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MANDATORY SAVINGS PENSION AND PENSION REFORM

ACCESS TO FINANCE – ALTERNATIVE SOURCE OF FINANCING

FINAL REPORT

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FINAL REPORT

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

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ABSTRACT

In Georgia, there are currently two pensions systems: (1) the state pension and (2) the non-state pension funds**.** The state pension is a PAYG (unfunded) pension program providing pensions for: (a) old age, (b) persons with qualifying disabilities and (c) survivors due to loss of a breadwinner. The non-state pension funds are voluntary pension schemes mainly established by a few number of employers for the benefit of their employees. The pension for the elderly under the state pension program is universal because benefits are paid irrespective of the needs or economic status of the pensioner. The principal purpose of this report is to present the need and basis for creating a Mandatory Savings Pension System, also known as the World Bank Pillar II System, with the immediate objective to create a pension system that requires the automatic participation of formally employed individuals from both the public and private sectors who earn monthly wage or salary of 400 GEL or more and who are between ages of 15 and 45. As such, this report focuses on the old age pension system. In order to comprehensively research this report, the authors performed the following analytical tasks:

- Examined the features, operations and functioning of a mandatory savings pension per the Georgian context and perspectives;
- Discussed the preconditions of Pillar II Pension System,
- Analyzed the rationalization of the Multi-Pillar Pension Systems to the Georgian case study.

Thus, the report analyzed the current Georgian pension systems and then hypothesized how the Georgian pension systems may be used as a base for establishing a Mandatory Savings Pension System. The authors recommend the combination, co-existence and correlation of these three pension pillars that should mirror the classical models of the World Bank Multi-pillar pensions.

ABBREVIATIONS

BAG	Business Association of Georgia
CEE	Central and Eastern Europe; Central and East European countries
CPI	Consumer Price Index
DB	Defined Benefit Pension Plan
DC	Defined Contribution Pension Scheme
EPI	Economic Prosperity Initiative, a USAID funded project in Georgia
EU	European Union
GDP	Gross Domestic Product
GEPLAC	Georgian - European Policy and Legal Advising Centre
GoG	Government of Georgia
MOF	Ministry of Finance, GoG
MOLHSA	Ministry of Labor Health and Social Affairs, GoG
NBG	National Bank of Georgia
PAYG	Pay As You Go (unfunded) Pension
PMCG	Policy Management and Consulting Group (Georgia
PIT	Personal Income Tax
SSA	Social Service Agency of the MOLHSA
SWOT	Strength, Weaknesses, Opportunities and Threats
USAID	United States Agency for International Development
VAT	Value Added Tax

CONTENTS

I. EXECUTIVE SUMMARY

1. Currently, there are two (2) pensions systems in Georgia: the state pension and the non-state pension funds**.** The state pension is a "pay- as you- go" (PAYG) unfunded pension program for: (a) old age, (b) persons with qualifying disabilities and (c) survivors due to loss of a breadwinner. The non-state pension funds are voluntary pension schemes mainly established by a few number of employers for the benefit of their employees and the schemes are contracted by the employer with one of the three, out of six, insurance companies authorized by the National Bank of Georgia (NBG) as pension fund providers.

2. The State Pension System:

   - At the current levels of pensioners' benefits, this system seems to be working without serious funding problems. However, it most pensioners claim that the pension amount is inadequate to cover both basic and minimum old age consumption needs at current prices.
   - Similar to countries the world over, Georgian demography is also ageing and the number of old age pensioners in Georgia has been increasing year after year.
   - As Georgia has an universal old age pension, the long-term sustainability of the state pension remains a huge concern, especially if it were to provide adequate pension to ensure poverty reduction/alleviation and/or wealth redistribution.
   - The old age monthly pension is currently GEL 100 that is paid regardless of the economic status and needs of the pensioner or whether he/she is affluent or economically challenged. Pensioners expect that the amount will further be increased to USD 100 (about GEL 160) within the year consistent with earlier presidential statements.
   - If pension benefits are adjusted based on or indexed against inflation (CPI), the amount of annual fiscal transfers to keep the system sustainable are expected to reach about GEL 1.2 Billion in 2015, GEL 2.1 Billion in 2020 and GEL 2.7 Billion in 2030. In addition, the current year's funding requirement is about GEL 900 Million.
   - The 2009[1] Statistic Report of the Social Service Agency (SSA) of the Ministry of Labor Health and Social Affairs (MOLHSA) reported that as of December 31, 2009, there were 838,500 pensioners, representing 19%[2] of the population. In 2009, 80% of total pensioners received old age pension. In terms of total pension spending, old age pension payments were 85% of the total pension expenditure. Moreover, the total expenditures for old age pension was 42.2% of the total expenditures for social services, indicating that a large part of the 2009 budget allocated to implement social services was spent on old age pension entitlements.

[1] Social Statistics Report issued by the Social Service Agency (SSA) of the Ministry of Labor Health and Social Affairs (MOLHSA). The report for the year 2010 is not available as of this writing. Report available via http://ssa.gov.ge/index.php?lang_id=&sec_id=630 in Georgia and accessed on September 2012.

[2] Data from EUROSTAT and EC Aging Report (2009) reports that in 2009, the average ratio of pensioners to total population in CEE countries is 26%. Report available via http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf and accssed September 2012.

- The public pension expenditures for old age, even at its current low levels, are now beginning to absorb a large portion of the overall state budget. In 2009, 14.5% of the total state budget was used to pay for pensions.

  If the current age criteria remains unrelated to reasonable Georgian tables on mortality or life longevity, the sustainability of the old age state pension for would require major and increasing fiscal transfers. The old age pension system must be reformed or rationalized with a type of "means-tested" criteria and/or creation of a pension buffer under the principles of "self-provision".

3. Non-State Pension Funds – Voluntary Private Pension**:**

- Currently, participants in the Non-State Pension Funds are only employees who are enrolled in different pension schemes established by their employers (pension plan sponsor) that are under several contracts with insurance companies (pension fund providers).
- The sponsoring employers are responsible for both paying and transferring regular pension contributions to the pension fund. In addition, the sponsoring employers frame the pension plans according to their terms, conditions and preferences.
- The pension contributions and the earnings (interest) there from are not tax-incentivized. Moreover, participants have unfettered access to their pension savings. The current non-state pension funds do not have, and are not designed to have, the ability to generate long-term savings. Therefore, these pension funds create lesser or no saving for retirement, because the participants could have already withdrawn their pension savings before retirement.
- The performance of the non-state pension funds is dismal as indicated by the NBG's data that reported, as of December 31, 2010, there were 16,870 participants with accumulated pension assets (reserves) of GEL 7,915.350. In addition, the total number, at 16,870, of participants is only 2.7% of the more than 618,600 individuals formally employed. For instance, in 2010 the amount of withdrawals were more than half of the amount of contributions..
- In order to create a sustainable fund to maintain a standard of living during retirement, the savings should be "locked-in" and withdrawals should be tempered and only allowed for limited and specified purposes. Moreover, when early withdrawal is not checked, participants will spend most of their pension savings and retire without an adequate supplementary pension.
- As the savings withdrawal rate exceeds 50% of contributions, the non-state pension funds are not in a position to achieve their pension objectives.
- If pensions continue to operate on a voluntary basis, draconian efforts would be required to make these non-state pension funds work and attract individuals, especially the majority of the labor force, to save for their retirement. The voluntary nature of the Non-State Pension Funds poses the following challenges:
  - Achieving a significant number of participants who will save for their pensions;
  - Overcoming the myopia of most individuals who do not see the need to save early for their retirement;
  - Addressing the moral hazard related to those who continue to believe that the Government of Georgia (GoG) or someone else will take care of their needs at old age;

- Attracting the lower income individuals, who are most vulnerable during old age, to save for their supplemental pensions.

– Further, prudential governmental regulations that are appropriate for long term saving contracts need to be in established, continuously strengthened, and enforced. The GoG should implement regulations for the risk-based reserve funding of pension liabilities, which are aligned with international best practices, must be implemented place and enforced. These regulations include: disclosure requirements, the nature and type of permitted investments for reserve assets, the segregation of pension assets from the insurers' general assets, and the independent management and custody of assets.

– In addition, regulations regarding annuity contracts, which encourage the design, development and marketing of both individual deferred and immediate annuity products, must be considered and put in place.

4. Mandatory Savings Pension.

– The principal purpose of this paper is to present the bases and groundwork for creating a Mandatory Pension System. This report recommends that the GoG establish a Mandatory Savings Pension System, that requires the automatic participation of formally employed individuals from both the public and private sectors who earn monthly wage or salary of GEL 400 or more and who are between ages of 15 and 45.

– Through time, the participation of self-employed individuals will be gradually phased-in, with the long-term goal of securing participation of all working individuals.

– The benefits derived from this system will only supplement the benefit entitlements from the State Pension Program while also complementing the functioning of the Voluntary Non-State Pension Funds.

– The Pillar II Pension System is not intended to replace the current state pension program or the Voluntary Non-State Pension Funds. Rather, the intent is to create a Multi-Pillar Pension System akin to the classical World Bank Pension Models listed below:

- Pillar I is the state pension that will remain a PAYG system;
- Pillar II is a mandatory savings pension which will be a pre-funded defined contribution (DC) pension, and
- Pillar III consists of the Non-State Pension Funds which are voluntarily pre-funded DC or defined benefit (DB) pension schemes.

– Pillar II, the Mandatory Saving Pension Platform, will merely be added to the two (2) already existing pension systems to complete a multi-pillar (3-pillared) pension systems for Georgia.

– The Pillar II Pension System will require workers to begin and, during their working years, continue saving a fraction of their monthly earnings that will accumulate in their individual pension accounts. The accumulated savings, which is the amount of contribution plus investment income (accumulation phase), will capitalize the purchase of regular pension payments (pay-out or distribution phase) following the participants' retirement dates.

– The Mandatory Savings Pension is a Defined Contribution (DC) pension scheme where participants contribute, on a monthly basis, 7.5% of their gross taxable

income. This rate of contribution, which is consistent with the average Pillar II Pension contribution rates in the Central Eastern European (CEE) countries, is considered to be neither too high nor too small so that, under normal economic and investment conditions, the amount of supplemental pension would adequately supplement the state pensions to cover for the consumption needs of the pensioner at and during retirement.

