

#### EDWIN SHEA PINEDA

University of Asia and the Pacific

# The Philippine Pension System: New Buttresses for the Old Multi-Pillar Architecture

## **History**

ince the 1990s there has been an increased global awareness of the need for both structural as well as parametric\*1 reform of pension systems in various countries, the Philippines included. The World Bank has often been a lead educator starting with the 1994 publication "Averting the Old Age Crisis," (spearheaded by economist Estelle James).\*2 Consequently, a research team from the World Bank was sent to the Philippines to undertake a comprehensive review of its pension institutions culminating in the report cited below.\*3

This report led to the eventual formation of the Retirement Income Commission, a joint public and private body tasked to undertake major reforms under the administration of President Joseph E. Estrada (1998 to early 2001). Unfortunately, the impeachment and removal of President Estrada also meant that the substantial reform agenda by the commission could not be implemented as originally envisioned.

The commission reviewed the exist-

ing pension system and proposed major reforms. The proposed architecture using the well-known multi-pillar framework pioneered by the World Bank for the Philippines has survived albeit in modified and tentative ways. This multi-pillar framework referring to the existing status quo and the new proposed architecture are both presented below (Figure 1 and 2).

The first pillar of the proposed program is still responsible for some of the redistribution feature that existed in the old system. It is directed towards the welfare improvement of the elderly population (age 60 and above), whose welfare are prioritised in several social security programs, who are considered poor. This is also in line with the government's call to battle against poverty. In the Medium Term Philippine Development Plan (MT-PDP) 2004 to 2010, the apportioned social assistance, social protection and safety nets for the older persons were an improvement of the structure and management of centers and institutions that took care of them including full implementation of the Expanded Senior Citizens Act of 2010.\*4

The proposed reformed second pillar: the defined-benefit (DB)\*5 program is a scaled down version of the current DB programs of Social Security System (SSS) (pension organisation for the private sector) and Government Service Insurance System (GSIS) (pension organisation for the government sector), with the two programs integrated and modified to correct identified weaknesses. The objective of this proposed pillar is to provide only a basic pension under a DB formula. Ideally, the reduced DB program should have been the same for both organisations paving the way for the unification of both into one state organisation.

The proposed reformed third pillar: the enhanced defined-contribution (DC) programs would supply the balance of the average desired replacement ratio. This will absorb the balance of the reduced DB programs in a new form, together with all the existing mandatory programs. The size of the benefit will be determined by the average target replacement rate. Essentially, the third pillar will enlist the participation of private financial institutions inspired by the example of Chile. Thus, the individual contributor will be free to choose and move periodically among accredited pension fund managers and alternative accumulation products, depending on their risk-return preferences at a particular time.

The fourth and last pillar will incorporate the financial instruments provided by the private sector, catering to the people who can afford to do so. This refers to private sector mutual funds, insurance-related investment funds, and trustor-trustee investment arrangements, and a new facility called the Personal Equity and Retirement Account (PERA), which will be elaborated upon later in this paper.

Figure 1: The Status Quo of the Philippine Pension Architecture

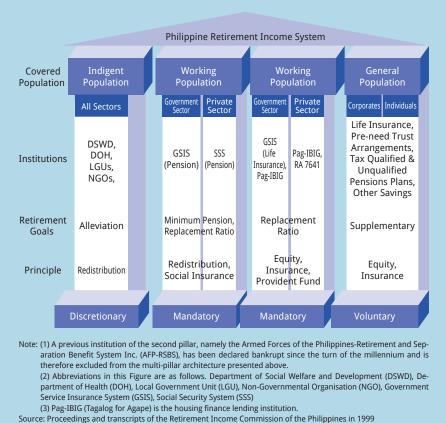
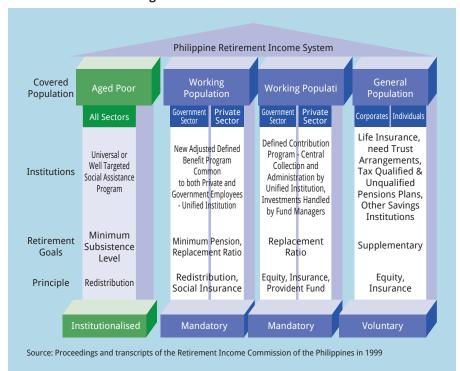


Figure 2: Retirement Income Commission Recommendation: New Mandatory Retirement Program



### The Status Quo of the Two Major Philippine State-Run Institutional **Providers**

The two principal pension organisations in the Philippines, namely SSS and GSIS, may be described succinctly as publicly-managed, DB organisations inspired directly by the social insurance mandate of the American system as established under U.S. President Franklin D. Roosevelt's New Deal (which in turn was inspired by earlier European models). Like its American model, these institutions are exhibiting the inexorable tendency to move into a problematic pay-as-you-go (PAYG)\*6 mode of financing (Table 1).

