Some Policy Issues in National Health Insurance Finance

Young-Seok Shin
Senior Research Fellow, KIHASA

1. Introduction

With its reserves totaling KRW20.8 trillion (2017), the National Health Insurance (NHI) is financially at its most stable since its introduction. However, the current government's healthcare program—"MoonCare," after President Moon Jae-in—is estimated to require by 2022 a 3.2-percent increase per annum in the contribution rate and an additional KRW10 trillion channeled from the NHI reserves, which, taken together, add up to KRW30.6 trillion. To make the NHI sustainable would involve increasing the efficiency of its reimbursement expenditure and stabilizing its revenue base. The revenues of the NHI come from contributions (87 percent), government subsidies (12 percent), and other sources (1 percent).

The fact that the NHI is the only one among all Korean social insurance schemes whose financial operations are administered according to the non-fund accounting rules of its own remains a controversial issue. Proponents of "convert-reserve-into-fund" argue that if operated on a fund accounting basis, the NHI would be subject to the Framework Act on Fund Management and hence to National Assembly scrutiny, and therefore become more transparent in its financial operations. On the other hand, those against this idea point out that the NHI, short-term as it is in nature, should remain flexible in its management and maintain its expertise and special status, especially when making contracts with stakeholders. This study is focused on discussing the appropriate size of the NHI reserve and whether or not it should be converted into a fund.

Before moving on to discussing the financing of the NHI, we need to understand how much Koreans are paying in taxes and social insurance contributions.

[Table 1] Public burden ratio for selected OECD countries (in %)

	2012			2013			2014			2015			2016	Yearly increase in PB
	PB	TB	SSC	PB	TB	SSC	PB	TB	SSC	PB	TB	SSC	PB	
KOR	24.8	18.7	6.1	24.3	17.9	6.4	24.6	18.0	6.6	25.2	18.5	6.7	26.3	1.48
USA	24.1	18.6	5.5	25.7	19.5	6.2	25.9	19.7	6.3	26.2	20.1	6.1	26.0	1.92
MEX	13.1	11.0	2.1	13.8	11.6	2.2	14.2	12.0	2.2	16.2	NA	NA	17.2	7.04
DEU	36.4	22.4	14	36.8	22.6	14.2	36.8	22.6	14.2	37.1	22.9	14.2	37.6	0.81
FRA	44.3	27.8	16.5	45.2	28.5	16.7	45.3	28.5	16.8	45.2	28.6	16.6	45.3	0.56
SWE	42.6	32.4	10.2	42.9	32.9	10	42.6	32.9	9.7	43.3	33.6	9.7	44.1	0.87
ITA	43.9	30.8	13.1	44.1	30.9	13.2	43.5	30.7	12.8	43.3	30.3	13	42.9	-0.57
JPA	29.4	17.2	12.2	30.3	18.0	12.3	32.0	19.3	12.7	NA	NA	NA	NA	
OECD	33.3	24.5	8.8	33.6	24.7	8.9	33.9	25.1	8.8	34.0	NA	NA	34.3	0.74

Note: PB—public burden (as % of GDP); TB—tax burden; SSC—social security contributions
Source: OECD Statistics

Korea's public burden ratio in 2016 was 26.3 percent, substantially lower than the OECD average, but higher than the US's. Here, public burden ratio is defined as the sum of tax burden and social security contributions as a share of GDP. Countries with a public burden ratio lower than Korea's include, apart from the US (26 percent), Mexico (17.2 percent), Chile (20.4 percent), Ireland (23 percent), and Turkey (25.5 percent). Those with a public burden ratio of over 40 percent include Denmark (45.8 percent), France (45.3 percent), Belgium (44.2 percent),

Finland (44.1 percent), Sweden (44.1 percent), Italy (42.9 percent), and Austria (42.7 percent).

Over the years between 2012 and 2016, Korea's public burden ratio increased at an annual average rate of 1.48 percent, compared to the OECD average of 0.74 percent. In the same period, the tax burden ratio increased by an annual rate of 0.92 percent while the social insurance contribution rate increased on average by 3.13 percent, most of which is attributed to the increase in the contribution rates for the NHI and the Long-Term Care Insurance.

