



VIETNAM: ADAPTING TO AN AGING SOCIETY OVERVIEW



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CONTENTS

ACKNOWLEDGMENTS	iii
1. INTRODUCTION	viii
2. PATTERNS AND IMPLICATIONS OF AGING IN VIETNAM	4
2.1 Growth, Demography, and Welfare.....	5
2.2 Aging Population, Labor Force, and GDP.....	8
2.3 Potential Impacts of an Aging Population on Savings	10
2.4 Fiscal Policy Challenges of an Aging Population.....	11
2.5 Model-Based Projections of Long-Term GDP Growth and Public Finances	12
3. Managing Aging	18
3.1 Lifecycle Approach to Building Human Capital.....	20
3.2 Adapting the Labor Market and Strengthening the Workforce.....	24
3.3 Reforms to Increase the Efficiency of Public Expenditures.....	26
3.4 Pensions	28
3.5 Health Services.....	31
3.6 Elderly Care.....	32
4. CONCLUSIONS AND POLICY IMPLICATIONS	36
REFERENCES	38

List of boxes, figures and tables

Box

Box 1. Japan Aging Policies.....	27
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Figures

Figure 1. Vietnam: Key Demographic Indicators.....	1
Figure 2. Per Capita Income Level at the Peak of Working-Age Population Share (purchasing power parity based; in percentage of U.S. per capita income at each country's peak year)...	2
Figure 3. Vietnam: Labor Market Outcomes, by Gender.....	8
Figure 4. Vietnam: Projected Growth Rates Decline under Five Scenarios.....	13
Figure 5. Vietnam: Aggregate Age-related Fiscal Costs, by Social Program	14
Figure 6. Vietnam: Aggregate Age-related Fiscal Costs, by Cost Driver.....	15
Figure 7. Lifelong Accumulation of Human Capital.....	20
Figure 8. Vietnam: Projected Spending, Revenues, and Deficits in VSS 2019-2080.....	28

Tables

Table 1. Vietnam: Poverty Headcount Rate by Age and Cohort, 2010-2016.....	6
Table 2. Vietnam: Projected GDP Growth.....	13

LIST OF ACRONYMS

ACFI	Aged Care Funding Instrument	HCI	Human Capital Index
ADB	Asian Development Bank	HCMC	Ho Chi Minh City
ADL	Activities of Daily Living	HIC	High-Income Country
AI	Artificial Intelligence	IADLs	Instrumental Activities of Daily Living
AI	Aging Index	ICT	Information and Communication Technology
ALMP	Active Labor Market Policy	IHME	Institute for Health Metrics and Evaluation
ASEAN	Association of Southeast Asian Nations	ILO	International Labor Organization
AT	Assistive Technologies	ILSSA	Institute of Labour Science and Social Affairs
BMI	Body Mass Index	ICT	Information and Communication Technology
BOD	Burden of Disease	IHME	Institute for Health Metrics and Evaluation
CCT	Conditional Cash Transfer	IMF	International Monetary Fund
CHE	Current Health Expenditure	IMR	Infant Mortality Rate
CHS	Commune Health Station	InterRAI	International Resident Assessment Instrument
CIT	Corporate Income Taxes	IPD	Implicit Pension Debt
CPI	Consumer Price Index	ISHC	Intergenerational Self-Help Club
CPR	Cardiopulmonary resuscitation	JAHR	Joint Annual Health Review
DALY	Disability-adjusted life years	JICA	Japan International Cooperation Agency
DB	Defined benefit	LFS	Labour Force Survey
DFAT	Department of Foreign Affairs and Trade (Australia)	LIC	Low-income Country
DOLISA	Department of Labor, Invalids and Social Affairs	LLL	Lifelong Learning
EAP	East Asia and Pacific	LMICs	Low- and Middle-income Countries
ECA	Europe and Central Asia	LTC	Long-term Care
EPL	Employment Protection Legislation	LTGM	Long-term Growth Model
FDI	Foreign Direct Investment	MCG	Management Consultant Group
FINDEX	Global Financial Inclusion Database (World Bank)	MDB	Multilateral Development Bank

FSA/FSAM	Financial Sustainability Analysis Model	MDC	Matching Defined Contribution
G20	Group of Twenty	MICS	Multiple Indicator Cluster Survey
GBD	Global Burden of Disease Study	MOH	Ministry of Health (Vietnam)
GDP	Gross Domestic Product	MOLISA	Ministry of Labor, Invalids, and Social Affairs (Vietnam)
GSO	General Statistics Office of Vietnam	MOOC	Massive Open Online Course
MPSARD	Master Plan for Social Assistance Reform and Development	TDR	Total Dependency Ratio
NCD	Non-communicable Diseases	TFR	Total Fertility Rate
NGO	Nongovernmental Organization	TVET	Technical and Vocational Education and Training
NTP	Nationally Targeted Program	UHC	Universal Health Coverage
OADR	Old Age Dependency Ratio	UN	United Nations
ODA	Official Development Assistance	UNFPA	United Nations Population Fund
OECD	Organization for Economic Cooperation and Development	UNICO	Universal Health Coverage Study Series
OOP	Out-of-pocket	USD	United States Dollars
PCIC	People-Centered Integrated Healthcare	VAE	Vietnam Association of the Elderly
PHC	Primary Health Care	VAT	Value-Added Tax
PISA	Program for International Student Assessment	VHLSS	Vietnam Household Living Standards Survey
PPP	Purchasing Power Parity	VHWs	Village Death Workers
PROST	Pension Reform Options Simulation Toolkit (World Bank)	VNAS	Vietnam Aging Survey
ROK	Republic of Korea	VNCA	Vietnam National Committee on Aging
RR	Replacement Rate	VND	Vietnamese Dong
RT	Robot Technologies	VSS/VSSF	Vietnam Social Security Fund
SDGs	Sustainable Development Goals	VWU	Vietnam Women's Union
SHA	Social Health Insurance	WB	World Bank
SI	Social Insurance	WDI	World Development Indicators
SMS	Short Message Service	WHO	World Health Organization
SOM	Serviceable Obtainable Market	YDR	Youth Dependency Ratio
SP	Social Protection	YLD	Years Lived with Disease/ Disability
SRB	Sex Ratio at Birth	YLL	Years of Life Lost
SSB	Sugar-Sweetened Beverage		
STEPS	National Survey of Risk Factors for Non-Communicable Disease (Vietnam)		

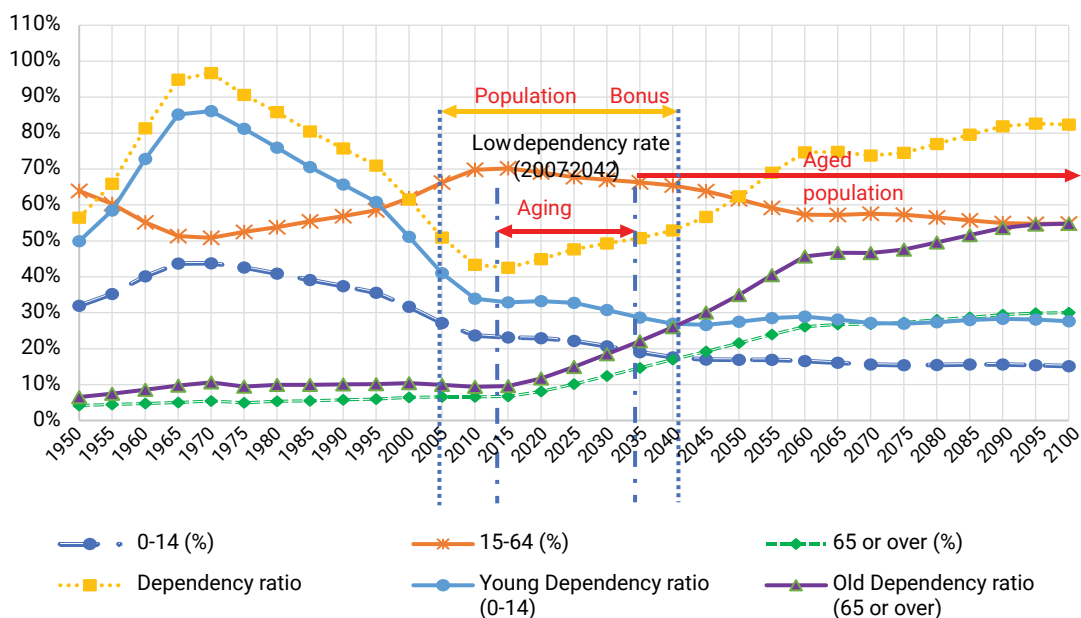


1. INTRODUCTION

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 has a 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 continue 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 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 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 Phillips 2005).

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.