### Other Components of the Third Pillar: The **Retirement Pay Law**

In 1993, the Labor Code of the Philippines, specifically Article 287 of Presidential Decree No. 442 dated May of 1974 (President Ferdinand Marcos' Martial Law Regime was in force since 1972), was amended to provide retirement pay to qualified private sector employees in the absence of any retirement plan in the establishment.

This amendment is known as the Republic Act 7641, or the Retirement Pay

**Table 1: Actuarial Life Estimates** 

	SSS 2015 Valuation	GSIS 2015 Valuation	
Negative flows in year	2022	Not available	
Fund exhausted in year	2032	2049	

Law.\*7 This law is the Philippine version of the employer mandate category in pension provision because the burden lies exclusively on employers. The act ensures that any private employee\*8 is able to receive retirement benefits if he satisfies the following conditions: (1) has retired optionally or compulsorily,\*9 and (2) has done at least five years of service to the company.

Once granted, the individual receives one-half month (15 days) base salary for every year of service from his employer plus one-twelfth of the 13th month pay and the cash equivalent of not more than five days service incentive leaves. The law allows employers to use their contribution to the employee's mandatory account in Home Development Mutual Development Fund (HDMF), known colloquially as Pag-IBIG, which is a government housing finance agency provided that any deficiency from the computed retirement benefits due to the employee is paid by the employers.

The Retirement Pay Law and Pag-IBIG Fund constitute major components of the third pillar (both existing and proposed) of the Philippine Pension System, known as the mandatory DC pillar. The law safeguards Filipino employees working in establishments that fail to structure pension benefit schemes. Often, these establishments are small- to medium-scale companies that do not prioritise a competitive package or a competitive human resources brand.

One problem with local corporate

practices is that the biggest retirement benefits are rewarded to the most loyal employees, to those who are spared from job cuts brought on by unfavorable business environments, or to those who belong to companies that are able to endure through time.

Since this law does not provide for portability of retirement benefits, the employee who transfers from one company is disadvantaged to receive less benefits than an employee who has worked under a single company in his entire life. The law therefore undermines job mobility and the possibility that employees can be forced to transfer even without their free will and consent.

#### A New Fourth Pillar **Pension Infrastructure**

In the late 1990s, a new bill was introduced into the Philippine Congress whose inspiration apparently stems from a combination of the Individual Retirement Account (IRA) and 401(k) programs of U.S. Moreover, it may have also been inspired by the World Bank literature on the voluntary fourth pillar pension provision, and the Chilean individual capitalisation (priva-

Table 2: Summary of Second and Third Pillar Pension-Related Tax Rates and Taxable Amounts for the Privately Employed Sector in the Philippines

Private Sector Retirement Programs	Total Rate (%)	Employer Rate (%)	Employee Rate (%)	Maximum Taxable Amount Per Month (PHP)
Social Security System	11.00	7.37	3.63	16,000
Mandated Retirement Pay <sup>(1)</sup>	2.50	2.50		
Employee's Compensation <sup>(2)</sup>	1.00	1.00		1,000
Pag-IBIG Fund Cutoff 1	3.00	2.00	1.00	1,500
Pag-IBIG Fund Cutoff 2	4.00	2.00	2.00	Over 1,500
Total Per Party		12.87	4.63-5.63	

Note: Private sector payroll tax rates (SSS and others) Source: The Services Group (2006)

tised) pension model. The bill was named "The Personal Equity and Retirement Account (PERA) Act of 2008." The following paragraphs describing this new law draw heavily on written transcripts of the joint Senate and House Committee proceedings dated 31 October 2008 in deliberating the version to be submitted for final approval in both houses.

The PERA account was supposed to be established by an individual and not by the employer, and hence the PERA account is more akin to the IRA (which is also established by the individual) rather than the 401(k) (which is established by the employer). The employee's PERA is owned by the individual. It is distinct from the employer-sponsored retirement or pension plan, if any. Moreover, the PERA account is administered by the regulated entities enumerated in the PERA Act, and not by the employer or its human resources (HR) department or retirement plan committee. Issues like vesting periods, rollovers when the employee changes employers, etc., are not relevant to PERA.

