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Coordinating Healthcare and Pension Policies: An Exploratory Study

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Abstract

Rapid ageing of the population globally represents an unprecedented historical trend. As pension and healthcare costs are positively correlated with rising incomes, ageing, urbanization, and a shift from communicable to life-style diseases, managing these costs is a major challenge. There are many linkages between healthcare and pension arrangements—in terms of costs, exposure to risks, and as they jointly impact on crucial policy decisions. This paper discusses the rationale for coordination between various programs to better manage the cost of ageing. The current difficult macroeconomic environment, including fiscal stringency conditions, strengthens the case for such coordination.

JEL Classification: J1, J4

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1. INTRODUCTION

Many countries in Asia are experiencing rapidly ageing populations due to a combination of declining fertility rates and sustained advances in longevity. According to a United Nations forecast in 2010, both the pace of ageing and the share of the aged in the population are projected to exceed corresponding global rates between 2010 and 2030 (UNDESA 2010)[1]. In 2010, Asia accounted for 54.4% of the global total of those above 60 years of age, and this is projected to increase to 59.9% by 2030. It is clear, therefore, that Asia will have a significant impact on the dynamics of global demographic trends.

Changing demographic profiles, along with advances in diagnostics and innovations in science and medical technology suggest greater resources will need to be devoted to managing the costs of ageing. However, as many countries in Asia are also ageing or are expected to age at relatively lower incomes, this portends significant challenges for governments across Asia to finance healthcare and pension expenditure. The rapid ageing of Asian economies has implications not just for financing healthcare and retirement expenditure for an increasing number of elderly people, but also for the broader economy and society, affecting for example employment and consumption patterns, technology generation and absorption capabilities, transport systems, and voting patterns (Roy and Punhani 2010).

This paper has a narrower focus. It explores the rationale for coordination in healthcare and pension arrangements with a view to minimizing the total resource costs devoted to managing the costs of ageing. This issue has received relatively limited attention in the literature, and as such this should be regarded as an exploratory study. It should be emphasized that coordination is not harmonization. The underlying economic, financial, and actuarial analytics are different for pension and healthcare programs. Moreover, pensions are for old age; health care needs are for life. There are linkages between healthcare and pension programs, however, for example in the collection of contributions, administrative and record keeping activities, which may contribute towards savings in total resource costs.

It is also useful to regard healthcare and pensions as a bundle of goods and services that the elderly will need to consume. This bundle of services represents a significant share of national income (up to 20% in OECD countries). How this bundle of services is financed and organized could not only impact on the adequacy of current healthcare and pension arrangements, but on other important areas as well. For example, better coordination between the two programs

[1] In 2010, the population aged over 60 was 9.9% of the total population, lower than the corresponding share globally of 11.0%. However by 2030, Asia's share at 16.7% is projected to exceed that of the world (16.5%). Similar trends are projected for the median age of the population. Life expectancy at birth in Asia is expected to increase from 70.3 in 2010 to 73.6 in 2030, with many Asia-Pacific countries exhibiting much higher levels (UNDESA 2010). There are, however, significant variations around these averages in various countries, so broad averages alone should not guide policies.

could facilitate social security for migrant workers, strengthen social safety nets, and positively impact economic growth.

In many Asian countries, this bundle of services needed by the elderly is organized and delivered on an ad-hoc basis under the responsibility of various government agencies and departments with only limited coordination between them. This paper argues that the fragmented nature of healthcare and pension programs increases the total resource costs of financing the bundle of services.

As countries in Asia are heterogeneous in terms of income levels, economic and political structures, institutional development, state capacities, demographic characteristics, and existing pension and healthcare systems, this paper does not aim to provide a blueprint for policy coordination between healthcare and pension arrangements. Rather, it explores the various avenues of coordination that are feasible with a view to minimizing the combined resource costs devoted to managing ageing.

The paper is organized as follows. Chapter 2 provides the rationale for policy coordination between healthcare and pension arrangements. This is followed in chapter 3 by a discussion of the areas where coordination between pension and healthcare policies may be feasible. Selected case studies from Asia involving such coordination are discussed in chapter 4. Chapter 5 concludes.

2. THE RATIONALE FOR POLICY COORDINATION

There are several reasons why exploring the feasibility of greater coordination between pension and healthcare merits consideration.

First, the combined expenditure on these two services is large, implying significant potential savings through better coordination. Table 1 provides data on social sector expenditure in OECD countries for 2007. The data suggests that such expenditure averaged 19.26% of gross domestic product (GDP) in 2007, with a wide range of 28.4% in France to 7.21% in Mexico. The OECD average for the public pension and health care expenditure to GDP ratio was 12.82, ranging from 19.97 for France to 4.03% for Mexico.

In Asian countries, public resources devoted to pensions and healthcare programs are lower than in the OECD countries. The average public expenditure on healthcare programs was 2.6% of GDP (WHO 2009), and public expenditure on pension programs is estimated to increase from 3% in 1990 to 10% in 2050 (ADB 2006). For the same period, private expenditure on healthcare and pensions as a share of GDP was 2.5% and 2.1%, respectively, of GDP. However, even these figures suggest a potential for significant resource savings from better coordination.