- In response to the general perception of stakeholders and counterparts that pension benefits from the Mandatory Pension would be insignificant, given the contribution rate of 7.5% of salary, the authors, in their final draft report and presentations, calculated the amount of pension benefits to a Mandatory Pension participant based on several scenarios. These scenarios were differentiated by the following:
  - Average monthly salary and modest rate of salary increases
  - Amount of monthly contributions
  - Number of contribution years
  - Interest rate during accumulation
  - Pension payment for 10 years certain and/or for life.
- In this paper, the authors have also presented and discussed in more detail certain features, operations and functioning of a Mandatory Savings Pension per the Georgian context and perspectives, the preconditions of Pillar II, as well as the rationalization of a Multi-Pillar Pension System.
- The current pension systems in Georgia are analyzed and discussed with the intentions of presenting the functions, and, limitations of the Pillar I and Pillar III Pension benefits mechanisms. The limitations in the current systems provide further bases for recommending the introduction and establishment of a Mandatory Savings Pension System aligned to the classical models of the World Bank Multi-Pillar Pensions.
- The authors in this report also highlighted relevant pension policy issues and lessons learned from past and/or on-going pension reforms in Europe, especially in the CEE countries, as they relate to the current Georgia socio-economic environment.

II. APPENDICES

A. BACKGROUND

B. METHODOLOGY

C. FINDINGS

D. RECOMMENDATIONS

E. ADDITIONAL INFORMATION

A. BACKGROUND

1. The USAID-EPI project, in collaboration with the Business Association of Georgia (BAG), commissioned the authors (consultants) to study and make conceptual recommendations of pension reform for the GoG. The assignment accounted for the interests of both the GoG and labor sector in introducing pension reforms and considered the experiences and lessons learned from pension reforms implemented in the CEE and Latin American countries. These case studies provided useful guides in shaping fundamental pension policy options for Georgia and for securing strong public-private consensus on how a pension reform is best implemented when taking into account Georgia's relevant socio-economic, cultural and political environments.
   - The consultants focused their study on funded private pension systems, particularly those of selected CEE countries, and on identifying and highlighting the challenges faced by private pension providers and those associated with supervisory oversight.. Accordingly, the consultants conducted in-depth research of the pension reforms worldwide and focused on the Mandatory Savings Pension System that requires workers to save for their supplementary income during retirement.
   - These studies translated into concept notes, exposure drafts, and PowerPoint presentations. All the materials were shared and discussed with the EPI leadership, the BAG officials and concerned officers of the GoG, particularly the Ministry of Finance (MoF).
2. Per the request of the MoF, in the second exposure draft of July 27, 2011 the authors compiled and submitted a comparative analysis of strengths, weaknesses, opportunities and threats (SWOT) of the Mandatory Savings vis-à-vis the Voluntary Savings (Pillar III) Pensions, as they would apply to Georgia.

3. Per the request of the BAG, in the third exposure draft of August 15, 2011 the authors presented and discussed the advantages and functionalities of the Pillar II Pensions in respect to:
   - Supporting economic development and expansion;
   - Its impact on social considerations;
   - Its effects on fiscal constraints, as well as on;
   - The manner by which a Pillar II Pension System can influence the development and growth of the capital market.

4. In this exposure draft, the authors discussed the functions and objectives of the Pillar II System and its advantages for the participants, as well as the key obstacles and threats to robust development of the Pillar II Pension System.

5. USAID-EPI, to support the authors, contracted with the Policy and Management Consulting Group (PMCG), a Georgian consulting outfit, to make an independent study of the State Pension System and the Non-State Pension Funds and the consequential need, if any, of a Mandatory Savings Pension System. EPI contracted with PMCG per a request from the MoF to perform quantitative analyses of the recommended Pillar II Pension System and the current Non-State Pension Funds On October 9, 2011, PMCG submitted their corresponding final report to EPI.

6. On October 29, 2011, the authors prepared and submitted their final draft report to EPI. This report incorporated the relevant data and analyses from the PMCG report as well as the principal recommendation for the GoG for establishing a Mandatory Savings Pension as part of a Multi III Pillar Pension Systems for Georgia. The reports and illustrations are part of the author's final report are likewise annexed to this report.

7. A copy of the authors' final report is annexed to this report.

B. METHODOLOGY

1. The consultants reviewed the relevant Georgian legislation pertaining to pension systems such as:
   - The Georgian Tax Code
   - The Georgian Law on State Pension
   - The Law of Georgia on Non State Pension Assurance and Provision
2. The consultants performed in-depth research of pension reforms in the CEE countries as well as other European and Latin American states, and focused on the functions and objectives as well as the challenges of a Mandatory Savings Pension System.
3. The consultants held discussions and consultations with pension experts at the World Bank and IMF.
4. The consultants held discussions and consultations with the BAG regarding potential approaches and strategies such as approximating the contribution rates, scope of compulsory contribution, tax incentives and other fundamental considerations to the legal framework for Mandatory and Voluntary Pensions.
5. The consultants held discussions and consultations with the Georgian Insurance Association (GIA) regarding the performance of the Non-State Pension Funds and how it can be strengthened in order to increase participation among employers and to attract pension savings on an individual basis.
6. The consultants held discussions and consultations with the Deputy Minister of Finance of the MoF.
7. The consultants conducted workshops and round table discussions on pensions with members of the BAG and the GIA.
8. The consultants participated as experts in round table discussions of pension issues organized by other organizations.
9. The consultants responded to issues raised in every discussion with the MoF and BAG with well-researched exposure drafts that were disseminated through the BAG.
10. The consultants enlisted the help of the Policy Management Consulting Group (PMCG), a local consulting firm, to conduct research on Georgia's demographic and economic data and provide projections based on reasonable assumptions of the public pension and non-state pension funds. At the same time, PMCG would independently assess the need for a Mandatory Savings Pension System as well as the opportunities and challenges of a Multi-Pillar Pension based on current Georgian social, economic and political environment.

C. FINDINGS

1. There are two (2) existing pension systems in Georgia: (a) the state pension program, an unfunded PAYG system and (b) the non-state pension funds, a voluntary pension savings.
2. State Pension System:
   - Fiscal transfers from the national budget fund this pension program. It provides pension benefits for: (a) old age starting at age 65 for men and age 60 for women; (b) disabled persons; and (c) loss of a breadwinner or commonly known as survivors' pension.
   - The following applies to the old age pension:
     - As other countries, the Georgian population is also ageing and the number of old age pensioners in Georgia has been increasing year after year.
     - Effective September 1, 2010, the monthly pension benefits for old age pensioners is GEL 100, which civil society and stakeholders claim to be inadequate to cover basic/minimum old age consumption needs at current prices.
     - It is a universal pension and not designed to target either poverty reduction/ alleviation or wealth redistribution. Rather, pensions are paid in flat amounts regardless of the economic status and needs of the pensioner or whether he/she is affluent or economically challenged.
     - Pension benefits are not indexed to inflation. If pension benefits are adjusted based on or indexed against the CPI, the annual fiscal transfers required to keep the system sustainable are expected to reach about GEL 1.2 Billion in 2015, GEL 2.1 Billion in 2020 and GEL 2.7 Billion in 2030.
     - Benefit payments are not related to pensioners' remaning living years and do not account for the difference in life expectancy per gender.
     - As of December 31, 2009, Georgia had 838,500 pensioners that represent 19% of the population and 80% receive old age pension benefits. In 2009, old age pension payments comprised 85% of total pension expenditures, which is 42.2% of the total expenditures for social services. Even at its current low levels, old age pension spends constitute a large portion of the overall state budget.
     - Unless reformed or rationalized with a "means-tested" criteria and if the current age criteria remain unrelated to reasonable Georgian tables on mortality or life longevity, the sustainability of the state pension for old age would require major and increasing fiscal transfers
3. Voluntary Non-State Pensions:
   - The non-state pension funds, a voluntary private pension scheme, was established under the Law of Georgia on Non-State Pension Assurance and Provision, signed on October 30, 1998, No. 1679-IS.
   - There are six insurance companies licensed by the NBG as pension fund providers as of this time. Out of the six companies, only three provide Non-State Pension schemes.
   - To date, the only participants in the Non-State Pension funds are employees enrolled in different pension schemes established by their employers (pension plan sponsor) that have a contract with an insurance company (pension fund provider).

- Due to its voluntary nature, only a few employers have established pension funds for their employees. On an individual basis, almost no one in Georgia is saving for his/her pension at this time. As of December 31, 2010, there were 16,870 participants, which is merely 2.7% of the more than 618,600 formally employed individuals.
- Workers have no external incentive to voluntarily save for their pensions. For example, pension contributions and the earnings (interest) there from are not tax-incentivized.
- The participants have unfettered access to their pension savings, which are withdrawn for any purpose or use. Unless savings are "locked-in" for retirement income and saving withdrawals before retirement are tempered and allowed only for limited and specified purposes, the non-state pension funds will not achieve the objectives of saving for retirement.
- The current solvency regulations for pensions are inadequate to ensure safe, stable and secure voluntary pensions compared to international best practices appropriate for long term savings contracts.
- The performance of the Non-State Pension Funds is very dismal. For instance, as of December 31, 2009, the NBG's data reported that the accumulated assets is only GEL 7,915.350, indicating that savings for pension under this platform is very low and, at most, insignificant.

4. Mandatory Savings Pensions:
   - Currently, Georgia does not have a Mandatory Savings Pension System. However, its design and implementation would greatly benefit the GoG and its people as indicated in other countries that included a Mandatory Savings Pension System into their pension reforms.

D. RECOMMENDATIONS

1. Establishment of a Mandatory Savings Pension as a supplement to benefit entitlements from the state pension program and to complement the functioning of the Voluntary Non-State Pension Funds.
    - This Pillar primarily targets the working force particularly the low and medium salary or wage earners who would otherwise neglect to save and provide themselves with a stream of retirement income

- Convene a high level consultative group to start deliberating on policy related options such as: a. introducing and developing of private pensions (both mandatory and voluntary) and b. identifying and addressing challenges and pre-conditions necessary to put in place for the development and/or implementation of a mandatory pension system.
- Convene a working group to create a road map for establishing a Mandatory Savings Pension System and to draft the enabling legal and regulatory framework, including amendments to the tax code to create incentives for pension savings.
- As a necessary consequence, the current legislative and regulatory framework of the Voluntary Non-State Pension funds would need to be upgraded and refined in order for this pension system to perform and achieve its purpose of saving for supplementary pension.
- Consider a regulatory platform for DC private pensions, whether mandatory or voluntary, that cover, at a minimum, the following:
    - Statutory capital requirements,
    - Fit and proper norms among others in:
        - Licensing of pension providers
        - Licensing of asset managers
        - Licensing of asset custodians
        - Licensing of entities engaged in the business of maintaining record of pension transactions
- To promote and enable the design, development and marketing of annuity products for the individual pension market and as a precursor to the eventual regulatory synchronization of both the Mandatory and Voluntary Private Pensions.
- Consider the promulgation of specific regulations regarding the Non-State Pension Fund particularly as related to the following:
    - Risk-based reserving (funding) of pension liabilities;
    - Disclosure requirements;
    - Permitted investment of reserve assets; and
    - Segregation of pension assets from the general assets of insurers.