[Table 2] GDP, tax revenue, tax burden, and social insurance contribution rate in Korea 2012~2016 (in KRW trillion, %)

Year	Current GDP	Gross tax revenue	Tax burden	Social security contribution
2016	1637.40	318.1	19.4	6.9
2015	1558.60	288.9	18.5	6.7
2014	1486.10	267.2	18.0	6.6
2013	1429.40	255.7	17.9	6.4
2012	1377.50	257	18.7	6.1
Yearly increase	4.42%	5.48%	0.92%	3.13%

Between 2015 and 2016, Korea's tax burden rate increased from 18.5 to 19.4 percent and the social insurance contribution rate from 6.7 percent to 6.9 percent. Social welfare expenditure is likely to increase as plans are in the works to introduce child allowance, increase old-age basic pension payments, and expand NHI coverage. The problem with this prospect is that as the growth potential weakens as it does with the declining productive population, it will become increasingly difficult to finance these plans with taxes.

2. Government subsidization

For every year in the past six years, the NHI ran surpluses as revenues outstripped expenditures. Its contribution revenue increased at an annual average rate of 7.03 percent. The amount of its government subsidies also increased, at an annual average rate of 4.86 percent. As a result, the share of contribution revenues, as compared with that of government subsidies, has been growing in NHI finance.

[Table 3] NHI finance in Korea 2012~2017 (in KRW100 million, %)

	2012	2013	2014	2015	2016	2017	Avg. growth rate
Contribution revenue (A)	364,685	393,661	421,803	453,035	486,221	512,151	7.03%
Expenditure (B)	388,035	415,287	439,155	482,281	526,339	572,913	8.10%
Account balance (A-B)	Δ23,350	Δ21,626	Δ17,352	Δ29,246	Δ40,118	Δ60,762	
Government support	53,507	58,072	63,221	70,974	70,974	67,839	4.86%
Subsidies from the General Account	10,073	9,986	10,191	15,185	18,914	19,011	2.37%
Subsidies from the Health Promotion Fund	30,157	36,446	45,869	41,728	30,856	7,077	13.55%
Cumulative balance	45,757	82,203	128,072	169,800	200,656	207,733	

Note: 1) The figures represent cash flows.
2) Government support consists of mandatory subsidies and penalty surcharges collected.
Source: Table 3-202, Public Finance of Korea 2018, National Assembly Budget Office (2018)

Contribution revenues and government subsidies in NHI finance

According to the constitution of Korea, it is part of the state's duty to promote social security and protect the health of all citizens. Thus, while the general public pays contributions into the NHI to finance their general health care needs (including long-term care), there are some areas in health care that require tax financing. For example, the Korean government uses its general tax revenue to finance preventive care, health promotion, emergency care, assisted conception programs for sub-fertile and infertile couples, prenatal and postpartum care, health care for

low-income groups, high-priced treatment for patients with rare and intractable diseases, maternal and child health programs, health care for the aged and the disabled, patient safety and bioethics, health care coverage programs for foreigners and Koreans with overseas residence.

Most countries with social insurance systems channel government subsidies to their national health insurance plans, as it is often the case that contribution revenues alone do not suffice to cover the cost of health care for their populations with increasing proportions of the elderly. In Japan, subsidies accounted for 38.8 percent of health care insurance revenues in 2015[1]. In 2017, 22.9 percent of Taiwan's National Health Insurance revenue came from government subsidies[2]. Germany's government subsidies as a share of the public health insurance revenue were as little as 6.3 percent in 2017[3], while in the same year in France contributions constituted less than half (44.8 percent) of the revenue[4].

[Table 4] Public health insurance finance in Germany 2006~2017 (in EUR100 million)

		2009	2010	2011	2012	2013	2014	2015	2016	2017	
Gross expenditure		1669.8	1703.4	1790.0	1854.8	1920.0	1996.7	2086.3	2205.4	2300.3	4.09%
Gross revenue		1645.8	1745.9	1842.8	1890.5	1925.1	1985.3	2061.7	2196.7	2295.6	4.25%
	Contributions	1572.6	1590.5	1691.2	1752.0	1811.3	1881.3	1847.9	2058.2	2152.0	3.98%
	Subsidies	71.1	116.6	131.4	138.4	113.7	103.9	113.8	138.6	143.6	9.18%
	Contributions/ Subsidies	4.52%	7.33%	7.77%	7.90%	6.28%	5.52%	6.16%	6.73%	6.67%	
Current account balance		-24	42.5	52.8	35.7	5.1	-11.4	-24.6	-8.7	-4.7	