Table 1: Social Sector Expenditure by Governments in OECD Countries

(% Share of GDP, 2007)

	Pensions (old age and survivors)	Health	Income support to the working age population	All other social services except health	Public social expenditure
OECD	**7.00**	**5.82**	**3.93**	**2.51**	**19.26**
France	12.48	7.49	4.58	3.85	28.40
Sweden	7.18	6.60	5.58	7.97	27.33
Germany	10.71	7.86	3.96	2.63	25.16
Italy	14.05	6.65	2.77	1.39	24.86
United Kingdom	5.38	6.85	4.55	3.76	20.54
Netherlands	4.74	5.98	5.38	3.97	20.08
Czech Republic	7.42	5.76	4.37	1.24	18.79
Japan	9.77	6.30	1.59	1.05	18.70
Canada	4.19	7.01	2.46	3.20	16.86
United States	5.96	7.23	2.02	0.99	16.20
Australia	3.36	5.74	4.01	2.90	16.02
Chile	5.15	3.66	0.88	0.88	10.56
Turkey	6.12	4.10	0.14	0.11	10.48
Republic of Korea	1.69	3.50	0.83	1.51	7.53
Mexico	1.38	2.65	0.90	2.28	7.21

Source: OECD (2010)

From the perspective of the economy as a whole, the relationship between pensions and healthcare costs is a complex one. In many countries, including the rapidly growing economies of the PRC, India, and Indonesia, the incidence of lifestyle diseases is growing and these diseases are affecting the working age population at a younger age. Despite possible savings on pension costs due to higher numbers or premature deaths resulting from lifestyle diseases, the resulting loss in productivity to the economy and the rise in healthcare costs due to lifestyle diseases could outweigh any such savings[2]. This is ultimately an empirical question, which has not so far been extensively researched in Asian countries.

Better management of healthcare expenditure through "healthy ageing", also increases the real value of pension income. For example, while controlling healthcare expenditure may be

[2] In most countries, health care costs are rising at a faster rate than GDP per capita. The Economist (2011) reports that in the past forty years (roughly from 1970 to 2010), healthcare spending in the US rose at an annual rate of 4.9%, but annual growth of GDP per capita was only 2.1%. This is unsustainable—if it were to continue, by 2065 the US would be spending 100% of GDP on healthcare.

difficult due to the stochastic nature of illnesses, better managing healthcare expenditure through leading healthier lifestyles, preventive care, and a more sophisticated understanding of the human body may also increase purchasing power during the retirement period. From a macroeconomic perspective, more effective use of primary care and secondary care through “gate-keepers” also reduces healthcare expenditure.

The second reason concerns the potential for better coordination to mitigate the adverse impact of ageing on economic growth. It is now widely accepted that population ageing will tend to lower labor-force availability and savings rates, thereby raising concerns about a future slowing of economic growth. Bloom et al. (2010) estimate that OECD countries are likely to see modest declines in the rate of economic growth as their populations age. However, they argue that greater female labor force participation and gradually extending the institutional retirement age can partially mitigate the economic consequences of an older population. In many Asian countries, declining fertility rates will cause labor-force-to-population ratios to rise as the shrinking share of young people will more than offset the skewing of adults towards the older ages (Bloom et al. 2010). These factors suggest that population ageing may not significantly impede the pace of economic growth in developing countries, if appropriate policies are institutionalized.

Robust and sustained economic growth is crucial to ensure that pension and healthcare promises remain credible, and that social security programs are fiscally sustainability (Barr and Diamond 2008). Coordinated social security funding (including healthcare and pensions), if intermediated through financial and capital markets, could boost national savings and investments, and stimulate economic growth. This is an example of a policy response that could help mitigate the adverse impact of ageing on economic growth discussed earlier.

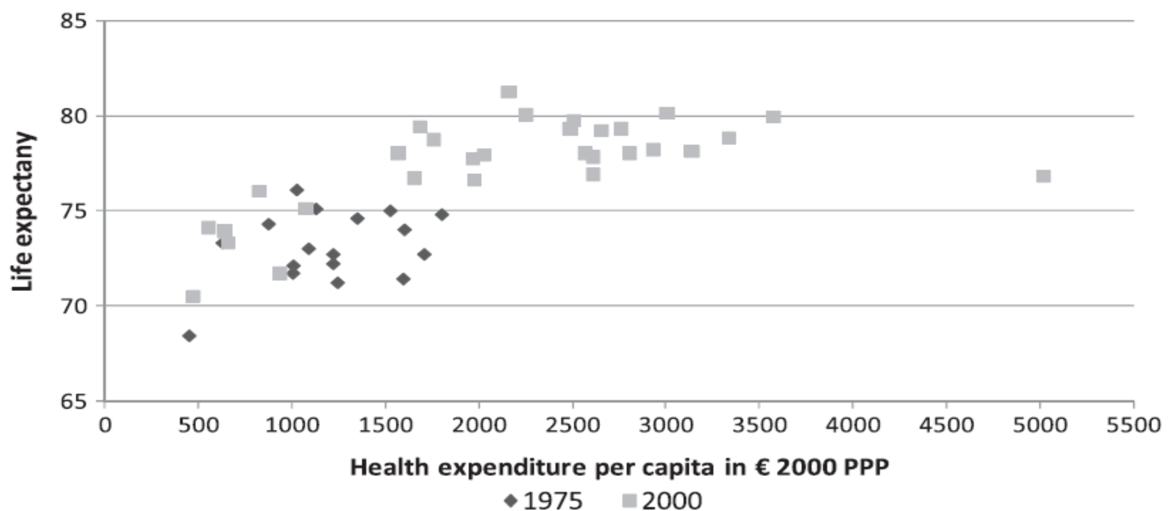
Further, domestic policy responses, such as increasing the institutional retirement age, need to be implemented gradually as they have important implications for labor markets, as well as for consumption, savings, and economic growth. The decision to exit the labor market and retire is based in part on an individual’s current and future healthcare and retirement financing arrangements. To the extent these arrangements impact on an individual’s decision to exit the labor market, policy coordination can help facilitate such a transition, and also enable progress in aligning the average effective retirement age with the official retirement age. Among the OECD countries, while in Japan and the Republic of Korea the effective retirement age for men and women is higher than the official age, the opposite is the case in Germany, Australia, and the Netherlands (Roy 2011—exhibit 16).

