NATIONAL SOCIAL PROTECTION FUND: THE MULTI-PILLAR EMPLOYEES' PROVIDENT FUND

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ABSTRACT

This paper formulates a comprehensive pension fund framework for enhancing system capacity to manage economic and social risks. The National Social Protection Fund (NSPF) attempts to quantify the informal sector, incorporated under a unified national protection scheme. The new protection mechanism consists of two sub-funds: The National Integral Social Security Fund (NISSF) and the National Education Fund (NEF). NISSF encompasses all economically active Malaysian population, including the informal workforce, whereas the NEF captures the economically inactive young population. Simulation findings indicate that education, health and income redistribution can improve the livelihood of the vulnerable population groups in Malaysia.

Keywords: Malaysia, EPF, Social Security, Social Protection, and Policy Modelling, JEL: Y20.

INTRODUCTION

There is a growing concern among policymakers that the Malaysian Employees' Provident Fund (EPF) has been experiencing idiosyncratic challenges in meeting the retirement needs of its members. The provident fund is a variant of a defined-contribution plan, which, by definition, is not designed to address longevity, inflation, and survivors' benefit-risk (Asher, 2012). EPF satisfies in principle the prudent person rule, addressing the distortions of myopic individual behavior (Mitchell & Fields, 1995). Notwithstanding, retirement income *per se* does not meet the threshold of insurability, constituting state intervention inevitable at the expense of taxpayers, current contributors, and retirees (Feldstein, 1998).

Furthermore, the current retirement *status quo* of the provident fund members is not economically desirable (Koutronas & Ismail, 2016). Only one-third of the active EPF members will have sufficient accumulated savings (Holzmann, 2014), with the account balances of 73.2 per cent of fund contributors yield less than RM 50,000 (Asher, 2012). With 70 percent lump-sum withdrawal rate, 50 per cent participation and absence of a life annuity option, *prima facie*, the actual EPF coverage is substantially lower (Koutronas & Ismail, 2016; Othman, 2010). As a result, most of the EPF members will not have adequate retirement income.

It is a plausible conjecture that EPF needs a paradigm shift in emphasis from retirement-based benefits to social protection forms of support. Such a development is mandatory given the emergence of new risks (demographic factors, labor mobility, climate, technological developments) and new needs (health care, pensions). These conditions require a dynamic provident fund where individual needs are met effectively and efficiently by implementing enhanced welfare benefits closely related to their specific context.

This paper formulates a comprehensive pension fund framework for enhancing system capacity to

manage economic and social risks. The National Social Protection Fund (NSPF) attempts to quantify the informal sector, incorporated under a unified national protection scheme. The new protection mechanism consists of two sub-funds: The National Integral Social Security Fund (NISSF) and the National Education Fund (NEF). NISSF encompasses all economically active Malaysian population, including the informal workforce, whereas the NEF captures the economically inactive young population.

The remainder of this paper is organized as follows. Section two outlines the Employees' Provident Fund. Section three describes the integrated fund mechanism into a simplified theoretical framework. Section four concentrates on data requirements and the simulation technique used upon the data. The final section summarizes the conclusions and provides policy recommendations. The Appendix contains tables and figures.

Employees Provident Fund (EPF) at a Glance

EPF is a trust fund (functions as a trustee for its members) established under the EPF Ordinance, 1951. It was amended to the EPF Act in 1991. EPF is a defined contribution plan based on a prescribed rate of contribution by employers and employees, accumulated as savings in a personal account and full withdrawal upon retirement. The scheme is mandatory for those in the formal sector, but it also allows those who are self-employed to contribute towards the fund. This flexibility is aimed at encouraging savings for old age. The basic rate of contribution is 12 per cent and 11 per cent for employers and employees, respectively regardless of the age of employee (Employee Provident Fund (EPF), 2014).

EPF is structured into three types of accounts, namely, Account I, Account II and Account III (see Table 1 and Figure 1). Each account is designed to serve the different needs of contributors and conditions under which a certain amount can be withdrawn. The account I constitute 60 per cent of members' savings for retirement in accordance with the primary objective of the scheme, i.e., to ensure that members have sufficient cash savings for retirement. Up to 20 per cent of the balance in Account I can be transferred for investment purposes. Account II allows a member to withdraw his/her savings once for buying or building a house. This withdrawal is limited to 20 per cent of the house price or 45 per cent of a savings account but not exceeding the aforementioned percentages.

Further withdrawals to reduce or to settle the balance of the housing loan is allowed every five years from the date of the previous withdrawal until the member attains the age of 55 years. Under this account, members will also be allowed to withdraw some money to finance the cost of their children's education. Account III is intended to help members to pay for their medical expenses of critical illness. This assistance in the form of emergency medical expenses allows 10 per cent of contribution to be withdrawn and it is not limited to the member-only but is extended to member's spouse, children, parents and siblings.

