Yale Center for the Study of Globalization

UHC Charter Expert Papers

TOPIC OF FOCUS

UHC financing must be public. UHC ideally must be financed by general taxation rather than either compulsory—or even worse, voluntary—social health insurance. Out of pocket payments for health should be out of the question as a primary source of financing.

Cheryl Cashin, Managing Director, Results for Development

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Introduction

Universal health coverage (UHC) is the aspiration to ensure all people in a society receive the quality health services they need without suffering financial hardship.[1] To make sustainable progress toward UHC requires that a country's health financing system routinely generate sufficient resources to expand and sustain access to high-quality health services with financial protection. Evidence and experience have shown that public resources are the most efficient and equitable way to fund health coverage.[2,3] There is ample evidence that payments at the time services are accessed ("out-of-pocket payments" or OOP) negatively affect utilization particularly for the poor, are highly regressive, and can lead to financial hardship and impoverishment.[4] Prepayment into a health insurance pool can reduce access barriers, but voluntary prepayment is also regressive and insufficient to provide universal access to services with financial protection. In fact, no country has attained universal population coverage based on a system of voluntary prepayment.[5] Public funding sources are the most equitable, efficient, and most likely to be adequate to fund UHC.

Within the government resource envelope for health, the mix of sources of funding is also important for achieving a stable resource base and raising funds in the most efficient and equitable way. Governments can raise revenue for the health sector through taxation (national and local general taxes and earmarked taxes), non-tax revenue sources, and development assistance grants. Countries committed to achieving or sustaining UHC rely on multiple sources of revenue, and the mix of sources may be important and may change over time as fiscal and health system challenges change. Most countries rely on some mix of general tax revenues at the national and local government levels, earmarked revenues, and private contributions toward the cost of health care. In general, there is a trend toward greater diversification of revenue sources and a shift toward general tax revenue and away from payroll tax financing, particularly as populations age and a smaller employed cohort has the financial burden for growing non-employed populations.[6] Trends in low-, middle- and high- countries alike confirm that general taxation has emerged as the cornerstone of revenue for successful UHC efforts—that is, those that raise funds equitably, provide universal or near universal population coverage, comprehensive access to high-quality services, and deep financial protection.[7] So UHC requires significant fiscal commitment from governments, which can be challenging given the macroeconomic and fiscal constraints faced by most governments. A combination of improved revenue collection efforts overall, combined with prioritization of health in

the public budget, and well managed expenditure are key to ensuring fiscally sustainable progress toward UHC.[8]

Equity in Health Financing

All potential revenue sources for the health sector involve some trade-offs for the broader economy. All taxes will impose some inefficiency on the economy as they cause people to change their behavior. Taxes that are the least distorting, that is, they have the least impact on individual behavior and economic choices, are those with the broadest base (the most people and corporations contribute) and the lowest rates. Evidence from high-income countries shows that property taxes are least distorting and damaging for growth, followed by consumption taxes, the personal income tax, and the corporate income tax.[9] Taxation of capital income has a potentially strong impact on investment. Similar evidence is not available for low-income countries, however, and the efficiency impact of alternative tax instruments is likely to be highly context-specific depending on the composition of the economic activity and the strength of the institutions.[10]

Taxes also impose different burdens on individuals depending on their income groups. Taxes that have a proportionately higher impact on the incomes of wealthier individuals are considered to be progressive and lead to a more equitable redistribution.[11] A tax worsens equity if it is regressive—that is, if it puts a disproportionate burden on poorer households The net efficiency and equity effects of taxes result from the burden of the tax and any distortions they create in the economy combined with the equity and efficiency effects of the benefits they finance.[12]

What matters is the combined impact of all tax measures and the benefit incidence of the spending they finance. Ghana's health care financing system has been shown to be progressive, driven largely by the progressivity of general taxes, which make up the bulk of revenue sources for the health sector. The national health insurance levy (which is an earmarked portion of the value-added tax) is mildly progressive. Even the premium paid by non-poor informal sector workers is considered progressive because of geographical differentials and the wide range of premium exemptions. There is a large exempt group whose premiums are fully subsidized by the central government. In terms of the net equity of the National Health Insurance Scheme (NHIS) itself, the results are mixed. Some research has shown that the wealthy are up to 50 percent more likely to enroll in the NHIS than the poorest residents.[13] The financial protection effect and the impact on utilization, however, tend to be greater among the poor.[14,15] The incidence of total benefits from both public and private health service utilization, however, is pro-rich. Public sector district-level hospital inpatient care is pro-poor, and benefits of primary-level health care services are relatively evenly distributed.[16]

Private, Non-Compulsory Sources of Health Financing

Out-of-Pocket Payments

Out-of-pocket payments include any payments made by users of health services at the point of use, both cash and in-kind, and includes user fees, other cost-sharing, and informal payments.[17] There is widespread evidence that out-of-pocket payments negatively affect UHC outcomes in multiple ways. First, these payments can pose a barrier to accessing necessary care, particularly among the poor. Second, when individuals do access services, out-of-pocket payments can be catastrophic (consume a large share of a household's budget for other necessities), or even drive a household into, or deeper into poverty. Finally, out-of-pocket payments are well known to be an inequitable source of health funding, with the poor bearing a larger burden as a share of their total income or household expenditure, the poor more likely to forego necessary treatment because of financial barriers, and the poor more likely to face catastrophic and impoverishing effects of these payments. Countries with a higher share of total expenditure coming from out-of-pocket payments consistently fall short of achieving UHC goals.[18]

Access Barriers

The cost of are at the point of service can be an important factor in a household's decision to seek necessary care, although the evidence quantifying these effects is scarce and often of low quality.[19,20,21,22] Studies that do exist show that the possibility of out-of-pocket payments can deter individuals from seeking care at all, or from continuing on with necessary treatment once care is sought.[23,24] A study in on district in Malawi showed the introduction of user fees reduced health center attendance by 68 percent, diagnosis of new malaria cases for children under five by 18 percent and over five by 56 percent, and diagnosis of new HIV cases by 48 percent.[25] The impact of direct costs to patients at the point of service can reduce both necessary and unnecessary care indiscriminately. Utilization of preventive care appears to be particularly sensitive to price at the time of use, and the poor are more sensitive than others.[26] There is some evidence that utilization of services in public facilities is more sensitive to fees than services in private facilities.

Conversely, when financial barriers are removed, utilization of services increases. Evidence consistently shows that utilization of curative services increases abruptly following fee removal, while utilization for preventive services increases more slowly but continues over time.[27] In Burkina Faso, for example, the implementation of a fee exemption policy for children under five resulted in utilization more than doubling (increasing by 133 percent) immediately after the policy was enacted. The effect of the policy was higher in facilities with higher health worker density, indicating the importance of supply-side readiness to complement reductions in demand-side financial barriers. The growth in utilization slowed and stabilized within four years of the policy.[28]

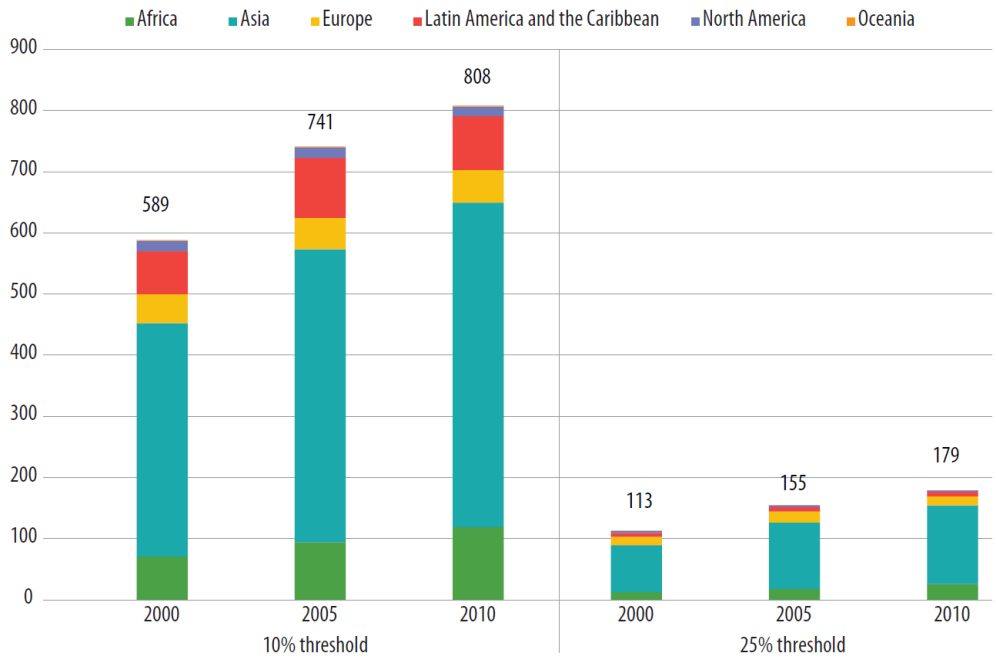
Catastrophic and Impoverishing Payments for Health Care

