] which is also a condition for receiving public funding. There are five basic standards—management system, staffing and organizational development, health and personal care, care recipient lifestyle, and physical environment and safety—each with principles and expected outcomes. Accreditation of residential and home care providers is also mandatory in Japan. The prefectures are entrusted with certifying providers, and the municipalities are in charge of supervision and auditing. The standards for certification relate to staffing, complaints handling procedures and elder protection, management and administration, and services provided.

7.4.2. Eligibility Rules based on Functional Ability Needs Assessment and a 'package' of elderly care services for those deemed eligible

A system for functional ability and needs assessment is a cornerstone of government stewardship because it determines who should be considered for public support for their care needs. An important field of regulation concerns the processes of determining who is eligible for support and how to assess care needs. Usually, the national government defines the rules and standards and mandates local authorities, government agencies, or medical doctors (general practitioners) to carry out the assessment with the individual person. For those who are deemed in need through the needs assessment, the next step has two basic options concerning eligibility: a universal system open to all, and a means-tested system in which only people below a defined income level are eligible. Accordingly, the assessment may take into account not only the levels of disability and functional limitations but also income/asset levels.

Many OECD countries have developed and implemented systems of strict needs assessment of levels of functional impairment (both physical and cognitive) and assessments of income/wealth.[162] **Lack of such a functional ability and needs assessment can lead to difficulties in targeting publicly financed or subsidized elderly care to those who are most in need of it: those who have physical and mental impairments and need assistance with their daily activities**. This is because in the absence of assessments, the public system could tilt toward supporting residential accommodations for poor and lonely elderly, regardless of their physical condition and care needs. This stems from historical practices, as

161 https://www.aacqa.gov.au/for-providers/accreditation-standards

162 In many high-income countries, the public provision of aged care services is delivered in the form of demand-side subsidies, which vary in level depending on the income level of the elderly, the severity of the functional limitations, and the household environment.

many governments (including Vietnam) fund and operate "welfare homes" residential care facilities.

There are several international practices to build upon while developing a systematic, universal system of needs assessment. Several approaches have been used to measure functional and cognitive limitations, including the International Resident Assessment Instrument (InterRAI) in the United States, the Aged Care Funding Instrument (ACFI) in Australia, and Easy Care in UK. Korea's elderly are assessed through a standardized assessment using a 52-item questionnaire to classify them into five levels.

The next step is to define a "basic package" of elderly care services, which is a basket consisting of a menu of services to be offered to a target population, with an associated level of subsidy. The list of services to be included cover social care and health care, delivered in all three tiers: home, community, and residential care. The level of subsidy varies from fully to partially funded depending on the services, the results of the functional ability needs assessment, and the economic conditions of the elderly and their households.

In many countries, a basic package of elderly care services remains a novel concept. Where the basic package is on the radar, it is typically limited to infrastructure (facilities and bed availability) because of the high share of public spending on such infrastructure. While home- and community-based care are growing in emphasis, such services are still in their infancy in rural areas. Furthermore, existing elderly care services focus mainly on meals and to a lesser extent on personal care, housekeeping, shopping, cultural activities, and wellness. Professional care services such as respite services, nursing care, therapy services, rehabilitation, medical services, and hospices are also underdeveloped.

Formulation of the functional ability and needs assessment and basic package should consider breadth, scope, and depth. For breadth, who is the target population of the elderly with care needs? For scope, which care and services will be included in the basic package? For depth, what proportion of the care service cost will be publicly financed?

7.4.3. Aging in place as the main modality and residential care as last resort

While well-organized home care is more cost-efficient than residential care, early developments of private provision tend to focus on institutional or residential care because of the high need for these services but also higher profit margins. Across countries and cultures, a universal preference for home- and community-based services rather than residential care can be seen. Those seeking elderly care should have access to services at home or in the community and should access residential facilities only when home or community care is no longer feasible. International experience suggests that the overarching goal should be to enable older people to remain independent in their own homes for as long as possible to prevent unnecessary healthcare utilization (such as potentially preventable hospitalizations and emergency department visits). Home care systems can also be adapted to changing needs and help contain long-term care expenditures by supporting informal caregivers and less cost-intensive home- and community-based services.