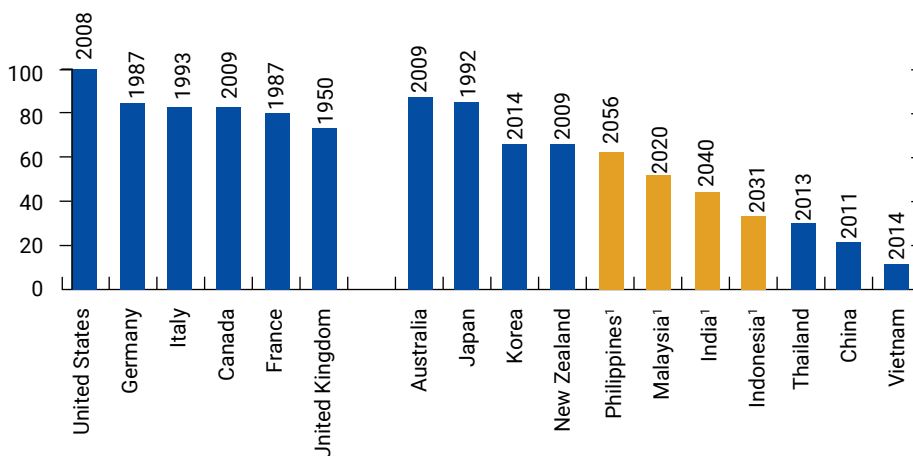
This demographic dividend is estimated to have contributed to about one-third of Vietnam’s spectacular growth during the period of 1985-2018. Vietnam is enjoying its 30th year of virtually uninterrupted rapid economic growth. The economy has expanded at an average of nearly 7 percent since 1988, and as a result, per capita income has increased almost fivefold over the same period. The demographic dividend is estimated to have contributed to about one-third of Vietnam’s spectacular growth during the period of 1985-2018, 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 (IMF 2017, World Bank and Ministry of Planning and Investment of Vietnam 2016). While remaining below the highs recorded in the 1990s, economic growth in recent years has been relatively resilient, broad-based, and job-friendly.

Notably, Vietnam’s working-age population peaked relatively early in terms of the country’s

per capita income. Figure 2 shows per capita income at purchasing power parity relative to the United States at the historical or projected peak of the share of the working-age population in selected advanced and Asian economies. Among these countries, Vietnam’s working-age population has reached its peak at the lowest relative per capita income level, at 10 percent of U.S. per capita income. (In comparison, South Korea peaked at about 70 percent, and Philippines, Malaysia and India are projected to peak at 70, 60, and 50 percent, respectively.)

“Getting old before getting rich” means that Vietnam faces a set of unique challenges that will need to be addressed through major reform efforts. These reform efforts must aim to take advantage of the “window of opportunity” while at the same time mitigate the demographic headwinds to growth and challenges of high fiscal costs of aging. Doing this while still at relatively low per capita income levels requires making hard choices and implementing major policy reforms.

Figure 2. Per Capita Income Level at the Peak of Working-Age Population Share (purchasing power parity based; in percentage of U.S. per capita income at each country’s peak year)



Sources: IMF World Economic Outlook (WEO) database and IMF staff calculations based on United Nations World Population Prospects: 2015 Revision (medium fertility scenario).

Note: The number at the top of each bar is the year in which the working-age population (15–64 years) share of the total population has peaked/is projected to peak.

Without reforms, long-term growth is projected to slow down, largely due to the aging of Vietnamese society. 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.

The global COVID-19 health crisis, which arose during preparation of this report, has also placed pressures on various segments of the economy. As discussed in the World Bank’s Vietnam COVID-19 Policy Update, the return to the pre-COVID-19 growth trajectory might take time and effort as the ‘new normal’ for people and businesses will be different, and it will also depend on what happens with Vietnam’s main trading partners.

The aging of the population may also add to fiscal pressures. Estimates based on the Fiscal Sustainability Analysis model (FSA) show that in aggregate terms, 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, depending on the scenario. 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.

This report promotes the view that while aging brings challenges, good policies can mitigate—and in some cases, reverse—their effects. This report outlines the challenges facing Vietnam as a result of its near-term demographic transition and the reforms that could help maximize its ability to thrive economically and socially. The report does not, however, focus solely on older people. Instead,

it presents a narrative about important structural changes—not only driven by demographics but also influenced by megatrends such as urbanization, technological change, and the rise of middle class, themselves influenced by broad global trends—and how these in turn affect the population across the age distribution.

This report aims to inform the government’s strategy. The main objective is to inform an ongoing dialogue about the patterns and implications of aging, focusing on key policy priorities for the coming decade. It aims to develop an integrated narrative that frames policy options to address Vietnam’s most pressing development challenges in the context of current and emerging domestic and global trends. The proposed policies dovetail with existing policy dialogue and sectoral engagements, focusing on issues posed by aging that require cross-sectoral coordination to succeed. The report further emphasizes optimal sequencing of realistic actionable recommendations.

The report consists of two parts. Part I starts with a brief description of the demographic situation in Chapter 1. Chapter 2 describes the current patterns and trends in key socioeconomic indicators (poverty, welfare, labor market participation) across different cohorts of the population, highlighting differences across age groups. Chapter 3 builds on these trends and patterns and describes the macro implications of aging, presenting model-based forecasts that link growth and fiscal trends with demographic trends and potential reform options. Part II focuses on the areas that are most affected by the aging trends: labor market (Chapter 4), pensions (Chapter 5), health (Chapter 6), and aged care (Chapter 7). Each chapter analyzes the salient features of the sector and presents directions for reforms. A section at the end of this Overview provides a summary of the reforms to address aging.



2. PATTERNS AND IMPLICATIONS OF AGING IN VIETNAM

2.1. 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).

While Vietnam is projected to enjoy the demographic window of opportunity until 2042, the share of prime-age adults peaked in 2014 and is now declining. The total dependency ratio (TDR) in Vietnam started declining in the late 1970s and has been declining rapidly, dropping from 0.78 in 1989 to 0.45 in 2009, driven by a decline in the youth dependency ratio (YDR). The TDR reached its minimum between 2009-2016 then started to increase, driven by an increase in Vietnam's old age dependency ratio (OADR). The OADR is projected to double from 0.11 in 2019 to 0.22 in 2039, while the YDR is projected to continue its half-century-long decline. 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. Vietnam's TDR will start increasing in 2020 and is projected to reach around 0.56 by 2049 (see more in Chapter 1).

Vietnam's rapid population aging—which is projected to accelerate, turning it into one of the fastest-aging countries in the world—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 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 working age is quite small.¹ 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 (Chapter 1 and World Bank and Ministry of Planning and Investment of Vietnam 2016).

Trends in poverty and welfare

To date, growth and poverty reduction have been broad-based and achieved with only a modest increase in measured inequality. As shown in Table 1 below, poverty rates in Vietnam have been declining for several years. Absolute poverty has fallen sharply in Vietnam over the last two decades, benefiting all generations, 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.

¹ UNFPA and VNCA. 2019 *Towards a Comprehensive National Policy for an Ageing Viet Nam*. Available at <https://vietnam.unfpa.org/en/publications/towards-comprehensive-national-policy-ageing-viet-nam>

Table 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
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.

Between 2010 to 2016, older generations benefited the most relative to the other age groups from poverty reduction.² While the national poverty rate declined from 20.6 to 9.3 percent, the rate among older people dropped even further and faster, 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 (Table 1). Incidence of poverty across cohorts of individuals for the 2010-2016 time period shows similar patterns: 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 more rapid decline in poverty among older groups compared with other age groups has occurred in both urban and rural areas (see more in Chapter 2).

Economic vulnerability in urban areas is more prevalent among younger adults compared to older adults, while in rural areas, economic vulnerability 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, both in urban and rural areas, while the “oldest old” group (ages 80 and over) has comparable levels of poverty and economic vulnerability in rural areas. Cohorts around retirement age (those ages 51-60

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

and 61-70) are the most economically secure while also having the lowest percentage of population in extreme poverty.

Vietnam's middle class is growing in both urban and rural areas, although growth is uneven between urban and rural areas and between age cohorts. 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 middle-class status across different age groups and cohorts, urban regions have a gap of up to 12 percent in middle-class status across different age groups. Although the probability of being in the middle class increased dramatically for younger urban adults between 2010-2016, this group is still underrepresented.

Along the age distribution, the younger rural cohort seems to be at a particular disadvantage. The youngest rural cohort appears to be at a particular disadvantage not only in terms of their high poverty and being underrepresented among the middle class but also in terms of having less upward mobility and more downward mobility. This has implications for Vietnam, as investing in these young workers is critical while there is still a demographic "window of opportunity."

There is no evidence that other indicators of living conditions are lagging for older groups. VHLSS-based patterns of access to safe water and sanitation underscore Vietnam's progress in improving the quality of life. 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 in both rural and urban areas, while living area also increased (see Chapter 2).