EPF introduced the Periodical Payment Withdrawal Scheme in 1994 to allow members who have reached retirement age to withdraw their savings periodically (once a month) until all savings are withdrawn. Besides the lump sum withdrawal at retirement, EPF also provides two other schemes. One of the other two options is part lump sum and part periodic payment while the other allows contributors to maintain the principal amount with EPF, withdrawing only the annual dividends.

In July 2000 EPF introduced yet another option, which is the annuity scheme comprising two types of schemes to suit the preference of contributors. The first one is known as the Conventional Annuity Scheme, and the other is the *Takaful* Annuity Scheme. These schemes are aimed at providing members with an even income stream throughout their retirement years. They are open to contributors between the ages of 16 and 70. Members of EPF may choose to buy one or both the schemes (Ong, 2001).

Table 1 Types of Withdrawal of EPF

No.	Type	Account	Purpose
1.	Age 55 years withdrawal.	Account 1 Account 2	Members can withdraw all of their savings either in a lump sum or partially for financial support during retirement period.
2.	Incapacitation withdrawal.	Account 1 Account 2	Members can withdraw all of their savings should they become physically or mentally incapacitated to work, having achieved the level of Maximum Medical Rehabilitation (MMI) to work to help and support their living.
3.	Pensionable employees withdrawal and optional retirement withdrawal.	Account 1 Account 2	This withdrawal allows members who are still employed in the Public Service and have been emplaced in the pensionable establishment to withdraw the employee's share of contribution including the dividends accrued after returning the government's share to Retirement Fund. This withdrawal allows the members who opted for early retirement from the Public Service to withdraw the employee's share of contributions, including the dividends accrued for periods where it was compulsory to contribute to EPF while in the Public Service.
4.	Leaving the country withdrawal.	Account 1 Account 2	Withdrawal can be made by Malaysian citizens who have renounced their citizenship in order to migrate to another country OR foreign citizens (members who contribute before 1 August 1998) who have ceased to be employed in this country and wish to return to their country of origin.
5.	Death withdrawal.	Account 1 Account 2	This withdrawal allows member's nominees or administrators or next-of-kin to withdraw the savings in the event of the member's death.
6.	Savings of more than RM1 million withdrawal.	Account 1 Account 2	Members can withdraw their savings if the credit is RM1.05 million as RM1 million is view as adequate to finance their basic retirement needs. Members are eligible to withdraw not less than RM 50,000 which will be taken from Account 2, and if it is insufficient, the balance will be taken from Account 1.
7.	Members investment withdrawal.	Account 1	Members can invest not more than 20% of their savings in Account 1 in excess of basic savings amount to increase their retirement savings.
8.	Age 50 years withdrawal.	Account 2	Members can withdraw all of their savings in Account 2 upon reaching age of 50 to prepare and plan for their retirement earlier.
9.	Withdrawal to reduce / redeem housing loan.	Account 2	Members can withdraw their savings in Account 2 to reduce or redeem the housing loan balance with the financial institution approved by EPF. Withdrawal to reduce or redeem the housing loan balance for a second house is allowed when the first house is sold or disposal of ownership has taken place.
10.	Education withdrawal.	Account 2	Members can withdraw their savings in Account 2 to finance the member's education and their children's education (including step-children and legally adopted children) at an Institution of Higher Learning either locally or abroad.
11.	Withdrawal to purchase a house or to build a house.	Account 2	Members can withdraw their savings in Account 2 to finance the purchase of a house and withdrawal to purchase a second house is allowed after the first house is sold or disposal of ownership of property has taken place. Members can withdraw their savings in Account 2 to finance to build a house and withdrawal to purchase a second house is allowed after the first house is sold or disposal of ownership of property has taken place.

Table 1 (cont..)