The third reason is that such coordination can help facilitate the extension of social security coverage, and strengthen social safety nets. Currently, social safety nets in many Asian countries comprise of ad-hoc programs run by different government agencies, departments, and statutory boards with only limited coordination between them. For example in India, the Ministry of Labour, the Ministry of Health, the Ministry of Rural Development, and the Ministry of Finance are involved in providing for healthcare financing, retirement security,

unemployment insurance, and work guarantee programs with limited coordination in terms of targeting of beneficiaries, administrative, and record-keeping activities. Coordination would help improve coverage, and eliminate duplication of efforts by multiple government agencies and programs.

The fourth reason is that both pension and healthcare programs are affected by changing demographic patterns, particularly advances in longevity. Income and healthcare expenditure are positively related and healthcare expenditure increases disproportionately with rising longevity. Figure 1 depicts the relationship between life expectancy and per capita healthcare expenditure in OECD countries in 1975 and 2000. Data from OECD countries suggest that health expenditure for an individual aged above 65 is four times that of an individual aged 15–64 and eight times higher for the old-old age group (OECD 2006). Takayama's (2011) estimate of health expenditure being 4.8 times higher for an individual aged above 65, using disaggregated age-specific health expenditure data from Japan, corroborates the OECD findings. The disproportionate increase in per capita healthcare expenditure is due to the combined impact of increasing cost of healthcare services associated with innovations in science and medical technology and the greater use of medical treatment as people age.

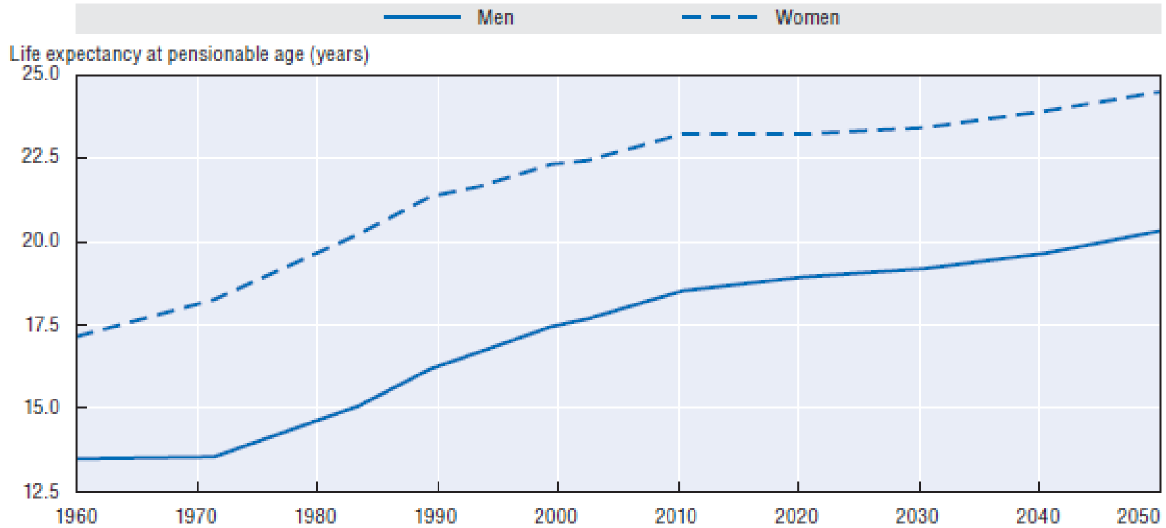
Figure 1: Per Capita Life Expectancy and Healthcare Expenditure in OECD Countries



Source: OECD Health Data 2008.

Figure 2 illustrates the average time spent in retirement since 1960. In 1960, the average male in OECD countries spent about 13 years in retirement, and the average female spent about 17 years. By 2010, this had increased to 18 years and 23 years, respectively. Forecasts from the United Nations and OECD suggest that at current retirement ages, by 2050 this will increase to 21 and 25, respectively, so the time spent in retirement has been increasing. It is evident that the increases in retirement age have not kept pace with increases in longevity.