Many families worldwide suffer financial hardship when they access health services and have to pay out of pocket for those services. These payments can be catastrophic (i.e. exceed a household's

ability to pay as measured by the share of those payments in the household's total spending exceeding a given threshold—10 or 25 percent according to the Sustainable Development Goals monitoring framework), or impoverishing if the health spending drives the household below, or further below, the poverty line.[29]

The most recent UHC tracking report indicates that across countries the mean incidence of catastrophic out-of-pocket spending on health at the 10 percent threshold is 9.2 percent of households (translating into 808 million people globally, or 11.7 percent of the world's population). At the 25 percent threshold, the mean is 1.8 percent (179 million people, or 2.6 percent of the world's population).[30] In terms of regional contribution, Asia makes up the largest share of people facing catastrophic health spending, followed Africa and Latin America and the Caribbean (Figure 1).

Figure 1. Number of People Facing Catastrophic Health Spending by Region, 2000-2010

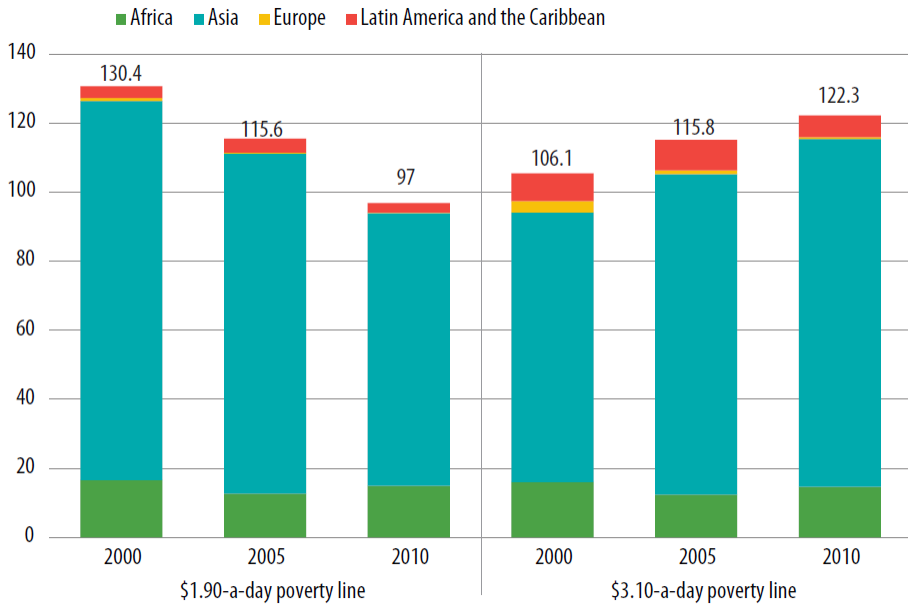


Source: Tracking universal health coverage: 2017 global monitoring report. World Health Organization and International Bank for Reconstruction and Development/The World Bank.

Indicators of impoverishing health spending link to the SDG to end poverty in all its forms everywhere. These indicators are based on international poverty lines--$1.90/day for extreme poverty of $3.10 for moderate poverty.[31] Using these poverty lines, the World Health Organization (WHO) and World Bank estimate that in 2010 1.4 percent of the world's population (97 million people) experienced impoverishing health spending relative to the extreme poverty line, and 1.8 percent of the world's population (122 million people) relative to the moderate poverty line.[32] These numbers have been declining since 2000 for impoverishing expenditure relative to the extreme poverty line (falling from 130 million people), but increasing since 200 relative to the moderate poverty line (rising from 106 million people in 2000) as shown in Figure 2.[33,34] In the case of impoverishing health

expenditures, the Africa region contributes by far the largest total number of individuals in all year according to both poverty lines.

Figure 2. Number of People Facing Impoverishing Health Spending by Region, 2000-2010



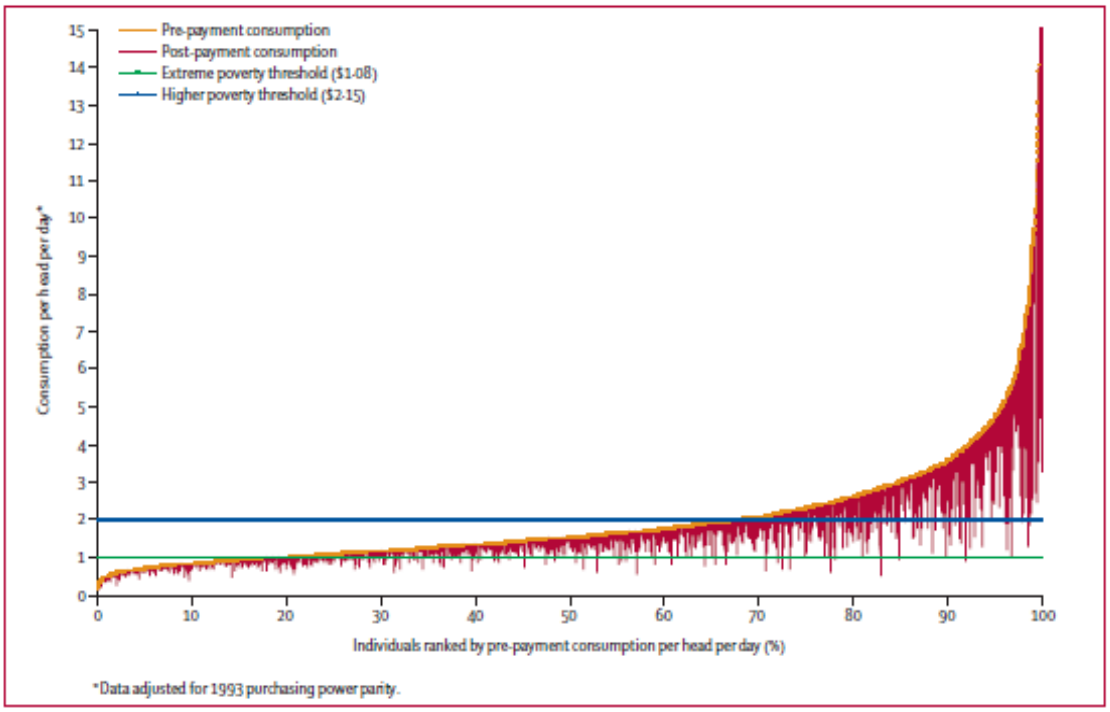
Source: Tracking universal health coverage: 2017 global monitoring report. World Health Organization and International Bank for Reconstruction and Deveplopment/The World Bank.

Out-of-pocket payments for health also exacerbate poverty. Global research shows that estimates of poverty rates increase when household health spending is further subtracted from total consumption. Research from Asia shows that in Bangladesh, China, India, Nepal, and Vietnam, where more than 60 percent of health-care costs are paid out-of-pocket by households, estimates of poverty rates were much higher when out-of-pocket payments were factored in, ranging from an additional 1·2 percent of the population in Vietnam to 3·8 percent in Bangladesh.[35]

The catastrophic and impoverishing effects of out-of-pocket heath spending typically hit the poor and vulnerable the hardest. In Cambodia, for example, the national incidence of catastrophic health expenditure was 4.9 percent in 2014, but for rural households with members seeking medical care, catastrophic health expenditure incidence was 12.3 percent, and the impoverishment rate among the lowest consumption quintile was 15.3.[36]though impoverishing health expenditures are likely to have greater impact on poor households, impoverishing out-of-pocket payments can push even the highest income households into poverty in some countries. In Bangladesh, households in even the highest consumption decile were pushed into poverty following health payments (Figure 2).