E. ADDITIONAL INFORMATION

1. CONCLUSIONS

- A Mandatory Savings Pension System provides the following benefits:
  - Increases national private savings,
  - Enables generation of long term capital that may be mobilized in various programs that generate employment opportunities,
  - Increase domestic productivity, and ease the long-term fiscal burden of the state pension and social assistance programs.
- A well-structured Mandatory Savings Pension System facilitates the attainment of, but is not limited to, the following long term policy objectives of the GoG:
  - Creation of a pension system that covers the whole population resulting in the increased retirement income of workers who save for their pensions. It will facilitate the modernization of the State Pension System to ensure its long-term sustainability.
  - Long term solution: A pension system that has long-term sustainability and addresses both the immediate and recurring socio-economic and political pressures. The pension system should also be able to withstand the fiscal/budget constraints consistent with the development of a market economy and changing demographics.
  - Promote economic development: The pension system promotes the accumulation of long-term savings to be used to increase the national productivity level, investment in entrepreneurial capital, and a robust labor market.
  - Mandatory Savings Pension System generates a predictable accumulation of long-term assets for investment to catalyze the capital market's development.
- Current Georgian demographics indicate an increasing number of people above 65 years of age, or elderly. The current dependency rate of two elderly to every ten people within the working ages of 15 to 64 years of age offers the best time to establish a Mandatory Savings Pension System for wage and income earners to save and provide for their pensions rather than having the elderly rely solely on the benefits from the State Pension program.
- The interest of the GoG and the private sector to create and establish long-term capital resources to spur investment and financial intermediation is currently very high.
- A Mandatory Savings Pension System would help to ease the political pressure related to the availability of long-term funds to finance the infrastructural development projects that are essential to develop the economy.
- The Mandatory Savings Pension System, as a mechanism to pre-fund future pension benefits that are only realized in the long-term (minimum of 20 years), would create higher levels of private and national savings, which will help to reduce Georgia's reliance on foreign capital flows.

2. ATTACHMENTS

DOCUMENTS	HEADING
Recommendations for Establishing a Mandatory Savings Pension (Pillar II Pensions) in a Multi Pillar Pension System in Georgia	Power Point Presentation to the Deputy Minister of the MoF on: "Pension Reform for Georgia: A Multi Pillar Pension: An Overview, August 15, 2011
Annexes to the above mentioned Recommendation Paper: – Annex 1A: Illustrative Scenarios of Mandatory Savings Pension – Annex 1B: Illustrative Scenarios of Voluntary Savings Pensions – Annex 2: Analysis of Mandatory Savings Pensions in ECC countries – Annex 3: Basic Exposure Draft of Pension Reform – Annex 4: Establishing Multi-Pillar Pensions: Lessons Learned for Georgia and SWOT Analysis of Mandatory Savings (Pillar II) and Voluntary Savings (Pillar III) pensions for Georgia – Annex 5: Overview of Pension Reform for Georgia – Annex 6: Report of the Policy Management Consulting Group (PMCG), Georgia on Pension Initiatives	Power Point Presentation on: "Pension Reform for Georgia: Establishing a Mandatory Savings Pension in Multi Pillar Pension System", during the October 5, 2011 Round Table Meeting with business executive, select government officials and the GIA. (English and Georgian versions),
	List of Attendees to the Round Table Meeting on Multi-Pillar Pensions held at the GIA on October 5, 2011
	References to Accompany Presentation on Multi Pillar Pension for Georgia, Round Table meeting at the GIA on October 5, 2011

ATTACHMENT 1

RECOMMENDATION FOR ESTABLISHING MANDATORY SAVINGS PENSION (PILLAR II PENSIONS) IN A MULTI (3) – PILLAR PENSION SYSTEMS FOR GEORGIA

By Business Association of Georgia and EPI

ABBREVIATIONS

BAG	Business Association of Georgia
CEE	Central and Eastern Europe; Central and East European countries
CPI	Consumer Price Index
DB	Defined Benefit Pension Plan
DC	Defined Contribution Pension Scheme
EPI	Economic Prosperity Initiative, a USAID funded project in Georgia
EU	European Union
GDP	Gross Domestic Product
GEPLAC	Georgian - European Policy and Legal Advising Centre
GoG	Government of Georgia
MOF	Ministry of Finance, GoG
MOLHSA	Ministry of Labor Health and Social Affairs, GoG
NBG	National Bank of Georgia
PAYG	Pay As You Go (unfunded) Pension
PMCG	Policy Management and Consulting Group (Georgia
PIT	Personal Income Tax
SSA	Social Service Agency of the MOLHSA
SWOT	Strength, Weaknesses, Opportunities and Threats
USAID	United States Agency for International Development
VAT	Value Added Tax

I - STATEMENT OF PURPOSE

1.1 The purpose of this paper is to recommend that the Government of Georgia (GoG) establish a Mandatory Savings Pension, aligned to the World Bank Pillar II Pension model as supplement to benefit entitlements from the state pension program and to complement the functioning of the Voluntary Non-state Pension funds.

1.2 The immediate objective of this recommendation is the automatic enrollment and participation, in a Mandatory Savings Pension System, of employed individuals in the formal (hired) labor both in the public and private sectors who earn a ***monthly wage or salary of 400 GEL or more and who are between ages of 15 and 45,*** on and or following the effective date of this pension system.

1.3 The gradual participation of self-employed individuals will also be phased-in to the Mandatory Savings Pension System consistent with the long-term objective of securing participation of all individuals in the active labor.

1.4 This Pension System will require workers to begin and, during their working years, continue saving a fraction of their monthly earnings to accumulate in their individual pension savings accounts. The accumulated savings, which is the amount of contribution and investment income[3], will capitalize the purchase of regular pension payments[4] following their retirement.

1.5 The recommended Pillar II Pension platform[5] is a Defined Contribution (DC) scheme where individuals enrolled in the pension system contribute, on a monthly basis, 7.5% of their gross taxable income. The contributions and investment income, or pension savings, shall be accumulated, recorded, maintained and reported in the Individual Pension Savings Accounts of each and every participant.

1.6 The recommended 7.5% contribution rate is considered to be the mean average as not too high or too small so that, under normal economic and investment conditions, the amount of supplemental pension would be meaningful and adequate to cover the consumption spending of the pensioner above his/her basic subsistence needs. This rate approximates the average contribution rates of Pillar II Pensions in the CEE countries. Please see Tables 13a and 13b under Section VII below.

1.7 Section VII of this paper applies the various features, operations and functioning of a Mandatory Savings (Pillar II) Pension System to the Georgian context and its perspectives.

1.8 This paper discusses the current pension systems in Georgia in order to analyze the functioning of the pension benefits' mechanisms and to build the foundation of a Mandatory Savings Pension System in order to complete for Georgia pension systems akin to the classical models of the World Bank Multi-pillar pensions.

1.9 Sections II, III and IV incorporate important pension policy issues of lessons learned from past and/or on-going pension reforms in Europe, especially in Central and Eastern European (CEE) countries as these issues correlate to the current Georgia

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[3] Also known as the "accumulation phase"

[4] Also termed the " pay-out or distribution phase"

[5] In the context of this report, the word "platform" refers to a program or policy that is structured to provide a good opportunity for attaining an intended action or objective.

socio-economic environment. These Sections further clarify the fundamental rationales and methodologies for creating and implementing pension systems.

II - BASIS AND NEED TO REFORM PENSIONS IN GEORGIA

2. The Multi-Pillar Pension Systems

2.1 Effective pension systems address and attain the following objectives:

- Provide income to the pensioner to enable him/her to meet his/her consumption spending in addition to basic needs[6] (It is hoped that "basic needs" are covered by pension entitlements from the state pension system). A system integrating both a state "pay as you go" (PAYG) and a pre-funded pension will most likely achieve this objective.
- Generate long-term capital that provides alternative sources of financing that can be mobilized to expand economic activities, growth and development while achieving optimum investment returns of pension assets.
- Promote increased national private savings especially for income earners who, during their working years, are able to set aside part of their wage or earnings to create an income stream during their post-employment (retirement) years.
- Enable the government to shift a large part of its responsibility of providing pensions to the individuals and the providers of private pension (private sector).

2.2 The World Bank's three Pillars Pension Model[7] was the template used for the pension reforms in Latin American countries as well as in the EU 10[8], EEC and CEE countries, such as in Kazakhstan in 1999, Russia in 2002, Armenia in 2011, to mention a few[9].

2.3 The Multi-Pillar Pensions consist of the following:

- A publicly managed, unfunded, defined benefit pillar, financed by fiscal transfers, to take care of poverty alleviation and wealth redistribution – Pillar I;
- A mandatory savings pension, privately managed, fully funded, DC Pillar, intended as an income replacement and financed by individual "earnings-based" savings – Pillar II; and
- A voluntary savings pension, privately managed, fully funded, DB (defined benefit) or DC pillar for additional retirement income, financed by any form of pension savings made on a voluntary basis- Pillar III.

2.4 A Mandatory Savings Pension (Pillar II), is an important component of the Multi – Pillar Pension Systems. It is designed to require workers to set aside a fraction of their wage or salary in pension savings accounts for additional retirement income to supplement their entitlements from the state pension program. Within the framework

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[6] It is ideally the function and objective of the state pension programs to provide benefit adequate to cover the basic needs of a pensioner for subsistence.

[7] World Bank, "Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth", World Bank Policy Research Report, 1994

[8] In 2004, 10 countries joined the European Union (EU)—eight from formerly Communist Central and East European (CEE) countries (Czech Republic, Hungary, Poland, Slovakia, Slovenia, Latvia, Lithuania, and Estonia) plus Cyprus and Malta

[9] Please see Tables 13a and 13b under Section VII below for reforms in other countries and Annex 1 to this report for additional information about pension reforms in Europe and Latin America

of the three (3) pillars of pensions, the pension reform for the GoG, could be anchored on the following platforms[10]:

- Pillar I – The current State (Public) Pension
- Pillar II – A Mandatory Savings Private Pension which is a DC scheme
- Pillar III – The Voluntary Savings Private Pension, currently the non-state pension funds, which can be either a DC or DB[11] plan or scheme.