Source: www.bundesversicherungsamt.de 2012,2015, 2017

[Table 5] Public health insurance finance in France 2011~2017 (in EUR million)

		2011	2012	2013	2014	2015	2016	2017	
Gross expenditure		156,764	160,894	164,802	168,307	173,202	199,367	206,310	5.3%
Gross revenue		148,167 (100%)	155,042 (100%)	158,015 (100%)	161,786 (100%)	167,446 (100%)	194,585 (100%)	201,422 (100%)	6.0%
	Insurance contributions	70,869 (47.8%)	72,577 (46.8%)	74,016 (46.8%)	76,067 (47.0%)	77,567 (46.3%)	87,273 (44.9%)	90,267 (44.8%)	4.6%
	Government subsidies	1,082 (0.7%)	1,066 (0.7%)	1,011 (0.6%)	949 (0.6%)	1,157 (0.7%)	1,577 (0.8%)	3,049 (1.5%)	30.3%
	General social contribution (CSG)	52,897 (35.7%)	55,018 (35.5%)	55,428 (35.1%)	55,433 (34.3%)	57,051 (34.1%)	70,228 (36.1%)	71,152 (35.3%)	5.8%
	Earmarked taxes	18,734 (12.6%)	21,444 (13.8%)	21,700 (13.7%)	24,235 (15.0%)	26,024 (15.5%)	29,635 (15.2%)	31,056 (15.4%)	11.0%
	Transfer revenue	2,412 (1.6%)	2,628 (1.7%)	2,739 (1.7%)	3,116 (1.9%)	3,215 (1.9%)	3,860 (2.0%)	4,108 (2.0%)	14.9%
	Other revenue	2,172 (1.5%)	2,307 (1.5%)	2,739 (1.7%)	3,116 (1.9%)	3,215 (1.9%)	3,860 (2.0%)	4,108 (2.0%)	14.9%
Current account balance		-8,597	-5,852	-6,787	-6,521	-5,756	-4,782	-4,888	-7.2%

Source: Commission des Comptes de la Sécurité sociale, 2014, 2016, 2018

[1] www.mhlw.go.jp
[2] National Health Insurance Statistics, 2018
[3] www.bundesversicherungsamt.de 2012,2015, 2017
[4] Commission des Comptes de la Sécurité sociale, 2014, 2016, 2018

[Table 6] Public health insurance finance in Japan (in JPY100 million)

	Public health expenditure	Government subsidies			% of government subsidies	Contribution revenue	Other	
		Total	National treasury	Local governments			Total	Out-of-pocket payments
2006	331,276	121,746	82,367	39,379	36.75%	161,773	47,757	47,555
2007	341,360	125,744	84,794	40,949	36.84%	167,426	48,190	47,996
2008	348,084	129,053	87,234	41,819	37.08%	169,709	49,323	49,141
2009	360,067	134,955	91,287	43,668	37.48%	175,032	50,080	49,905
2010	374,202	142,610	97,038	45,572	38.11%	181,319	50,274	47,525
2011	385,850	148,120	100,303	47,819	38.39%	187,518	50,212	47,375
2012	392,117	151,500	101,134	50,366	38.64%	191,203	49,414	46,579
2013	400,610	155,319	103,636	51,157	38.77%	195,218	50,072	47,076
2014	408,071	158,525	105,369	53,157	38.85%	198,740	50,806	47,792
2015	423,644	164,715	108,699	56,016	38.88%	206,746	52,183	49,161
	3.1%	2.9%	3.6%	4.7%		3.1%	1.0%	0.4%

Source: Health and Welfare Statistics Association (2015), Ministry of Health, Labor and Welfare (www.mhlw.go.jp)

[Table 7] Public health insurance finance in Taiwan (in TWD million)