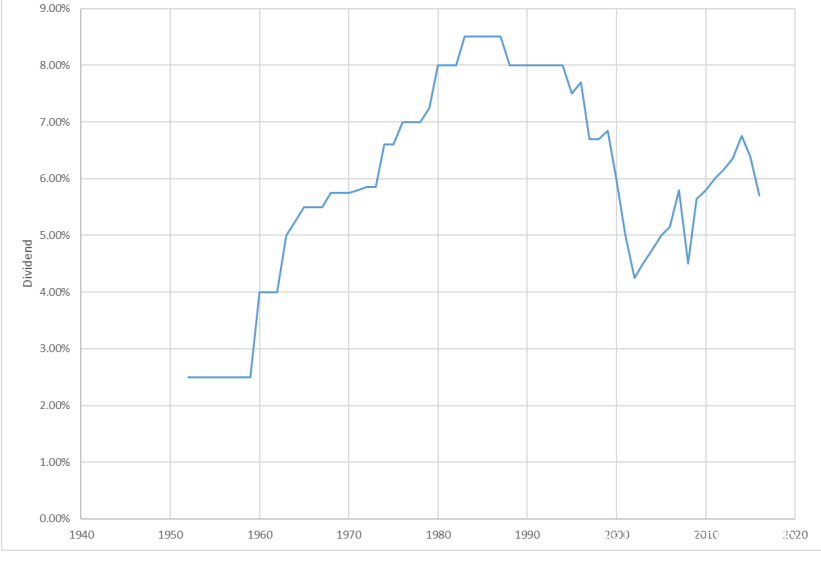
12.	Housing loan monthly installment withdrawal.	Account 2	Members can withdraw their savings in Account 2 to pay for housing loan monthly instalments taken for the purpose of buying or building a house. This is an addition to the existing withdrawal, which is the withdrawal to reduce or redeem housing loan.
13.	Flexible housing withdrawal.	Account 2	Set aside a part of savings in member's Account 2 to the Flexible Housing Withdrawal Account to enable the member to obtain a higher housing loan amount to purchase or build a house. Member can obtain a higher loan amount since the credit assessment on the net income also takes the EPF contribution into consideration.
14.	Health withdrawal.	Account 2	Members can withdraw their savings in Account 2 to pay for medical expenses incurred for the treatment of critical illnesses and/or to buy medical aid equipment as approved by the EPF Board for oneself or permitted family members.
15.	Hajj withdrawal.	Account 2	Members can withdraw their savings in Account 2 to perform their Hajj effective from January 2013.

Source: Employees Provident Fund Data in (Mansor, Syed Salleh, Tan, Koutronas, & Aikanathan, 2014)

EPF has exhibited significant cash flow growth that inconsistently returns added value to its members in the form of dividends (see Figure 2). EPF nominal rates have been historically moderate to high, averaging 5.95 per cent per annum during the period 1961–2014 (Koutronas & Ismail, 2016). EPF dividends have reached historic low levels during the 1997 Asian financial crisis and the 2008 global financial crisis with 4.25 per cent and 4.50 per cent, respectively. Since 2015, the fund experienced a dividend rate of 5.70 per cent due to domestic economic conditions.

In September 2016, the membership of the pension fund reached 14.72 million, of which 6.83 million are active and contributing members. A significant change to age pension eligibility was made by the Malaysian government in 2001 (from 55 to 56), in 2008 (from 56 to 58) and in 2012 (from 58 to 60) (Peng & Tengku Hamid, 2014).

Table 2 EPF-Dividend (1952-2017)



Source: 1-million-dollar-blog.com. (2017)

The National Social Protection Fund (NSPF)

The NSPF relies on a defined-benefit scheme with defined-contribution elements where EPF accepts to manage in a principled manner. It remains a savings scheme with personal financing features, such as education, housing down payments and medical care, accompanied though by predetermined mandatory contributions. In the case of additional borrowing, members will use the retirement savings accounts as collateral, subject to strict limitation terms, borrowing at the guaranteed rate. Furthermore, EPF will create a defined-benefit annuity based on accumulated balances in individual accounts that will guarantee the real value of the return. The three-to-one pillar scheme will be sustainable and viable as long as the compounded contributions along with the expected retirement amount and the expected return of assets are in perfect alignment.

The new fund mechanism aims to reduce vulnerability and manage the risk of low-income EPF members with regard to basic consumption and social services. The combination of basic needs, such as a pension, health insurance and education, into a comprehensive fund, can eliminate living risk to those individuals who do not fulfill retirement requirements. The fund is designed to transfer resources to groups deemed eligible due to deprivation.

The Social Protection-DNA Model

The proposed analytical framework evaluates the overall impact of integrated funding. The development of the two national funds follows a right-handed double helix curvature. The Social Protection-DNA model (SP-DNA) examines the impact of the dual funds in reducing poverty within