2.5 The Pillar I Scheme is designed to protect the elderly from absolute poverty and the inability to meet the minimum subsistence level. Pillar II and III protect individuals from relative poverty and a sharp or drastic fall in consumption following retirement.

2.6 The life cycle deficit of the elderly, or the difference between what they consume and what they produce, is funded in a variety of ways: (a) from what they have saved and accumulated; (b) from public pensions; and (c) from family transfers basically from their working adult children.

2.7 When elders rely on their adult children to cover their old age life cycle deficit, an increase in the number of elderly means fewer children sharing in the cost. Therefore, the average burden on each child to provide support is greater.

2.8 Both Pillar I and Pillar III Pensions exist in their nascent stages in Georgia. What remains is the creation and implementation of a Pillar II Pensions System. The implementation of a Pillar II System, however, would necessarily provide critical insights on how the existing Pillar I system may be reformed to ensure its long term sustainability as well as how the current Voluntary Non-state Pension System may be harmonized with the principal objectives of the World Bank Pillar III Model, so that all three (3) pillars complement and supplement each other.

2.9 The demographic trend in Georgia indicates a growing number of elders. Beginning in September 2011, the monthly old age pension was increased to GEL 100 amidst popular expectations that the amount will be further increased to USD 100 in 2012. There is also a growing popular demand to adjust the amount of pensions in proportion to current prices (inflation). It is widely thought that GEL 100 is not sufficient to provide for the basic subsistence needs of the pensioners. The performance and expected development of the state pension program is discussed in more detail under Sub Section 6.1, Section VI. (See also Tables 6 & 7).

2.10 The current non-state pension funds, a Voluntary Savings Pension, are not attracting significant participation. As of the end of December 2010, there are only a little more than 16,000 participants and all of which were employees of firms with established DC Pension plans for their employees. The dismal performance of the non-state pension funds is discussed in more detail in sub-section 6.2 Section VI. (See also Table 9).

2.11 As to purposes and objectives, a Multi-Pillar Pension System for Georgia could be structured as follows[12]:

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[10] In the context of this report, the word "platform" refers to a program or policy that is structured to provide good opportunity for doing something.

[11] Because of difficulties funding DB pensions, members' benefits are particularly at risk on the continuing ability of the sponsor /founder to fully fund the accruing pension liabilities. The solvency requirements of DB schemes to follow international best practices would be a huge challenge, as "book reserves" are no longer permitted. We do not recommend DB pension schemes in Georgia, especially at this time.

Table 1 – Purposes and Objectives of the Multi-Pillar Pensions

Pillar I – State Pension	Pillar II – Mandatory Savings Pensions	Pillar III – Voluntary Savings Pension
Publicly managed DB pension for poverty reduction/alleviation and wealth redistribution	Supplemental benefits to Pillar I entitlements for income smoothing[13] of pensioners to enable them to at least maintain their consumption appetites and lifestyles at retirement. Privately managed system.	Enables individuals who do not fall under the mandatory savings under Pillar II, as well as higher income individuals, to save for their pensions to enable them to maintain their life styles at retirement. Privately managed.
Financed by fiscal transfers	Financed by earnings-related mandatory savings and investment income	Financed by creation of personal savings assets, purchase of annuity contract on, voluntary basis.

2.12 The co-existence of these 3 pension pillars will deepen and broaden the reach of pension systems to a majority, if not all, of Georgian citizens and bona-fide residents. These pension systems will give them every opportunity to save and enjoy the benefits of having additional income during their retirement years.

2.13 The 3-pillared pensions "allows better diversification of risks and thus provides better protection to individuals, who may be vulnerable of economic shocks"[14]. The Multi-Pillar Pension System is consistent with establishing improved social safety nets and protection mechanisms.

2.14 The proposed Pillar II Pension will not supplant or replace the Pillar I Pension System nor will it render obsolete the Pillar III Pension System. All three (3) systems, functioning together, will allow for robust development, growth and sustainability of these pension systems.

2.15 The implementation of a Pillar II System would necessarily provide critical insights for the GoG for continuing rationalization of the State Pension System to ensure its long-term sustainability. It will likewise drive the harmonization of the current Non-State Pensions with the principal objectives of the World Bank Pillar III Model. All three (3) pillars, thus, complement and supplement each other.

2.14 "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", written by. Ms. DeliaVelculescu, of the IMF, aptly stated that:

> "A number of Emerging European economies reformed their pension systems in the late 1990s and early 2000s by adopting multi-pillar pension framework aimed to improve long-run fiscal sustainability and lead to better

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[12] See also: World Bank "Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth", World Bank Policy Research Report, 1994

[13] People postpone certain consumption when they are young and earning a wage and save a portion of their current earnings, so that they can consume more than their reduced earnings would permit in old age.

[14] Mark Dorfman, Richard Hinz, David Robalino and Robert Holzmann. "The Financial Crisis and Mandatory Pension Systems in Developing Countries", World Bank Pension Primer, December 2008

macroeconomic outcomes that would result to higher national saving rates and increased labor participation. The reform initiatives involved mostly the introduction and establishment of ***Pillar II, a mandatory, pre-funded, defined-contribution*** second pillar pension system"[15]. *(Highlighting, by author)*

2.15 The need to increase national savings is crucial for Georgian economic development and growth. Christophe Cordonnier[16], of GEPLAC, rightfully observed that:

- "(T)he drop in private saving (according to IMF, private savings fell from 13.8 percent of GDP in 2005 to 6.3 percent in 2007) becomes a serious cause for concern–we are once again forced to reiterate our recommendation to develop *a "compulsory" system of long-term private savings*, patterned on the best international benchmarks and, especially, the Chilean system of pension funds, as soon as possible. Without such an increase in savings, not only the strategic project of transforming Tbilisi into a regional financial hub will remain a dream–despite the manifest comparative advantages of Georgia in this field". *(Highlighting, by author)*

III – PRIVATE PENSIONS

Private (Supplemental) Pensions

3.1 Pension provision classically involves two (2) stages: (a) the saving or accumulation stage and (b) the pension pay-out or distribution stage. Each and both of these stages run through many years. Hence, particularly during the accumulation stage, growth of pension assets continuously rides through uncontrollable vagaries in the economic cycles. During the pay-out stage, the amount of capital used to purchase the contract for regular pension payments earns interests at guaranteed rates, until all the capital and interest earned are entirely paid out.

3.2 Analysis of historical patterns in developed asset markets demonstrates that, despite significant variation in rates of return due to market volatility, a diversified portfolio of assets, which is the main characteristics of privately managed pensions, would result in a higher level of retirement savings over nearly all time periods[17].

3.3 A fundamental requirement for the development of private pensions is the growth and sustained existence of solid and stable structures that support the investment of pension savings. This would ensure that pension assets accumulate in safe and secure marketplace amidst economic and demographic changes.

3.4 There is no substitute for prudential regulations in the functioning of private pensions. At its core, the business of private pensions is provision of income security of the participants when they retire. Therefore, regulations that provide optimum protection of participants and their pension savings must be in place in order to ensure that private pensions develop and grow efficiently in a safe and secure financial market.

3.5 Private pension arrangements or schemes are either (a) Mandatory or (b) Voluntary. Private pensions differ in many ways with public or social security pensions. Some of the fundamental differences are:

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[15] See: Delia Velculescu, IMF, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", 2010

[16] Christophe Cordonnier, "Financing Georgian Industry", GEPLAC, 2008

[17] Please see Alicia H. Munnell & Anthony Webb & Alex Golub-Sass, 2008. "How Much Risk is Acceptable?" Issues in Brief ib2008-8-20, Center for Retirement Research, revised Nov 2008.

Public (State) Pensions	Private Pensions
Basically intended to provide minimum subsistence benefit for poverty alleviation	Supplements minimum subsistence benefits provided by state pension for smoothing consumption needs of pensioners
Unfunded, PAYG	Pre-funded by regular private savings. DCs are fully funded at all times and DBs require minimum funding levels equal to accruing pension liabilities.
Exposure to political, fiscal and social influence and pressures	Based on the principle of "self-provision" - pensions depend on the amount one had saved before his/her retirement. Isolated from political, fiscal and social pressures
Pension payments come from fiscal transfers	Participants' individual savings are used to pay pension benefit. No fiscal transfer involved
Functioning (eligibility, amount, manner and time, of benefit payments) depend on government's unpredictable options	Functioning is based on permanent legislation that prescribes minimum prudential provisions of contracts relating to pension savings accumulation and pension payments
Unregulated	Regulated and supervised
A social safety net for poverty reduction/alleviation and as mechanism for wealth redistribution	Ability to increase national private savings for long term investment that can be directed to support financing of activities that increase national productivity, entrepreneurial and capital investment and expanded labor base
Not intended to, and does not, contribute to development and growth of the financial services sector	Ability to catalyze development and growth of the financial sector by the accumulation of long term investible assets that prompts robust activities in the financial sector and expansion of the labor market

3.6 The Mandatory Savings Pension System (Pillar II) in the Georgian socio-economic environment is presented in more detail in Section VII of this paper.

3.7. Voluntary (Pillar III) Pensions. Voluntary Savings Pension System is a platform where:

- Individuals may save for additional retirement income in a pension fund in pooled and diversified long-term investment portfolios of pension fund assets, rather than in other individualized forms of traditional savings.
- Individuals who are not required by law to participate and enroll in the Mandatory Savings Pension may save for their retirement income. Workers who fall outside of the prescribed criteria for mandatory participation in the

Pillar II Pension System may build their pension accumulation under the Pillar III Voluntary Schemes.

- Workers who are enrolled in the Mandatory Savings Pension System may still save under the Voluntary System in amounts exceeding the mandatory contribution levels.
- Individuals who are not employed or do not receive a regular income, but have the means to save for their old age, can build their pension savings in pension funds or deferred annuity products that are available in the voluntary market.
- Occupational DB pension schemes may be established.
- Individuals who would want more flexibility to access pension savings for purposes other than income at retirement, such as receiving a lump sum payment on retirement.