As part of the deinstitutionalization movement, policies in many countries now strive to transform care models from historically residential to home- and community-based care. Across the OECD and Asia, countries are addressing the growing need to provide LTC to their rapidly aging populations by enabling people to age in place, rather than providing LTC in residential settings. OECD countries use a range of policies to encourage home care, including a mix of demand- and supply-side interventions such as direct expansion of home care supply (e.g., Canada, New Zealand, Sweden), regulatory measures, and financial incentives. Asia also offers many relevant examples. The ROK-ASEAN Home Care Program, which builds on the success of a home care model involving volunteers in Korea, has been implemented in ASEAN countries

with adaptations to the local context.[163] Thailand has piloted a "home health care" scheme through 26 local hospitals, targeted at older people living at home, with services including health promotion, treatment, and rehabilitation.[164] Finally, older people's groups (or "senior citizens' clubs") operate or are planned in Brunei, Japan, and Thailand and offer support networks, health information dissemination, and fitness activities.[165]

7.4.4. Continuum and coordination both within LTC and across healthcare and LTC

A common challenge in many countries' healthcare and LTC delivery systems is the lack of integration of services across different programs or settings, both within LTC and across acute medical care and LTC. As the needs of the elderly change over time—either temporarily or permanently—a care continuum with the proper mix of services is needed to meet these changing needs. Good international practices call for developing a continuum of care. Services provided at home can range from domestic aid and personal care to supportive services and health services for bedridden elderly. Community-based services can include social and recreational services as well as rehabilitation and some nursing services. Institutional care can include assisted living, food and accommodation, supervision of medical care, specialized care (e.g. dementia care), and hospice services. Respite services that are critically important for informal caregivers can be provided in any of these settings. Ideally, the continuum of aged care services would be diverse enough to encompass an optimal and flexible service mix that responds to the diverse needs and circumstances of the elderly and their families.

Coordinating social care and health care services is especially challenging because in most countries (including Vietnam), the health care system is separate from the provision and regulation of LTC, even though the lines are not always clear-cut. Health and social care are usually under totally different regulatory frameworks, have different organizational structures, are provided by different professionals, and use different financing and payment models. Among the few countries that offer public long-term care insurance (Germany, Japan, and South Korea), long-term care insurance is operated separately from the health insurance system. The lack of coordination leads to fragmented care for older people for whom both types of care may be necessary. The fragmentation of programs, services, and benefits for long-term care recipients also often contributes to misaligned incentives such as cost shifting between payers and providers and also increases the cost to the individuals and to society.

The concept of care coordination is often based on the strong role of primary care as the driver of coordination functions, including gatekeeping. Such a model anticipates and shapes patterns of care according to the projected health and medical needs of the population while placing considerable emphasis on strengthening the role and raising the quality of primary care. It considers changing demands such as the aging of the population, the rapid increase in chronic diseases, significant strengthening of community-focused care, and the vertical and horizontal integration of facilities (physical, as well as in areas of information and communication) to provide comprehensive services along a continuum or chain of care, using primary care as the point of entry into the system. Care coordination consists of a mix of measures that link professionals and organizations at all levels, emphasize patient-centered care integration, manage patient referral through the delivery system, and promote follow-up care as well as the continuity of long-term service provision.

Care coordination has increasingly come to dominate the service delivery landscape in many OECD and Asian countries. In Japan, government efforts to integrate LTC and health care have placed primary emphasis on community-based care, and a general practitioner's assessment is required as part of the LTC triage process. In Southeast Asia, Thailand has piloted service models that integrate health and social care—the "Bangkok 7 Model"

163 Rok-Asean Cooperation Fund (2013).
164 HelpAge (2013).
165 UNFPA and HelpAge International (2011).

and the "Community-Based Integrated Services of Health Care and Social Welfare" for Thai Older Persons, which involve collaboration among local authorities, volunteers, and older people (Stefanoni and Williamson 2015). In Singapore, the Agency for Integrated Care was created in 2009 to bring about a patient-focused integration of primary, intermediate, and long-term care. It operates at all levels— patient, provider, and system—and it works to have providers at all levels coordinate their efforts on behalf of the patient.[166]

7.4.5. Adequate and sustainable financing

An adequate and sustainable system of financing is an essential component of an elderly care system. The financing approaches vary significantly across the OECD countries. Generally, the main sources of financing for aged care services in OECD countries are general taxation and obligatory social security contributions, as well as voluntary private insurance and OOP payments directly made by users. In terms of spending, at one extreme is universal coverage within a single program, in which long-term care coverage is provided through a single system (e.g., tax-based models in Nordic countries; public LTC insurance models in Germany, the Netherlands, Japan, and South Korea; and personal care and nursing care through health coverage in Belgium). At the other end of the spectrum are means-tested safety net schemes in which strict income or asset tests are used to set financial thresholds for eligibility for publicly funded LTC services and benefits targeting the needy (e.g., England, United States).