Figure 2: Life Expectancy at Pensionable age (1960–2050)



Source: OECD (2011)

The observations in Figures 1 and 2 have important implications for financing healthcare and pension expenditure. Coordination between healthcare and pension policies and programs can enable governments to better address the economic costs of advances in longevity.

Fifth, better coordination can facilitate provision of social security benefits for migrant workers.

Flows of migrant workers across geographical borders in Asian countries and from outside the region have increased with globalization and greater integration of countries in the global economy. However, migrant workers in most countries are not required to contribute to social security programs of the recipient country, or in their country of origin (e.g., Singapore and Malaysia). There has been an increased recognition by policymakers, and greater effort in some countries such as India, Philippines, and Japan to extend social security coverage for migrant workers using Totalization Agreements[3] or bilateral agreements similar to Double Tax Treaties. Coordination between healthcare and pension programs—especially on collecting contributions, and investment management of migrant workers' contributions—would ensure that the migrant worker has continued social security protection. For example, without coordination a host country would have to negotiate separate agreements with the pension program (under Ministry of Labor in most countries), with the healthcare program (under the Ministry of Health), and other social security programs. Coordination could reduce the transaction cost of totalization agreements.

[3] Totalization agreements are similar to double taxation treaties, and ensure that individuals do not pay social security taxes or contributions in more than one jurisdiction, or alternatively avoid paying them all together. These agreements also help fill gaps in benefits levels of individuals who have worked for significant periods of time in multiple countries.

Further, as countries move away from defined benefit to defined contribution type of retirement schemes, the density of contributions[4] of each individual to healthcare and retirement financing programs becomes increasingly important. Coordination can also help facilitate higher density of contributions through totalization agreements for migrant workers.

Lastly, coordination between programs could assist in better public financial management. In many countries health and pension programs are organized or financed by the state. Individual contributions to these programs are thus equivalent to a tax on wage income, and have similar equity and efficiency implications any income tax. Considering the equity or efficiency implications of a particular tax (or revenue) to finance a particular program (or expenditure) is not entirely useful[5], as it is the combined incidence of all taxes[6] that matters. Extending the argument to healthcare and pension programs suggests that there is a strong case for policy coordination. For example, consider a hypothetical country which requires members to contribute 2% of their wage income to the social health insurance (SHI) program, and 6% of their wage income to a public pension program, amounting to a combined contribution rate of 8%.

An increase in the contribution rate by either SHI program or the public pension program singularly, without policy coordination between the two, would divert disproportionate resources towards a particular activity (either healthcare or pensions in this case). When either program is contemplating increasing the contribution rate, the combined contribution rate of 8% has important implications, and not only the contribution rates of the individual programs (2% and 6%, respectively). This is because it is the same base on which contributions are levied. Thus, increases in contribution rates to either of the programs will reduce the total resources available to finance other programs. It is only with policy coordination that appropriate trade-offs between various competing priorities and programs can be achieved.

[4] The density of contributions refers to the actual contributions made to the healthcare or pension fund by an individual divided by the potential maximum number of contributions throughout the life span. The density of contributions impacts the adequacy of the benefit level in pure defined contribution pension programs; and the incentives to contribute in healthcare programs.

[5] The effectiveness of earmarked taxes to finance a particular program is still debated. Many have considered it to be an efficient source, as it increases accountability and ensures a certain source of revenue is matched with certain expenditure. But such an arrangement also reduces the fiscal flexibility of the state and promotes the formation of advocacy coalitions and interest groups associated with certain public expenditure programs.

[6] Incidence of taxation refers to who ultimately pays the tax. Economic theory suggests that the incidence of taxation is determined by the elasticities of demand and supply. In evaluating the equity and efficiency of taxes the combined incidence of taxes are important because different taxes have different allocative and distributional affects (Musgrave 1959). In social security programs, as it is the same base that is being taxed (wage income), the combined incidence of all social security taxes play an important role.

Contribution rates to a range of social security programs for selected Asian countries are shown in Table 2. The contribution rates to retirement financing and associated programs range from 6% to nearly 30% of an individual's wage income, while contributions for all social security programs (including healthcare and unemployment insurance) range from 9.2% to 40%[7]. So contribution rates of social security programs vary widely between Asian countries. This wide range further underscores the importance of policy coordination between various social security programs (healthcare and pension programs accounting for a significant share) within countries being levied on the same base, i.e., wage income.

[7] The base on which the contribution is levied also varies widely between the sample countries.

Table 2: Contribution Rates to Social Security Programs in Selected Countries

Economy	Contribution Rates for Pensions, Disability, and Survivors' Programs			Contribution Rates for All Social Security Programs		
	Insured person	Employer	Total	Insured person	Employer	Total
Brunei Darussalam	8.5	8.5	17.0	8.5	8.5	17.0
PRC	8.0	20.0	28.0	11.0	29.0	40.0
Hong Kong, China	5.0	5.0	10.0	5.0	5.0	10.0
India	12.0	17.6	29.6	13.8	22.4	36.1
Indonesia	2.0	4.0	6.0	2.0	7.2	9.2
Japan	7.9	7.9	15.7	13.1	13.8	26.9
Malaysia	11.5	12.5	24.0	11.5	13.8	25.3
Philippines	2.3	7.07	10.4	4.6	8.3	12.9
Singapore	20.0	15.0	35.0	20.0	15.0	35.0
Republic of Korea	4.5	4.5	9.0	7.8	8.7	16.5
Sri Lanka	8.0	12.0	20.0	8.0	12.0	20.0
Taipei,China	1.3	10.6	11.9	2.9	14.5	17.4
Thailand	3.4	3.4	6.9	5.0	5.2	10.2
Viet Nam	6.0	12.0	18.0	8.5	20.0	28.5

Source: Estimated from Official Reports; SSA (2010)

3. AREAS OF COORDINATION

The previous chapter discussed the rationale for greater coordination in healthcare and pension programs. This chapter discusses the various possible areas for coordination in healthcare and pension programs.