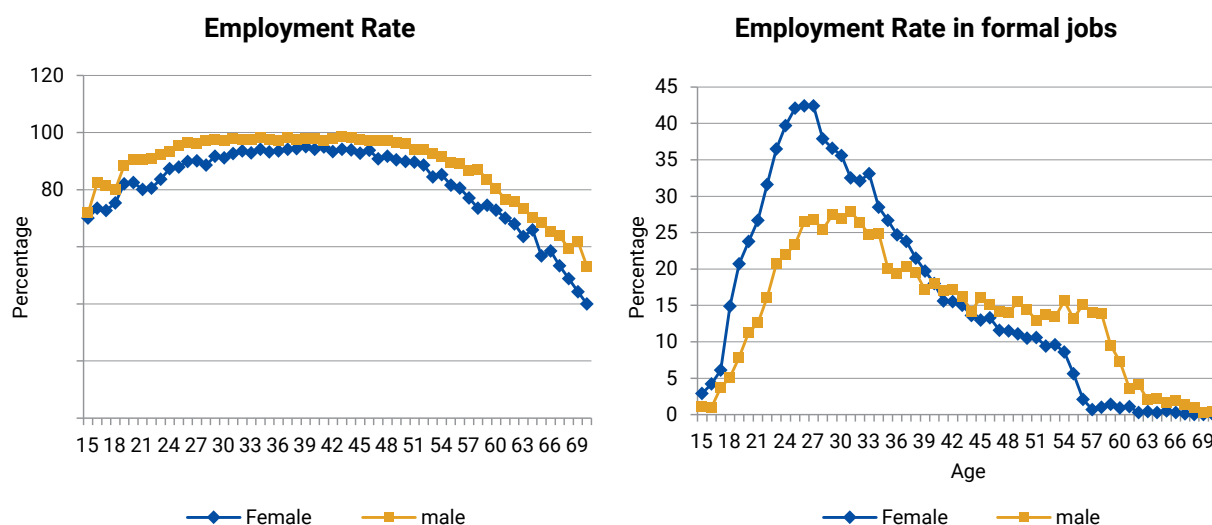
Poverty in Vietnam has strong ethnic dimensions, and the "last mile" agenda for ethnic minorities in Vietnam is heightened by demography. As of 2016, ethnic minorities³ accounted for 73 percent of the number of poor people nationally (9 million), even though they make up just 14 percent of the total population.⁴ Furthermore, only 23 percent of ethnic minorities are economically secure, compared to 81 percent of Kinh and Hoa. Driven by their higher fertility rate, the age structure of 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. If not given chances for proper education and health, they will not reach their full potential at the time when Vietnam will need all of its labor force at the peak of their productivity.

Although women fared well in the labor market during the last decade, inequalities in labor market outcomes persist. Vietnam has closed a number of gender gaps along a wide range of social and economic measures, including bringing female labor force participation within 11 percentage points of that of men. The high labor market participation of women is undoubtedly influencing and being influenced by low fertility. Another notable achievement is that younger women are more likely than men of the same age to have formal jobs (Figure 3). This can be 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. These trends will help reverse the disadvantage that today's middle-aged and older women have with respect to access to formal jobs, wage-paying jobs, and access to pensions.

3 There are 53 ethnic groups in Vietnam with distinct cultures and languages, with 75 percent living in 13 provinces in the Northern Mountain and Central Highlands regions. Dang, H.A. 2012. "Vietnam: A Widening Poverty Gap for Ethnic Minorities." In *Indigenous Peoples, Poverty and Development*, edited by G.H. Hall and H.A. Patrinos, 304-43. New York: Cambridge University Press.

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

Figure 3. Vietnam: Labor Market Outcomes, by Gender



Source: Authors, based on VHLSS 2014 and 2016.

2.2. Aging population, labor force, and GDP

The labor market is a channel through which aging may influence growth. Over the next three decades, Vietnam's labor force is projected to contract by an annual average of 0.9 percent, creating strong headwinds to sustaining growth outcomes. 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.

However, demography is not destiny, and there is some scope to mitigate the trends in the working-age population through increased productivity and labor force participation. 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 relatively high and rapid productivity growth over the past couple of decades, labor productivity still remains relatively low, given the low base. Vietnam's labor productivity is low (estimated at USD 11,142 in 2011 PPP international dollars for 2018) compared, for example, to selected Asian countries (with an average productivity of USD 47,070 in 2011 PPP international dollars in the same period).

Some key features of Vietnam's labor market will play an important role in determining future productivity and labor force participation. These features are described below.

- **Two out of five working Vietnamese toil in the agricultural sector, but younger workers are less likely to work on farms than their parents.** Output per worker in the agricultural sector is only about half that of the national average, suggesting considerable scope to boost total economy GDP by shifting labor resources to

higher value-added sectors—a trend that is already evident. Moreover, the rural economy has already transformed rapidly in recent decades with four remarkable shifts: (i) a decline in the rural labor force; (ii) an absolute decline in employment in agriculture; (iii) a rise in rural wage work; and (iv) a new predominance of non-agricultural incomes. As of 2018, the size of the non-agriculture labor force matched that of the agriculture labor force in rural areas. This non-agricultural rural labor force is largely concentrated among younger, more educated workers, resulting in segmentation of the rural workforce with older people dominating the agriculture sector.⁵

- **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). Additionally, while younger workers are starting in the informal sector, their participation in the formal labor market increases by middle age. This is important because firms in the formal sector are almost four times as productive per employee as those in the informal sector.⁶ Nonetheless, formalization remains slow.
- **While Vietnam appears to have relatively low overall percentages of well-trained labor, educational achievement of younger workers is considerably higher, with quality of workers therefore expected to mitigate steady declines in quantity.** 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.⁷ 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 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.

- **While the overall labor force participation is high, and, on average people work till late in life, many in urban areas withdraw from work relatively early, and in case of urban women in formal jobs retirement is very early.** In fact, 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 (see Chapter 3). Availability of a pension and (and its generosity) has a strong association with lower labor force participation at older age. Therefore, pension reform, and an increase in retirement age in particular, has significant potential to 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). However, there is also the risk that growth, urbanization and expansion of social security systems will see current rural workers increasingly adopt the retirement behavior of urban workers. That downside risk is considerable in the absence of further reform of pension systems.

Also, individual labor market behaviors tend to adjust to the new reality of a longer life expectancy (Lee and Mason 2017). 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

5 These patterns are common as countries transition from LMIC status to UMIC status, with the relative size of their agrarian labor almost falling by half.

6 Demombynes and Testaverde, 2018.

7 GSO, Vietnam Labor Force Survey, 2018.

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.

2.3. Potential impacts of an aging population on savings

The potential impacts of an aging population on savings are primarily determined by two offsetting effects - compositional and behavioral, presenting an unclear picture of future developments.⁸

The compositional effect is derived from well-established life-cycle theories,⁹ which posit that young adults borrow, middle-aged adults save, and senior citizens live off their savings (dis-save). This would suggest that an aging population will lead to a lower savings rate. However, behavioral effects suggest 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, meaning that an aging population will lead to a higher savings rate. Kinugasa and Mason (2007)¹⁰ suggested that behavioral responses may dominate in Asia, but, overall, the net impact of an aging population on savings in a LMIC economy is unclear.

The incentives for precautionary savings will reflect both the generosity and coverage of pensions and health care system.¹¹ Generous and well-funded pensions systems can provide workers with confidence that they will not live their retirement years in poverty, while overly generous and under-funded pension and social insurance systems can exacerbate fiscal pressures associated with an aging population. Vietnam's current contributory pension coverage is 22 percent pointing to the need to expand the coverage. Additionally, as Bloom et

al. observe,¹² an aging population will have greater health care needs, putting pressures on both public expenditures and private retirement savings. (Although from a historical perspective, growth in health spending is primarily driven by growth in per capita income, extension of coverage by national health systems and technological change). Investments in public health can not only assuage fears that retirement funds will be devoured by medical bills (thus reducing the incentives for precautionary savings), but if translated into healthy aging, can also allow older workers to extend their years of employment—which in turn benefits household incomes and thus tax revenues and household consumption patterns.¹³

Supporting financial inclusion through enhanced access to finance and pension coverage could help counteract the dissavings associated with aging. 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 boost savings and strengthen financial intermediation—in addition to providing for a steady retirement income for participants (see below and Chapter 5 on proposed reforms in the area of pensions). Greater financial inclusion and increased pension coverage typically help channel savings into investment, boosting productivity and growth outcomes.¹⁴

⁸ World Bank 2016.

⁹ For example, 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 their expected cumulative income over their entire life.

¹⁰ Kinugasa, T. and A. Mason (2007), "Why Nations Become Wealthy: The Effects of Adult Longevity on Saving", *World Development*, 35(1), pp.1-23

¹¹ Amaglobeli et al. 2019. *The future of savings: The role of pension design in an aging world*. IMF Staff note: 19/01.

¹² See, for example: Bloom et al., "Macroeconomic implications of population aging and selected policy responses," *Lancet*, February 12, 2015.

¹³ Research on China by the IMF notes that fear of age-related health care costs can drive precautionary savings and calculates that for every yuan spent by the government on healthcare, household consumption was increased by 2 yuan. IMF (2010). "China: Does Government Health and Education Spending Boost Consumption?" IMF Working paper, WP/10/16.