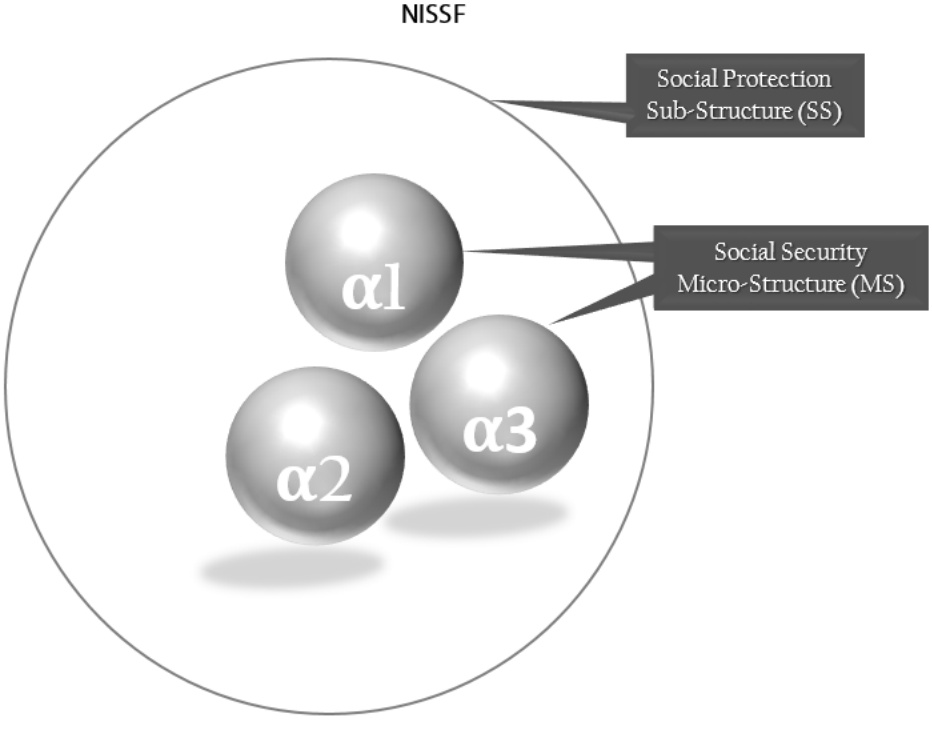


Figure 1 The National Integral Social Security Fund (NISSF)

(Source: Authors' Elaboration)

the framework of real-time multidimensionality (Ruiz Estrada, Chandran, & Tahir, 2014) and the *Omnia Mobilis* assumption (Ruiz Estrada, 2011).

Multidimensional scaling reveals the structure of data set by plotting points into a multidimensional graphical setting. The underlying dimensions extracted from the spatial configuration of the data aim to identify those dimensions affecting perception or behavior of the existing dataset that reflect to hidden structures or important relationships that are not readily event in it. In other words, the model algorithm provides multidimensional equilibrium solutions that cannot be observed in a traditional two-dimensional Cartesian plane. Algorithmic and graphical multidimensionality provides a holistic approach to the relationships between variables.

The NISFF and NEF fund spiral around interconnected to each other. NISFF is a three-pillar fund encompassing three sub-funds, namely, the formal employee's fund ($\alpha 1$), the informal employee's fund ($\alpha 2$), and the unemployment insurance fund ($\alpha 3$). NEF alternatively is a single-pillar fund. In three-dimensional Euclidean space, each of the fund surfaces is geometrically bounded by a sphere.

The movement of the integrated fund and the three sub-funds on the helix-1 trajectory is perpendicular to the social security microstructure (MS) and the single social protection sub-structures (SS), respectively. The sub-fund trajectories change when their single social protection sub-structures angular with a different angle against their single social protection structures. The establishment of the sub-funds is not perpendicular to their single social protection structures. Accumulated contributions cause the sub-funds' orbital motion in the direction of their single social protection structures. So, the sub-funds drift on the helix-1 trajectory. In parallel, the single-pillar fund drifts on the helix-2 trajectory. NISFF and NEF interact in the social protection substructure area (see Figure 2).

The volume formula of a sphere is given by

$$V = \int_0^{2\pi} \int_0^{\pi} \int_0^{r} r^2 \sin\theta \, dr \, d\theta \, d\varphi \approx \frac{4}{3}\pi r_i^3 \quad (1)$$

r_i reflects the radial distance of a point from a fixed origin; θ depicts the polar angle measured from a fixed zenith direction; and φ represents the azimuth angle of its orthogonal projection on a reference plane that passes through the origin and is orthogonal to the