There is evidence of impoverishing out-of-pocket health spending even in countries where the entire population is officially covered by a health insurance scheme or by national or subnational health services. Incidence of impoverishing spending is negatively correlated with the share of total health spending channeled through social security funds and other government agencies.[37]

Figure 3. Impoverishing Out-of-Pocket Payments for Health in Bangladesh



Source: van Doorslaer et al. (2006)

Globally, but in low- and middle-income countries in particular, a significant part of overall out-of-pocket health spending goes to purchase medications. In the Asia region, medicines consistently make up over 70 percent of household spending on health.[38] Even countries that have made significant progress expanding population coverage face challenges reducing out-of-pocket payments and the impacts on household financial security when coverage of medicines is inadequate. In Mexico, for example, in spite of the success expanding coverage of the poor through Seguro Popular, the reduction in catastrophic spending has been modest due to continued high spending on medicines.[39] Addressing gaps in coverage and access to medicines is critical to improving financial protection and other UHC goals.

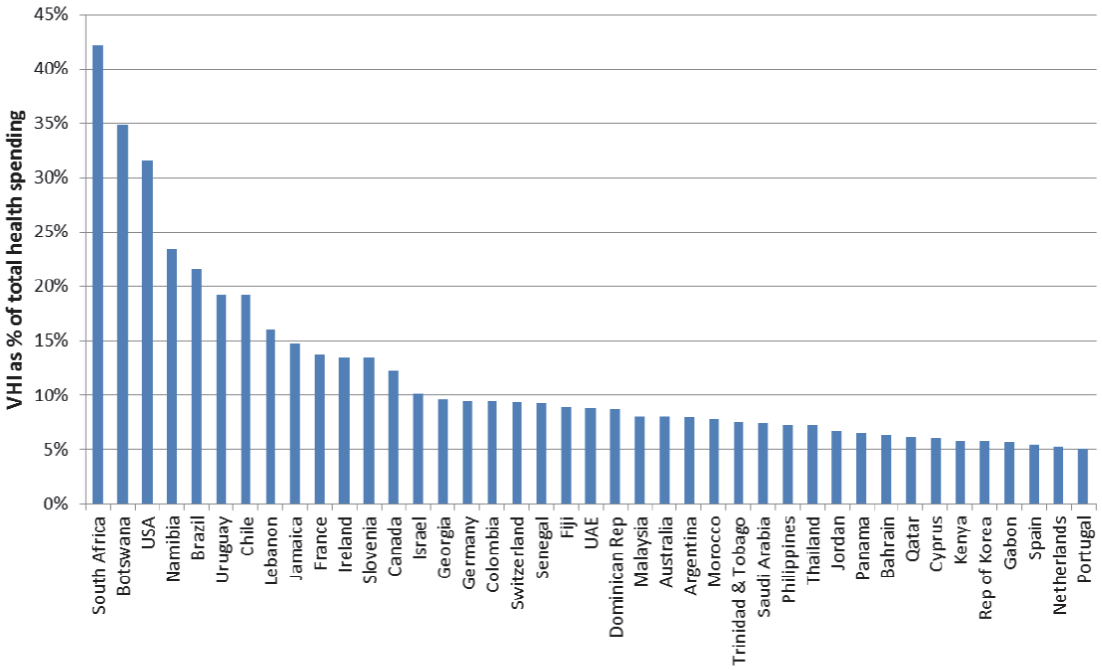
Private Voluntary Health Insurance

Voluntary health insurance (VHI) schemes are based on voluntary pre-payment of premiums to access a set of benefits are agreed between the beneficiary and insurer. This is in contrast to compulsory schemes where membership and payment of contributions are made compulsory by the government (by law) for the population as a whole or large sections of the community.[40] VHI appears in many forms, from large commercial insurance companies, to smaller non-profit organizations, to community-based health insurance (CBHI). There are different categories of VHI depending on the role it plays in the health financing system. The OECD categories for VHI are: primary (the main source of pre-paid coverage in the country), substitutive (individuals have the option to opt out of public compulsory insurance), complementary (covers cost-sharing in public

compulsory insurance), supplementary (provides pre-paid coverage for additional benefits beyond those of the public compulsory system), or duplicative (covers services already covered under the public compulsory system, which the individual cannot opt out of).[41]

VHI plays a relatively small but growing role in health financing globally, particularly in low- and middle-income countries. In 2012 a total of 46 countries had a greater than five percent share of VHI in total health expenditure, of these 23 were low- and middle-income countries (Figure 4).

Figure 4. The Role of VHI in Total Health Spending, 2012



Source: WHO (2014) presented in Kutzin, Yip and Cashin (2016).

The small role of VHI in financing for UHC is not surprising given that voluntary contributions to health insurance schemes have limited effect in generating sufficient revenue equitably and ensuring access to all necessary services.[42] Yet, particularly if public financing is inadequate, voluntary health financing (VHI) as a form of prepayment could be preferable to out-of-pocket expenditure. It may expand protection - to some extent - against the financial risks of ill health but, given problems of adverse selection,[43] population coverage is likely to be very limited. In a state-subsidized, low-cost voluntary health insurance scheme in Nigeria, for example, enrollment in the scheme was associated with a large increase in service utilization (36 percent) and better financial protection (63 percent lower out-of-pocket expenditure). The uptake was low, however at only 33 percent of the population, and there is some evidence of crowding out of the uninsured as the utilization of services among that group declined.[44]

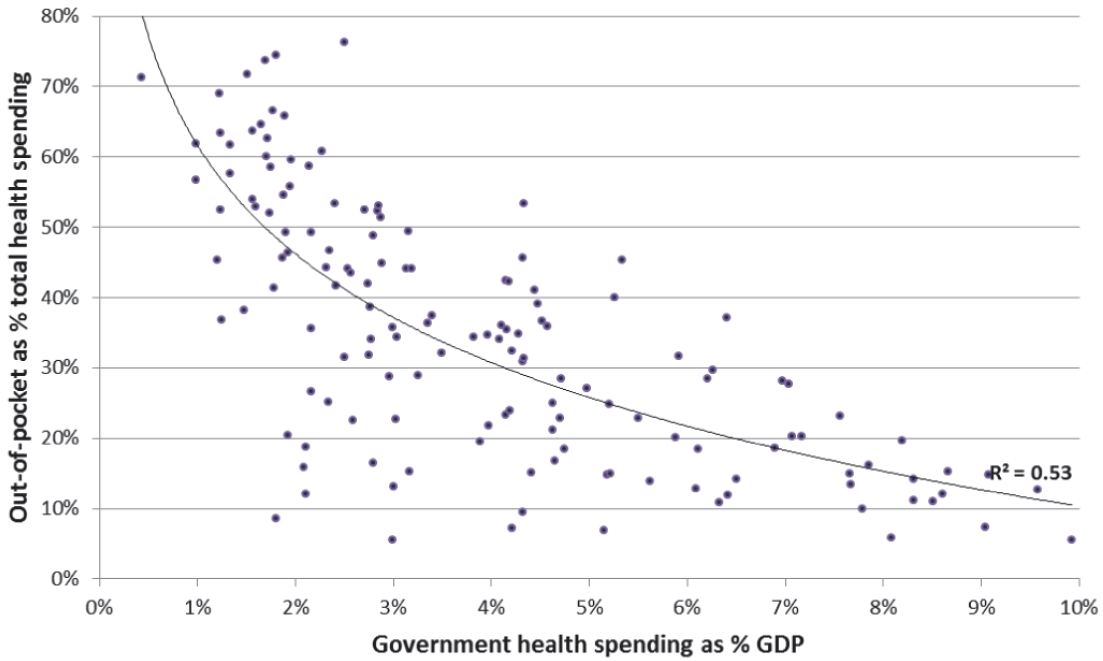
Community-based voluntary health insurance has been tried in a number of lower income countries as a way to introduce some risk-pooling and financial protection. These systems have provided a

stepping stone to more systemic approaches to pooling and universal coverage, in Ghana and Rwanda for example,[45] but in general do not have significant impact on coverage in most countries. A systematic review found that in general wealthier households are more likely to join CBHI schemes than the poor, and enrollment is highly elastic to the premium with typically high drop-out rates.[46]