¹⁴ Caprio, Gerard and Patrick Honohan. 2001. *Finance for Growth: Policy Choices in a Volatile World*. The World Bank: <http://documents.worldbank.org/curated/en/341151468762914798/Finance-for-growth-policy-choices-in-a-volatile-world>

An aging population could change the transmission mechanisms of monetary policy. A growing segment of the population (retirees) will be less sensitive to interest rate changes, as their dis-savings reflect consumption needs. There is a related fiscal dynamic: national savings reflect both public and private savings (fiscal deficits are counted as net borrowing by the former), while changes to interest rates will affect debt servicing costs. Global interest rates are likely to remain low for the foreseeable future, which will affect rates in Vietnam. For the private sector, lower prevailing real interest rates would reduce the cost of investment, while retirees reliant on interest income would correspondingly face lower returns.

2.4. Fiscal policy challenges of an aging population

Rising pressures on the fiscal position tied to aging underscore the need for the government to continue to strengthen fiscal space, particularly during the current demographic window of opportunity. Vietnam's fiscal expenditures are comparatively high as a share of GDP for a country at its income level, reflecting relatively high revenue mobilization for an LMIC. Although Vietnam's public finances have improved in recent years, fiscal space remains constrained and public debt elevated. Reflecting persistent fiscal deficits, which averaged 5.7 percent from 2010 through 2016, the government's debt position increased from 47.1 percent in 2010 to a peak of 63.6 percent in 2016. Public debt then declined to an estimated 54 percent in 2018, supported by robust GDP growth.

Aging is expected to affect public finances through both revenues and expenditures. On the revenue side, as an increasing share of the population enters retirement—and hence no longer earns an

income—there will be a commensurate impact on fiscal revenues generated from personal income taxes (assuming no changes to the tax code). Similarly, growth in other sources of revenues, such as corporate income taxes (CIT), could moderate with a potential moderation in GDP tied to deceleration in growth of the labor force. At the same time, age-related expenditures—particularly for social pensions and health and elder care—are likely to increase with a rising share of the elderly in the total population. Declining government revenue and spending shifts could lead to an increase in the fiscal deficit and public debt as a share of GDP. A possible moderation in GDP growth could negatively affect the government's debt service costs and capacity to borrow if investor confidence is eroded.

With Vietnam's rapid demographic transition, public spending on public pensions and public health care is likely to come under marked pressure. Currently, Vietnam spends an estimated 4 percent of GDP on the social insurance programs and 5.9 on public health care. In comparison, more developed economies spend an estimated 9.5 percent of GDP on public pensions and 6.8 percent on public health care.¹⁵ While a reduction in the school-age cohort might suggest potential savings in public spending on education, it is anticipated that Vietnam will boost per student spending sufficiently to offset (or even more than offset) the reduction in the number of students (at least in the medium term), given the need to boost human capital. In addition, with the need to boost productivity, there will be pressures to increase government expenditure on infrastructure, which in recent years has been declining as a share of GDP (albeit from a relatively high share, 11.5 percent of GDP).

¹⁵ See World Bank (forthcoming) *Diverse Paths: The Dynamic Evolution of Social Protection in Asia and the Pacific*. and Clements, Benedict et al. 2015. "The Fiscal Consequences of Shrinking Populations" IMF Staff Note, October 2015. IMF.

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

Two World Bank modeling frameworks have been used to analyze the potential impacts of Vietnam's aging population on trends in macroeconomic growth and the fiscal budget: the Long-Term Growth Model (LTGM) and the Fiscal Sustainability Analysis model (FSA), respectively.¹⁶

The World Bank's Long-term Growth Model (LTGM) is used to estimate five growth scenarios for the period 2019–2050.¹⁷ 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. The *favorable human capital* scenario (S4) sets the growth rate for the Human Capital Index 50 percent higher than its current value by 2030. It assumes that Vietnam can improve its education outcomes, and that the results are reflected in economic performance. 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 (Table 0.1). Higher human capital growth scenario presents the best prospects for Vietnam going forward. Even then, GDP growth in 2050 is projected to be lower than growth today (Figure 4).

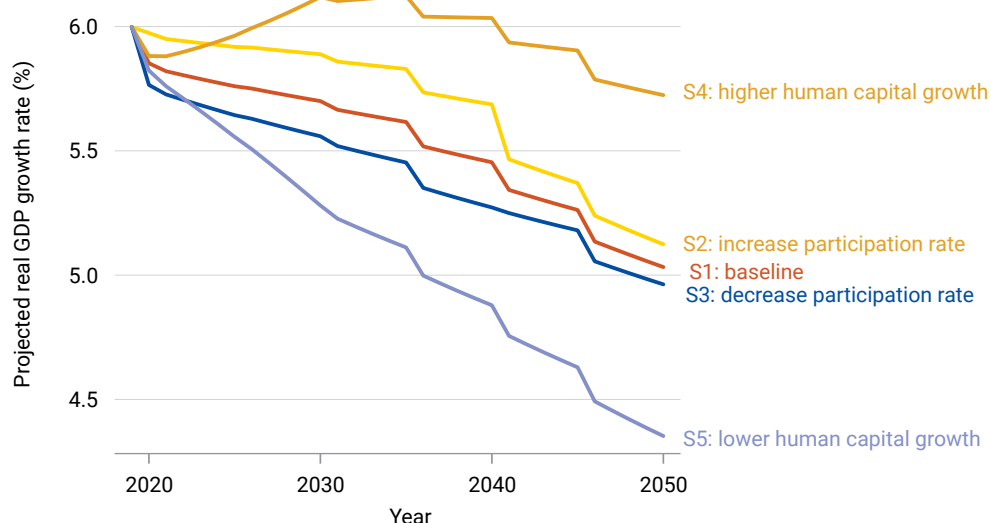
Drawing on the FSA model, three scenarios were developed for trends in expenditures on education (primary, secondary and tertiary), pensions, healthcare, and social protection. As Vietnam's demographic transition accelerates, policymakers will have to juggle multiple and often conflicting fiscal objectives. The FSA-based model estimates show that:

- 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, depending on the scenario.
- Despite fewer primary-age students, annual expenditures on primary education are unlikely to decline significantly due to increased demand for higher-quality education. Vietnam is projected to spend 20–80 percent more on secondary education in 2050 relative to the current level. Annual expenditures for tertiary education are projected to increase to 0.88–1.41 percent of GDP depending on the scenario, accounting for most of the public expenditures on education by 2050.

16 LTGM is developed by Steven Pennings, Leonardo Garrido, and Jorge Luis Guzman: <http://www.worldbank.org/LTGM>. The LTGM builds on earlier work by Hevia and Loayza (2012). The aging block framework of the FSAM developed by Ralph van Doorn. These models were used to develop a baseline and a set of alternative long-term growth and fiscal scenarios to illustrate the potential long-term growth and fiscal impacts of the aging population to inform possible policy options. The growth and fiscal scenarios are considered separately, but the GDP growth and relevant demographic scenarios are applied with the fiscal scenarios to assess the potential fiscal impacts under different growth outcomes. The GDP growth and fiscal scenarios are based on the emergent demographic trends, unless otherwise specified. Demographic trends are from the UN's medium-fertility population projections, 2018 update.

17 The model's parameters include the depreciation rate, labor share of income, human capital index, total factor productivity, labor market participation, external balance, net foreign direct investment, and demographics.

Figure 4. Vietnam: Projected Growth Rates Decline under Five Scenarios
Projected Annual GDP growth rate (percent), by scenario, 2019–2050



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

Table 2. 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

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

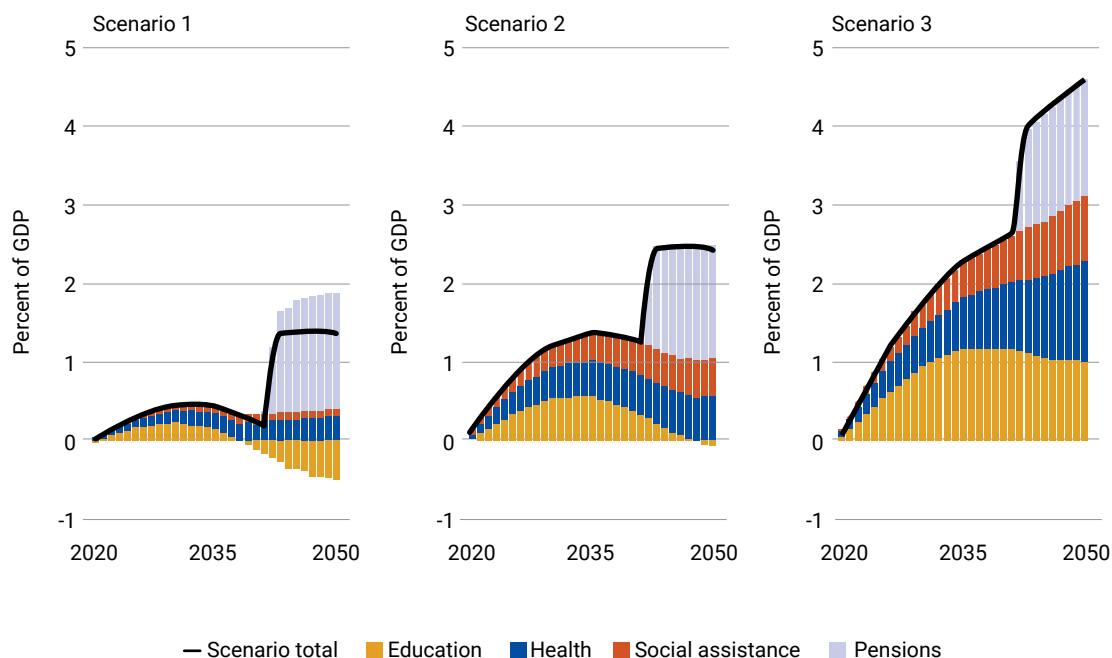
- In the next three decades, annual expenditure for healthcare for the elderly population is projected to increase four- to five-fold as a share of the economy. Annual expenditures for healthcare for the non-elderly population are projected to increase to 1.59-1.97 percent of GDP, depending on the scenario.
- Expanding coverage and improving service quality will be the real drivers of future growth in fiscal costs. Under the scenario, which

incorporates demography and expanded coverage, 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 contributory pensions, and the rest from expanded coverage in the health and social protection categories. Under the scenario, which 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 education sectors (Figure 5 and Figure 6).