3.1 Coordination in Collection of Contributions

There are two basic models for organizing public pensions—the social insurance model and the benefit payment model (Ross 2011). The social insurance model handles all major functions including the collection of contributions and the distribution of benefits to members. These are found in France, Germany, Brazil, Mexico, Japan, and Thailand, for example. The benefit payment model relies on the tax administration system for the collection of member contributions, but pays beneficiaries directly. Examples of such arrangements are found in the United States, Canada, the United Kingdom, Sweden, and Australia. The investment function in this model is either handled in-house such as in Sweden, or is sourced to another organization such as the Treasury Department in the United States.

The collection of contributions runs parallel to the tax administration system in the social insurance model, and is integrated with the tax administration system in the benefit payment model. Ross (2011: 6–7) argues, "historically in Western Europe parallel systems developed, but in other places integrated collection systems have always prevailed, as in the United States, America and Australia. In these countries social insurance institutions developed later and could effectively use established tax collection systems".

Similarly, for public healthcare programs there are two broad models—the social insurance model and the benefit payment model. However, the types of social insurance or benefit payment models that countries use to finance healthcare plans differ widely. These relate to whether the social insurance model delivers healthcare services directly or through a network of contracted providers; or whether there is a single healthcare fund or competing funds that individuals can choose from (The Netherlands) or are assigned to (Japan)

Predictably, a parallel collection system is more expensive, as integrated collection systems have lower administrative costs (Ross 2011). In Singapore; Malaysia; and Hong Kong, China the provident fund collects the combined contributions for both healthcare and pension programs; while two separate organizations collect healthcare and pension contributions in the Philippines. The Republic of Korea recently integrated the collection of contributions to the healthcare and pension programs. Contributions had been collected separately, but since 2011 contributions to both programs have been collected by the National Health Insurance Corporation (NHIC), which is also given the responsibility for administrative and record-keeping activities of both programs. A combined, centralized collection of healthcare and pension contributions allows savings in administrative costs, either through the established tax system or through the organization managing the programs[8].

[8] The extent to which cost savings can be realized in various countries when centralized collection methods are used is an empirical question, and has not received attention in the literature.

3.2 Coordination of Administrative Functions, Data, and Record-keeping Activities

Social security organizations can realize considerable economies of scale through coordination of administrative functions, particularly in data and record-keeping activities. A centralized collection system and record-keeping activities reduces transactions cost, and most importantly eliminates wasteful expenditure on duplication of services. Further, such coordination facilitates totalization agreements and portability of pension and healthcare benefits.

3.3 Coordination in Investment Management

An important question that needs to be addressed in this context is whether it is efficient to have single or multiple competing funds for public healthcare and public pension programs. Another question is whether a case can be made for a combined healthcare and pension fund, especially if both funds have the same investment mandate and are subject to statutory requirements on the degrees of exposure to different asset classes.

The standard argument in favor of multiple funds is that it reduces the monopoly power of each fund, promotes competition which forces funds to reduce their administrative costs, and reduces systemic risk [9]. This argument, however, is based on the assumption that members of the healthcare or pension program have the freedom to choose between competing funds. Moreover, if funds are required to have similar investment mandates or exposure to different asset classes there may be little effective competition as each is constrained by regulation and will offer similar returns. If, however, fund managers are allowed to compete by offering packages that differ in some dimensions, the choice and competition will give funds an incentive to be cost effective, and increases economic efficiency. This is not the case in healthcare and pension plans in most Asian countries. Individuals do not have the option of selecting from competing multiple funds; in most countries, there is a separate health insurance fund and a separate pension fund that manages their respective assets and liabilities.

A related issue is whether investments in healthcare and pension funds should be undertaken jointly. There has been only limited research on this issue. Both pension and healthcare funds have different liability structures, and the variance in benefit payments, in both defined

[9] Pension and healthcare systems are affected by macroeconomic, demographic, technology, labor market, and financial shocks. Each of these could, individually or collectively, undermine the viability of the pension or healthcare system by increasing the risk faced. Diversification and increased competition amongst fund managers reduces systemic risk in the healthcare or pension systems.

contribution and defined benefit pension programs, is arguably smaller than the variance in payments in healthcare funds. This is due to the stochastic nature of illnesses and the uncertainty about the cost of treatment. While it is indeed difficult to accurately project the liabilities in pension funds, especially due to rapidly changing demographic profiles and advances in longevity, it is arguably easier to estimate the expected expenditure of pension plans than that of healthcare plans. It can be argued that the difference in the liability structures between healthcare and pension programs would impact the investment decisions of their respective funds. This then implies that there is a case to consider separate investment management of healthcare and pension funds.