Public spending levels for elder care services vary greatly, with an OECD average of 1.7 percent of GDP. In China, public spending on LTC is less than 0.05 percent of GDP, much lower than both the average of 1.7 percent in the OECD countries and 3.5–4 percent of GDP in some OECD countries.[167] For medical and social care combined, public spending in EU countries ranges from 0.2 percent in Cyprus to 4.5 percent of GDP in Denmark, with an average of 1.8 percent. For social care alone, spending ranges from 0.02 percent of GDP in Latvia to 0.7 percent of GDP in the Netherlands.[168]

An important issue in the development of a robust public financing system is the division of responsibilities for financing among the different layers of government. In most countries, both local and national governments are involved in financing LTC, and funds are distributed from central government to sub-national levels in an effort to reduce disparities in the delivery of services to people with similar needs.[169]

Users share responsibility for LTC costs by paying premiums for obligatory social security contributions or cost sharing through OOP expenditures.[170] Private financing accounts for one-third of total LTC expenditure in Germany, 22 percent in the United States,[171] and 10 percent in Denmark.[172] The most frequent form is OOP payment. Private insurance for elder care services is not very common due to a range of limiting factors (Box 7.6), including adverse selection in which people at greater risk of needing care will buy insurance while people with "good risks" will not, thus driving premium prices higher.

166 See the Singapore Agency for Integrated Care (AIC) 2015, https://partners.aic.sg/newsroom/fs
167 World Bank (2019).
168 European Commission (2013).
169 Joshua (2017).
170 Colombo et al. (2011).
171 Kaiser Family Foundation (2013). Also in the United States, over 75 percent of nursing home residents have their care paid for by government-administered programs. The market price of full-time care for an elderly person in need (for example, someone who is bedridden or has dementia) in the United States is estimated to be around USD 80,000 per year.
172 Joshua (2017).

Box 7.6. Feasibility and Use of Private Insurance to Finance Long Term Care: Review of Experiences

Private insurance is challenging to develop and price for many reasons. One reason is that individuals tend to be myopic, and when they are young, they do not believe that they will need aged care in later years. There also exists moral hazard: if aged care insurance is private and voluntary, those who know that they are at a high risk of disability and needing care will be most likely to purchase insurance, making the pool comprised of high-cost individuals and increasing premiums for all. In addition, since the package of aged care services typically includes services that are valued generally (e.g., housekeeping, meal preparation), otherwise healthy individuals would also want to qualify for those services.

LTC is subject to several forms of uncertainty on account of (i) longevity, as medicine progresses; (ii) the length and intensity of the periods of functional dependency that precede death, particularly the likelihood of developing dementia after age 80 (the costliest condition for which LTC is needed); and (iii) policy. These uncertainties have frustrated the expansion of market-based insurance and made LTC insurance very challenging to price due to the difficulties of assigning robust probabilities to various factors. As a result, as seen in the United States, LTC insurance policies tend to have premiums well above those justified by the expected benefits, while they cover relatively smaller shares of total expenditure risk (Brown and Finkelstein 2011; Cremer, Pestieau, and Roeder 2015).