IV - MOTIVATING PRIVATE PENSION SAVINGS THROUGH TAX INCENTIVES

Pension Tax Regimes

4.1 Pension savings, in contrast with other forms of savings, require the "locking-in" of amounts saved for one's income at retirement. The period that savings are "locked-in" may span many years. Grant of special personal income tax (PIT) treatments in respect to contributions and savings' earnings is an incentive for one to save for the long term. On the other hand, tax-advantaged savings also serve as a disincentive for accessing pension savings before retirement when early withdrawals are subject to PIT.

4.2 Governments commonly provide tax incentives to motivate workers to save for their retirement. Tax incentives play an important role in helping address to a large extent the myopia of individuals who are naturally prone to disregard the need to save for their retirement during their working years. When people do not save for retirement, they come to realize, and regret, that they have no source of cash in-flow to rely on because they did not save enough, or did not save at all, during the years they were earning income.

4.3 Tax incentives implicitly reduce governmental revenues. Hence, the granting of tax incentives is preconditioned on the continuing soundness of GoG's macro-economic fundamentals and also that the amounts given in PIT incentives would not result in fiscal deficits.

4.4 However, if pension assets are indeed mobilized to spur and realize economic growth, both the national productivity and the labor market expand, which results in an increase in both domestic consumption and the expansion of tax bases for PIT and VAT. The increased dynamism in economic activities translates into additional revenue that will exceed the amounts of granted incentives.

4.5 Tax incentives appropriately apply to both Mandatory and Voluntary Savings Pensions, which are both supplementary pensions schemes. However, prudential fiscal policy demands that incentives should be limited in amount so that pensions do not serve as a vehicle for inappropriate avoidance of PIT or cause undue fiscal burdens. On an individual basis, the limitation would apply to how much one can save in either one or a combination (total) of all the pension schemes, regardless of whether these are the Mandatory or Voluntary Pension Systems. For instance, the

amount of tax-advantaged contribution, and applicable taxable earnings, is expressed as a percentage of gross (taxable) wage or salary but capped in terms of yearly maximum amounts. For example, the tax laws might provide that "for any one individual, contributions up to 10% of gross salary or taxable income not exceeding GEL 3,000 per annum, and all income earned by investing the pension savings, regardless of amount, ***that are kept intact*** in the pension savings account of the individual are excluded from personal income tax".[18]

4.6 Tax incentives for supplementary pensions come from the PIT which is one of the following pension tax regimes:

- EET – Exempt, Exempt, Taxed. The contributions are EXEMPT from PIT, the earnings are likewise EXEMPT from PIT but the pension benefits are TAXED. In an EET regime, the government postpones the collection of PIT and recoups and collects the PIT as and when the pensions are paid out to the pensioner. Globally, EET is the most common pension tax regime.
- TEE – Taxed, Exempt, Exempt. The contributions are TAXED, the earnings are EXEMPT and the pension payouts are EXEMPT. This regime is similar to the incentives given to interest earned from deposit in licensed financial institutions as per the Tax Code of Georgia[19], but which is not an incentive that is currently afforded to interest or earnings earned from investing pension savings[20]. In the long term, this regime is more onerous for the GoG than EET. However, in the short term, its adverse fiscal impact is less than EET.

4.7 Whether the tax regime is EET or TEE, early withdrawal should attract the payment of the corresponding PIT. In the case of TEE, the withdrawal is normally applied first against accumulated earnings and, to that extent PIT is due and payable. In the case of EET, the entire amount of withdrawal is subject to PIT.

4.8 The illustrative projections of Pillar II and Pillar III Pensions in this report also respectively reflect the potential fiscal impacts of EET and TEE incentives.

4.9 For Georgia, the author recommends EET. As Georgia adopts gross income taxation, the amounts of tax incentives given earlier are recouped entirely[21] from the total of all pension pay-outs. The collection of the same PIT is merely postponed. In addition, tax administration for monitoring contributions and investment income for

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[18] These are suggested pension –related tax incentive provisions from the author.

[19] Article 102 (f) of the Tax Code of Georgia excludes from gross taxable income any interest earned from the placement of funds on term and savings deposits by an individual with banks and other financial or credit institutions.

[20] Article 82.1 b) of the Tax Code of Georgia, exempts from income tax "pension received from a cumulative and repayable non-state pension scheme in the amount of effected contributions". It is clear from this provision that the earnings in the cumulated pension savings are subject to PIT at the moment these are received as pensions or as repayable (such as withdrawal) from a non-state pension scheme. However, it is not clear how PIT on the interest or investment income is reported and paid in the case of early (partial or total) withdrawals of pension savings.
See also Article 8.19, b.a) that defines (taxable) interest income to include pension insurance reimbursement (amount) paid by an insurer to an insured person minus insurance contributions effected for receiving this reimbursement.

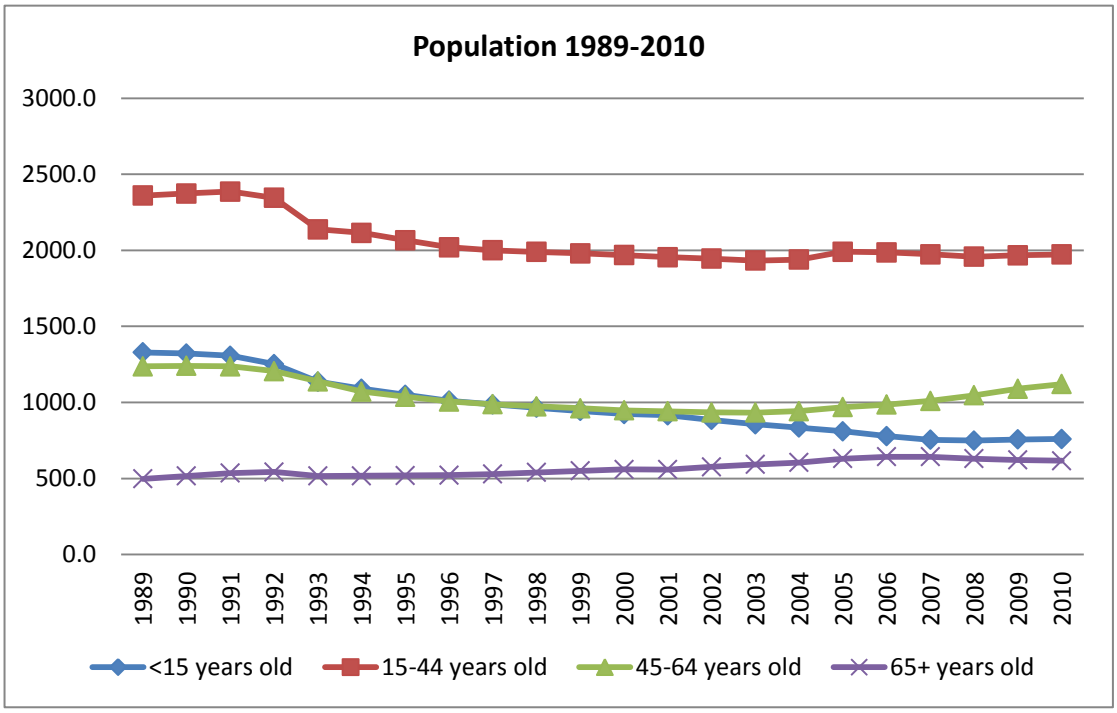
[21] Recoupment of postponed PIT could be more than the amount of the incentive because: (a) the total amount of pension payouts would include not only the amount of contribution and the earnings during the accumulation stage but also the earnings of the pension fund during the payout stage and (b) in the case of pensions paid for life, if and when the pensioner/annuitant out-lives the actuarially determined period for pension payments.

the purposes of enforcing Articles 8.19.b.a) and 82.1.b) of the Tax Code would be less cumbersome and less expensive in an EET tax regime for pensions.

V- GEORGIAN DEMOGRAPHIC AND BASIC ECONOMIC INDICATORS

5.1 Population

Graph A



Source: PMCG Report, Pension Development in Georgia, Annex 6

Table 2 –Population and Demographic Statistics 2005 to 2010

	2005	2006	2007	2008	2009	2010
In thousands, unless indicated as %						
POPULATION (total)	**4,401.3**	**4,394.7**	**4,382.1**	**4,385.4**	**4,436.4**	**4,469.3**
Male	**2,083.9**	**2,079.5**	**2,078.4**	**2,080.8**	**2,108.9**	**2,127.4**
Female	**2,317.4**	**2,315.2**	**2,303.7**	**2,304.6**	**2,327.5**	**2,341.9**
POPULATION: over 15 years	**3,591.3**	**3,615.5**	**3,627.1**	**3,635.8**	**3,679.9**	**3,709.8**
Male	**1,663.2**	**1,673.5**	**1,682.8**	**1,685.4**	**1,710.2**	**1,727.0**
Female	**1,928.1**	**1,942.0**	**1,944.3**	**1,950.4**	**1,969.7**	**1,982.8**
POPULATION: below 15 years	**810.0**	**779.2**	**755.0**	**749.6**	**756.5**	**759.4**
Male	**420.7**	**406.0**	**395.6**	**395.4**	**398.7**	**400.3**
Female	**389.3**	**373.2**	**359.4**	**354.2**	**357.8**	**359.1**
	2.6%	**-0.2%**	**-0.6%**	**-0.8%**	**0.5%**	**0.2%**
POPULATION: 15 to 44 years	**1,991.0**	**1,986.4**	**1,973.8**	**1,958.1**	**1,967.8**	**1,972.7**
Male	**976.0**	**974.9**	**973.8**	**967.5**	**975.9**	**981.7**
Female	**1,015.0**	**1,011.5**	**1,000.0**	**990.6**	**991.9**	**991.0**
POPULATION: 45 to 64 years	**969.4**	**985.8**	**1,010.4**	**1,047.4**	**1,090.2**	**1,120.5**
Male	**442.9**	**450.3**	**462.6**	**478.4**	**499.1**	**512.5**
Female	**526.5**	**535.5**	**547.8**	**569.0**	**591.1**	**608.0**
POPULATION: 65 years old	**630.9**	**643.3**	**642.9**	**630.3**	**621.9**	**616.6**
Male	**244.3**	**248.3**	**246.4**	**239.5**	**235.2**	**232.8**

Female	**386.6**	**395.0**	**396.5**	**390.8**	**386.7**	**383.8**
POPULATION: 15 to 64 years	**2,960.4**	**2,972.2**	**2,984.2**	**3,005.5**	**3,058.0**	**3,093.2**
Male	**1,418.9**	**1,425.2**	**1,436.4**	**1,445.9**	**1,475.0**	**1,494.2**
Female	**1,541.5**	**1,547.0**	**1,547.8**	**1,559.6**	**1,583.0**	**1,599.0**
DEPENDENCY RATIO	**21.3%**	**21.6%**	**21.5%**	**21.0%**	**20.3%**	**20.0%**
Male	**17.2%**	**17.4%**	**17.2%**	**16.6%**	**15.9%**	**15.6%**
Female	**25.1%**	**25.5%**	**25.6%**	**25.1%**	**24.4%**	**24.4%**

Source: PMCG Report, Pension Development in Georgia, Annex 6

5.1.1 The demographic indicators in Georgia shows a trend toward an ageing population. The trend is similar, though not yet as high, as in the EU community and, in particular, CEE countries.