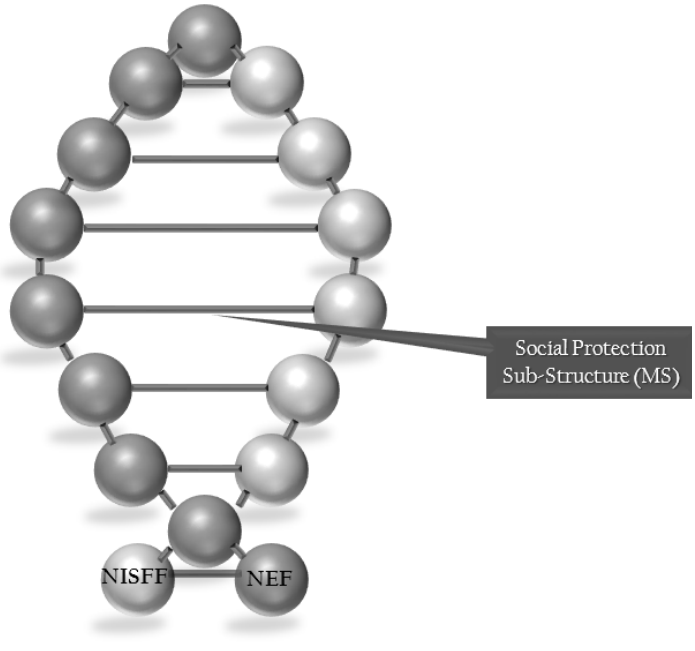


Figure 2 The Social Protection Heli
(Source: Authors' Elaboration)

zenith, measured from a fixed reference direction on that plane. In the helix-1 setting, the radial distance r_i is equivalent to sub-funds' annual growth rate:

$$r_i^{h_1} = \frac{\partial a_i(t)}{\partial t} \tag{2}$$

The radial distances $r_{i_{\alpha_1}}^{h_1}$, $r_{i_{\alpha_2}}^{h_1}$, and $r_{i_{\alpha_3}}^{h_1}$ of sub-funds are giveen by

$$r_{i_{\alpha_1}}^{h_1} = \frac{\partial a_1(t)}{\partial t} \tag{3}$$

$$r_{i_{\alpha_2}}^{h_1} = \frac{\partial a_2(t)}{\partial t} \tag{4}$$

$$r_{i_{\alpha_3}}^{h_1} = \frac{\partial a_3(t)}{\partial t} \tag{5}$$

Then, we calculate their social security micro-structure:

$$MS_{i_{\alpha_1}}^{h_1} = \frac{4}{3}\pi \left(r_{\alpha_1}^{h_1}\right)^3 \tag{6}$$

$$MS_{i_{\alpha_2}}^{h_1} = \frac{4}{3}\pi \left(r_{\alpha_2}^{h_1}\right)^3 \tag{7}$$

$$MS_{i_{\alpha_3}}^{h_1} = \frac{4}{3}\pi \left(r_{\alpha_3}^{h_1}\right)^3 \tag{8}$$

The merge of the three-social security micro-structures gives the social protection substructure of NISFF:

$$SS_i^{h_1} = MS_{i_{\alpha_1}}^{h_1} \amalg MS_{i_{\alpha_2}}^{h_1} \amalg MS_{i_{\alpha_3}}^{h_1} \tag{9}$$

where ($\amalg$) is defined as the c-connector symbol. The total sum of the social protection substructures gives the helix-1 curvature:

$$h_1 = \sum_{i=1}^{\infty} SS_i^{h_1} = SS_1^{h_1} \overline{\amalg} SS_2^{h_1} \dots \overline{\amalg} SS_\infty^{h_1} \tag{10}$$

where ($\overline{\amalg}$) is defined as the t-connector symbol. In the helix-2 setting, the radial distance of the fund is given by

$$SS_i^{h_2} = r_i^{h_2} = \frac{\partial \beta_i(t)}{\partial t} \tag{11}$$

Similarly, the total sum of social protection substructures gives the helix-2 curvature:

$$h_2 = \sum_{i=1}^{\infty} SS_i^{h_2} = SS_1^{h_2} \overline{\amalg} SS_2^{h_2} \dots \overline{\amalg} SS_\infty^{h_2} \tag{12}$$

Application of the Social Protection DNA Model (SP-DNA) in Malaysia

The multi-dimension setting enables the SP-DNA model to be tested in a real-world setting. The interacted Euclidean space facilitates the visualization of real-time changes in each fund component. Change in the determination of the past, present, and future assumes the existence of a subjective and temporally extended point of view over reality, from which reality can be described. We perform a serial of simulations by using the Social Protection DNA Simulator in the case of Malaysia. The primary objective is to evaluate the possibility of implementing the National Social Protection Fund (NSPF) in Malaysia. Numerical data were necessary for the SP-DNA model retrieved from international and national organizations, namely, Asian Development Bank, International Labour Organization, World Bank, International Monetary Fund, World Health Organization and Employees Provident Fund.