- 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 2042.¹⁹

Figure 5. Vietnam: aggregate age-related fiscal costs, by social program (percent of GDP)

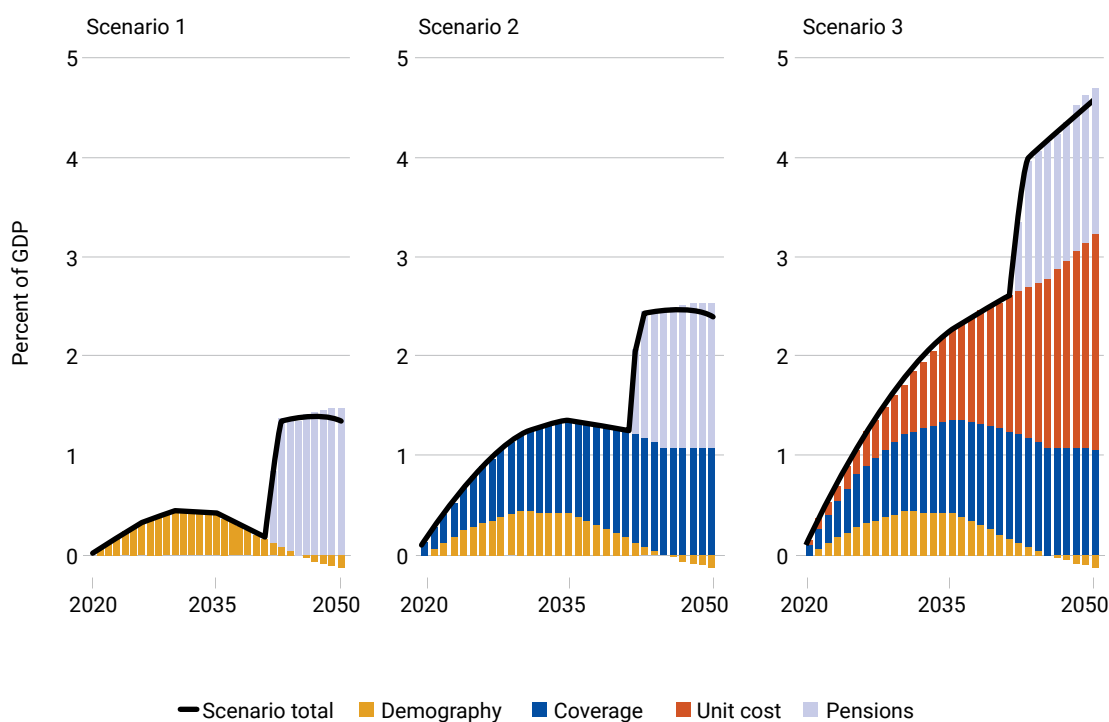


Sources: World Bank staff projections using data from the Vietnam Household Survey (VHSS), UN World Population Prospects, and World Development Indicators.

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

¹⁸ Vietnam has two major pension schemes that could affect its future fiscal situation. The non-contributory Social Insurance (SI) pension system is financed through the fiscal budget. It provides means-tested coverage for retirees below a certain income threshold and for all elderly of 80 years or older. Meanwhile, the contributory Vietnam Social Security Fund (VSSF) is an extra-budgetary pension

Figure 6. 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: Unit costs are defined separately for each program/category of social spending, see Chapter 3 for further details.

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

Notably, the projections do not take into account the impacts of the global COVID-19 health crisis, which hit during the preparation of this report and which could have implications for Vietnam’s GDP growth going forward. As described in the World Bank’s Vietnam COVID-19 Policy Update, Vietnam seems to be moving out of the health crisis with extraordinary results: as of mid-May, the number of infected people was just over 300, with nearly 80 percent of them having recovered, and no registered deaths. However, the crisis has increased pressure on multiple segments of the economy. After showing resilience during the first quarter, the economic costs became increasingly visible during the lockdown: many businesses closed (over 300 per day), approximately 3 million workers lost their jobs and income, various banks reported an increase in delinquent loans, and even

the government witnessed a 40 percent decline in its revenue from value-added taxes (VAT) during April. While a rapid (or V-shaped) recovery is possible, it is unlikely. As noted earlier, the return to the pre-COVID-19 growth trajectory might take some time and effort because the ‘new normal’ for people and businesses will be different, and the speed of the recovery will also depend on what happens with Vietnam’s main trading partners.

Given 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 health

and social security needs of an aging population. An inability to balance these 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.

As Vietnam’s per capita income increases and external grants and concessional loans become

scarcer, the government must rely more heavily on domestic sources of financing—primarily the sale of government securities. Banks and state entities—primarily the VSSF—are overwhelmingly the buyers of these securities, and conflicting pressures can be anticipated between the VSSF’s need to boost returns on investment and the government’s need to finance its obligations.



3. MANAGING AGING

The Government 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 dilemma. 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,¹⁹ 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 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. 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.

World Bank (2020) highlighted four broad areas that are critical for improving the pace and quality of Vietnam's growth to take advantage of the remaining demographic dividend.²⁰ The first is better allocation of resources from low to highly productive firms and removal of obstacles in the business environment. The second is improving the efficiency of spending on infrastructure and broadening its financing. The third is "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). The fourth is upgrading skills and boosting opportunities for jobs for all.

Particularly in light of the COVID-19 crisis as well as the impacts of an aging population, the Government should do all it can today to stimulate the economy without endangering the country's longer-term fiscal and debt sustainability. As described in the World Bank's Vietnam COVID-19 Update, COVID-19 has already changed the global economy with three emerging mega-trends: (i) the global trade system will look different in the years ahead, (ii) social distancing will change how people work and do business, and (iii) the value of life will become an explicit element of Government decisions. The Government can leverage the opportunity presented, as well as minimize the risk posed, by these mega-trends to enhance development outcomes by improving the competitiveness and resilience of Vietnam's economy. The Update proposes several concrete and implementable 'no-regret' policy actions to reshape Vietnam's economy by: (i) repositioning Vietnam in new global value chains, (ii) supporting the boom in e-commerce by enhancing digital payments, (iii) expanding the delivery of contact-

¹⁹ See Gill and Kharas (2016).

²⁰ World Bank. 2020. *Vibrant Vietnam, Forging a Foundation of a High-Income Economy*.

free health services, (iv) sharing information for improved resilience and incentivizing responsible behavior, and (v) aiming for a low-carbon development pathway. These actions can not only generate much-needed economic gains during the recovery phase but also enable Vietnam to implement a successful reform agenda in the longer term, including in dealing with the impacts of an aging population.

The following sections summarize the recommendations of the report on the policies and investments in human capital that are needed, including programs and policies to enhance the labor market participation of older workers. The report also proposes reforms to increase the efficiency of public expenditures, focusing on pensions, health and long-term care for the elderly.

3.1. Lifecycle approach to building human capital

Investing in and protecting human capital is necessary from birth to adulthood and through the older years, following each person's life trajectory. Vietnam needs to continue investing in people along the lifecycle to address emerging needs. Productive human capital is increasingly important as the nature of work has and continues to evolve

in response to global megatrends, including technological change. Similarly, policies fostering productive and dignified aging will contribute to improved welfare of the population (Figure 7).

Vietnam's track record of investing in the human capital of its people is remarkable. Vietnam's human capital index (HCI) exceeds the global, regional, and even upper middle-income country averages. From 1993 to 2017, the infant mortality rate decreased from 32.6 to 16.7 (per 1,000 live births).²¹ In education, the net enrollment rate for primary school increased from 78 percent in 1992-1993 to 93 percent in 2014, for lower secondary school from 36.0 percent to 84.4 percent, and for upper secondary school from 11.4 percent to 63.1 percent.²²

Nonetheless, human capital gaps continue to persist across ethnic groups and between rural and urban populations. Ethnic minorities are disproportionately affected, with an under-five stunting rate that remains stubbornly high at 31.4 percent, compared to the majority Kinh at 15 percent. Disparities in such indicators can also be seen between rural and urban populations: in 2016, the child mortality rate in rural areas (26.0 per 1,000 live births) was more than double that in urban areas (12.7).