3.4 Coordination of Tax Treatment

The tax treatment of retirement and healthcare financing instruments need to be coordinated to ensure equitable tax treatment for providers of such instruments and among the instruments. In many economies including India, Singapore, and Thailand tax treatment for many retirement and healthcare financing instruments, and their providers varies considerably. This results in significantly differing relative prices for different instruments; and in differing advantages to providers. This affects contemporaneous and temporal decisions that individuals make regarding consumption and savings.

Transitioning to more equitable treatment however poses challenges including securing political consensus for the tax changes. Transition costs and their management would impact on the pace and extent to which such coordination is feasible.

3.5 Intra Program Coordination

Not only is there a strong case for policy coordination amongst healthcare and pension programs, but also among various healthcare programs on the one hand, and among various pension products or programs on the other. The reasoning is as follows.

There is consensus amongst pension and social security practitioners and experts that the replacement rates[10] (from all sources of income during the retirement period) should be about 60%, to protect against longevity, inflation, and survivors' risks (OECD 2011). As individuals will rely on multiple instruments, retirement products, or pension programs to achieve this replacement rate, there is a case for policy coordination among the various instruments made available (provident fund, social insurance, social pensions, capital and financial market products, annuities, etc.) to the pensioner to ensure that the total resource costs devoted are minimized.

[10] The Replacement Rate is the ratio of income post-retirement to the last drawn salary of the pensioner.

The case for policy coordination amongst various healthcare programs is more complex. This is because of inherent market failures, and to a lesser extent the government failures regarding the provision and delivery of healthcare services (Blomqvist 2011). While some healthcare services have characteristics of public goods (immunization, vaccination programs, etc.), most healthcare services are private goods. Further, the market for healthcare services is characterized by information asymmetry, moral hazard, adverse selection, etc.; there is thus a role for the state in the provision of healthcare services, and to also minimize the impact of market failures in healthcare[11].

As individuals may rely on both public and private programs for healthcare protection, coordination and regulation among various healthcare programs (public and private) will help minimize the total resource costs devoted to financing healthcare. Such coordination manifests itself in controlling the supply of beds (public and private) across all levels of speciality care (primary, secondary, and tertiary) in particular areas. Two competing speciality hospitals serving a small geographical location may be efficient in a narrow technical sense, but inefficient from a broader societal resource cost perspective.

Most social security programs have an element of workman's compensation that relates to healthcare benefits for an employee in the event of a work-related injury or accident. This is typically provided for with the pension program—including collection of contribution, investment management, and administrative functions. The healthcare component of the workman's compensation runs parallel to existing national health program, and could be integrated. In most cases, the instrument used to finance the healthcare component of workman's compensation, and the healthcare program is a form of social insurance (example: Philippines, Viet Nam, and India).

The above discussion suggests that not only macro-level coordination between healthcare and pension policies is needed, but that coordination among different components of pension and health systems are also essential.

3.6 Coordination in Design of Healthcare and Pension Program

The design of the healthcare and pension program is an area that has received only limited attention in the literature, but has important fiscal implications as they can give rise to contingent liabilities. For example, if the pension guarantee made by the state takes into account rising healthcare costs so as to ensure that real pension income does not fall, and if this is done without coordination with the arrangements within the health program to address cost inflation, the total guarantee given by the state will be sub-optimal. If the net guarantees (both healthcare and pensions) are too high they will give rise to contingent liabilities. The net

[11] For example, this can be accomplished by reducing the ability of a healthcare provider to exploit its information advantage.

guarantees could also be too low in the absence of coordination. The example of coordination with respect to healthcare cost inflation is an example of only one of the various elements in the design of healthcare and pension programs. There are other areas that impact the design of both healthcare and pension programs, such as benefit levels, net replacement rate, and retirement age.

4. COUNTRY EXAMPLES

The previous Chapter discussed the rationale for greater coordination between healthcare and pension programs, and envisaged the different types of possible coordination between the two. This chapter provides a broad overview of existing coordination mechanisms in selected Asian countries—the Philippines, Thailand, Viet Nam, India, Singapore, and Malaysia.

4.1 Philippines

In the Philippines, the state pension program is administered by the Social Security System (SSS) and governed by the Social Security Commission. A separate, state-owned corporation, Phil Health, which is governed by the Department of Health, administers the healthcare program. Contributions to both programs are deducted from an individual's payroll, shared by the employer and employee, and credited to SSS and PhilHealth respectively[12]. Both the SSS and PhilHealth have similar investment mandates, and exposure to asset classes, but their respective investment and cash management functions are carried out separately. The administrative arrangements for both programs, including record keeping and processing claims, appear to have only limited coordination as they are housed in separate organizations and are supported by different institutions.