5.1.2 The historical population data indicates an increasing trend in both male and female genders. Since 2005, the number of people below 15 years of age reflects a declining trend, while the number of those over 15 years of age has increased. There is likewise an increasing trend in the group comprising 45 to 64 years of age. These indicators logically show continuing and consistent increases in the number of elderly in the future. This analysis can be deduced from both Graph A and Table 2 above.

5.1.3 As can be pictured from Graph A and Table 2, the current (2010) dependency ratio is a little more than 20% on average, based on data from the recent six years. This means that there are approximately two elderly for every ten people in the active labor sector (15 to 64 years of age). It is worth noting that the number of people between 45 and 64 years of age (past middle age and nearing retirement group) is likewise increasing. This trend indicates that more people would, in no time at all, become eligible and entitled to receive old age pension benefits from the state pension.

5.1.4 In 1997, when pension reforms were implemented in the EU10 countries the average dependency ratio in those countries was 17%.

5.2 Basic Economic Indicators

5.2.1 Gross Domestic Product and Consumer Price Index

Table 3: Historical Basic Economic Indicators, 2005-2010

	2005	2006	2007	2008	2009	2010
GDP (nominal), mln	11,621.0	13,790.0	16,994.0	19,075.0	17,986.0	20,791.0
GDP (real), mln	8,561.4	9,365.0	10,521.0	10,774.7	10,365.6	11,026.5
GDP (real), changes	9.6%	9.4%	12.3%	2.4%	-3.8%	6.4%

	2005	2006	2007	2008	2009	2010
GDP deflator changes	7.9%	8.5%	9.7%	9.6%	-2.0%	8.7%
GDP deflator, index	135.7	147.3	161.5	177.0	173.5	188.6
GDP per capita, nominal	2,689.1	3,133.1	3,866.9	4,352.9	4,101.3	4,686.5
GDP per capita, real	1,981.1	2,127.7	2,394.0	2,458.8	2,363.7	2,485.5
CPI, index	132.5	144.6	158.0	173.8	176.8	189.4
Average inflation rate	8.3%	9.2%	9.2%	10.0%	1.7%	7.1%

Source: PMCG, citing IMF Country (Georgia) Report 2011 - 2016

5.2.2 On the basis of the historical economic data reported above, a projection of the future developments of economic indicators can be gleaned from Table 4 below.

Table 4: Projected (Basic) Economic Indicators- CPI and GDP

	2011	2012	2013	2014	2015	2020	2025	2030	2032
Real GDP Growth	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Average CPI Inflation	12.6%	7.9%	6.0%	5.8%	5.5%	5.0%	4.0%	4.0%	4.0%
Nom. GDP, mln GEL	23,557	26,616	29,839	33,289	37,139	63,886	107,406	174,288	211,810
Real GDP Growth	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%

Source: PMCG Report, Pension Development in Georgia, Annex 6

5.2.3 Tables 2, 3 and 4 above provide Georgian demographic and socio-economic data and projections. These tables offer valuable input for analyzing the current old age pension program in Georgia. They also provide the necessary bases to suggest the creation of a Multi-Pillar Pension System that includes a Pillar II Pension.

VI - CURRENT PENSION SYSTEMS IN GEORGIA

There are two (2) pensions systems in Georgia today: the State Pension[22] and the Non-State Pension[23], the latter of which is a pre-funded voluntary pension scheme.

6.1 The State Pension

6.1.1 The State Pension provides pension benefits to Georgian citizens and residents for: (a) old age measured at 65 years for men and 60 years for women; (b) a disabled person; and (c) loss of a breadwinner which is commonly known as survivors' pension.

6.1.2 Despite the decreasing trend in the total number of state pension beneficiaries[24], from 2008 onwards, the number of pensioners receiving old age pension has, in fact, been increasing year after year:

[22] Georgian Law on State Pensions, signed December 23, 2005, N 2442 – RS, which took effect on January 1, 2006

[23] Law of Georgia on Non-State Pension Assurance and Provision, signed on October 30, 1998, No. 1679-IS

Table 5: State Pension Historical Statistics

	2008	2009	2010	2011 (Aug)	2011 (Sept)
Number of state pension beneficiaries	842,246	838,493	835,901	828,203	
Yearly state pension payments, mln GEL	647.5	741.7	781.4	516.9	
Number of old-age pension beneficiaries	*658,310*	*659,964*	*662,288*	*662,978*	
Monthly individual pension, in GEL	55-70	80	80	80	100
Total old-age pension payments[25], mln	**509.4**	**599.6**	**634.5**	**423.5**[26]	**795.6**[27]
Percent of pension/GDP	2.9	3.5	3.1	2.7	3.4[28]

Source: PMCG Report, Pension Development in Georgia, Annex 6

6.1.3 Currently, the state pension system seems to be working without serious funding problems, albeit it is inadequate to fully cover basic old age consumption needs at current prices.

6.1.4 The eligibility criterion for the old age pension is based solely on age and measured at 60 years of age for women and 65 years of age for men. It is a universal pension and is not designed for poverty reduction/ alleviation or for wealth redistribution. Pensions are paid in flat amounts, currently GEL100, regardless of the economic status and needs of the pensioner or whether he/she is affluent or economically challenged.

6.1.5. Being a universal old age pension, the long term sustainability of the state pension is a huge concern especially if it were to provide adequate pension particularly to the poor with the objective of poverty reduction/alleviation or wealth redistribution. Unless reformed or rationalized with some types of "means-tested" criteria and if the current age criteria remain unrelated to reasonable Georgian tables on mortality or life longevity, the sustainability of the state pension for old age would require major and increasing fiscal transfers. Please see Table 5 above.

6.1.6 Table 4 provides projected economic indicators while Table 5 details the state pension's recent statistics. If the amount of pension is indexed with the CPI, as projected in Table 6, a probable development of the state old age pension program is analyzed and projected in Table 7 in terms of annual old age state pension expenditures.

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[24] State pension system involves different beneficiaries to the social benefit programs like old-age, disability, internally displaced people, survivors and others, see also the official website of Social Service Agency available via www.ssa.gov.ge.

[25] Actually paid during years

[26] Covering amount of actual pension payments during January – August, 2011

[27] Implicit value pension payments for FY 2011 based on the number of pensioners in August, 2011

[28] Nominal GDP for 2011 is an estimated value

Table 6 – Projected Monthly Amount of CPI Indexed Old Age State Pension

Based on 2011 prices

Monthly amount of old age state pension – 100 GEL as of September 2011 Adjusted based on CPI at the end of the immediately preceding year								
	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted	113	121	129	136	175	222	270	292
2 years adjusted	100	121	121	136	167	222	259	280
5 years adjusted	100	100	100	100	144	184	230	280
Number of pensioners, thousands	670.5	673.8	681.1	690.4	738.5	793.4	820.1	823.4

Source: PMCG Report, Pension Development in Georgia, Annex 6

Table 7 - Projected Annual Expenditures of CPI Indexed Old Age State Pension

Based on 2011 prices

In Million GEL	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted	909.2	978.4	1,054.3	1,126.7	1,550.9	2,113.6	2,657.1	2,885.2
Adjusted every 2 years	804.6	978.4	993.0	1,126.7	1,480.0	2,113.6	2,548.9	2,770.0
Adjusted every 5 years	804.6	808.6	817.3	828.5	1,276.1	1,751.8	2,263.5	2,770.0

Source: PMCG

6.1.7 State Pension Expenditure: As of the end of 2009[29], the Statistic Report of the Social Service Agency (SSA) of the Ministry of Labor Health and Social Affairs (MOLHSA) reported a total of 838,500 pensioners, which is 19%[30] of the population. This ratio is much lower than the average 26% ratio in CEE countries. In 2009, 80% of the of number of pensioners are beneficiaries of old age pension and, in terms of total pension spending, old age pension payments was 85% of total pension expenditures. Moreover, total expenditures for old age pension was 42.2% of the total expenditures for social services and 14.5% of the total budget for the year 2009. Table 8 below depicts more details on the public pension systems of the GoG. Special attention should be given to the increasing trend in respect of the above-mentioned coefficients (percentages) indicating that public pension expenditures, particularly for old age, are now beginning to absorb a large portion of the state budget.

Table 8 – Analysis of Pension Expenditures

For the years ending 2008 and 2009

	2008	2009
Total Number of Pensioners	842,200	838,500
Total Population	4,382,100	4,385,400
Ratio of Pensioners to Population	19.2%	19.1%

[29] Social Statistics Report issued by the Social Service Agency (SSA) of the Ministry of Labor Health and Social Affairs (MOLHSA) for the year 2010 is not available as of this writing. Report available via http://ssa.gov.ge/index.php?lang_id=&sec_id=630 in Georgia and accessed on September 2012.

[30] In comparison, the EUROSTAT and EC Aging Report (2009), reports that the average ratio of pensioners to total population in CEE countries in 2009 is 26%. Report available via http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf and accssed September 2012.