	Gross revenue	Contribution revenue	Government subsidies			
			Overall	Central government	Local government	Municipalities
2010	431,999 (100%)	323,826 (75.0%)	108,172 (25.0%)	87,588 (20.3%)	15,218 (3.5%)	5,367 (1.2%)
2011	464,776 (100%)	347,763 (75.0%)	117,013 (25.0%)	79,874 (17.1%)	34,119 (7.3%)	3,020 (0.6%)
2012	475,378 (100%)	358,982 (75.5%)	116,396 (24.5%)	101,839 (21.4%)	13,325 (2.8%)	1,233 (0.3%)
2013	462,382 (100%)	352,001 (76.1%)	110,381 (23.9%)	110,289 (23.9%)	95 (0.0%)	-3 (0.0%)
2014	473,730 (100%)	362,526 (76.5%)	111,204 (23.5%)	111,141 (23.5%)	64 (0.0%)	-1 (0.0%)
2015	475,550 (100%)	362,911 (76.3%)	112,640 (23.7%)	112,642 (23.7%)	-3 (0.0%)	0 (0.0%)
2016	463,336 (100%)	354,860 (76.6%)	108,476 (23.4%)	108,479 (23.4%)	-3 (0.0%)	0 (0.0%)
2017	470,906 (100%)	362,930 (77.1%)	107,976 (22.9%)	107,979 (22.9%)	0 (0.0%)	0 (0.0%)
Yearly growth rate	2.8%	3.3%	1.4%	3.6%	-10%	-10%

Source: National Health Insurance Statistics, 2018

[Table 8] Household tax burden and health insurance contribution 2016, by income decile (in KRW10 thousand)

	Household income deciles									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Tax	2.59	1.58	2.76	3.29	5.31	12.79	12.08	17.28	22.93	95.89
Health insurance contribution	5.58	2.44	4.23	4.43	7.42	10.93	10.43	12.39	16.04	25.23
Contribution/Tax	2.15	1.54	1.53	1.35	1.40	0.85	0.86	0.72	0.70	0.26

Note: Tax includes comprehensive income tax, comprehensive real estate tax, Class A payroll tax, property tax, automobile tax, environmental improvement charge

The ratio of NHI contributions to income tax in Korea is higher for low and middle income earners than higher income earners. The way to make the NHI more equitable would be to increase government subsidies for it rather than increasing the contribution rate. Moreover, as

the income of the self-employed is in general not accurately monitored, hikes in insurance contribution rate are likely to face resistance from wage workers.

Too much reliance on social insurance contributions could reduce employment levels and growth. A more growth-friendly approach would be to increase the NHI's reliance on tax revenues, while reducing the proportion of payroll-based contributions in the NHI's revenue (currently over 80 percent). A 2009 OECD report ["Social Health Insurance vs. Tax-Financed Health Systems—Evidence from the OECD" (Wagstaff)] has argued that a contribution-financed social health insurance scheme reduces the formal-sector employment by 8~10 percent and total employment by 5~6 percent. Indirect tax mechanisms such as value added tax (VAT) affect employment less aversely than does a payroll tax like social insurance contribution. Korea's tax wedge is among the lowest in OECD countries. Taxes and social security costs have been kept low in an attempt to stimulate economic growth. In these circumstances, there is room for replacing a segment of the NHI's contribution revenue with subsidies. For example, a 5-percentage-point reduction in the NHI contribution rate can be offset by increasing the VAT rate by 3.5 percentage points from the current 10.0 percent.

General revenue-financing

The Special Act on Sound Finance of National Health Insurance, introduced in 2002, was the first legal framework to stipulate how much should be given in subsidies to the NHI. The Special Act was expired in 2006, and the NHI has since 2007 been subsidized in part by general revenues (National Health Insurance Act) and in part by the National Health Promotion Fund (National Health Promotion Act). The subsidies coming from the two sources are supposed to add up to 20 percent (12 percent from general revenues and 6 percent from the Health Promotion Fund) of the total amount of contribution revenues anticipated for every year until 2022. The amount of government subsidies allocated last year to the NHI was KRW6.1247 trillion, down by KRW317 billion from the preceding year.