Public, Compulsory Sources of Health Financing

If compulsory participation and subsidization are accepted as the only way to achieve truly universal coverage and the equity inherent in that goal,[47] then public sources of funding must constitute the cornerstone of financing for UHC.[48] Indeed, no country has achieved universal population coverage or brought down potentially impoverishing out-of-pocket payments relying on private voluntary funding.[49] Although some targeted policies may also be necessary to bring down OOPs and skew their distribution away from the poor, the strongest lever is increasing government health spending as a share of total health expenditure and relative to the size of the economy. Figure 5 shows the strong correlation between government health spending as a share of gross domestic product (GDP) and the share of OOP in total health expenditure.

Figure 5. Relationship Between Government Health Spending and Out-of-Pocket Payments, 2012



Source: WHO (2014) presented in Kutzin, Yip and Cashin (2016).

Social Insurance and Earmarked Payroll Contributions

Historically, the countries that originated the concept of universal health coverage in the post-World War II era (mostly in Europe) aimed to ensure a productive, healthy labor force, and thus health

coverage was mostly tied to employment.[50] As middle- and lower-income countries increasingly committed to ensuring access to health coverage, they adopted (or were encouraged to adopt) these models that focused on employer-based coverage for the formal sector, with possibly some other arrangements for the poor and vulnerable populations.[51] More than 60 countries now have some system in place to earmark payroll or income tax revenues for health insurance.[52] Some countries earmark broader-based income taxes to fund health insurance coverage. In Denmark, for example, a national 8 percent income tax is earmarked for health by the central government and then redistributed to five regions and 98 municipalities through a risk-adjusted capitation formula and some activity-based payments.[53]

The social and ideological mandate for UHC has changed since the post-World War II era, however, and the challenges and inequities that come with tying health coverage to formal labor market participation have emerged clearly.[54] High-, middle-, and low-income countries alike are facing the ideological and practical limitations of an employment-based social insurance model and grappling with ways to make these systems more equitable and sustainable. All of these efforts sooner or later require a greater reliance on and commitment of general budget revenues to expand and sustain coverage.

Voluntary Participation in Social Health Insurance

A large number of social health insurance systems in low- and middle-income countries include voluntary enrollment for the non-exempt population based on private premium contributions, or unenforced mandatory (de facto voluntary) participation for this group largely the non-poor informal sector, including agricultural works. In these countries social health protection is provided to the poor (either through free access to tax-financed facilities or subsidized participation in the social insurance system) and to workers in the formal employment sector and civil servants (through compulsory employer-based social insurance) but not to those who fall between these two groups, known as "the missing middle."[55] Examples of voluntary participation for the non-poor informal sector workers in social health insurance systems include China, Ghana, Indonesia, Kenya, Nigeria, and Vietnam.

In spite of the appeal of collecting premiums from those who can afford to pay as a way to bring revenue into social health insurance systems, global evidence consistently shows this approach to be problematic for several reasons.[56,57] The informal sector tends to be large and significant—on average 70 percent of the labor force in developing countries producing 35 percent of the output in the economy.[58] The informal sector is not organized in sizeable groups, it is administratively difficult to recruit, register and collect regular contributions in a cost effective way. Membership and premium payment is therefore often voluntary leading to low uptake, poor retention and adverse selection.[59,60] A systematic review of experience in low- and middle-income countries with voluntary enrollment in social insurance systems confirmed these challenges. Consistently low enrollment was found even when activities were specifically aimed at increasing [61]

Furthermore, informal sector worker incomes may be seasonal or unpredictable, making regular premium payments unrealistic for them. Setting appropriate premium rates that are affordable and

considered worth the potential benefit, and that contribute meaningful revenue to the social insurance system, has been challenging. Finally, the cost of identifying the poor in the informal sector for targeting premium subsidies or exemptions can be high, raising questions about the cost of collecting premiums relative to the revenue collected.[62] For these reasons, countries that continue to rely on voluntary (or de facto voluntary) participation of premium-paying informal sector workers in social insurance systems rarely get past modest coverage levels without significant infusions of public subsidies to cover this group, as in Thailand. Progress has been made Indonesia and Vietnam, but coverage gaps remain for this group.

The Move Toward General Taxation

There is a general trend toward greater diversification of revenue sources, with a diminishing role for payroll tax funding, which Joe Kutzin argues is a practical consequence of the "ideology" of UHC.[63] If coverage is truly universal, entitlement is de-linked from employment, and from direct contributions more generally. On the practical side, wage-linked contributions cannot generate a sufficient revenue base in high-income countries because of aging populations, and in lower-income countries because of low formal sector labor participation rates and weak tax collection systems.[64] Voluntary premium payments have failed to attract large-scale enrollment or generate significant revenue.

The move toward greater reliance on general taxation to fund UHC is evident in high-income countries, even those with a long history of contributory social health insurance. There are many reasons for this, including the distortions that these taxes have caused in the labor market and the narrow revenue base they provide in many countries due to large informal sectors.[65] Estonia, France and Japan, for example, are seeking to reduce overreliance on earmarked payroll taxes to fund the health sector because payroll taxes not only have led to labor market distortions but also no longer generate enough revenue to cover health needs due to aging populations no longer participating in the labor force.[66]

In Estonia, almost two-thirds of total health expenditure is financed by a mandatory social tax, collected in the form of a payroll tax (equal to 13 percent of employee wages and of self-employed individuals' earnings). In 2015, approximately 50 percent of the total insured were contributing employees, 47 percent were insured without contributing (primarily children and pensioners), and 3 percent were covered due to other circumstances (e.g. state contributions on behalf of some population groups). The current government is working to reduce the direct contribution share from payroll tax by gradually decreasing the mandatory contributions rates for employees.[67]

France's national health insurance system was funded almost exclusively by an earmarked payroll tax until 1998, when the funding source shifted to a more general earmarked income tax (the Generalized Social Contribution), which is levied not only on wage income but also on income from financial assets and investments, pensions, unemployment benefits, disability benefits and gambling.[68] Coverage for those not eligible for the public insurance scheme or complementary private coverage are financed mainly by the state through an earmarked tax on tobacco and alcohol

and a 5.9 percent tax on private insurance providers. In Japan, universal coverage is financed by social insurance contributions (49 percent), 37 percent by general taxes (25 percent national, 12 percent local) and 14 percent by out-of-pocket contributions.[69]

Increasingly, low- and middle-income countries are following the trend away from employment-based funding toward general tax funding for UHC. Several countries that have made a large commitment to subsidize the uncovered population with general government budget funds and relax income-related targeting mechanisms have made significant progress toward UHC. Thailand, for example, found it difficult to expand coverage through payroll taxes alone and have expanded their allocation to health through general revenues with no income-related targeting .[70] Mexico has achieved high coverage in its public insurance scheme Seguro Popular with 86 percent of the budget coming from central government general revenues to provide coverage for all residents who are not eligible for any other social security scheme, including non-poor informal sector workers, underemployed, unemployed, or other non-salaried workers.[71] In China the government provides general budget subsidies through two schemes to cover urban residents (URBMI) and rural residents (NRCMS) who are not covered by other schemes.[72] The challenge with all of these schemes is that they are separate pools from the employment-based social insurance pools, which brings a sometimes large degree of inequity in access and quality of services and financial protection, and parallel purchasing arrangements, which can introduce inefficiency and further inequity.[73]