	2008	2009
Number of Old Age Pensioners	658,300	660,000
Number of Pensioners Due to Disabilities	137,800	139,900
Number of Pensioners Due to Loss of a Breadwinner	41,900	35,500
Number of Victims of Political Repression	4,200	3,100
Amount of Monthly Pension for Old Age	GEL 70	GEL 80
Amount of Monthly Pension Due to Disability	GEL 65	GEL 70
Ratio of Old Age Pensioners to Total Number of Pensioners	78.1%	78.7%
State Compensation and Academic Scholarship		
Number of Retired Judges	77	76
Number of Scholars	4,324	3,568
Other Categories	22,536	21,434
Sub-total	26,937	25,078
Average Monthly Amount of State Compensation & Academic Scholarship	GEL 130.7	GEL 124.7
Monthly Transfers for All Pensions (GEL)	57,767,300	65,051,000
Annual Transfers for All Pensions (GEL)	693,207,600	780,612,000
Monthly Transfers for Age Pensions (GEL)	46,081,000	52,800,000
Annual Transfers for Age Pensions (GEL)	552,972,000	633,600,000
Total Expenditure for Social Service (GEL)	1,347,400,000	1,505,900,000
Ratio of Old Age Pension to Total Pensions Expenditures	79.8%	85.0%
Ratio of Old Age Pensions Paid to Social Expenditures	41.0%	42.1%
Share of Social Expenditures in Total Budget	24.9%	27.9%
Share of Old Age Pension Expenditure in Total Budget	12.81%	14.46%

6.2 Non-State Pension Funds – Voluntary Private Pension

6.2.1 The law establishing non-state pension funds was enacted in October 1998. However, the current legislation needs further refinements to make it more effective and attractive for long-term pension savings. Moreover, current legislation does not give tax incentives that encourage and motivate individuals to save for their pensions.

6.2.2 Subject to regulatory licensing, the current legislation allows insurance companies, banks, employers, employers' unions, professional associations to be the founders

and providers of non-state pension schemes. The NBG is charged with regulating and supervising activities related to non-state pension funds. To date, six pension fund providers, all insurance companies, have been licensed by the NBG.

6.2.3 Of the six licensed pension fund founders, only three insurance companies provide non-state pension funds at this time. The schemes are DC arrangements.

6.2.4 Both foreign specialists and Georgian experts gave serious thought to introducing mechanisms to promote public awareness, interest and participation in the Non-State Pension Funds. For example, a study commissioned by the EU in 2008 recommended a host of important action steps, including the need to strengthen the legal and regulatory framework of pensions, as well as giving consideration for tax incentives to participants of the Non-State Pension Funds.

6.2.5 Prudential and necessary regulations, which are necessary as pensions are long-term contracts, need to be in established, continuously strengthened and enforced. The GoG must implement and diligently enforce regulations that are consistent with international best practices and address the following issues: a. risk-based reserving (funding) of pension liabilities; b. disclosure requirements; c. investment of reserve assets; d. segregation of pension assets from the general assets of insurers; and e. independent asset management and custody.

6.2.6 In addition, regulations relating to annuity contracts should be framed and issued to encourage the design, development and marketing of individual deferred annuity and immediate annuity products[31]. Annuity contracts are the most effective products for pension savings and pension payments, particularly on an individual basis in the voluntary pension market.

6.2.7 Current participations in Non-State Pension Funds are predominantly employees enrolled in different pension schemes established by employers (pension plan sponsors) for the benefit of their employees. The pension plans are framed according to terms, conditions and preferences of the sponsoring employer[32]. The depositor (employer) contracts with the pension provider, or insurance company, and assumes responsibility for paying and transferring to the latter the amount of regular pension contributions. Such contributions and the earnings, or interest, are deposited and accumulated in the nominal[33] accounts of the participants/members who are employees of the depositor.

6.2.8 The performance of the Non-State Pension Funds is very low and dismal. As of December 31, 2010, there are only 16,870 participants while the accumulated pension assets (reserves) total to merely GEL 7,915.350 During the year 2010, the amount of withdrawals were more than a half of contributions. The following details, taken from the website of the NBG, reference the Non-State Pension Funds:

[31] In this context, an annuity contract during the "saving or accumulation" stage is a deferred annuity, while an annuity contract in respect of the "pay-out or distribution stage", i.e., to begin annuity payments is an immediate annuity.

[32] The law refers to employers as "depositor[s]".

[33] The term "nominal" may refer to an account "in the name of" the participant employee. Some jurisdictions use the term "notional" account denoting that pension savings are in abstract amounts. In contrast, the term "individual pension savings account" is used to describe specific assets accumulated and owned by the participant in the classical Pillar II pension. It is not clear whether the term "nominal" refers to a "notional account" or to an "individual pension savings account".

Table 9: Voluntary Private Pension – Non- State Pension Funds

Founder	Contributions (GEL)	Number of valid agreements as of 31/12/2010	Number of participants	Amounts withdrawn from pension schemes	Pension reserves as of 31/12/2010 (GEL)	Income from the investment of pension reserves
JSC Insurance Company Aldagi BCI	1,662,570	217	5,412	745,111	4,949,031	512,158
JSC GPI Holding	696,320	11,440	11,429	415,215	2,712,945	238,320
JSC Insurance company Imedi-L International	34,398	7	38	192	253,374	24,571
Insurance Company TAO Ltd	0	0	0	40,105	0	0
International Insurance Company IRAO Ltd	0	0	0	0	0	0
Insurance Company Partner Ltd	0	0	0	0	0	0
Total	**2,393,288**	**11,664**	**16,879**	**1,200,623**	**7,915,350**	**775,049**

Source: National Bank of Georgia available via http://nbg.gov.ge/index.php?m=493

6.2.9 The current Non-State Pension Funds do not have, and are not designed to have, the ability to generate long term savings, much less savings for retirement, because participants can withdraw their pension savings before retirement.

6.2.10 Unless savings are "locked-in" for retirement and allow withdrawal of savings before retirement only for limited and specified purposes, participation in Non-State Pension Funds do not achieve the objective of saving for their pensions. Moreover, when early withdrawal is left unchecked, participants will spend most of their pension savings and retire without adequate supplementary pension. As could be deduced from the Table 9, the withdrawal rate in 2010 was in excess of 50% of contributions made during that year. If this trend goes unabated, the Non-State Pension Funds will not achieve pension's objectives.

6.2.11 If and when contributions and earnings are given tax-incentives and the withdrawals of savings are modestly restricted, the functioning and performance of the Non-State Pension Funds would certainly improve. However, draconian efforts would be required to make the non-state pension funds work and attract individuals, especially the majority of the labor force, to save for their retirement if the system of pension savings remains to operate solely on a voluntary platform. The voluntary nature of the Non-State Pension Funds is within itself a huge challenge to: (a) achieving a significant number of participants who will save for their pensions; (b) overcoming the myopia of most individuals who do not see the need to save early for their retirement; (c) minimizing the moral hazard related to those who continue to believe that the government or someone else would take care of their needs at old age; and (d) getting the lower income, who are most vulnerable at old age, to save for their supplemental pensions .

6.2.12 Tables 10 and 11 below reflect very optimistic projections[34] of the potential development of the Non-State Pension Funds, both for the formal and informal sectors. Basic assumptions are stated as the headings of these tables.

Table 10 - Voluntary Pension Savings – Formal Sector[35]

The average amount of annual contribution: GEL 1000

Participation rate as indicated in the table

Net investment return is equivalent to a 6% interest compounded quarterly

Withdrawal rate: 30% of annual contributions taken up in the following calendar quarter

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	5.00	11.44	19.45	29.07	61.68	76.95	91.92
Participation Rate	5%	10%	15%	20%	30%	30%	30%
Investment income	0.19	0.67	1.51	2.81	16.69	39.49	91.16
Withdrawals	0.00	1,50	3.43	5.84	18.50	23.09	27.58
Pension payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension assets	5.19	15.80	33.33	59.37	310.74	710.25	1,608.82
Investment income /GDP	0.00%	0.00%	0.00%	0.01%	0.03%	0.04%	0.04%
Net Pension assets / GDP	0.02%	0.05%	0.10%	0.16%	0.49%	0.66%	0.76%
PIT for the year, if TEE	0.04	0.13	0.30	0.56	3.34	7.90	18.23
PIT for the year, if EET	1.04	2.42	4.19	6.38	15.67	23.29	36.62
Accumulated PIT, if EET	1.04	3.16	6.67	11.87	62.15	143.05	321.76

Source: Compiled and researched by PMCG

Table 11 - Voluntary Pension Savings – Informal Sector

Participant's monthly taxable income: GEL 1000 or more

The average amount of annual contribution: GEL 1000

Participation rate as indicated in the table

Net investment return is equivalent to a 6% interest compounded quarterly

Withdrawal rate: 30% of annual contributions taken up in the following calendar quarter

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	4.03	9.38	16.22	24.85	60.31	78.70	93.52
Participation Rate	5%	10%	15%	20%	30%	30%	30%
Investment income	0.15	0.55	1.25	2.37	4.00	6.26	11.90
Withdrawals	0.00	1.21	2.81	4.87	18.09	23.61	28.06
Pension payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension assets	4.19	12.90	27.56	49.92	283.92	678.71	1,567.99

[34] Additional scenarios projected with different assumptions are also contained in Annex 1B and in the Report of PMCG, a copy of which is attached to this report as Annex 6

[35] The projection is in addition to employer- sponsored pension fund for their employees.

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Investment income /GDP	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%
Net Pension assets / GDP	0.02%	0.04%	0.08%	0.13%	0.44%	0.63%	0.74%
PIT for the year, if TEE	0.03	0.11	0.25	0.47	0.80	1.25	2.38
PIT for the year, if EET	0.84	1.98	3.50	5.44	12.86	16.99	21.08
Accumulated PIT incentives	0.84	2.58	5.51	9.98	56.78	135.74	313.60

Source: Researched and compiled by PCMG

VII - THE PILLAR II PENSION

A Mandatory Savings Pension System for Georgia

7.1 Pillar II Pension and its Implications for Georgia

Additional Pension through "Self Provision"

7.1.1 This report's key recommendation is the establishment of Pillar II Pensions, as part of a Multi-Pillar Pension System in Georgia. As a necessary consequence, the current legislative and regulatory framework of the Voluntary Non-State Pension Funds would, of similar importance, need to be upgraded and refined for it to perform and achieve the purpose of saving for supplementary pension.

7.1.2 Pillar II is a Mandatory Savings Pillar and, in general, it provides the most benefits to those who contribute most"[36]. As a natural consequence, both the contribution amount and the time horizon for generating savings are primary determinants of the amount of income on retirement. This Pillar primarily targets the work force, both in the private sector and civil service, and particularly those receiving a low to medium salary or wage who would otherwise neglect to save and provide themselves a stream of retirement income.

7.1.3 The implicit assumption is that without compulsion, individuals make mistakes that they later regret. Hence, the government forces each worker to save during their working years to avoid a drastic fall in their standard of living during retirement.