[Table 9] Changes in the legal framework mandating financial support for the NHI

<table>
<tr><td rowspan="2"></td><td rowspan="2">Period of application</td><td rowspan="2">Legal base</td><td colspan="3">Quantity and source of support</td></tr>
<tr><td>Overall (A+B)</td><td>National Treasury (General Account: A)</td><td>Health Promotion Fund (Earmarked tobacco taxes: B)</td></tr>
<tr><td>Before the Special Act</td><td>July 2000~2001</td><td>Para. 3, Article 67, National Health Insurance Act</td><td colspan="3">Within its budgetary limits, the state provides support a part of the contribution a locally-insured person is to pay.</td></tr>
<tr><td rowspan="3">After the Special Act</td><td>2002~2004</td><td rowspan="2">Article 15, Special Act on Sound Finance of National Health Insurance</td><td>50% of local finance</td><td>40% of local finance</td><td>10% of local finance (within 97% of the anticipated amount of Fund revenue</td></tr>
<tr><td>2005~2006</td><td>50% of local finance</td><td>35% of local finance</td><td>15% of local finance (within 65% of the anticipated amount of Fund revenue)</td></tr>
<tr><td>2007~2022</td><td>Article 108, National Health Insurance Act; Para. 2, Addenda, National Health Promotion Act</td><td>20% of anticipated contributio n revenue</td><td>14% of anticipated contribution revenue</td><td>6% of the anticipated amount of contribution revenue (within 65% of the anticipated amount of Fund revenue)</td></tr>
</table>

Note: Earmarked Tobacco Tax was introduced in 2002; since 2007, the subsidies the NHI receives from the National Health Promotion Fund are not subject to allocation to localities and workplaces.

These two legal frameworks rather vaguely and loosely stipulate that the government "shall subsidize an amount equivalent to 20 percent of the expected amount of contribution income for the relevant year." As a consequence, the gap between the promised amount and the amount actually subsidized has been growing since 2007, totaling a cumulative of over KRW18 trillion in 2017. During this period, the ratio of government subsidies to NHI contribution revenues averaged as low as 15.45 percent.

[Table 10] Government subsidies to NHI since 2007 (in KRW100 million)

	Government subsidies	Real-term contribution revenues	
2007	36,718	43,457	6,739
2008	40,262	49,946	9,684
2009	46,786	52,332	5,546
2010	48,561	56,915	8,354
2011	50,283	65,844	15,561
2012	53,432	72,780	19,348
2013	57,994	78,064	20,070
2014	63,149	83,188	20,039
2015	70,902	88,660	17,758
2016	70,917	95,186	24,269
2017	67,747	100,834	33,087
2007~2017 total	606,751	787,206	180,455

Note: 1) Government subsidies represent National Treasury subsidies plus financial support from the National Health Promotion Fund
2) Real-term contribution revenues are based on closing of accounts

The National Health Promotion Act places a ceiling of 65 percent of the National Health Promotion Fund revenue (earmarked tobacco tax) on subsidies to the NHI. Consequently, the actual subsidies the NHI received from the Fund in the years from 2007 to 2017 averaged 3.8 percent of its anticipated contribution revenue, instead of the promised 6 percent.

[Table 11] Subsidies received from the National Health Promotion Fund (in KRW100 million)

	NHPF (earmarked tobacco tax)			Ratio of subsidies received to the amount of anticipated NHI contribution revenue
	Amount received (A)	Amount stipulated (B): 65% of anticipated NHP revenue	A/B	
2007	9,676	10,239	94%	4.5%
2008	10,239	10,239	100%	4.1%
2009	10,262	10,262	100%	3.9%
2010	10,631	10,630	100%	3.7%
2011	9,568	10,630	90%	2.9%
2012	10,073	10,630	95%	2.8%
2013	9,986	10,198	98%	2.6%
2014	10,191	10,191	100%	2.5%
2015	15,185	15,185	100%	3.4%
2016	18,914	18,914	100%	4.0%
2017	19,011	19,936	95%	3.8%

Source: National Health Insurance Service

Issues concerning government subsidies to the NHI

The amendments in 2017 to both the National Health Insurance Act and the National Health Promotion Act have extended the time-frame for government subsidy provision to the NHI to December 31, 2022. But such amendments are regarded as a stopgap. Moreover, the legal basis that prescribes government subsidies to the NHI is, as some of its constituent phrases make it out to seem, lacking in binding force (Government shall subsidize the NHI "within budgetary

limits" and the National Health Promotion Fund "may provide" financial support to the NHI—Article 108, National Health Insurance Act).