The inherent challenges of such uncertainty are reflected in the low share of total LTC spending accounted for by private LTC insurance. Across the OECD, this share remains under 2 percent, and it only reaches 5 percent or higher in Japan and the United States. Purchasers of private LTC insurance tend to be high-income, reflecting the overpricing noted above. In addition, private LTC insurance is often taken as a complement to publicly financed programs (whether financed through dedicated social LTC insurance or from general revenues), with people seeking supplemental services outside the public package (OECD 2011)

Source: Joshua (2017)

There is no "silver bullet" available to ensure sustainable financing of LTC. Each of the different approaches has its advantages and disadvantages (Table 7.2). Any discussion of the sustainability of LTC must also consider the need to influence the demand side (i.e. the needs of an aging population) through prevention, rehabilitation, and adaptations to the living environment.[173]

Table 7.2. Advantages and Disadvantages of Different Financing Approaches to Aged Care

Approach	Advantages	Disadvantages
Mandatory social insurance (Germany, South Korea, Japan)	Entitlement to benefit Affordable contribution (if income-related)	Limited tax base Rigidity in benefits awarded Implicit debt
Tax-based, universal systems (Nordic European countries)	Broader tax base	No direct link between revenues and benefits Less transparency in benefit allocation Implicit debt
Private insurance (Japan, United States)	Theoretically neutral for the public budget	If voluntary: • Not affordable for people with low, insecure income • Adverse selection (If mandatory, may require subsidies for people with low incomes)

Source: European Commission (2014).

173 European Commission (2014)

7.4.6. Strong Workforce

Workforce challenges, including maintaining an adequate LTC workforce, are common challenge across the OECD. In all countries, the majority of the LTC workforce are frontline workers who provide hands-on help with basic activities of daily living such as eating, dressing, bathing, and toileting. They are typically women who are certified nurse aides, home health care aides, and home or personal care workers. They are generally low-skilled workers requiring minimal training in most countries. Many countries face a chronic shortage of LTC workers, especially of well-trained and skilled workers.[174] Recruiting and retaining direct-care workers in LTC settings is particularly challenging due to many factors, including demanding working conditions, low wages, low job prestige, few fringe benefits, and limited career options and career paths.[175]

From a policy perspective, potential solutions to tackle the long-standing workforce issues in the LTC sector include establishing and enforcing occupational standards (job descriptions), ensuring adequate wages, and mandating initial and continuous staff training. Working conditions may be improved by offering supervision (coaching) and making use of information and communication technology (ICT) tools to support and supplement personal care (e.g, the use of telecare). For example, alarm systems are common in most European countries, where GPS tracking and video communications are also being tested in various aged care settings. Formalized initial and continuous training is in place for personal home care in 60 percent of European countries and for domestic helpers in 25 percent of the countries.[176] In Thailand, a training course over three months leads to formal qualification of care assistants.

7.4.7. Latest technologies

Technologies—ranging from robotics and AI to biotech and materials technology to ubiquitous computing and connectivity—are increasingly being applied to the LTC sector. Chomik and Piggott (2018) divide technical innovations in the LTC sector into three categories: assistive technologies (AT); information and communication technology (ICT);[177] and robot technology (RT).[178] The impact of all three depends as much on psychology as technology, because their successful application rests on the acceptance by older cohorts, who may be suspicious of or insecure about using them.[179] Technologies are also likely to have impacts on the labor market (including of caregivers) in numerous ways. First, ICTs, ATs, and RT will relieve informal caregivers of some of their burden, making mature caregivers more amenable to formal labor force participation. Second, if robots have the capacity

174 In the OECD, between 1-2 percent of the total workforce in 2015 was employed in providing LTC, and the share is likely to more than double by 2050. Joshua (2017), citing OECD and European Commission (2015).

175 Stone & Harahan (2010). The LTC workforce also includes long-term care facility administrators and licensed health professionals, including registered nurses, licensed practical or vocational nurses, social workers, physical therapists, occupational therapists, and physician assistants or aides. Relatively few in number, these skilled professionals usually assume supervisory or managerial responsibilities rather than providing direct, hands-on care. In only a few countries such as the Netherlands, physicians are directly involved in the provision of LTC.

176 Feiler et al. (2016).

177 Blaschke et al. (2009) provide a comprehensive review of assistive and ICT technologies, including those that assist with monitoring behaviors, performance of tasks, and connectivity with other sources of support. For example, smart home and monitoring devices could identify abnormal behaviour (e.g., falls) and alert caregivers of potential dangers. Telehealth, on the other hand, allows older people to access health services easily and cheaply and also incorporates monitoring systems and exchanges diagnosis data (e.g., blood pressure), in the process raising care quality and health decision making regardless of setting. Chomik and Piggott (2018).