Figure 7. Lifelong Accumulation of Human Capital



21 United Nations Inter-Agency Group for Child Mortality Estimation 2018.

22 Vietnam Living Standards Survey 1992-1993; Vietnam Household Living Standards Survey (VHLSS) 2014. (General Statistics Office (GSO) of Vietnam)

Vietnam's demographic shift makes human capital development a top priority across the life cycle. A rapidly aging labor force will need to make gains in productivity and harness growth potential in high-demand and technology-intensive sectors of the economy. This will require maximizing human capital through health, education, and labor market access for every segment of the workforce, from today's future workers to middle-aged and older workers.

Increased human capital investments will be needed to improve quality to offset the aging-induced shrinking labor force

Vietnam has opportunities to close human capital gaps among the young. Vietnam's impressive HCI performance also highlights the remaining challenges: an overall HCI score of 0.67 means that a child born in Vietnam today will be 67 percent as productive when he/she grows up and enters the world of work, compared with a child who enjoys complete education and full health.²³ The learning-adjusted years of school is 10.2 years, compared with the 12.3 years of school that a child who starts school at age four can expect to complete by his/her 18th birthday—a learning gap of 2.1 years. To put this in perspective, top-ranked Singapore has a learning gap of 1 year when taking quality of learning into account. Human capital limitations from early health disadvantage are also important: in Vietnam, the probability of survival to age five and share of children who are stunted are in the lower second quartile of the distribution among 157 comparator countries. Its rate of under-five stunting is particularly worrisome, with 25 out of 100 children stunted and therefore at risk of cognitive and physical limitations that will last a lifetime.

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 and conditional cash transfers (CCTs) could make a difference. Vietnam has already committed to improving grassroots health service delivery, including maternal and child health services. CCTs and behavioral change counseling to mothers and families could be complementary measures 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.

Building worker skills for today's and tomorrow's jobs

Building a world-class tertiary education system, comprising technical and vocational education and training (TVET) institutions and universities, will require radical reforms to Vietnam's higher education and training systems. This, in turn, 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. Increasing resources should be a top reform goal to improve Vietnam's tertiary education system. A reformed tertiary education system should have clear results-based targets for improvements in access, equity, relevance, research and innovation and technology transfer. To increase the overall coverage of tertiary education equitably, more diversification is needed within the education system, for example by developing more cost-effective, non-university options (TVET institutions) that are responsive to employers' needs and promoting good-quality

²³ World Bank. 2018. Human Capital Index. <http://www.worldbank.org/en/publication/human-capital>. Accessed August 2, 2019.

private tertiary education institutions by allowing equal access to compete for government-funded service and/or research contracts.

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. The public sector can also help expand and improve the current system by working with the private sector to identify market-demanded skills that the private training sector cannot fill and incentivize the provision of such courses.

Industry involvement is critical for addressing workforce skills challenges, and closer cooperation with the private sector can also incentivize technology transfer. As of 2015, only 22 percent of firms in Vietnam reported that they provide formal training to their employees,²⁴ despite the fact that nearly half of the respondents said that skills shortages negatively affect their businesses. When firms 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 (Tan et al. 2016). 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 by introducing more sophisticated adaptive learning using big data.

Investing in human capital does not stop at youth

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. A system of lifelong learning can prepare adult workers for the expected impacts of technological changes on the labor market. 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. 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.

The most effective measures to scale up training 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.²⁵ 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, 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.

24 World Bank. 2016. *Enterprise Survey 2015: Vietnam 2014-2016*. <https://microdata.worldbank.org/index.php/catalog/2664>

25 Badiani-Magnusson, Reena C; Bodewig, Christian; Macdonald, Kevin Alan David; Newhouse, David Locke; Rutkowski, Jan Jerzy. 2014. *Skilling up Vietnam: preparing the workforce for a modern market economy*. Directions in Development; Human Development. Washington, DC; World Bank Group. <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=19705606>

Healthy, active, and dignified aging

Healthy and active aging requires lifestyle changes earlier in the life cycle such as proper nutrition, safe workplaces, and a clean environment. These actions require multi-sectoral involvement, as many of the risk factors for disease and disability are not within the jurisdiction of the health sector to take action. Some key actions in this area are summarized below.

- Effectiveness in tobacco control requires multiple mutually supporting interventions.²⁶ Large increases in cigarette taxes relative to initial prices continue to be the most effective policy to reduce cigarette consumption, followed by enforced comprehensive smoke-free air laws in indoor worksites, restaurants, and bars. The least effective measures are simple interventions like health care provider interventions alone, active quit lines alone, or financial coverage of treatment alone.
- Interventions to ensure a healthy diet include encouraging consumer demand for healthy foods and promoting appropriate infant and young child feeding practices.²⁷ Yet simply increasing the awareness of healthy diet is not generally adequate to change practices. Additional complementary policies are needed, such as trade, food, and agricultural policies that increase incentives for producers and retailers to grow and sell fresh fruit and vegetables and for the food industry to reduce trans-fats, sugars, and salt through reformulation of food products. Other measures include tightly regulating how foods and beverages are marketed to children and establishing standards of healthy dietary practice in preschools and schools and in the workplace.

26 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.

27 WHO. 2020. Healthy diet fact sheet. <https://www.who.int/en/news-room/fact-sheets/detail/healthy-diet>, accessed February 14, 2020.

- Maintaining low levels of obesity is crucial for reducing non-communicable diseases (NCDs) and other health problems, particularly diabetes.²⁸ Measures to prevent obesity could include taxing of sugar-sweetened beverages and ultra-processed foods, building on extensive global experience in taxation design. Front-of-package labeling and related nutrition profiling and warning labels also have been shown to shift consumption away from ultra-processed foods and beverages.
- Alcohol is an important risk factor for burden of disease in Vietnam due to accidents and disease. Among the most effective measures is raising prices on alcohol through excise taxes and pricing policies.²⁹

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.³⁰

28 Shekar, Meera; Popkin, Barry M.. 2020. Obesity: Health and Economic Consequences of an Impending Global Challenge. *Human Development Perspectives*. Washington, D.C.: World Bank Group. <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=31740756>

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.

29 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.

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

3.2. Adapting the labor market and strengthening the 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.³¹

Extending productive working lives requires comprehensive interventions in many areas, with technology playing an important role. 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 that would play out through such channels as improving health and longevity (e.g., through biotechnology and through automated diagnosis, surgery, and therapies), transforming work and the

workplace (e.g., through automation and increased use of artificial intelligence, machine learning, and cloud computing), and transforming the labor market function (e.g., through remote and virtual education and training, cloud-based matching services, and ergonomic and human function aiding devices in the workplace). Notably, the COVID-19 health crisis has already had a dramatic impact in terms of ramping up the use of technology for remote work. As described in the World Bank Vietnam COVID-19 Policy Update #5 (Morriset et al. 2020), work-from-home and social distancing policies are radically changing how people work and interact. They are also fundamentally altering what work is performed and how people perform it, with an acceleration in automation.

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. 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 in Chapter 2, 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 as well as negative perceptions about the adaptability and productivity of older workers. One relatively inexpensive government intervention 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 employment of the younger generation. Similar initiatives could be used to help address negative attitudes regarding the capacity of older workers.

³¹ 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. (<https://www.ft.com/reports/health-at-work>)

Studies show that ensuring good and healthy working conditions as well as a variety of tasks helps to prevent declining productivity.³² 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.

The gender gap in labor force participation is larger among mature workers, and complementary interventions aimed at developing childcare and elderly care will help gradually close it. Such policies would help 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 East Asia and Pacific (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 (Morton et al. 2014). In addition to 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 in subsidizing childcare services or through other channels such as extended-day kindergarten and primary school services (as Vietnam is already extending the kindergarten day).

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—namely, ethnic minorities and both younger and older individuals in the rural workforce.

- **A comprehensive approach to improving ethnic minority outcomes would include supporting their migration prospects.** While it is vital for ethnic minorities to transition to higher-productivity jobs, these transitions are complicated by the physical remoteness of their communities. The Vietnam Jobs Report identified three key entry points for reducing 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. Complementary skills development for ethnic minorities is also needed, including interventions that develop entrepreneurship skills, technical skills for wage employment, and life and soft skills to support the pursuit of these livelihoods. Active Labor Market Policies (ALMPs) targeted at ethnic minorities could be important tools for both those who decide to stay and those who decide to migrate, if specific characteristics of ethnic minorities are leveraged in the design of such policies.
- **Support for the segmented rural workforce would entail a set of overall policies for continued agricultural restructuring, including building on reforms in land policies to help maximize productivity and returns for those reliant on farming.** 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. Younger rural workers would benefit from interventions to support rural jobs upgrading that help them move up the value chain and into the knowledge economy—for example, in high-value agriculture and associated agro-processing—which requires both greater mastery of some of today's skills as well as an emphasis on knowledge-intensive skills. For

³² Börsch, Supan, and Weiss (2011) showed 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.

those who continue relying on agriculture, skills development can help improve earnings and job prospects as much as in any other industry.