The NISFF and NEF funds depend on their accumulated contribution rates. In the NISFF, the accumulated contribution rate e_1 stands for the formal employees' fund α_1; the accumulated contribution rate e_2 stands for the informal employees' fund α_2, and the accumulated contribution rate e_3 stands for the unemployment insurance fund α_3. Similarly, the accumulated contribution rate e_4 stands for the NEF. The numerical computation of the parameters above requires to take into account (i) the Malaysian population size; (ii) the unemployment rate; (iii) formal-employees-to-total workforce rate; and (iv) non-formal-employees-to-total-workforce rate.

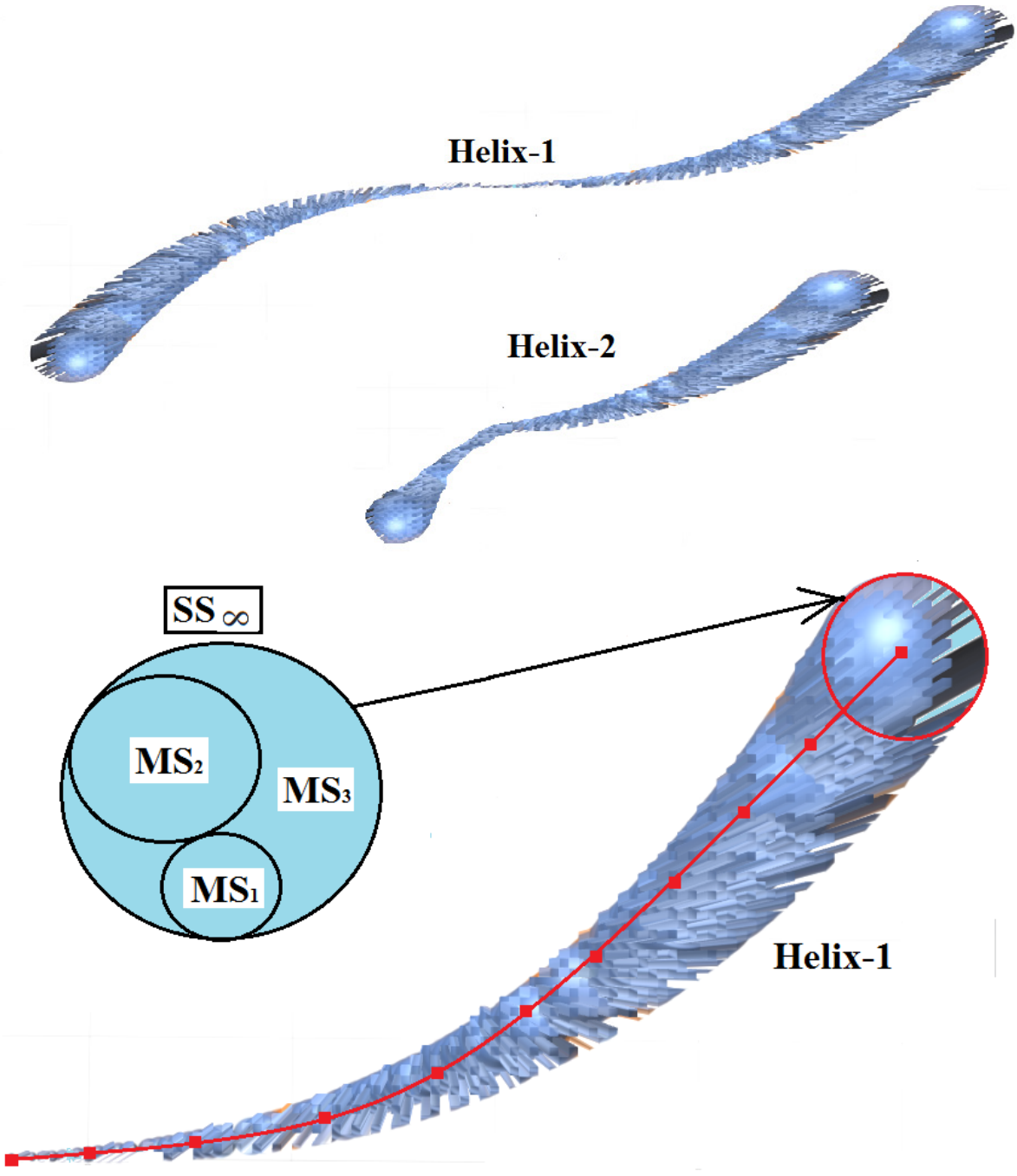


Figure 3 The Social Security Micro-Structures (MS), the Social Security Sub-Structures (SS), Social Protection Helix for Malaysia

(Source: Authors' Elaboration)

Funds are subject to minimum funding requirements in order to funds to deliver benefits. The amount of the minimum required contribution for the funds depends on whether the value of plan assets equals or exceeds the plan's funding target for the plan year. If the plan's assets are less than the funding target, the minimum required contribution for the year is equal to the plan's target normal cost plus the amortization of the funding shortfall. If the plan's assets equal or exceed the funding target, the minimum required contribution is the target normal cost, which is reduced by the plan assets over the funding target.