Furthermore, the estimates of anticipated contribution revenue, which serve as the base for deciding how much the NHI will get in subsidies, turned out to have been consistently lower than the actual amount collected. Also, as suggested above, it is next to impossible for the subsidies coming from the National Health Promotion Fund, limited as they are to 65 percent of the Fund's expected revenue, to make up the stipulated 6 percent of the NHI's ever-growing contribution revenue.

Increase government subsidies to the NHI?

For: The argument for increased government subsidies to the NHI can be summarized as thus: The National Treasury's financial support to the NHI should increase to an extent corresponding to the increases in its coverage. Or else, considering the continued increase in NHI coverage and the rapid aging of the population, the National Treasury should, if nothing else, keep its financial support at the stipulated rate. The NHI as a social insurance scheme is responsible for a diverse range of programs, including health checkup, prenatal and postpartum care benefits, and insurance contribution support for the low-income population. As the incumbent government is committed to expanding public health coverage to an unseen extent, government subsidies to the NHI will need to increase.

Against: If the ongoing aging of the population and a declining economic growth rate are anything to go by, and given how rapid the pace of growth has been for NHI finance, government subsidies may continue to grow to an extent detrimental to national finance. From the perspective of fiscal management, it's inefficient to increase financial support from the deficit-running National Treasury to a social insurance scheme with a reserve of KRW20.8 trillion.

How to improve government subsidies to the NHI

Social welfare programs are financed through general tax, contribution and out-of-pocket payment. Public assistance in particular is financed as a rule by general tax revenues. Social insurance is in large part contribution-financed and may rely to a lesser extent on other financing resources. How a certain social welfare program should be financed is a decision concerning the needs of the population for which it is intended. How the financing burden should be shared between different funding sources is a highly-political process that mirrors the social dynamics of the time. Tax-financing, while having a strong redistributive impact, may not be an effective financing method. Contribution-financing, as it may involve only those who can pay contributions, is considered less tax-resistant. Out-of-pocket payment is thought to be useful in curbing excessive service use.

The decision as to in what amount subsidies will be given to the NHI must be made based on the principle that the ultimate managing responsibility for social security programs rests with the government. Also, the subsidies should be provided in an amount that will help increase the sustainability of NHI finance and sharpen the corporate sector's international competitive edges, while still maintaining the soundness of national finance.

Option 1

-Maintain the current scale of subsidy provision
-Delete the phrases that set time limits for the provision of financial support.
-Eliminate uncertainties inherent in the phrase "20 percent of the amount of anticipated revenues from insurance contribution for the relevant year" by replacing it with "20 percent of the amount of revenues from insurance contribution for the year before the preceding year."
-Provide subsidies to the NHI from the National Treasury (15 percent of the amount of revenues from insurance contribution for the year before the preceding year), the earmarked

tobacco tax revenue (3 percent) and the National Health Promotion Fund (2 percent).

Option 2

-Tie the rate of increase in support to the three-year average rate of increase in general revenues

-Recoup shortfalls by indirect taxation (social-purpose tax)

3. Increasing the transparency of NHI finance

Korea's national budget (consolidated public-sector finance) is composed of one general account, 19 special accounts, 67 funds (6 social insurance funds, 5 account-based funds, 48 project-based funds, and 8 financial aid funds). The current law allows the NHI and the Long-term Care Insurance (LTCI) to administer their financial affairs, under the control of the Minister of Health and Welfare, with their own accounts, without having to go through National Assembly scrutiny. The revenues and expenditures of the other social insurance schemes—National Pension (NP), Government Employees Pension (GEP), Teachers' Pension (TP), Military Pension (MP), Employment Insurance (EI), and Worker's Compensation Insurance (WCI)—are administered through funds, which, as part of the consolidated public-sector finance, should follow the general procedure of financial planning and settlement and whose financial operation is subject to National Assembly deliberation and approval.