The only participation of the employer is that it may voluntarily contribute to an employee's PERA (Section 6). The employer's contribution, once made, is owned by the employee under his PERA account. This makes the PERA account portable regardless of how many times the employee changes jobs. This was a major objective of the law.

It is for these reasons that the financial vehicle PERA account was proposed, starting in the late 1990s. This instrument was seen as a supplement to the existing DB pension systems SSS and GSIS where individuals can voluntarily contribute additional retirement funds entitling them to favorable tax treatment (income tax deductible up to a certain limit equal to 5% tax exemption (initially proposed by the Department of Finance to be 15%) to encourage private saving for retirement.

However, the lack of political prioritisation of the reform as well as unsettled issues on taxation and regulation, delayed the passage as well as the implementation of the measure, with the PERA bill finally signed by former President Gloria Macapagal-Arroyo on June 2008 (eight years after initial discussions).\*10 Its implementing rules and regulations were released by the Bureau of Internal Revenue (BIR) and the BSP only in July 2015 with the actual implementation commencing in 2016.

Two years after implementation, market appetite on the PERA investment scheme remains limited, leading to the Bangko Sentral ng Pilipinas (BSP) contem-

plating its digitalisation in the next few years in a bid to increase participation among the public.\*11

### How Does the New 2008 PERA Law (Republic Act 9505) **Compare with the Older** 1993 Retirement Pay Law Amending the 1974 Labor Code?

With equal overall benefits and replacement rates (defined as the ratio between the pension benefits upon retirement and the pre-retirement salary multiplied by the estimated remaining life) for both the PERA account and the retirement pay mandated by Republic Act 7641, the mandatory contribution rate of employer, the voluntary contribution rate of the employee, and the investment yield of fund managers can mathematically be derived in a simulation exercise. See annexed appendix for mathematical derivation.

Three assumptions:

- employee's salary due to own productivity does not grow,
- employee's remaining life after retiring is 20 years, and
- inflation is zero.

Under the above assumptions, mandatory contribution rate of employers can be demonstrated to equal 8.62% of the employee's annual wage/salary. In other words, 8.62% will comply with the old 1993 Retirement Pay Law as well as the new PERA Law in providing the same level of replacement benefits as a percent of the average wage.

Put another way, the individual employee can look forward to seeing future pensions increased by the employer-provided 8.62% of his or her average wage; and may elect to save beyond the benchmark 8.62% in the individual PERA account.

When the assumption of zero salary growth is relaxed, the investment yield net of inflation must compensate the average annual salary growth. This means that PERA investment managers must ensure

that they achieve a bare minimum of real returns equal to the average annual salary growth of their clients.

### Simulation Exercise on the Hypothetical Merger Between the PERA Law and the **Retirement Pay Law** Representing the New Fourth Pillar **Architecture**

Provided various assumptions, Figure 3 shows some potential replacement rates based on Equations 9 to 12 derived in the Appendix. The size of the bubbles in the Figure 3 corresponds to the performance of the investment managers, i.e., the investment yield net of inflation (the bigger the bubble the better the performance). Employees have the option to contribute beyond the minimum 8.62% contribution rate from employers, consequently yielding increased replacement rates.

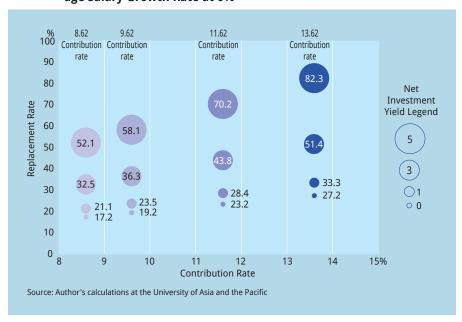
The Figure 3 considers the scenario wherein the average salary growth

of the employee net of inflation is zero. This assumes that the real wage of the employee is constant throughout. Given the minimum contribution rate from the employers and lackluster performance of the investment manager (that is 0% net investment yield), the PERA account is expected to generate a 17.2% replacement rate of the employee's last salary. This implies that retirement income for the next 20 years is less than a guarter of his or her last annual salary. Note that this replacement rate is equal to the expected replacement rate for an employee with zero salary growth as mandated by the minimum provisions of the Retirement Pay Law, derived by Equations (1) to (9) in the Appendix.

In the case that the employee decides to contribute an additional 1%, this will marginally increase the replacement rate by 2%, still assuming zero net investment yield. On the other hand, should investment managers beat inflation by 1% and considering no contribution from the employee, the replacement rate is expected to increase by 3.8%.