Managing Fiscal Challenges

If it is accepted that UCH is most equitably and effectively financed through general tax revenues, significant fiscal commitment is required on the part of the government. Adequate financing for UHC relies on a combination of the macroeconomic and fiscal capacity of the government and the priority the government places on allocating existing revenues to achieving UHC goals.[7475,76]

The ability of the government to generate tax revenue has been found to be a major determinant of progress towards universal health coverage. One study of 89 low- and middle-income countries found that each US$100 per capita per year of additional tax revenues corresponded to a yearly increase in government health spending of nearly $10. This translated into more effective health service coverage in financial protection. For example, the proportion of births with a skilled attendant present by nearly seven percentage points and the extent of financial coverage by more than 11 percentage points.[77] Increase in revenue from regressive revenue sources, such as consumption taxes, a more regressive form of taxation that might reduce the ability of the poor to afford essential goods, were associated with increased rates of post-neonatal mortality, infant mortality, and under-5 mortality rates.[78]

The revenue generation potential of the government may be limited, however, and is strongly affected by the employment rate and the share of employment that is in the formal sector. Furthermore, the size of a country's GDP alone does not predetermine tax rates and total revenues that are ultimately collected, which are shaped by fiscal policy choices.[79] Many low- and middle-income countries are introducing measures to improve the effectiveness of revenue collection

efforts, such as strengthening tax administration institutions; reducing exemptions that do not serve a clear policy purpose; broadening the base of specific taxes, such as value-added taxes (VATs) and corporate income taxes, among others.[80] These measures can also be an important source of new revenue to finance UHC. Ghana, for example, has had some success with such measures, with the increased revenue benefiting the health sector even as the share of health in the government budget has declined.[81]

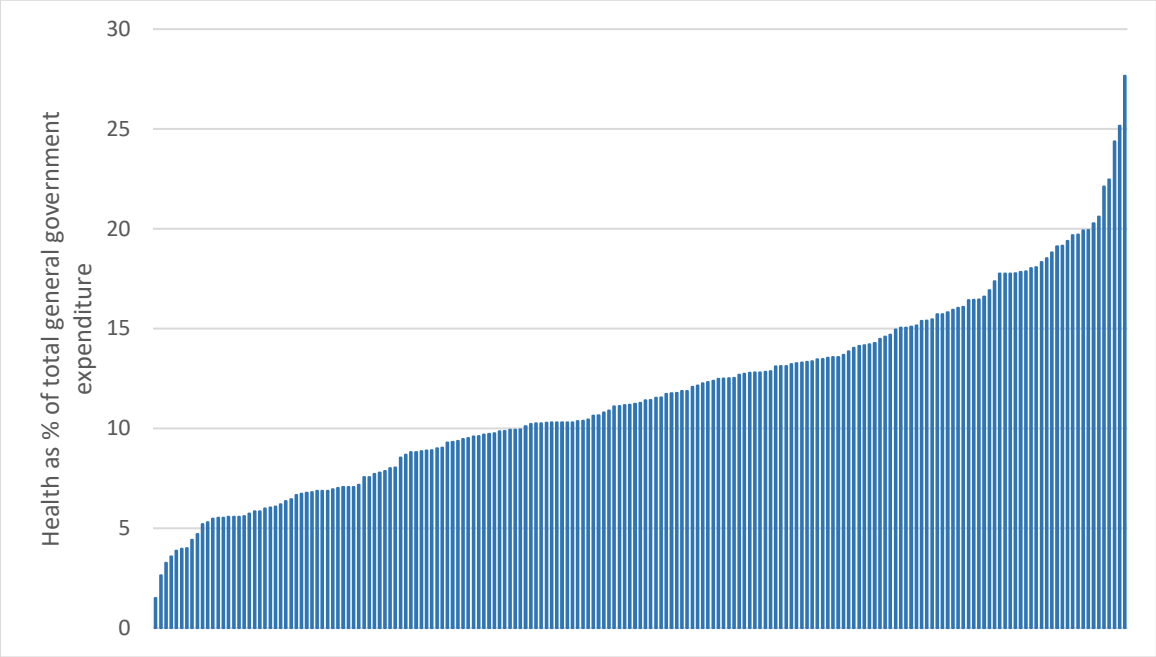
Economic growth alone is often not sufficient to bring about adequate increases in real government health spending to achieve health sector objectives.[82] Priority in the government budget for health, along with macroeconomic growth, has been important in enabling countries to expand population coverage, improve service delivery, and provide better financial protection.[83] The priority given to health in government budgets varies widely, with the share of total general government expenditure allocated to health averaging 11.5 percent across 157 countries (Figure 6). This share ranged from 1.5 percent in Myanmar to nearly 28.0 percent in Costa Rica. Tandon et al. (2014) provide an overview of trends in priority given to health in government budgets and the theoretical and empirical factors affecting priority for health.[84]

The scope for increasing the share of the total budget allocated to health will be limited in part by the share of the budget that is discretionary, or not already accounted for by mandatory expenditures. Nondiscretionary expenditure items include interest payments on debt, wages for civil servants, pensions, and social security contributions, and any other expenditures fixed by law. What is left, after nondiscretionary budget items have been covered, is the discretionary budget, which is allocated between the various sectors. Wage spending in particular is a nondiscretionary expenditure that often crowds out government spending on other priority areas. Public debt and debt servicing (interest payments) is also a major constraint. In 2006 only 65 percent of Kenya's general government budget was discretionary. This budgetary rigidity made it difficult for the government of Kenya to allocate funds to policy priorities. Between 2006 and 2012 the discretionary share of the budget increased to almost 90 percent. The increased flexibility made it possible to increase the budget share for health from a low of 4.3 in 2007 to 8.0 percent in 2012.[85]

Priority setting within the budget should reflect the principle that all resources are put to their highest valued use (efficiency), and that worse-off households benefit disproportionately from government spending (equity). Within the discretionary budget, some expenditures may be inefficient or exacerbate inequities, and therefore be targets for dialogue about reallocation toward the health budget.[86] Some subsidies and tax exemptions are driven by political pressures or compromises and can create both inequities and inefficiencies in addition to lost revenue. Energy subsidies in particular are found to be highly inefficient, leading to overconsumption of fuel and reduced incentives for investment in renewable energy.[87] Fuel subsidies are often intended to benefit lower- and middle-income households with lower-priced energy, but most often benefit the wealthy, who have higher per capita energy consumption.[88] Reducing unproductive subsidies and tax exemptions could make more room for health in the budget in many low- and middle-income countries (box 1.7). In Indonesia, the share of the budget consumed by fuel subsidies often exceeded the share allocated to health and education combined. In 2006, Indonesia reduced fuel subsidies and

brought down debt levels, but fuel subsidies continued to consume up to 20 percent of the total budget in the country. A bold move by the newly elected president cut fuel subsidies by more than 30 percent at the end of 2014; the president pledged to allocate the savings to Indonesia's development priorities, including health.[89]

Figure 6. Health as a Share of Total General Government Expenditure (2012)



Source: World Bank, World Development Indicators 2015.

To circumvent the annual process of setting budget ceilings and the uncertainty it creates for the health budget, some in the health sector advocate for a specific tax or a share of government revenue to be earmarked for health. Earmarking separates all or a portion of total revenue—or revenue from a tax or group of taxes—from general revenue and sets it aside for a designated purpose. Earmarked taxes can take various forms, including specific taxes on goods, a dedicated payroll tax, or a fixed share of total revenues set aside for a specific purpose. In addition to earmarking payroll taxes to fund social health insurance enrollment, countries use many other forms of earmarking to the health sector.

Ghana earmarks a portion of the value-added tax (VAT) to fund exempt individuals in the National Health Insurance Scheme. Brazil, Indonesia and Viet Nam specify the share of total government spending that should be allocated to the health sector ("expenditure earmarking"). A government resolution in Vietnam mandates that increases in total government health spending cannot be less than the increase in total government spending; this ensures that the health sector's share of total government spending cannot decrease.[90,91,92] Indonesia and four countries in Latin America—Bolivia, Brazil, Colombia and Mexico—earmark a portion of transfers from the national government to subnational governments for spending on health.