Plan assets must be reduced by any credit balance, if applicable. In the case of NISFF, the Minimum Social Protection Fund (λ) shows a single equation under the uses of e_1, e_2, and e_3:

$$MSPF=\lambda=600x\_1+150x\_2+100x\_3=0 \quad (13)$$

Simulation findings show that the minimum monthly contributions per capita for the formal employees' fund α_1 amount to RM 600, for the informal employees' fund α_2 amount to RM 150, and for the unemployment insurance fund α_3 amount to RM 100. Differentiate expression (13) will give us the maximum values of the social security micro-structures (MS) for Malaysia:

$$\frac{\partial \lambda_t}{\partial x_1} = 600 + 150x_2 + 100x_3 = 0 \quad (14)$$

$$\frac{\partial \lambda_t}{\partial x_2} = 600x_1 + 150 + 100x_3 = 0 \quad (15)$$

$$\frac{\partial \lambda_t}{\partial x_3} = 600x_1 + 150x_2 + 100 = 0 \quad (16)$$

The second differentiation of the expressions (14), (15) and (16) build the final social protection sub-structure (SS) in Helix-1:

$$MMS_1 = \sum \frac{\partial^2 \alpha_t}{\partial^2 x_1} = 0 + 150 + 100 = 0 \quad (17)$$

$$MMS_2 = \sum \frac{\partial^2 \alpha_t}{\partial^2 x_2} = 600 + 0 + 100 = 0 \quad (18)$$

$$MMS_1 = \sum \frac{\partial^2 \alpha_t}{\partial^2 x_3} = 600 + 150 + 0 = 0 \quad (19)$$

Forming the matrix representation of the expressions (17), (18) and (19), we obtain a social protection sub-structure (SS) final result equal to 18,000,000.

$$SS = \begin{bmatrix} 0 & 150 & 100 \\ 600 & 0 & 100 \\ 600 & 150 & 0 \end{bmatrix} \quad (20)$$

Inserting expression (20) into (21), we estimate the Helix-1 basic coefficient H_1:

$$H_1 = 1 - \sqrt{\frac{1}{\log SS}} \quad (21)$$

which is 0.63. Then, we calculate the minimum social protection fund λ in equation (13):

$$MSPF=\lambda=600\times0.63+150\times0.63+100\times0.63=535.50 \quad (22)$$

The above results suggest that the minimum monthly average fund requirements for the social protection fund amount to RM535.50, contributions paid by approximately 18 million members. Similarly, the social security micro-structure maximum values MS_1, MS_2 and MS_3 are RM757.50, RM 591.00 and RM572.50, respectively:

$$MS_1 = \frac{\partial \lambda_t}{\partial x_1} = 600 + 150 \times 0.63 + 100 \times 0.63 = 757.50 \quad (23)$$

$$MS_2 = \frac{\partial \lambda_t}{\partial x_2} = 600 \times 0.63 + 150 + 100 \times 0.63 = 591 \quad (24)$$

$$MS_3 = \frac{\partial \lambda_t}{\partial x_3} = 600 \times 0.63 + 150 \times 0.63 + 100 = 572.50 \quad (25)$$

Then, we obtain the social protection sub-structure (SS) for Helix-1:

$$SS_t = \frac{\sum_{i=1}^{3} MS_i}{3} = 640.00 \quad (26)$$

and inflection critical point

$$\sigma = \frac{MS_1}{MS_2} \times \frac{MS_1}{MS_3} \times 100\% = 170.00 \quad (27)$$

Expression (27) indicates the minimum contributions of RM 170 are required to pay by the active Malaysian workforce (between 18 years and 60 years old) illustrates the NSPF sustainability benchmark of attaining its medium- and long-term objectives.