As shown by the simulation, replacement rates are strategically improved when investment managers outperform inflation by 1% compared to employees supplementing their PERA account by 1% In short, greater efficacy, in promoting replacement rates resides in the PERA investment managers' performance compared to increased marginal savings by individual employees.

Figure 3: Replacement Rates at Different Contribution Rates Assuming Average Salary Growth Rate at 0%



#### **Conclusion**

It is generally known by many domestic analysts, financial institutions, and international organisations such as the World Bank, that the two principal state-pillars of the Philippine Pension System (the SSS and GSIS) as well smaller auxiliary programs are not sustainable in the long run. The inevitable transition to the problematic PAYG mode of funding may be delayed but only by a decade or so.

Therefore, the alternative voluntary DC, fully funded components of the system need to be reinforced and reinvigorated. This is consistent with global trends that are moving away from unfunded (or partially funded) DB programs toward DC, fully funded programs.

The introduction of the PERA is a positive step in this global trend. However, its reception and market participation have been anemic. There are several reasons for this:

- The PERA Law deals with the voluntary fourth pillar of the system. It is on top of the mandatory first to third pillar taxation. Therefore, it caters primarily to wealthier Filipinos who have enough surplus income and savings to invest in their own future pensions. The middle classes are already dealing with the mandatory payroll taxes of the second and third pillar. The employee's tax burden ranges from 4.63% to 5.63% and the employer's share is 12.87% of prescribed taxable wage limits (Table 2). Thus, they may not have the desire or sufficient surplus income to fund the fourth pillar programs such as PERA.
- It appears that the level of financial literacy and awareness even among the surplus-earning classes of Philippine society is generally substandard and insufficient. The secondary and tertiary educational systems need to incorporate and propagate financial literacy programs in a much greater depth and breadth.

- Investment of pension assets is not sufficiently diversified internationally or even regionally. Therefore, the return-risk ratios are not fully optimised across a larger and more prosperous financial market. This is subject to an on-going research endeavor by the School of Economics of the University of Asia and the Pacific and may be the subject matter of future articles.
- More specifically, the PERA tax rebates currently set at 5% for every PHP 100,000 investment may be too low given the potentially elastic demand for investment products such as mutual funds and unit investment trust funds. Other analysts have also advocated for income tax deductibility of PERA contributions rather than tax rebates as a more efficient savings incentive similar to making life insurance and/or health insurance premiums tax deductible.
- The New PERA and Older Retirement Pay Law are inherently limited in scope to the second to fourth pillar constituents and thus do not answer the needs of a large number of both the aged poor and the younger poor (i.e. newly married young couples and impoverished street children) of Philippine soci-

The authors strongly urge that the previously disbanded Retirement Income Commission be reconstituted, re-formed, and once again tasked to formulate a new reform agenda for the Philippine system which it had already started to accomplish when it was regrettably abolished in early 2001. The present Philippine president Rodrigo Roa Duterte is under extreme political pressure from labor groups and left-leaning groups to periodically and unilaterally increase pensions across-the-board via executive orders even when the SSS cannot afford to do so. This has already happened in January 2017 with a PHP 1,000 per person increase and another increase is scheduled in early 2019.\*12 The presence of a re-constituted Retirement Income Commission will hopefully prevent the arbitrary politicisation of pensions such as these. It will also formulate a strategically detailed plan to save and reform the pension system.

#### Acknowledgement

This article is the joint effort of the following people: Senior Economist Edwin S. Pineda (Editor and Co-author); Research and Modelling jointly done by graduate staff members of the University of Asia and the Pacific: Emerson E. Borja, Christian A. Siaton, and Lenny De Vera.

### **Appendix**

Mathematical Derivation for the Unification of the Old Retirement Pay Law (RA 7641) of the Third Pillar and the New PERA Law (RA 9505) of the Fourth Pillar of the Philippine Pension Architecture

The following mathematical formulation is taken from an ongoing study by the School of Economics of the University of Asia and the Pacific (UA&P) for the Fund Managers Association of the Philippines (FMAP) and the Trust Officers Association of the Philippines (TOAP).