In practice the results of earmarking in terms of equitable and efficient health revenue generation are highly context-specific and dependent on the political economy of priority-setting in the country's budget process.[93] It may be a useful tool in some instances for countries to overcome failures in the budgeting process, such as when the link to policy is weak or other external pressures interfere with effective priority-setting. The evidence suggests, however, that effectiveness of the earmark may diminish over time and the budget rigidity may become inefficient, and earmarking does not take the place of effective and transparent government budget priority-setting and political commitment to UHC being accompanied by budgetary commitment.[94]

Conclusions

To make sustainable progress toward UHC requires that a country's health financing system routinely generate sufficient resources to expand and sustain access to high-quality health services with financial protection. Evidence and experience confirm that public resources are the most efficient and equitable way to fund health coverage. Within the options for public funding sources, general taxation are proving to be the most sustainable, equitable, and flexible to achieve UHC goals. Even well-established social health insurance systems are increasingly relying on general budget transfers in middle- and high-income countries alike to remain sustainable in the face of aging populations and large informal sector workforces.

Other options, such as private voluntary insurance, including CBHI, or voluntary participation in social health insurance can provide some population coverage and financial protection in the short term when out-of-pocket payments are high and putting vulnerable households at economic risk. These options fail over the long-term, however, to achieve coverage that is universal, inclusive, and equitable. Out-of-pocket payments can play only a limited, targeted role in health financing if universal coverage goals of equitable access to quality services with financial protection are to be achieved.

This means that governments must match political commitments to UHC with fiscal commitments. They need to be serious about prioritizing health in the budget and taking on the political obstacles to freeing up fiscal space, and ultimately improving revenue collection overall to adequately fund UHC and other government priorities. Some short-cuts, such as earmarking or other "innovative" financing my provide a short-term boost or political signals about priority for UHC, but these approaches do not take the place of serious commitment to UCH as a priority and the political and budgetary trade-offs that may come with that commitment.

References

Acharya A, Vellakkal S, Taylor F, Masset E, Satija A, Burke M, and Ebrahim S (2013). The impact of health insurance schemes for the informal sector in low- and middle-income countries: a systematic review. Washington, D.C.: World Bank.

Bonfert A, Hennig J, Heymann M, Hussein K, Langenbrunner J, and Ozaltin A (2015). Closing the gap: health coverage for non-poor informal sector workers. Joint Learning Network for Universal Health Coverage.

Bonfrera I, Van de Poel E, Gustafsson-Wright E, and van Doorslaer E (2018). Voluntary health insurance in Nigeria: Effects on takers and non-takers *Social Science & Medicine* (205): 55-63.

Cashin C, Bloom D, Sparkes S, Barroy H, Kutzin J, O'Dougherty S. 2017. Aligning public financial management and health financing: sustaining progress toward universal health coverage. Geneva: World Health Organization; (Health Financing Working Paper No. 4).

Chemouni B (2018). The political path to universal health coverage: power, ideas and community-based health insurance in Rwanda. *World Development* 106: 87-98.

Dupas P (2014). "Global health systems: pricing and user fees." In Culyer A, ed. *Encyclopedia of Health Economics, First Edition.* Elsevier Inc.

Evans D, Elovainio R, Humphreys G (2010). World Health Report 2010. Health Systems Financing: the path to universal health coverage. Geneva: WHO.

Falkingham J (2004). Poverty, out-of-pocket payments and access to health care: evidence from Tajikistan. *Social Science and Medicine* 58(2): 247-258.

Fernandes Antunes A, Jacobs B, de Groot R, Thin K, Hanvoravongchai P, and Fless S (2018). Equality in financial access to healthcare in Cambodia from 2004 to 2014. *Health Policy and Planning* 10.1093/heapol/czy073. [Epub ahead of print].

Figueras J, Robinson, R, and Jakubowski E, eds. (2005). *Purchasing to improve health system performance*. European Observatory on Health systems and Policies.

Frenk J, Gómez-Dantés O, and Knaul F (2009). The democratization of health in Mexico: financial innovations for universal coverage. *Bulletin of the World Health Organization* 87:542-548.

Fuchs V (1996). What every philosopher should know about health economics. *Proc Am Philos Soc* 140: 186-9.

Fuchs V (2010). Health care is different—that's why expenditures matter. *JAMA* 303(18): 1859-1850.

Gaskins M and Busse R (2009). Moridity-based risk adjustment in Germany: long in coming but worth the wait *Eurohealth* 15(3): 29-32.

Hatt L, Makinen M, Madhavan S, and Conlon C. (2013). Effects of user fee exemptions on the provision and use of maternal health services: a review of literature. *J Health Popul Nutr*. 31(4 Suppl 2):67-80.

IEG (2008). Climate Change and the World Bank Group. Phase I-An Evaluation of World Bank Win-Win Energy Policy Reform. Washington, DC: World Bank Independent Evaluation Group (IEG).

Ikegami N, Yoo B-K, Hashimoto H, Mtsumoto M, Ogata H, Babazono A, Watanabe R, Shibuya K, Yan B-M, Reich M, and Kobayashi Y (2011). *Lancet* 378: 1106-1115.

IMF. 2013. *Energy Subsidy Reform: Lessons and Implications.* Washington, DC: International Monetary Fund.

IMF (2011). Revenue Mobilization in Developing Countries. Fiscal Affairs Department, International Monetary Fund, Washington, DC.

Jehu-Appiah C, Aryeetey G, Spaan E, De Hoop T, Agyepong I and Baltussen R (2011). Equity aspects of the National Health Insurance Scheme in Ghana: Who is enrolling, who is not and why. *Social Science and Medicine*72(2): 157-165.

Jowett M (2015). Raising revenues for health in support of UHC: strategic issues for policy makers. Geneva: World Health Organization.

Ketsche P, Adams EK, Wallace S, Kannan V, and Kannan H (2015). The distribution of the burden of US health care financing. International Journal of Financial Research 6(3): 29-48.

Knaul F, Gonzalez-Pier E, Garcio-Junco D, et al. (2012). The quest for universal health coverage: achieving social protection for all in Mexico. *Lancet* 380: 1259-1279.

Kutzin J (2001). A descriptive framework for country-level analysis of health care financing arrangement. *Health Policy* 56(3): 171-204.

Kutzin J (2012). Anything goes on the path to universal health coverage? No. Bulletin of the World Health Organization 90:867-86.

Kutzin J, Jakab M and Cashin C (2010). Lessons from health financing reform in central and eastern Europe and the former Soviet Union. *Health Economics, Policy and Law*. doi:10.1017/S1744133110000010

Lagarde M and Palmer N (2008). *Bulletin of the World Health Organization* 86(11): 817-908.

Lagomarsino G, Garabrant A, Adyas A, et al.(2012). Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *Lancet* 380(9845):933–43.

Maeda A, Araujo E, Cashin C, Harris J, Ikegami N, and Reich M (2014). Universal Health Coverage for Inclusive and Sustainable Development:A Synthesis of 11 Country Case Studies. Washington, DC: The World Bank.

McIntyre D, and Meheus F (2014). Fiscal Space for Domestic Funding of Health and Other Social Services. Centre on Global Health Security Working Group Papers. London: Chatham House.

McIntyre D, Ranson MK, Aulakh BK, et al.(2013). Promoting universal financial protection: evidence from seven low- and middle-income countries on factors facilitating or hindering progress. *Health Res Policy Syst* 11(1):36.

Mondaca A and Chi C (2017). Equity in out-of-pocket payment in Chile. *Revista de Saude Publica* 51:44.

Nigenda G, Wirtz V, González-Robledo L, and Reich M (2015). *Health Systems & Reform* 1(3): A Special Issue on the Mexican Health System and Reforms pp 217-228.

Nikoloski Z andMossialos E (2018). Membership In Seguro Popular In Mexico Linked To A Small Reduction In Catastrophic Health Expenditure. *Health Affairs* 37(7): 1169-1177.

OECD (2016). Universal health coverage and health outcome. Paris: Organization for Economic Cooperation and Development, OECD Publishing.

OECD (2011). A system of health accounts 2011. Paris: Organization for Economic Cooperation and Development, OECD Publishing.