The Minimum Education Fund (Đ) is a single equation that evaluates how much Malaysian parents must

pay each month in the future for the high school education of each child (see Expression 28). The equation depends on two variables, namely, the minimum education monthly spending (β_1) and the minimum salary monthly (β_2), both expressed in real terms:

$$MEF=Ð=\beta_1 y_1+\beta_2 y_2=0 \quad (28)$$

with values 100 and 150, respectively. Differentiate expression (28) with respect to y_1 and y_2

$$\frac{\partial Ð_t}{\partial y_1} = 100 + 150y_2 = 0 \quad (29)$$

$$\frac{\partial Ð_t}{\partial y_2} = 100y_1 + 150 = 0 \quad (30)$$

The second differentiation of the expressions (29) and (30) build the final social protection sub-structure (SS) in Helix-2:

$$MS_1 = \sum \frac{\partial^2 \beta_t}{\partial^2 y_1} = 0 + 150 = 0 \quad (31)$$

$$MS_2 = \sum \frac{\partial^2 \beta_t}{\partial^2 y_2} = 100 + 0 = 0 \quad (32)$$

Forming the matrix representation of the expressions (31) and (32), we obtain a social protection sub-structure (SS) final result equal to 15,000.

$$SS = \begin{bmatrix} 0 & 150 \\ 100 & 0 \end{bmatrix} \quad (33)$$

Inserting expression (33) into (34), we estimate the Helix-2 basic coefficient H_2:

$$H_2 = 1 - \sqrt{\frac{1}{\log SS}} \quad (34)$$

which is 0.51. Then, we calculate the minimum social protection fund SS_T in equation (35):

$$SS_T=100+(150\times0.51)+(100\times0.51)+150=188.75 \quad (35)$$

The above results suggest that the minimum monthly average fund requirements for the social protection fund amount to RM188.75, contributions paid by approximately 18 million members. The following formula gives the national social protection fund (NSPF):

$$NSPF=\{1+[\sqrt{(H_1)^2\times(H_2)^2\times100\%)}]\times Y\}\times(1-R) \quad (36)$$

where Y represents the collectable contribution years, and R represents the risk rate. Holzmann (2014) found that only one-third of EPF members with active, positive balances have sufficient accumulated savings at retirement, with 73.2% with balances less than RM 50,000 (Asher, 2012). The connotations mentioned above imply that there is approximately a probability of 73 per cent of the active Malaysian population that is either no longer able or not willing to pay – in part or in full – their contributions. Then, the calculation of the expression (36) is

$$NSPF_{no\ evasion}=\{1+[\sqrt{(1+0.63)^2\times(1+0.51)^2\times100\%)}]\times(1)\}=3.22 \quad (37)$$

$$NSPF_{no\ evasion}=\{1+[\sqrt{(1+0.63)^2\times(1+0.51)^2\times100\%)}]\times(1)\}\times(1-0.73)\approx0.87 \quad (38)$$

The optimal value of the NSPF is RM 3.22 billion on average in real terms1. The significant reduction of the NSFP value due to contribution evasion amount to RM0.87 billion per year, which is translated for the Malaysian government an annual injection of additional funds RM2.35 billion.

CONCLUSIONS

In view of the complex and diverse challenges provident systems are experiencing, it would be appropriate to engage various forms of normative action that correspond to the EPF's needs and objectives. Study findings undoubtedly provide insightful connotations in this respect, justifying a series of specific policy initiatives. The switch-status of EPF fund from a pension vehicle to an integrated multi-pillar fund with assistance features can help

the vulnerable Malaysian populations groups in the short run. Furthermore, additional mandatory contributions will significantly affect retirement finances and it can, therefore, be expected to affect savings significantly and prevent poverty in old age. Household lifecycle disposable low-income will be increased by the amount of pension payments received after retirement.

The financial sustainability of NSFP requires additional per capita monthly contributions amount to RM415.00. The inclusion of the foreign workforce – 1.5 million workers – is mandatory. Poverty reduction requires the transformation of the informal sector of Malaysia into a sustainable formal sector: annual poverty cut by 35 per cent can lead to a minimum monthly pension of RM2500.00.

EPF development agenda requires a new approach to its fund development, taking the multiple interlinked domestic and global challenges that exist even more into account. Reform decisions should be based on a clear understanding of what outcomes the current design influences and how it allocates costs and risks. EPF should seek ways of reforming their pension systems in anticipation of far financial burdens in the future (Holzmann, 1988). Pension funds can restore their actuarial balance if policymakers undertake funding-oriented reform initiatives. Notwithstanding, the need for system sustainability constitutes an opportunity to reevaluate existing programs and social trends, considering more fundamental changes.

Besides, the post-2015 Malaysia development agenda will acknowledge the critical role extending adequate social protection plays in furthering key outcomes, ensuring the inclusion of all groups in development and society as a means to combat inequality, vulnerability and poverty. It is therefore of paramount importance that, in view of the multiple roles that EPF can play in social and economic development, EPF's development agenda will acknowledge the critical role extending adequate social protection plays in furthering key outcomes, ensuring the inclusion of all groups in development and society as a means to combat inequality, vulnerability and poverty. Fiscally sustainable multi-pillar fund framework based on strong legal and regulatory frameworks should be an integral component of national development strategies to achieve inclusive, equitable, sustainable development.

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