3.3. Reforms to increase the efficiency of public expenditures

As the population ages, public expenditures on pensions, health, and long-term care are expected to increase. Given the rapid pace of aging, and in the context of being relatively low-income, Vietnam will need to pursue a multi-pronged approach to strengthen service delivery while meeting rising

demand. Older people tend to consume more health care as illnesses, chronic diseases, and hospital visits become more frequent in old age, with health care demand tending to decline only at a very old age. Demand for long-term care tends to increase after people turn 65 years of age, then further increases steeply after they turn age 80. Only the old can benefit from old-age pensions.

The Japanese experience with introducing aging-related policies in these areas is instructive. This experience is described in Box 1.

Box 1. Japan Aging Policies

In Japan, policies targeting the elderly were established in the 1960s and proceeded to evolve in subsequent decades as the population began to age rapidly. The population was still relatively young in the 1960s, with only six percent being age 65 or above. Life expectancy stood at 68 years for men and 73 years for women. Nearly all older people lived with younger family members, with only 12 percent living alone or with their spouses only. Nearly one-third of the population lacked health insurance, and 55 percent of households receiving public assistance were doing so due to illness.

To address these issues, the government launched universal health insurance in 1961 by expanding the area-based program for the informal population nationwide. However, household health care costs could still be significant, with co-payments of 50 percent for dependents and the informal population. In the same year, a universal pension was attained by creating the pension insurance program for the informal population, in addition to the existing formal sector pension programs. In 1963, the government passed the Elderly Welfare Act, which established tax-funded care services for older people, including nursing homes and “home helpers.”

Social security programs were enhanced in the 1970s, as life expectancy jumped significantly and the elderly population grew steadily. Nearly eight percent of the population was age 65 or above, and life expectancy reached 72 years for men and 77 years for women. More and more older people were choosing to live by themselves, with 22 percent living alone or with spouses. In 1973, the government abolished co-payments for older patients (those age 70 or above), leading to a considerable rise in visits to health care facilities and social admissions (stays in a hospital without a major medical issue). Insufficiency of personal and social care services to meet the needs of elderly persons was in the background. Health care spending by the elderly continued to rise throughout the decade, with the ratio to health care spending by the young jumping from 2.4 in 1971 to 4.0 in 1977. In 1973, the government raised the protection level of pension programs by starting to index benefits to inflation and, for the formal sector programs, introducing the revaluation of past earnings.

In the 1980s, the government sought to make health care spending more efficient and sustainable, rationalizing social protection programs and adjusting for risk. Life expectancy continued to climb, to 75 years for men and 81 years for women, and over 10 percent of the population was age 65 or above. Nearly one-third of the elderly were living alone or with spouses. In 1983, the government re-introduced co-payments for older patients and introduced an age-risk adjustment between insurance programs in the formal and informal sectors. In the 1985 pension reform, the government established the basic pension program as a flat-rate part common to the formal and informal sector programs to enhance the stability of pension programs as a whole. Efforts were made to improve the quality of aged care services, with the establishment in 1987 of a national certification program for social and care workers.

With the population continuing to age rapidly, the government significantly expanded infrastructure for long-term care in the 1990s. Nearly 15 percent of the population was age 65 or above, and life expectancy grew further to 77 years for men and 83 years for women. More than 40 percent of the elderly were choosing to live alone or with spouses. In 1990, the government launched a ten-year plan to invest enormous sums in long-term care services. The government also decentralized social welfare spending to the municipal level and began to promote at-home and community-based care. To make public buildings more accessible to the elderly, the government passed the Act on Promotion of Construction of Accessible Buildings in 1994. That same year, the government also decided to raise the formal sector pensionable age from 60 to 65 years, to be implemented gradually over 12 years from 2001.

The 2000s saw a transition to insurance-based financing of long-term care and further reforms to social protection programs. The population continued to age rapidly, with those age 65 and above reaching a fifth of the population, and life expectancy continuing to climb, to 79 years for men and 86 years for women. Over half of the elderly were living alone or with spouses. In 2000, the government began long-term care insurance, transitioning from tax-based to insurance-based financing (with government subsidies). The government continued to promote at-home and community-based care and eased access to public transportation for the elderly by passing the Act on Promotion of Accessible Public Transportation in 2000. Further reforms to social protection programs included an automatic balancing mechanism in the pension scheme in 2004 for its long-term stability under further demographic changes, and a separate health insurance program for those age 75 or above, launched in 2008, to share older population's health costs widely and equitably among different programs and generations.

In the 2010s, Japan continues to reform social protection programs and promote community-based care. The rapid aging of the population continues apace, with 27 percent of the population age 65 or above and life expectancy continuing to inch higher, to 81 years for men and 87 years for women. Nearly 60 percent of the elderly are living alone or with spouses. Since 2012, the government has been carrying out a comprehensive tax and social security reform, raising the consumption tax rate, and expanding and stabilizing childcare, health, long-term care, pension, and employment programs. The government continues to promote community-based integrated care. The goal is to allow older people to “age-in-place” by receiving coordinated services in housing, health care, nursing care, care prevention, and social participation from within the community.

Source: JICA 2019.

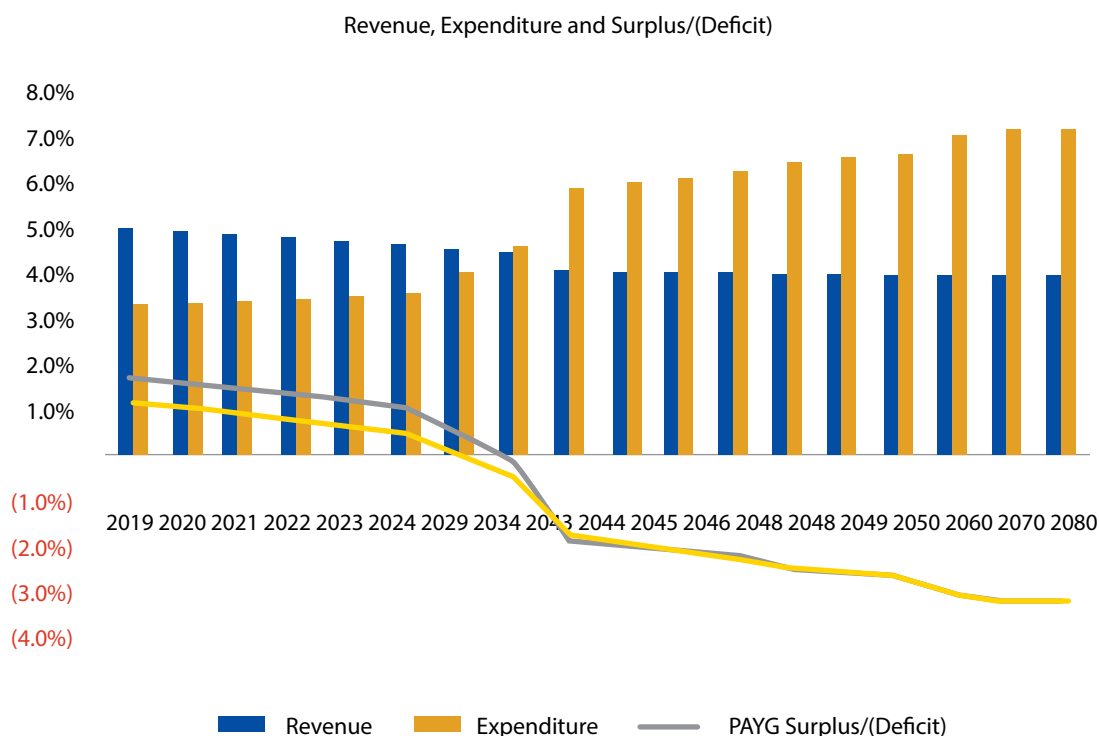
3.4. Pensions

Vietnam has an ambitious goal of reaching 50 percent coverage of its formal pension scheme by 2020, but it will likely be a struggle without greater policy innovation and public spending. The current coverage of around 22 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. The 2014 Social Insurance Law amendments allow

for a matching contribution approach for informal sector workers to incentivize their participation in social security, but the match is very modest and it is too early to say whether it will expand coverage significantly. Another strategy is to gradually lower the age for social pension eligibility from the current 80 years, which is very high. This strategy has already been proposed by policymakers in Vietnam, but not yet financed.

The pension system faces two major interrelated challenges: a coverage gap and the unsustainable finances of the Vietnam Social Security (VSS) pension scheme. Around one-quarter of the elderly are estimated

Figure 8. Vietnam: Projected spending, revenues, and deficits in VSS 2019-2080



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

Source: World Bank PROST projections. (See World Bank 2010.) to have received a contributory pension in 2018, meaning that more than three-fourths of the elderly did not (although those over age 80 and a small share of the elderly 65-79 deemed to be poor receive a small social pension funded by the central government). The non-contributory pension is a response, but the program in its current form kicks in too late in life and with a benefit that is too small to have more than a marginal impact. 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 (Figure 1). 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. 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.