OECD (2004). The OECD Health Project - Private Health Insurance in OECD Countries. Paris, France: Organisation for Economic Cooperation and Development.

Patcharanarumol W, Panichkriangkrai W, Sommanuttaweechai A, Hanson K, Wanwong Y, and Tangcharoensathien V (2018). Strategic purchasing and health system efficiency: A comparison of two financing schemes in Thailand. *PLoS ONE* 13(4): e0195179. https://doi.org/10.1371/journal.pone.0195179.

Pettigrew L and Mathauer I (2016). Voluntary Health Insurance expenditure in low- and middle-income countries: Exploring trends during 1995–2012 and policy implications for progress towards universal health coverage. *Int J Equity Health* 15: 67.

Pisani E, Kok M, and Nugroho Kharisma (2017). Indonesia's road to universal health coverage: a political journey. *Health Policy and Planning* 32: 267-276.

Reeves A, Gourtsoyannis Y, Basu S, McCoy D, McKee M, and David Stuckler D (2015). Financing universal health coverage—effects of alternative tax structures on public health systems: cross-national modelling in 89 low-income and middle-income countries. *Lancet* 386(9990): 274–280.

Reich, M., Cashin, C., et al. (2016). Moving towards universal health coverage: lessons from 11 country studies. *Lancet* 387(10020):8011-16 .

Rothschild M and Stiglitz J (1976). Equilibrium in competitive insurance markets.

Ruangratanatrai W, Lertmaharit S, Hanvoravongcai P (2015). Equity in health personnel financing after universal coverage: evidence from Thai Ministry of Public Health's hospitals from 2008–2012. *Hum Resour Health* 13:59–67.

Silva H, Strucchi L, Bazan F, Tadiri E, and Ratcliffe H (2016). Plan Nacer/Programa SUMAR: Measurement to ensure effective universal health coverage. Primary Health Care Performance

Initiative https://phcperformanceinitiative.org/plan-nacerprograma-sumar-measurement-ensure-effective-universal-health-coverage accessed September 2018.

Smith P and Witter S (2004). Risk pooling and health care financing: implications for health system performance. Health, Population, and Nutrition Discussion Paper. Washington, D.C.: The World Bank.

Takaku, R, Bessho S, Nishimura S, and Ikegami N (2015). Fiscal disparities among social health insurance programs in Japan. Chapter 3 in *Achieving and Maintaining Universal Health Coverage for Inclusive and Sustainable Growth: Lessons from Japan*. Washington, DC: World Bank. manuscript in preparation.

The Board of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds (2017). 2017 Annual Report.

Tracking universal health coverage: 2017 global monitoring report. World Health Organization and International Bank for Reconstruction and Deveplopment/The World Bank.

UK Department of Health. Resource Allocation: Weighted Capitation Formula. 7th ed. London. 2011.

Umeh C and Feeley F (2017). Inequitable access to health care by the poor in community-based health insurance programs: a review of studies from low- and middle-income countries. *Global Health: Science and Practice* 5(2): 299-314.

van Doorslaer E, O'Donnell O, Rannan-Eliya Somanathan A, et al. (2006). Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. Lancet 368(9544): 1357-1364.

Vilcu I, Probst L, Dorjsuren B, and Mathauer I (2016). Subsidized health insurance coverage of people in the informal sector and vulnerable population groups: trends in institutional design in Asia. *International Journal for Equity in Health* 15:165.

Vrangbaek K. The Danish health care system. In: International profiles of health care systems: Australia, Canada, Denmark, England, France, Germany, Italy, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States. Washington (DC): Commonwealth Fund; 2010; 16–18.

Wagstaff A, Flores G, Smitz M-F, Chepynoga K, and Eozenou P (2018). Progress on impoverishing health spending in 122 countries: a retrospective observational study. *The Lancet* 6:e180-e192.

Wang H, Torres L, and Travis P (2018). Financial protection analysis in eight countries in the WHO South-East Asia Region. *Bulletin of the World Health Organization* 96:610-620.

Wang H, Zhang L, Yip W, and Hsiao W (2006). Adverse selection in voluntary Rural Mutual Health Care health insurance scheme in China. *Social Science and Medicine* 63(5): 1236-1245.

Watson SI, Wroe EB, Dunbar EL, Mukherjee J, Squire SB, Nazimera L, Dullie L4, Lilford RJ (2016). The impact of user fees on health services utilization and infectious disease diagnoses in Neno District, Malawi: a longitudinal, quasi-experimental study. *BMC Health Serv Res* 16(1):595.

World Bank (2016).

World Health Organization (2015). Health workforce 2030: towards a global strategy on human resources for health. Geneva: World Health Organization.

WHO (2016). Global Health Expenditure Database: Indicators and Data. Geneva: World Health Organization. http://apps.who.int/nha/database.

World Health Organisation (2010). World Health Report: Health Systems Financing: the path to universal coverage. Geneva: World Health Organization.

World Health Organization (2000). The World Health Report 2000 – Health Systems: Improving Performance. Geneva: World Health Organization.

Yee E (2001). The effects of fiscal decentralization on health care in China. *Univ Ave Undergrad J Econ* (5)1.

Zombre D, De Allegri M, and Ridde V (2017). Immediate and sustained effects of user fee exemption on healthcare utilization among children under five in Burkina Faso: a controlled interrupted time-series analysis. *Social Science and Medicine* 179: 27-35.

Endnotes

[1] Evans D, Elovainio R, Humphreys G (2010). World Health Report 2010. Health Systems Financing: the path to universal health coverage. Geneva: WHO.

[2] Fuchs V (1996). What every philosopher should know about health economics. *Proc Am Philos Soc* 140: 186-9.

[3] Kutzin J (2012). Anything goes on the path to universal health coverage? No. *Bulletin of the World Health Organization* 90:867-86.

[4] World Health Organization (2010). World Health Report: "Health Systems Financing: the path to universal coverage" WHO, Geneva.

[5] Kutzin J, Yip W, Cashin C (2016). Alternative financing strategies for universal health coverage. In: Scheffler R, editor. World scientific handbook of global health economics and public policy. Volume I: the economics of health and health systems. Hackensack, NJ: World Scientific.

[6] Cashin C (2016). Health financing: the macroeconomic, fiscal and public finance context. Washington, DC: The World Bank.

[7] Maeda A, Araujo E, Cashin C, Harris J, Ikegami N, and Reich M (2014). Universal Health Coverage for Inclusive and Sustainable Development :A Synthesis of 11 Country Case Studies. Washington, DC: The World Bank.

[8] Maeda et al. (2014).

[9] IMF (2011). Revenue Mobilization in Developing Countries. Fiscal Affairs Department, International Monetary Fund, Washington, DC.

[10] IMF (2011).

[11] Cashin C (2016).

[12] IMF (2011a).

[13] Jehu-Appiah C, Aryeetey G, Spaan E, De Hoop T, Agyepong I and Baltussen R (2011). Equity aspects of the National Health Insurance Scheme in Ghana: Who is enrolling, who is not and why. *Social Science and Medicine*72(2): 157-165.

[14] Scheiber G et al. (2012).

[15] Nguyen, Rajkotia and Wang 2011.

[16] Akazili, et al.(2012).

[17] OECD (2011). A system of health accounts 2011. Paris: Organization for Economic Cooperation and Development, OECD Publishing.

[18] World Health Organization (2010).

[19] Several authors contend that in general the evidence for the relationship between user fees and service utilization is weak and the quality of studies low overall, so this is an area that needs to be better understood and with adequate nuance.

[20] Ibid.

[21] Dzakpasu S, Powell-Jackson T, and Campbell OM (2014). Impact of user fees on maternal health services utilization and related health outcomes: a systematic review. *Health Policy and Planning* 29(2): 137-150.

[22] Hatt L, Makinen M, Madhavan S, and Conlon C. (2013). Effects of user fee exemptions on the provision and use of maternal health services: a review of literature. *J Health Popul Nutr*. 31(4 Suppl 2):67-80.