178 Several Asian countries have already invested heavily in robotics. In some cases, robots may be used to deal with routine manual tasks such as laundry or transport services, freeing up staff to attend to non-routine caring tasks. A review of RT by Broekens et al. (2009) in the context of elderly care finds assistive social robots have aspects that are functional (as a form of user interface) and affective (raising quality of life—e.g., through companionship)..

179 Flandorfer (2012) finds that sociodemographic characteristics such as age, gender, and education matter for user acceptance of RT, concluding that assistive devices should be tailored to individual needs (Chomik and Piggott 2018). The research of Han and Braun (2010) focuses on assisting aged people in mastering digital technologies and enhancing their communication modes, leisure activities, and social connectivity. They describe how to use digital technologies to promote active aging, called 'digital ageing' in Korea. Internet Navigator, a computer training program, Cyber-Family, and the 1080 Family Online Game Festival are components of their research at the Research Institute of Science for the Better Living (Nguyen and Nguyen 2010).

to substitute/replace formal caregivers, then the international movement of LTC workers may be reduced, and any predicted shortage of care workers in developed countries may be mitigated.

Development of elderly care should take advantage of technology advancements, especially as their use helps facilitate home-based care/aging in place and coordination of care.[180] There is much to learn from China in this respect, with its willingness to experiment in many areas of provision and financing, including such difficult areas as caring for senior citizens with dementia and in community settings. In addition, technology holds some promise for increasing the value for money in elderly care, and China is positioning itself as a leader in this area. Assistive technology (including utilizing big data and cloud computing) and disruptive technology can be used to support service delivery, quality enhancement, and the public financial management of care.

7.5. Recommendations for the Future

In Vietnam, projections endorsed by MOLISA forecast that the number of elderly who will need regular care due to difficulties in at least one physical or mental function, will be more than 10 million by 2049, compared to 2.5 million in 2019 (MOLISA 2019).

Vietnam has strong foundations and prior achievements in social policy, a vibrant private sector, and also a strong self-help groups community tradition and can capitalize on all three to meet the challenge of elderly care going forward. The highest authorities in Vietnam have expressed a clear commitment to pursue the Sustainable Development Goals, with concerted efforts toward equitable and inclusive development to ensure that "no one is left behind" in Vietnam today.[181] The country has an excellent past record of developing and implementing policies in the social sectors. Total health spending has increased significantly over the past 15 years and is now 6.1 percent of GDP. Social health insurance coverage has also increased rapidly such that 87 percent of the population has insurance coverage today, including most of the poor and vulnerable groups, whose premium contributions are covered through government subsidies.[182]

Self-help groups are envisaged as the backbone for care provision, and the government is committed and has set various targets for their development. Given that Vietnam is aging at a low level of income, promoting ISHCs is a good strategy, as the community approach is a cost-effective way to provide support and care. ISHCs should be further developed through public support.

At the same time, in line with increased needs and the growing middle class, the demand for formal care will increase and is best met by private provision under government stewardship. In line with projected demographics, the effective demand for medical, nursing, and personal care will also grow in the coming decades. MCG (2019) estimates that the market size for medical, nursing, and personal care service will grow rapidly in the coming decades, especially in the big cities of Hanoi, Danang, and HCMC. The projections based on Serviceable Obtainable Market (SOM) show that by 2030, the effective demand for nursing and medical care will increase by 2.7 times the existing demand in 2019. By 2040, the demand for medical care will increase to 5.7 times the 2019 value, and demand for nursing care will be about 4.1 times the 2019 value.

Vietnam's experience with "Socialization Policy" in the education and health sectors reinforces the need for government stewardship and regulatory oversight of private provision of social services. Since the "Socialization" policy was initiated in the 1980s, Vietnam continues to advance the policy through privatization and commercialization of selected public services. While the policy provides the appropriate framework for developing a model

180 Leichsenring and Alaszewski (2004).

181 United Nations (UN) Viet Nam. 2015. *UN Joint Position and Advocacy Note on Socialization: A Call for an Equity-focus revisiting.* Unpublished.