4.2 Viet Nam

In Viet Nam, Viet Nam Social Security (VSS) administers the state pension and healthcare program. It falls under the purview of the Ministry of Labour, Invalids and Social Affairs (MoLISA) and the Ministry of Finance. Contributions to the pension program and the health care program are deducted from an individual's payroll, and in addition to employer contributions, they are credited to respective healthcare and pension funds. Both funds have similar investment mandates comprising of exposure to treasury bills, government bonds, and money market instruments. The VSS handles investment and cash management of both programs. Prior to the implementation of "Circular 21" if either program accounts ran out of

[12] Contributions for some members are subsidized by the state, or are paid annually—for example the members of the Overseas Worker Program are required to pay annual contributions.

funds (the healthcare program has been accruing deficits since 2005), benefits could be paid from the surpluses accrued in other program accounts. Circular 21 envisages greater accountability of the programs for meeting their liabilities, and requires program deficits to be financed by government budgets rather than from accrued surpluses of other social security programs.

While there is centralized collection of contributions, and the investment function is carried out in-house by the VSS, the healthcare and pension funds are invested separately. Allowing a program fund to go into deficit to use accumulated reserves from other funds implicitly defeated the purpose of separate investment and cash management of the programs. There appears to be policy coordination between the two programs with respect to changes in the contribution rates. The Social Insurance Law, which governs the pension arrangements, was implemented before the Health Insurance Law in 2007, but any increases in contribution rates are synchronized between the two programs.

4.3 Singapore

In Singapore, state healthcare and pension programs are administered by the Central Provident Fund, a statutory board under the Ministry of Manpower. Contributions to healthcare and pension program are deducted from an individual's payroll, shared by the employer and employee, and channeled to medical savings account "Medisave", and another account to finance retirement expenditure[13].

For the purpose of investment management, CPF does differentiate between balances held accumulated in Medisave or other accounts of a member[14]. A significant share of CPF balances are held in non-marketable Government of Singapore bonds, and members earn a pre-determined interest rate on their balances.

CPF also offers a health insurance plan called Medishield which is used for in-patient treatment at restructured hospitals. More generous versions of Medishield were privatized in 2005 to National Trade Union Congress (NTUC). Since then many private insurance companies have been offering top-up plans to the basic Medishield scheme. Premiums to most healthcare schemes in Singapore (public and private) can be financed from a member's Medisave account but they need to be approved by the CPF Board. To that extent, there is coordination amongst the various healthcare schemes in terms of their financing arrangements.

Singapore's healthcare and pension arrangements provide an example of various aspects of coordination. Though the program is not administered by the Ministry of Health, and is under

[13] CPF also has mandatory contributions to finance housing expenditure, but these are not discussed in this paper. Asher and Nandy (2006) provide an analysis of the CPF system.

[14] The investment management of Medishield, discussed below, is carried out separately from that of Medisave.

the purview of the Ministry of Manpower, there is implicit policy coordination in the contribution rates to healthcare and pension program. This is reflected in the many occasions on which the CPF has changed its overall combined contribution rate to both programs, particularly during periods of economic crisis to reduce the immediate burden on employers. There is coordination in collection of contributions, and its investment by the CPF. The CPF system is intricately linked with the tax administration system, which also reduces the marginal efficiency cost of funds (of tax revenue).

Most importantly, the administration, record-keeping, and data processing functions for both programs are handled by the CPF itself. It is assumed that this allows them to realize considerable cost-savings due to economies of scale. As CPF has access to disaggregated and policy-relevant data on various aspects of healthcare and pension arrangements, this can bring a unique systemic perspective in social security planning and reform15.

4.4 Malaysia

Malaysia too relies on a mandatory provident fund, the Employers Provident Fund (EPF) to administer its healthcare and pension programs. It also allows members to use the EPF to finance housing and education. Contributions to the EPF are shared by employer and employee, and are parked in three separate accounts to pay for housing, pensions, and healthcare expenditure respectively. The EPF does not distinguish between the accounts for investment purposes. Member balances are invested in Malaysian government securities, real estate, money market products, and equity instruments. As withdrawals from healthcare account amounted to less than 0.5% of all EPF withdrawals, in 2007 the healthcare account was dismantled. Member contributions following 2007 reforms are now channeled to two accounts: housing (Account I) and pensions (Account II). Malaysia does not have a national health plan, but allows members to pay for certain healthcare expenses from their balances in EPF. Those employed in the formal sector, however, are part of a compulsory work injury scheme.

The Social Security Organization (SOCSO), initially established as a government department in 1971 and later converted into a Statutory Board, administers an employment injury health insurance scheme and an invalidity pension scheme. Contributions to SOCSO are deducted from the individual's payroll (1.25%). Employers are also required to contribute to both programs (1.0%). Contributions for both programs are invested in Government of Malaysia securities, private debt securities, and money market instruments. SOCSO appears to have a

[15] Social security has multiple objectives which include consumption smoothening, poverty relief, income redistribution, amongst many others. Social security programs, including healthcare and pensions, are impacted by underlying macroeconomic, demographic, and labor market trends. Thus, when discussing any aspect of social security, it is important to consider a systemic perspective and not view a particular program in isolation or insular from the economic paradigm (Barr and Diamond 2008).

more conservative investment mandate than its counterpart the EPF. There appears to be only limited coordination between the two organizations administering healthcare and pension programs in Malaysia. EPF and SOCSO have a common membership so administrative coordination could potentially cut administrative costs.