[Table 12] Social insurance finance in Korea

	Fund or non-fund	Finance type	Included in the consolidated public-sector finance (yes or no)	Responsible Ministry	Insurer/Managing entity
NHI	National Health Insurance Account		No	Ministry of Health and Welfare	National Health Insurance Service
LTCI	National Health Insurance Account		No	Ministry of Health and Welfare	National Health Insurance Service
NP	Fund	Social insurance fund	Yes	Ministry of Health and Welfare	National Pension Service
GEP	Fund	Social insurance fund	Yes	Ministry of Personnel Management	Government Employees Pension Service
MP	Fund	Social insurance fund	Yes	Ministry of National Defense	Ministry of National Defense
TP	Fund	Social insurance fund	Yes	Ministry of Education	Teachers' Pension Corporation
EI	Fund	Social insurance fund	Yes	Ministry of Employment and Labor	Ministry of Employment and Labor
WCI	Fund	Social insurance fund	Yes	Ministry of Employment and Labor	Labor Welfare Corporation

Source: Table 1-4, Public Finance of Korea 2018, National Assembly Budget Office (2018)

Korea's NHI is a contribution-financed single-insurer system premised on agreement between parties and on the principle of limited government intervention, unlike, for example, the UK's NHS, which, as a tax-financed scheme, is run mostly by the government. The NHI is short-term in nature, keeping to the principle of keeping revenues in line with expenditures (according to which revenues and expenditures are projected and kept balanced on a year-by-

year basis). In that it is predicated on the principle of keeping revenues in line with expenditures, the NHI differs from fund-based social insurance schemes whose aim is to generate profits from their reserves.

[Table 13] National health insurance and in selected countries

		Budgeting process	Other control mechanisms	Government review	Parliamentary deliberation: yes or no
Taiwan	Social insurance	-Ministry of Health submits its global budget plans to the Prime Minister -NHI negotiates on global budget and its allocation -Ministry of Health makes final decisions	Audit by Health Insurance Reimbursement Coordination Committee, etc.	Government is responsible as the ultimate authority	Yes
UK	General taxation	-Parliament makes decisions as to global budget -Relevant agencies compete for budget resources	Independent accounting and audit by CHAI	Regulated by government	Yes
US	Public insurance + private insurance		Federal and state government manage for-profit and not-for-profit health insurance companies	Audit by government	Yes (Medicare)
France	Social insurance	-National Assembly adopts annual national health expenditure targets for -National Assembly deliberate on and decides health budgets	Social health insurance managed Public Sickness Funds by non-governmental organizations	Regulated by government	Yes
Germany	Social insurance	Associations decide contribution rates and service fees for their respective programs	Audit of public sickness funds by financial management boards	Regulated by government	No
Japan	Social insurance	Government and associations decide budgetary matters	Autonomous financial management by associations	Regulated by government	No

Source: "Would it be possible to convert National Health Insurance into a Fund?" *Health Focus News* (December 6, 2017), Mira Choe

For conversion

Proponents of "convert-reserve-into-fund" argue that if operated on a fund-accounting basis, the NHI would be subject to the Framework Act on Fund Management and hence to National Assembly oversight, and therefore become more transparent in its financial operations. In addition, it is appropriate that, as a rule, government finance includes all public sector finances. Thus, the NHI finance should in a broad sense be regarded as part of government finance. Given that the NHI is the largest, expenditure-wise, of all social insurance schemes in Korea, it should be converted into a fund and made part of the consolidated public finance, thus placed

under the supervision of the government, just as are the other social insurance programs, so as to reduce wastage in spending. Once converted into a fund, the NHI will have to be budgeted in advance based on its expenditure needs. That way, Korea's health insurance reimbursement system, currently run on a fee-for-service basis, will shift to one based on a forecast total expenditure.

Against conversion

Allowing the National Assembly to decide on NHI revenues and expenditures (contribution rate and service fees) may, if anything, undermine the soundness of NHI finance, with political interests interfering with decision-making that concerns people's health. In current circumstances where there is no strong mechanism for controlling NHI expenditures, a more urgent issue would be to improve the forecasting of revenues and expenditures. A discussion of the NHI should be centered not on whether it should be converted into a fund but on how to improve the coverage and optimize its reimbursement. As it is a short-term insurance plan, the NHI, with its revenues and expenditures kept balanced on a year-by-year basis, has little need, much less profit motivation, to establish a managed fund of long-term reserves. Also, the NHI should remain flexible in its mostly short-term financial operations, keeping its expertise and special status in making contracts with stakeholders. If controlled by the National Assembly, the NHI will likely be managed in a way that belies the intent embedded in a national health insurance, focusing on constraining its expenditures, not, as now, on ensuring coverage and appropriate reimbursement.