182 World Bank (2018).

of public-private cooperation in elderly care, the benefits from socialization are likely to be muted if governance gaps (e.g., weak regulatory mechanisms to monitor and enforce) and under-developed institutional mechanisms, common in a low middle-income country like Vietnam, are not addressed. Matters are further confounded by decentralization or "autonomization" (i.e. delegation of autonomy to the sub-national levels to manage personnel, financial resources, and public services). In the health sector, the cost of service is reported to have increased and given rise to incentives to offer costly profit-generating and privately initiated services, including in public facilities (UN-JPG 2015). Nurturing the government's stewardship capacity will require—in addition to financing—building a regulatory framework, ensuring availability and strengthening capacity to deliver and monitor, and provide quality assurance for all national and subnational levels. This includes setting and enforcing transparent rules and standards pertaining to the services as well as accreditation of providers and public procurement procedures. With a regulatory framework, the government can control the achievement of policy goals and the level of public spending.

Culturally, many spouses and adult children want to care for their spouses and/or parents, and the goal of public policy is to facilitate the elderly care market so there is adequate and affordable elderly care for consumers to exercise choice. This can be done by building a well-functioning market for elderly care services where individuals can find services that satisfy their needs, preferences, and resource constraints. What is important in terms of public policy is to give them options to choose what works best for them. Options include one or a combination of the following: (i) purchase care, if they have resources; (ii) use publicly subsidized/free care, if they do not have resources; and (iii) provide informal care, with the option of respite care for caregivers. This will require many types/levels of subsidies to be provided depending on the degree of functional impairment/disability and income.

To move in this direction, Vietnam should consider the following actions.

Develop a strategy for aged LTC. A strategy needs to spell out the respective roles of the state, nonstate providers (for-profit and not-for-profit), communities, and households and should outline a sustainable financing strategy. This report argues that aged care will most likely be an area where financing is mixed, where provision is often outside the public sector, and where clear policy is vital to avoid the problem of over-reliance on institutional care, which is costly and generally not preferred by older people.

Continue developing ISHCs and learning good practice examples from neighboring countries of community-based provision of care. This will be vital for reasons of both sustainability and quality and will also be a way of taking the approach of "aging in place," where aged care is provided as far as possible in home- or community-based settings. In terms of community- and home-based care, Older People's Association branches and ISHCs can be valuable assets in Vietnam. There are already many examples of ISHCs providing community-based homecare and facilitating health check-ups, exercise groups, and other preventive measures for older people. There are also interesting examples from abroad, such as Thailand's "Friends Help Friends" Initiative, in which older people's groups receive public funding to train volunteers to provide support for frail elderly people, with volunteers often from among the "younger elderly." China also has many pilots at the subnational level and innovations such as "time banks" where the younger elderly provide care to older elderly, and the time provided is "banked" and they have a credit for future care to be provided when they are older elderly.

Develop an action plan to diversify the types of available care services providers. First, greater private sector participation in the delivery of social care services is needed. These private actors should be encouraged to provide home-based, community-based, and institutional care options to households of all income levels. Second, the

social care workforce will need pathways toward formalization to facilitate oversight that ensures the system can provide consistent levels of quality services. This formalization should include frontline caregivers as much as healthcare professionals and social workers. Finally, sustainable financing mechanisms should be designed to make care services, and especially aged care services, affordable for those who need it. A key decision in the process of strategy formulation will be who is prioritized for public subsidies. While the poor elderly should be a priority, it is important also to prioritize on the basis of degree of disability.

Strengthen the government regulatory and oversight capacity to guarantee that both public and private service providers supply a high and consistent quality of social care. MOLISA and related agencies will be responsible for setting and enforcing clear "rules of the game" on such issues as service quality and mechanisms for coordinating with medical/health service providers. Licensing, accreditation, and oversight standards will need to evolve, and performance monitoring will need to prioritize service quality and client outcomes rather than the quantitative indicators of performance currently used. Fundamentally, this transition requires that the government go from being a direct supplier of social care services, albeit for a small fraction of the population, to being a purchaser and regulator of services provided increasingly in the private sector. The pillars of the regulatory framework are:

- accreditation of suppliers, ensuring that suppliers have the necessary managerial and technical capacity and resources;
- public procurement rules and procedures;
- eligibility rules and systems of functional needs assessment to determine the quantitative and qualitative needs of clients;
- service standards and quality assurance;
- qualification system for different types of care workers; and
- reporting and monitoring system.