The Retirement Pay Law mandates companies to provide a retiring employee an amount equal to 22.5t multiplied by the pre-retirement daily salary of an employee equal to  $P_n/261$  where  $P_n$  is the pre-retirement annual salary and t is the number of years of service to the company. The pre-retirement daily salary estimate follows the calculation of the National Wage and Productivity Commission.\*13 The benefit given to an employee is thus equal to:

$$\Pi_2 = \frac{22.5P_{\rm n}t}{261} \tag{1}$$

In the proposed Portable Retirement Pay, the overall benefit that an employee will receive at retirement can be expressed by the equation:

$$\Pi_2 = cP_0[(1+s)^{t-1} + (t-1)(1+i)^{t-1}]$$
 -(2)

where, c = contribution rate $P_0$  = annual salary at year 0 *s* = average yearly salary growth t = total years of worki = investment yield net of inflation.

In order to have a seamless transition, the cost to employers in the existing Retirement Pay Law, Π<sub>1</sub> and the cost to employers in the proposed Portable Retirement Pay,  $\Pi_2$  must be the same.

$$\Pi_1 = \Pi_2 \tag{3}$$

$$\frac{22.5P_{\mathrm{n}}t}{261} = cP_{0}[(1+s)^{t-1} + (t-1)(1+i)^{t-1}] - (4)$$

Under the Retirement Pay Law design, this paper assumes that the employee stays in the company for 40 years and that any net investment yield is claimed by the employer and is not transferred to the employee. For both the Retirement Pay Law and the proposed Portable Retirement Pay, we assume that the employee's salary does not grow, the employee's remaining life after retiring is 20 years, and inflation is zero. We also assume that  $P_n = P_0(1+s)t-1$ . Equation (4) can thus be modified to:

$$\frac{22.5P_0(1+s)^{t-1}(t)}{261} = cP_0[(1+s)^{t-1} + (t+1)(1+i)^{t-1}]$$

$$\frac{22.5P_0(t)}{261} = cP_0(1+t-1) \tag{6}$$

$$\frac{22.5P_0(40)}{261} = cP_0(40) \tag{7}$$

The contribution rate required for the Portable Retirement Pay to equalise the required benefit in the existing Retirement Pay Law can be expressed as:

$$c = \frac{22.5P_0(40)}{261} \cdot \frac{1}{P_0(40)}$$
 - (8)

$$c = \frac{22.5}{261} = 0.0862 \tag{9}$$

We factor in the possibility that salaries may increase over time due to inherent improvement of an employee's productivity. In the proposed model, salary growth decreases the replacement rate of the retirement fund. Replacement rate is equal to the benefit received by the employee divided by the required income:

$$r = \frac{\Pi}{P_n l} \tag{10}$$

where, r = replacement rate $\Pi$  = benefit  $P_n = P_0(1+s)^{t-1} = \text{pre-retirementan-}$ nual salary l = remaining years

The replacement rate of the Retirement Pay Law,  $r_1$ , and the Portable Retirement Pay Law,  $r_2$ , are expressed as:

$$r_1 = \frac{\prod_1}{P_0(1+s)^{t-1}l} = \frac{\frac{22.5P_0(1+s)^{t-1}t}{261}}{\frac{261}{P_0(1+s)^{t-1}l}} \quad -(11)$$

$$r_2 = \frac{\Pi_2}{P_0(1+s)^{t-1}l} = \frac{\mathrm{cP}_0[(1+s)^{t-1}+(t-1)(1+i)^{t-1}]}{P_0(1+s)^{t-1}l} - (12)$$

In order to equalise the replacement rates of the existing and the new model, fund managers must be able to meet an investment yield i (net of inflation) equal to the average salary growth s. This can be determined by equating the replacement rates of the Retirement Pay Law and the Portable Retirement Pay.

$$r_1 = r_2 \tag{13}$$

$$-(6) \quad \frac{\frac{22.5P_0(1+s)^{t-1}t}{261}}{P_0(1+s)^{t-1}l} = \frac{cP_0[(1+s)^{t-1}+(t-1)(1+i)^{t-1}]}{P_0(1+s)^{t-1}l} - (14)$$

$$(1+s)^{t-1} = (1+i)^{t-1} - (15)$$

$$s = i$$
 - (16)

#### **Notes**

- Parametric reforms refer to issues like contribution rates, benefit formulas, management systems, and other parameters vs. larger systemic issues like the nature of funding, public or private ownership, etc.
- World Bank (1994)
- \*3 World Bank (1995)
- For a complete copy of the law, see https:// www.officialgazette.gov.ph/2010/02/15/ republic-act-no-9994/.
- A DB pension system means that benefits are defined by a formula, whereas, a defined-contribution pension system means

that contributions are invested in financial markets and yields a variable investment return. On the other hand, pension systems are either pre-funded (often called fully-funded, partially funded, or just funded) with individual's contributions invested to pay their own future benefits.