4.5 Thailand

Thailand's healthcare system is administered by three organizations—the National Health Security Office, the Ministry of Public Health, and the Social Security Office (SSO) which administers pension arrangements.

Currently, there are three healthcare schemes—one for formal sector workers, one for civil servants, and a Universal Coverage (UC) scheme which covers the entire population. The UC scheme, implemented in 2001, superseded many complex healthcare programs for those employed in the informal sector. The social insurance program covers around 8%, the civil service program another 8%, and the remaining population are covered by the UC Scheme. The three programs are administered by separate organizations, with limited policy coordination between them.

The UC and civil service schemes are tax-financed, and have no user fees or co-insurance rates. The social insurance program is administered by the SSO, which also administers the pension program. Contributions to both the social insurance and pension program are deducted from an individual's payroll, shared by the employer and the employee, and credited to separate funds in the SSO. SSO hires professional investment and fund managers to invest these funds. The funds have similar investment and asset class exposure requirements, and earn similar returns on investments.

Policymakers have made repeated attempts to harmonize the three health schemes, to combine administrative and record keeping functions, but have been thwarted by powerful interest groups that benefit from keeping the programs separate[16]. As the social insurance program covers less than 8% of the population and paid for only 6% of total health expenditure in 2009, the overall impact of existing coordination between healthcare and pensions programs administered by the SSO is relatively small.

4.6 India

Healthcare and pension arrangements are administered by multiple organizations with limited regulatory supervision in India. The healthcare program is administered the Employees State Insurance Corporation (ESIC) enacted under the Employee State Insurance Act of 1948 which

[16] The social insurance scheme and the civil service scheme offer their members relatively more generous benefits than the UC scheme (Ramesh 2009).

is headed by the minister of labor, and is a contributory program for those employed in the formal sector. Contributions are collected from an individual's payroll and are channeled to an insurance fund. Members and their dependents are entitled to receive treatment at ESIC hospitals or at approved private hospitals.

There are other health insurance and community schemes such as Rashtriya Swasthya Bima Yojna (RSBY), the Chiranjeevi maternal healthcare scheme, and the National Rural Health Mission (NRHM), amongst many others. But there is no policy coordination between these various schemes in terms of infrastructure utilization, coverage, and targeting mechanisms.

The Employees Provident Fund Organization (EPFO), established under the EPF Act of 1952, administers the pension program—a defined contribution employee's provident fund (EPF) and a defined benefit pension scheme (EPS). Contributions to the EPFO are collected from an individual's payroll, and are shared by the employer and employee. Member balances are invested predominantly in public sector debt investments and members are credited a pre-determined interest rate which has not significantly fluctuated (Asher 2008)

There are other voluntary pension programs—such as the New Pension Scheme (NPS) and tax-advantage savings schemes such as the Public Provident Fund (PPF)—and micro-pension schemes that are also administered by different departments. However, there is limited policy coordination and regulatory oversight of the various pension schemes. This is reflected in the uneven tax treatment between various pension programs. The Pension Fund Regulatory and Development Authority (PFRDA) Bill, which seeks to set up regulatory authority governing the NPS is yet to be passed by the Parliament.

5. CONCLUDING REMARKS

Rapid ageing of the population globally represents an unprecedented historical trend. As pension and healthcare costs are positively correlated with rising incomes, ageing, urbanization, and a shift from communicable to life-style diseases, managing these costs is a major challenge.

As there are many linkages between healthcare and pension arrangements—in terms of costs, exposure to risks, and as they jointly impact on crucial policy decisions—this paper discusses the rationale for coordination between various programs to better manage the cost of ageing. The current difficult macroeconomic environment, including fiscal stringency conditions, strengthens the case for such coordination.

Ultimately, healthcare and pensions is a bundle of services that the elderly would need to have access to. It is also clear that the share of resources devoted to financing this bundle of service will continue to increase as people live longer and have better access to healthcare services. The extent to which coordination between healthcare and pension arrangements enables

countries to minimize these resource costs, suggests it could be a helpful way to better manage the costs of ageing.

An avenue not explored in this paper, are possible alternative solutions to the provision and delivery of this bundle of services, and to manage costs of ageing. As many Asian countries have limited fiscal space to finance social expenditure, innovative solutions relying on the state and the market in the provision and delivery of the bundle of services merit consideration.

Greater research on the various economic and social linkages underpinning healthcare and pension arrangements also needs to be explored in country-specific contexts. This would require greater research, availability of robust disaggregated data on demographic and macroeconomic variables.

The country examples in this paper provided a broad overview of the various types of coordination mechanisms in place between healthcare and pension arrangements. As the sample countries have differing economic, social, and political institutions, and are in various stages of demographic transition, there are no blue-prints for perfectly coordinated healthcare and pension systems. Coordination between healthcare and pension programs should ultimately minimize total resource costs devoted by a society to managing healthcare and pension programs.

To give impetus to such coordination it would be useful to initiate national and sub-regional forums for exchange of ideas and practices so that network externalities can be realized. Multilateral organizations such as the World Bank and the World Health Organization could play a role by considering greater internal coordination between those responsible for pension and healthcare, and initiating communication among them about how to better coordinate pension and healthcare policies. Their insights can be then incorporated in their policy advice and research output on these issues.

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