Encourage private sector participation, starting with two specific models. One of these models would be opening existing public welfare homes to self-paying patients and providing these patients with enhanced quality services. These welfare homes will continue to serve social protection beneficiaries their regular clients and receive government support to do so. This model is widely used in China and has been implemented in several facilities in Vietnam (i.e. Vu Thu District Social Protection Center in Thai Binh). Another model is utilizing government buildings and other fixed assets to develop concessional arrangements with private providers that operate them as elderly care facilities. Providers will set prices, establish fees, and collect revenues from their patients. The government will use concession fees to influence the pricing policies of these providers. It is expected that these concessions will result in the development of government assets as institutional facilities with nursing, palliative, and/or hospice services and that they would also provide day-services and home-based services for nearby communities. This model is widely used in Singapore and is increasingly used in China.

Strengthen coordination between the social care system and other relevant government entities. First, the social care system will need to be well-coordinated with the health care system. Second, cooperation with MOF will be crucial on such issues as ensuring the taxation of and creation of tax incentives for non-profit and for-profit social care service providers. Finally, local governments, NGOs, and volunteers will also need to strengthen their cooperation and coordination.

Prepare a well-trained cadre of volunteers and professionals to staff and manage the LTC delivery network. Vietnam has already proposed measures to strengthen the legal framework for and tertiary education of social workers, and the implementation of these must be accelerated. New models of training will also be needed to meet with emerging demand for new or adjusted skills across the delivery network, especially for case management. There is also a need to build the capacity of families and community

volunteers who wish to provide home- and community-based services. Human resources to deliver adequate and quality respite care services is another area that requires attention. Socialization is deeply intertwined with challenges associated with institutional capacity, especially professionalization of civil servants, and human resource planning. In order for the government to ensure oversight of the delivery and quality of vital social services, a critical cadre of government staff (e.g., civil service, social workers) is needed to enforce the state-decreed standards of provision of public services.

Have a continuous dialogue on the government responsibilities for coverage and financing. This is a continuous process and political economy and societal preferences are important.

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7.7. Annex: Laws and Policies Related to the Rights of Older Persons in Vietnam, 2009-2018

No.	Date	Reference No	Topic(s)	Issued By
	16 Jan 2002	10/2002/ND-CP	Decree on socialization/financial regulation on revenue-generated public service entities	Government
	5 Aug 2004	141/QD-TTg	Vietnam National Committee on Aging (VNCA)	Prime Minister
	18 Apr 2005	05/NQ-CP	Resolution on enhancing socialization of education, health, culture, and sport	Government
	25 Apr 2006	43/ND-CP	Decree replaced decree 10/2002 with an expanded scope of influence to all services, and orientation towards decentralization and fostering autonomy in public service entities and socialization	Government
	30 May 2008	69/ND-CP dated	Decree on socialization/incentive policies of private sector involvement in education, vocational training, health care, culture, sports, and environment	Government
	30 May 2008	68/ND-CP	MOH responsible for providing guidance on medical care, physical therapy, and rehabilitation for people with disabilities and mental health problems in social protection establishments	MOH
	30 Mar 2009	07/TT-BLDTBXH	Decree outlining requirements for social protection centers in relation to their environment and facilities to be licensed to care for older persons including aspects like ratio of caregivers to older persons	MOLISA
	23 Nov 2009	39/QH12	Law on the elderly	National Assembly
	15 Jun 2009	23/TT-BLDTBXH	Circular on a framework curriculum for training domestic care workers, which also covers skills to care for older persons.	MOLISA
	25 Mar 2010	32/QD-TTg	Decision on the Social Work Profession Development Project (2010–2020) for the development of a system of social work service providers at all levels.	Prime Minister
	22 Mar 2010	10/TT-BGDDT	Circular on professional standards for commune/ward/township social workers, undergraduate framework curricula on social work	MOLISA
	4 Apr 2011	04/TT-BLDTBXH	Circular assigning social protection centers responsibility for medical care, including treatment and rehabilitation	MOLISA
	15 Jul 2011	2514/QD-BYT	Decision on development of the social work profession in the health sector in 2011-2020	Ministry of Health
	25 Mar 2010	32/QD-TTg	Decision approving the scheme on development of social work profession in the period 2010-2020	Prime Minister
	14 Jan 2011	06/ND-CP	Decree providing detailed guidelines regarding implementation of the Law on the elderly	Government