- The Services Group (2006) succinctly describes these terms as follows: In a PAYG mode of financing, the current retirees are paid from current contributions and each generation depends on the younger generation to pay for their pensions. The US Social Security is a PAYG system. Another example of a PAYG system would be a typical European social security program in which workers make contributions to an agency which has no assets, that uses revenues to pay current pensioners benefits and that promises workers to pay their future pensions funded from future contributions. Thus, PAYG assumes that there is a growing cohort of younger workers that join the system relative to the number of retirees. This demographic state of affairs does not exist anymore for Western Europe, North America, large parts of Asia, which are in radical demographic decline. PAYG is the penultimate state to a pension system's bankrupt-
- The full text of the Retirement Pay Law can be accessed through https://www.ilo.org/ dyn/natlex/docs/ELECTRONIC/31980/ 82364/F669925030/PHL31980.pdf.
- Employees of the national government are excluded. Employees of retail, service, and agricultural establishment or those with not more than ten employees are likewise excluded.
- Employees who have reached sixty years of age can retire optionally. Upon reaching sixty-five years of age, employees are mandated to retire.
- \*10 Arroyo signs savings plan act into law. Manila: GMA News Online (2008)
- \*11 Lopez, Melissa Luz (2018)
- \*12 This initiative by President Duterte has since been incorporated in a proposed new ioint senate and house bill increasing minimum pensions with a graduated increase in the level of payroll taxes for both employers and employees. The bill is now in the president's office for approval (or veto) as of January 2019.
- \*13 The formula can be found in page 47 of the Handbook on Workers' Statutory Monetary Benefits 2018 edition prepared by the Department of Labor and Employment

which can be accessed online through http:// bwc.dole.gov.ph/images/Handbook/Hand bookonWorkersStatutoryMonetaryBene fits2018Edition.pdf.

#### Bibliography

- "Arroyo signs savings plan act into law," GMA News Online, 22 August 2008. Retrieved from https://www.gmanetwork.com/news/ news/nation/115478/arroyo-signs-savingsplan-act-into-law/story/
- "BSP looking to bring PERA online as appetite stays low," BusinessWorld, 21 September 2018. Retrieved from https://www.bworld online.com/bsp-looking-to-bring-peraonline-as-appetite-stays-low/
- Department of Labor and Employment. (2018) "Handbook on Workers' Statutory Monetary Benefits 2018 Edition. PDF."
- Government Service Insurance System. (2016) "Annual Report 2016 Fulfilling Our Commitments." Retrieved from http://www. gsis.gov.ph/downloads/transparency/2016-GSIS-Annual-Report.pdf

Social Security System. (2017) "SSS: Anim na

Dekadang Sinisiguro Kinabukasan ng Bawat Miyembro Annual Report 2017."

- The Services Group. (2006) "Structural and Governance Reform of the Philippine Pension System World Bank ASEM Trust Fund Project (TF052298) Contract No. 7138110."
- World Bank. (1994) "Averting the old age crisis: policies to protect the old and promote growth - summary (English)." Washington DC; World Bank. Retrieved from http://docu ments.worldbank.org/curated/en/6499514 68344639990/Averting-the-old-age-crisis-po licies-to-protect-the-old-and-promote-grow th-summary
- World Bank. (1995) "Philippines An agenda for the reform of the social security institutions (English)." Washington DC: World Bank. Retrieved from http://docu ments.worldbank.org/curated/en/3818214 68780009859/Philippines-An-agenda-forthe-reform-of-the-social-security-institu

#### Edwin Shea Pineda

Senior Economist, School of Economics, University of Asia and the Pacific

Edwin Shea Pineda is a Senior Economist and member of the faculty of the School of Economics of the University of Asia and the Pacific (UA&P). His fields of research and specialisation include insurance (life & non-life, and health), pensions, trust funds, mutual funds, social security, and the nonbank financial sectors. His interests also include economic impacts of taxation, risk management & portfolio optimization modelling, and the use of management science and operations research in economics. He was educated at the University of the Philippines in Diliman, Quezon City (BS in Business Economics and MBA). He also obtained a Master's degree in Economic Development from Cornell University in Ithaca, New York. From 1999 to 2001, he was an assigned economist representing the academic sector on the Philippine Retirement Income Commission. From 2010 to 2011 he was Education Director of the Philippine-based Insurance Institute of Asia and the Pacific (IIAP), the educational arm of the insurance industry in the Philippines.