What to do now?

Whether or not to convert NHI finances to a fund has been a moot point among experts and government ministries. Thus, the argument "for conversion" needs to be supplemented with a way to improve the capability of predicting NHI revenues and expenditures, or the introduction of a mechanism—like global budgeting—of sufficient force to control NHI's finances. On the other hand, the argument "against conversion" needs to further consider how to ensure transparency in the NHI.

4. Appropriate level of NHI reserve

Article 38 of the National Health Insurance Act mandates the NHI to set aside an amount equivalent to 5~50 percent of its reimbursement expenditure for each fiscal year. The use of NHI's finances in reserve is limited to meeting the shortfall in reimbursement expenditure. The NHI turned to a surplus in 2006, and since then its reserve has grown year after year, totaling an estimated KRW20.7733 trillion in 2017.

[Table 14] Mandatory health insurance reserves in selected countries

		Upper limit	Sources
Taiwan	Safety Reserve	Covers 1~3 months' reimbursement expenditures	Surplus revenue, arrears, revenues from fund operations, tobacco and alcohol taxes, etc.
Japan	Association-managed Health Insurance Reserve (for large firms)	Up to 3 months' reimbursement expenditures (predicated on the annual average of the past 3 years)	Surplus revenue
	Japan Health Insurance Association Reserve (for small and middle-sized firms)	Up to 1 month's reimbursement expenditures (predicated on the annual average of the past 3 years)	
	National Health Insurance Association Reserve (for high-income self-employed individuals)	Up to 10 percent of the past 3 years' reimbursement expenditures	
Germany	(Health Fund) Current assets	Up to 25 percent of the monthly average reimbursement expenditure	Fixed portions of contribution revenues and government subsidies
	(Health Insurance Association) Mandatory reserve	25~100 percent of monthly average reimbursement expenditure	Surplus revenue
Korea	Mandatory reserve	5~50 percent of reimbursement expenditure for each fiscal year	Surplus revenue

Rationale for reducing the reserve

Some argue that for a system that covers its expenditure out of revenues on a year-by-year basis, the NHI is holding in reserve more than necessary. As the NHI's expenditure grows continuously, the "50-percent-of-total-reimbursement-expenditure" ceiling may as well allow the reserves to grow too large. Also, the NHI used little of its reserve to expand its health coverage.

In defense of keeping the reserve at its current level

Having run a surplus every year since 2011 thanks to a large extent to reduced use of health services and the expenditure rationalization measures that followed the global economic crisis, the NHI is likely to swing to a deficit in 2018. Moreover, as MoonCare, with its significant health coverage expansion afoot, is expected to spend an estimated KRW30.6 trillion over the next 5 years, the NHI reserve is likely to shrink at a rapid clip. The surpluses the NHI has run in recent years may look oversized, but considering the mid- to long-term risks that lie ahead, it's best to keep the reserve at its current level.

Suggested levels of the NHI reserve

Stakeholders differ in where they stand on the reserves and surplus-financing of the NHI. The insured are against contribution rate hikes but demand more coverage. Health service providers want to have service fees increased. And the insurer and the government want to maintain the NHI reserve as mandated by law.

In their study "Improving the Management of Mandatory Reserves for Stable Financing of the National Health Insurance" (2015), Hyun et al. have suggested that the NHI should hold a reserve equivalent to up to 3.6 months' reimbursement expenditure: 1.4~1.7 months' expenditure for reimbursement liabilities; 1.2~1.8 months' expenditure in preparation for an economic downturn; 0.1~0.3 months' expenditure in preparation for major unforeseen events such as an outbreak of infectious disease. A National Audit report for 2017 has revealed that the

Ministry of Health and Welfare plans to manage the NHI in such a way that it can keep holding a reserve equivalent at least to 1.5 months' reimbursement expenditure (KRW10 trillion) for the next 10 years.