No.	Date	Reference No	Topic(s)	Issued By
	19 May 2011	17/TT-BLĐTBXH	Circular on procedures for getting monthly social pension, burial cost and eligibility for social security facilities.	Ministry of Labor, Invalids and Social Affairs/MOLISA
	15 Oct 2011	35/TT-BYT	Circular on instructions for implementation of health care for older persons	Ministry of Health
		15/NQ-TW	Resolution of the 11th Central Executive Committee on social policy issues for the period 2012-2020	
	8 Oct 2012	81/ND-CP	Circular with requirements for social protection centers in relation to their environment and facilities to be licensed to care for older persons	Government
	22 Nov 2012	1781/QĐ-TTg	Decision approving The Vietnam National Action Program for the Elderly for the period 2012-2020	Prime Minister
	15 Oct 2012	85/ND-CP	Decree outlining roadmap to adjust elderly care services	
	29 Mar 2013	538/QD-TTg	Decision on approving process for universal coverage of health insurance project for 2012-2015/ 2020.	Prime Minister
	21 Oct 2013	136/NĐ-CP	Decree on Social Assistance	Government
	24 May 2013	07/TT-BLDTBXH	Circular about professional standards for social work collaborators working in communes/wards/townships	MOLISA
	8 Mar 2013	07/TTBYT	Circular about Village Health Workers (VHW) tasks under project of health care for older persons	Ministry of Health
	10 Jun 2013	09/TTLT-BLDTBXH-BNV	Joint Circular on functions, powers, rights and organizational structure of public social work centers	MOLISA Ministry of Home Affairs
	2 Oct 2015	37/TTLT-BLDTBXH-BNV	Joint Circular on functions, powers, rights and organizational structure of Provincial Department of Labor, Invalids and Social Affairs and District Division of Labor, Invalids and Social Affairs	MOLISA Ministry of Home Affairs
	16 Jun 2014	59/ND-CP	Decree amends decree no 69/2008/ND-CP to expand socialization in the area of verification	Government
	24 Oct 2014	29/TTLT-BLDTBXH-BTC	Circular on training for volunteer caregivers	MOLISA MOF
	25 Jan 2014	197/QĐ-TTg	Decision on Strengthening Vietnam National Committee of Aging	Prime Minister
	20 Apr 2015	524/QD-TTg	Decision on strengthening and developing the network of social assistance facilities for the period 2016-2025	Prime Minister
	2 Aug 2016	1533/QD-TTg	Decision on approving the Project for expanding intergenerational self-help club	Prime Minister
	2015	524/ QD-TTg	Decision to guide the prevention of disease, provision of health care, medical examination and treatment, and rehabilitation for people living in social protection establishments	MOH
	27 Oct 2015	33/TT-BYT	Circular about CHS tasks under the Project of health care for older persons.	Ministry of Health

No.	Date	Reference No	Topic(s)	Issued By
	19 Aug 2015	30/TTLT-BLDTBXH-BNV	Joint Circular about professional standards for public employees working in the field of social work	MOLISA
	2 Oct 2015	37/ TTLT-BLDTBXH-BNV	Joint Circular to develop the network of social protection establishments for older persons	MOLISA
	10 Oct 2016	141/ND-CP	Decree regulating revenue-generated public service entities/socialization	Government
	30 Dec 2016	7618/QĐ-BYT	Decision on Health Care for the Elderly Project for the period 2017 – 2025	Ministry of Health
	2 Feb 2017	01/TT-BLDTBXH	Circular on ethical and professional standards for social workers	MOLISA
	12 Sept 2017	103/ND-CP	Decree on the establishment, organizational structure, operation, dissolution, and management of social assistance facilities	Government
	29 Dec 2017	33/TT-BLĐTBXH	Circular guiding the organizational structure, staff norms, processes, and standards of social assistance at social assistance facilities	Ministry of Labor, Invalids and Social Affairs
	18 Oct 2018	96/TT-BTC	Circular on management and use of budget for taking care of older persons, including primary health care and access to preferential credit	Ministry of Finance

Source: Authors; Phong and Nam (2019); MOLISA (2019) (WB/ADB Report); Ministry of Health of Vietnam and Health Partnership Group 2016 (2016); UN SP JPG (2015).

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