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 in or move to the informal economy. This can be achieved by integrating the non-contributory and contributory elements of the scheme.

A pension system consisting of four parts is proposed: (i) a reformed VSS contributory pension for formal sector workers, (ii) a simplified and more innovative scheme for informal sector workers that draws on more generous budgetary subsidies, (iii) a social pension providing a more adequate income floor at a younger age to those without sufficient formal pension benefits, and (iv) an expanding private pension system for those who can afford to save more. Policymakers will have to decide how to strike a balance among these four elements, as there will be trade-offs in how spending will be allocated among them and their distributional and inter-generational incidence, and sequencing will be essential. 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. The four elements of a future proposed pension system are summarized below.

(i) Reform the formal sector contributory system (VSS) to make it financially sustainable. This must be completed before the VSS can safely expand its coverage, to avoid dramatically increasing long-run deficits. A number of these measures are anticipated, and adopting them in the planned amendments to the Social Insurance Law is a pressing priority. Financial balance of the pension system can be achieved by:

- **Gradually increasing the official retirement ages and closing the retirement age gender gap.** Steadily raising (by 4-6 months per year) and equalizing the retirement age 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 be initiated as soon as possible.
 - **Reducing the financial incentives for early retirement.** The conditions for receiving 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.** Recent measures expanding the base for contributions beyond participants’ basic salary (to include allowances, bonuses, and other compensation) are a welcome step. 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. 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.
- (ii) Reform the existing matching contributory scheme to design a more subsidized and dedicated pension scheme for informal workers, with the aim of increasing coverage of the social insurance system.** 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.** The points at which informal workers 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.
- **Provide stronger financial incentives for workers to make contributions toward their pension.** 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).³³ Contribution rules should also be simplified to acknowledge and accommodate irregular 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 deliver the costs and efficiency to informal sector workers that are usually only available for the better-off.

(iii) **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.

(iv) **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 retirement. To make the current private pension pillar successful, a robust supervisory 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.

It will also be important to 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 also to gradually add 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 task of setting overall investment strategies and rules and the task of managing day-to-day investments.

³³ See Holzmann et al. (2014) and Holzmann et al. (2020) for global reviews of matching defined contribution (MDC) pension schemes.

3.5. Health services

Given Vietnam's current demographics, the development of a new medium-term health-care strategic framework requires a double focus on: (i) preparing the younger cohorts to enter their later ages in good health and (ii) ensuring the social inclusion of older persons and opportunities to lead a dignified, healthy, active, and independent life. Actions will be needed throughout the life cycle, from the antenatal period 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. It is particularly important to screen people in different age groups or risk profiles to detect diseases and/or risk factors early, which 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).

Vietnam's health care system needs to respond to the epidemiological transition. The health delivery system will require a fundamental reorientation toward more emphasis on primary care and reduced reliance on hospital care in order to manage the increase in NCDs exacerbated by aging. The health system also needs to be prepared to deal appropriately with the complexities of disease in older people, as the needs of older persons are more complex than those of most younger people. To this end, in addition to improving primary health services, the system will need stronger coordination among health providers, strengthened health promotion and illness prevention in urban settings, and implementation of effective cost containment and quality improvement measures. The dominant fee-for-service provider payment system should be replaced with a diagnosis-related group-based system, which has a proven track record internationally for containing the costs of inpatient care. Reforms of human

resource policies and programs for the health sector are also needed, requiring new graduate and post-graduate training programs for general practitioners as well as retraining of existing cadres. Reorientation to primary care and case management will also benefit from reforms in provider payment mechanisms for health services, strengthened gate-keeping modalities to control unnecessary hospital usage and admissions, and improved coordination of care across levels of the health system. In addition, efficiency improvements will be needed in areas such as pharmaceutical procurement and prescription practices.

To address existing gaps and challenges in both health care policy and implementation, some specific measures to develop people-centered integrated health care systems could be considered. The reforms, which are summarized briefly below, cover the areas of policy and governance, health service delivery, health financing, and empowerment of households and individuals.

- **Policy and Governance.** First, intersectoral cooperation should be prioritized and supported, addressing issues such as pollution, prices of harmful/unhealthy goods and products (such as tobacco and alcohol), 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 second important priority is to improve accountability and oversight. A stronger accountability mechanism that includes both government oversight and patient/citizen oversight is needed. Ensuring effective monitoring of performance, implementation, and outcomes across the board will also be important. 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. Finally, a critical overarching

change 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 financial interventions.

- **Health Service Delivery.** First, building capacity of health workers as well as non-medical caregivers is a key priority. Capacity building for health workers should help them respond to the healthcare needs of older persons more effectively, while support for household members and other non-medical caregivers should include training to help increase their effectiveness as well as respite when the burden of care becomes overwhelming. A second priority is to increase the scale and effectiveness of public health communication, boosting communication efforts at all ages and in multiple settings and channels to increase health literacy. Third, reforms are needed to develop more effective disease screening and primary health care. Clear technical guidelines are needed for disease screening that takes into account cost-effectiveness and targets higher-risk groups. Another important intervention involves scaling up effective models of primary health care that are being piloted at the CHS and regional polyclinics. Fourth, integration and streamlining of the healthcare delivery system is critical, including organization of upward and downward referral networks, improved integration of curative and preventive services, and integration of palliative and end-of-life care into care programs. Finally, expanding expertise in geriatric medicine capable of managing healthcare needs of older persons, including neurological diseases (like dementia and Alzheimer’s disease, among others) is necessary. Notably, the COVID-19 health crisis may also have longer-term implications for health service delivery: as discussed in the World Bank Vietnam COVID-19 Policy Update, with the sudden shift away from doctor’s offices in many parts of the globe, some are wondering whether the adoption of telemedicine will

continue post-pandemic and how such a shift would impact worldwide health markets.

- **Health Financing.** Health financing priorities should include targeted reforms to promote healthy choices, overarching shifts in budget allocation mechanisms and health worker remuneration, and lowering of financial barriers to care for older individuals. Improvements to health care service provision efficiency should be guided by data, allocate financing appropriately, and guarantee affected communities a voice. Finally, gaps in health financing can be filled through effective and transparent public-private partnerships.
- **Households and Individuals.** Government programs and reforms at a systemic level should be supported by programs empowering individuals and households 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 increasing knowledge to recognize symptoms and disease in the households. Efforts should 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.

3.6. Elderly care

The traditional informal family-based (familial) care model is increasingly strained by urbanization, migration, demography, and other economic and social factors. As life expectancy increases but a longer life is accompanied by prolonged periods of frailty and disability, if elderly care is not widely available, public and private costs will be incurred through the restricted labor market participation of adult familial caregivers, especially women, and increased expenditures on medical/health care.

Public policies should not discourage the intergenerational social contract which is based

on familial provision 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. What is important in terms of public policy is to give families 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. Families with frail elderly can then weigh 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.

Self-help groups are envisaged as the backbone for care provision. 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.

At the same time, in line with increased needs and the growing middle class, the effective demand for formal care will increase. 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, and 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.

To build a well-functioning market for elderly care services where individuals can find services that satisfy their needs, preferences, and resource constraints, Vietnam should consider the following actions:

- **Develop a strategy for aged LTC.** The strategy should spell out the respective roles of the state, non-state 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 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.** In terms of community- and home-based care, Older People's Association branches and ISHCs can be valuable assets. Vietnam already has 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. Finally, sustainable financing mechanisms should be designed to make care services—and especially

aged care services— affordable for those who need it.

- **Strengthen government regulatory and oversight capacity to ensure that 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.” 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. This transition requires that the government move 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.
- **Encourage private sector participation, starting with two specific models.** One of these models would open existing public welfare homes to self-paying patients and provide these patients with enhanced quality services. These welfare homes will continue to serve social protection beneficiaries and receive government support to do so. This model is widely used in China and has been implemented in several facilities in Vietnam. Another model is utilizing government buildings and other fixed assets to develop concessional arrangements with private providers that operate them as elderly care facilities. This model is widely used in Singapore and is increasingly used in China.
- **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 implementation should be accelerated. New models of training will be needed to meet emerging demand for new or adjusted skills across the delivery network, as well as capacity building for families and community volunteers who wish to provide home- and community-based services. Human resources to deliver adequate and quality respite care services also requires attention. In order for the government to ensure oversight of the delivery and quality of vital social services, a critical cadre of government staff is needed to enforce the state-decreed standards of provision of public services.
- **Have a continuous dialogue on government responsibilities for coverage and financing.** This is a continuous process, and political economy and societal preferences are important.



4. CONCLUSIONS AND POLICY IMPLICATIONS

The unwinding of Vietnam's demographic dividend will have profound medium to long-term macroeconomic implications. Labor-force dynamics will impact 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.

Improvements in labor productivity, public financial management, and public service delivery can help mitigate the potential negative impacts tied to aging. 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 sector than in the agricultural sector). 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. Taking advantage of the remaining demographic window of opportunity and building on the strength of the aging workforce would be key policies.

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.

The impacts of an aging population will be felt in terms of both fiscal revenues and expenditures, and pressure on 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 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 the 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.

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 demand. 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.

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