[23] Falkingham J (2004). Poverty, out-of-pocket payments and access to health care: evidence from Tajikistan. *Social Science and Medicine* 58(2): 247-25

[24] Watson SI, Wroe EB, Dunbar EL, Mukherjee J, Squire SB, Nazimera L, Dullie L4, Lilford RJ (2016). The impact of user fees on health services utilization and infectious disease diagnoses in Neno District, Malawi: a longitudinal, quasi-experimental study. *BMC Health Serv Res* 16(1):595.

[25] Watson et al. (2016).

[26] Lagarde M and Palmer N (2008). *Bulletin of the World Health Organization* 86(11): 817-908.

[27] Lagarde and Palmer (2008).

[28] Zombre D, De Allegri M, and Ridde V (2017). Immediate and sustained effects of user fee exemption on healthcare utilization among children under five in Burkina Faso: a controlled interrupted time-series analysis. *Social Science and Medicine* 179: 27-35.

[29] Tracking universal health coverage: 2017 global monitoring report. World Health Organization and International Bank for Reconstruction and Development/The World Bank.

[30] Ibid.

[31] In international dollars using 2011 purchasing power parity (PPP).

[32] Ibid.

[33] Ibid.

[34] Wagstaff A, Flores G, Smitz M-F, Hsu J, Chepynoga K, and Eozenou P (2018). Progress on impoverishing health spending in 122 countries: a retrospective observational study. The Lancet Global Health (6)2: e180-e192.

[35] van Doorslaer E, O'Donnell O, Rannan-Eliya Somanathan A, et al. (2006). Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. Lancet 368(9544): 1357-1364.

[36] Fernandes Antunes A, Jacobs B, de Groot R, Thin K, Hanvoravongchai P, and Fless S (2018). Equality in financial access to healthcare in Cambodia from 2004 to 2014. *Health Policy and Planning* 10.1093/heapol/czy073. [Epub ahead of print].

[37] Wagstaff et al. (2018).

[38] Wang H, Torres L, and Travis P (2018). Financial protection analysis in eight countries in the WHO South-East Asia Region. *Bulletin of the World Health Organization* 96:610-620.

[39] Nikoloski Z andMossialos E (2018). Membership In Seguro Popular In Mexico Linked To A Small Reduction In Catastrophic Health Expenditure. *Health Affairs* 37(7): 1169-1177.

[40] Pettigrew L and Mathauer I (2016). Voluntary Health Insurance expenditure in low- and middle-income countries: Exploring trends during 1995–2012 and policy implications for progress towards universal health coverage. *Int J Equity Health* 15: 67.

[41] OECD (2004). The OECD Health Project - Private Health Insurance in OECD Countries. Paris, France: Organisation for Economic Cooperation and Development.

[42] Kutzin, Yip and Cashin (2016).

[43] See Precept Four: UHC requires compulsory participation, comprehensive pool funding, subsidization and consolidation of the entire system.

[44] Bonfrera I, Van de Poel E, Gustafsson-Wright E, and van Doorslaer E (2018). Voluntary health insurance in Nigeria: Effects on takers and non-takers *Social Science & Medicine* (205): 55-63.

[45] Chemouni B (2018). The political path to universal health coverage: power, ideas and community-based health insurance in Rwanda. *World Development* 106: 87-98.

[46] Umeh C and Feeley F (2017). Inequitable access to health care by the poor in community-based health insurance programs: a review of studies from low- and middle-income countries. *Global Health: Science and Practice* 5(2): 299-314.

[47] See Precept Four: UHC requires compulsory participation, comprehensive pool funding, subsidization and consolidation of the entire system.

[48] Fuchs (1996).

[49] Kutzin (2012).

[50] Kutzin, Yip and Cashin (2016).

[51] Ibid.

[52] Cashin C, Sparkes S, and Bloom D (2017). Earmarking for health: from theory to practice. Geneva: World Health Organization; (Health Financing Working Paper No. 5).

[53] Vrangbaek K. The Danish health care system, 2009. International profiles of health care systems: Australia, Canada, Denmark, England, France, Germany, Italy, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States. Washington (DC): Commonwealth Fund; 2010. 35-42.

[54] Kutzin, Yip, and Cashin (2016).

[55] Bonfert A, Hennig J, Heymann M, Hussein K, Langenbrunner J, and Ozaltin A (2015). Closing the gap: health coverage for non-poor informal sector workers. Joint Learning Network for Universal Health Coverage.

[56] McIntyre D, Ranson MK, Aulakh BK, et al.(2013). Promoting universal financial protection: evidence from seven low- and middle-income countries on factors facilitating or hindering progress. *Health Res Policy Syst* 11(1):36.

[57] Lagomarsino G, Garabrant A, Adyas A, et al.(2012). Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *Lancet* 380(9845):933–43.

[58] World Bank (2016).

[59] Jowett M (2015). Raising revenues for health in support of UHC: strategic issues for policy makers. Geneva: World Health Organization.

[60] Lagomarsino et al. (2012).

[61] Acharya A, Vellakkal S, Taylor F, Masset E, Satija A, Burke M, and Ebrahim S (2013). The impact of health insurance schemes for the informal sector in low- and middle-income countries: a systematic review. Washington, D.C.: World Bank.

[62] Vilcu I, Probst L, Dorjsuren B, and Mathauer I (2016). Subsidized health insurance coverage of people in the informal sector and vulnerable population groups: trends in institutional design in Asia. *International Journal for Equity in Health* 15:165.

[63] Kutzin, Yip and Cashin (2016).

[64] Ibid.

[65] Kutzin, Yip and Cashin (2016).

[66] Maeda A, Arauj E, Cashin C, Harris J, Ikegami N, Reich MR (2014). Universal health coverage for inclusive and sustainable development.

[67] Cashin, Sparkes and Bloom (2017).

[68] Cashin (2016).

[69] Maeda et al. (2014).

[70] Ibid.

[71] Bonfert et al. (2015).

[72] Ibid.

[73] See Precept Four: UHC requires compulsory participation, comprehensive pool funding, subsidization and consolidation of the entire system.

[74] WHO (2010).

[75] Kutzin, Yip and Cashin (2016).

[76] Cashin (2016).

[77] Reeves A, Gourtsoyannis Y, Basu S, McCoy D, McKee M, and David Stuckler D (2015). Financing universal health coverage—effects of alternative tax structures on public health systems: cross-national modelling in 89 low-income and middle-income countries. *Lancet* 386(9990): 274–280.

[78] Reeves et al. (2015).

[79] McIntyre D, and Meheus F (2014). Fiscal Space for Domestic Funding of Health and Other Social Services. Centre on Global Health Security Working Group Papers. London: Chatham House.

[80] IFM (2011).

[81] Cashin (2016).

[82] Kutzin, J., Jakab, M. and Cashin, C. 2010. Lessons from health financing reform in central and eastern Europe and the former Soviet Union. *Health Economics, Policy and Law*. doi:10.1017/S1744133110000010

[83] Maeda et al. (2014).

[84] Tandon A, Fleisher L, Li R, and Yap W (2014). Reprioritizing government spending on health: pushing an elephant up the stairs? *WHO South-East Asia Journal of Public* 3(3): 206-212.

[85] Kenya Ministry of Devolution and Planning. 2013. *Comprehensive Public Expenditure Review.* Nairobi: Government of Kenya.

[86] IMF (2011).

[87] IMF (2013). Energy Subsidy Reform: Lessons and Implications. Washington, DC: International Monetary Fund.

[88] IEG (2008). Climate Change and the World Bank Group. Phase I-An Evaluation of World Bank Win-Win Energy Policy Reform. Washington, DC: World Bank Independent Evaluation Group (IEG).

[89] Cashin (2016).

[90] Brazil's march toward universal health coverage. B World Health Organ; 2010;88(9):641-716.

[91] Agyepong I, Adjei S. Public social policy development and implementation: a case study of the Ghana National Health Insurance scheme. Health Policy Plann; 2008;23:150-60.

[92] Schieber G, Saleh K, Lavado R. Health financing in Ghana. Washington (DC): World Bank; 2012.

[93] Cashin, Sparkes, and Bloom (2017).

[94] Ibid.