7.1.4 Contributions to this Pillar are "earnings-based" and, together with the investment income, constitute the pension savings. As a DC scheme, participants take a large part of the investment risks. The principle of "risk and reward" is an attractive feature of this Pillar, although it could also work against those too interested in speculative investment. However, regulations must be in place so that there exists reasonable assurance that the participants understand the basic investment options and that their chosen options objectively address their individual levels of risk tolerance.

7.1.5 Individual Pension Savings Accounts: The provision of actual individual pension savings accounts under Pillar II allows participants to see and feel the value of their pension savings at any point in time. This enables them to make decisions as to whether their savings are accumulating adequately to meet their consumption needs during retirement. Transparency in the maintenance and reporting of individual account statements reinforces the participants' "sense of ownership" of actual assets rather than merely a promise of future benefits.

7.2 Georgian Labor Force

[36]; Larry Willmore, "Three Pillars of Pensions? A Proposal to End Mandatory Contributions"; DESA Discussion Paper No. 13, United Nations, June 2000.

7.2.1 In 2006, the Georgian active labor force, the 15 to 64 years of age group, was estimated at two million individuals. In 2012, this number slightly declined to less than two million. During 2006 to 2010, the number of self-employed decreased by about 140,000. However, the number of hired labor in the formal sector increased from 572,000 in 2008 to around 618,600 in 2010.

7.2.2 The dual consequences of the 2008 War and the world financial meltdown adversely impacted Georgia. For instance, unemployment increased from 13.3% in 2007 to 16.9% in 2009, and slightly improved to 16.3% in 2010. It is logical to expect that employment rates will continue to improve as the economy rebounds from the adverse impact of the 2008 war and the global financial crises.

7.2.3 Table 12 below indicates that the average nominal monthly salary of hired employees in Georgia grew rapidly over the last few years. Salaries were measured at GEL **535** in **2008 and reaching GEL 609 in 2010,** as compared to GEL 277 in 2006 and GEL 368 in 2007.

7.2.4 It is an encouraging observation that increases in private sector salaries prompted corresponding raises in the average salary levels of state employees. This development attracted qualified and competent workforce members to the civil service.

Table 12 - Employment Statistics

In thousands	2006	2007	2008	2009	2010
Total population	4,401.3	4,394.7	4,382.1	4,385.4	4,469.3
Labor force (aged 15 and over)	2,021.8	1,965.3	1,917.8	1,991.8	1,944.9
Average monthly earnings	277.9	368.1	534.9	556.8	609.4
Employed	1,747.3	1,704.3	1,601.9	1,656.1	1628.1
Hired	603.9	625.4	572.4	596.0	618.6
Self-employed	*1,141.6*	*1,078.8*	*1,028.5*	*1,059.0*	1007.1
Not-identified	*1.8*	*0.1*	*1.1*	*1.2*	1.2
Unemployed	274.5	261.0	315.8	335.6	318.3
Unemployment rate (%)	13.6	13.3	16.5	16.9	16.3
Employment rate (%), of which:	53.8	54,9	52.3	52.9	53.8
15-24 years age group is (%)	23.0	21.4	23.1	22.7	24.2
25-34 years age group is (%)	56.8	59.5	55.9	54.6	56.5
35-44 years age group is (%)	68.9	70.7	68.1	68.8	70.6
45 years and over age group is (%)	59.5	61.1	56.9	58.0	58.3

Source: Compiled and researched by PMCG

7.3 Basic Parameters of the Proposed Mandatory Savings Pension (Pillar II) for Georgia

7.3.1 Retirement age: Retirement age is 65 for both men and women. The unified age of retirement takes into account gender equality issues, such as the ability of women to work until age 65 and the fact that life expectancy of women is longer than for men. Therefore, this closes the "longevity gaps" in the amount of pensions payable for life.

7.3.2 Compulsory participation based on age: All workers in the formal sector[37] aged 15 to 45 at the time the system takes effect. This will ensure that the oldest participant will have at least 20 years to save before retirement.

7.3.3 Compulsory participation based on salary or wage: All workers in the formal sector earning a salary or wage of at least 400 GEL a month. It is believed that under current prices, this group of workers would be able to set aside a fraction of their monthly salary or wage as pension savings with very little impact on their daily consumption budgets.

7.3.4 Contribution rate: 7.5% of gross salary or wage. This level of contribution is not too high but neither is it too low as to cause significant pension saving shortfall in the expected amount of pension. The rate is also consistent with current levels of Pillar II contributions in the CEE countries, as is detailed Table 13a:

Table 13a – Mandatory (Pillar II) Pension Contributions in Select CEE Countries[38]

Country	Year of Reform	Contribution Rate	Mandatory Participation in Privately Managed Pillar II
Bulgaria	2002	5%	Below 42, voluntary for others
Croatia	2002	5%	Below 40, voluntary for others
Estonia	2002	6%	Voluntary for all
Hungary	1998	8%	All new entrants, voluntary for others
Kazakhstan	1998	10%	Mandatory for all
Kosovo	2002	10%	Below 55, voluntary for others
Latvia	2001	8%	Below 35, voluntary for others
Lithuania	2004	5.50%	All new entrants, voluntary for others
Macedonia	2006	7.42%	All new entrants, voluntary for others
Poland	1999	7.30%	Below 30, voluntary for others
Romania	2008	6%	Below 35, voluntary for others
Russia	2002	6%	Below 35, voluntary for others
Slovak Republic	2006	9%	Voluntary for all

Source: The Financial Crisis and Mandatory Pension Systems in Developing Countries, World Bank 2010[39]

Please note that social security pension systems funded by social taxes exist in these countries. Some countries gave the option to the workers whether to have their pension savings in the privately managed Pillar II pensions or to remain under the social security system.

[37] Defined as hired labor in the private or civil service.

[38] More details of pension reforms in more countries are presented in Annex 2

[39] Mark Dorfman, Richard Hinz, David Robalino and Robert Holzmann. "The Financial Crisis and Mandatory Pension Systems in Developing Countries", World Bank Pension Primer, December 2008

Table 13b: A Glimpse of the Pension System of Selected CEE Countries after Reforms In 2008[40]

	Hungary	Poland	Latvia	Bulgaria	Estonia	Lithuania	Slovakia	Romania
Pension Reform Year	1998	1999	2001	2000	2002	2004	2005	2008
Pillar I	DB, PAYG	NDC, PAYG	NDC, PAYG	PP, PAYG	DB, PAYG	DB, PAYG	PP, PAYG	PP, PAYGO
Private Pillar II	Prefunded	Prefunded	Prefunded	Prefunded	Prefunded	Prefunded	Prefunded	Prefunded
Mandatory/ Optional	mandatory for new entrants	Mandatory up to age 29, Optional for 30 to 49	Mandatory up to age 29, Optional for 30 to 49	Mandatory up to age 40	Mandatory up to 18, Optional to others	Optional	Mandatory for new entrants	Mandatory up to age 35, Optional 36 t-44
Contribution Rate	8%	7.3%	10%, decreased to 8%	5%	6.5%, decreased to 6%	6%, decreased to 5.5%	9%	2% increased to 6%
Contributors as percentage of total employed workers (Participation Rate)	69%	95%	82%	73% (as of 2006)	80%	52%	725	Not available
Asset to GDP as of end of 2006	6.3%	11.1%	3.9%	1.9%	3.6%	4%	1.7%	Not available

7.4. Illustrative Scenarios of Potential Development of Pillar II Pensions[41]

7.4.1 In order to project the development of a Mandatory Savings Pension System, the authors applied the quantitative parameters indicated in Point 7.3 to the following indicators: the employment rate, population data, demographic statistics, historical data and projections of the basic economic indicators of Georgia. The authors also used the following additional and common assumptions:

[40] Mark Dorfman, Richard Hinz, David Robalino and Robert Holzmann, Annex to "The Financial Crisis and Mandatory Pension Systems in Developing Countries", World Bank Pension Primer, December 2008

[41] Additional scenarios projected with different assumptions are also contained in Annex 1A and in the Report of PMCG, a copy of which is attached in Annex 6.

Table 14: Scenario 1a

Participants: Employees in the Formal (Private and Public) Sector Only

Monthly salary or wage is 400 GEL or more

15 to 45 years of age at the effective implementation date of the pension system

Contribution Rate is: 7.5% of monthly salary

Return on Investment is 6%, compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	230.54	285.04	350.43	427.63	976.31	1,867.32	4,241.76
Investment income	8.78	25.54	47.08	74.41	335.89	935.10	2,902.26
Pension payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension assets	239.31	549.88	947.40	1,449.44	6,180.28	16,882.72	51,808.87
Investment Income / GDP	0.03%	0.09%	0.14%	0.20%	0.53%	0.87%	1.37%
Net Pension assets / GDP	0.90%	1.84%	2.85%	3.90%	9.67%	15.77%	24.46%
PIT Incentives for the year, if TEE	1.76	5.11	9.42	14.88	67.18	187.02	580.45
PIT Incentives for the year, if EET	47.86	62.11	79.50	100.41	262.44	560.48	1,428.81
Accumulated PIT Incentives, if EET	47.86	109.98	189.48	289.89	1,236.06	3,376.54	10,361.77

At the beginning of its 5th year, the net pension asset is expected to be more than GEL 1.4 Billion and about 4% of the projected nominal GDP. After a period of 20 years of implementation, the net total pension assets will be about GEL 51 Billion, which will be around 34% of the projected nominal GDP in that year.

Table 15: Scenario 1b

Contribution Rate is: 7.5% of monthly salary;

Net Return on Investment is 4%, compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	230.54	285.04	350.43	427.63	976.31	1,867.32	4,241.76
Investment Income	5.82	16.79	30.70	48.13	209.31	563.44	1,674.67
Pension payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension assets	236.36	538.19	919.32	1,395.08	5,733.48	15,145.92	44,522.56
Investment Income / GDP	0.87%	0.96%	1.05%	1.15%	1.53%	1.74%	2.00%
Net Pension assets / GDP	0.89%	1.80%	2.76%	3.76%	8.97%	14.15%	21.02%
PIT Incentives for the year, if TEE	1.16	107.64	183.86	279.02	1,146.70	3,029.18	8,904.51
PIT Incentives for the year, if EET	47.27	60.37	76.23	95.15	237.12	486.15	1,183.29
Accumulated PIT Incentives, if EET	47.27	107.64	183.86	279.02	1,146.70	3,029.18	8,904.51

At the beginning of its 5th year, the net pension asset is expected to be around GEL 1.4 Billion and about 3.76% of the projected nominal GDP. After a period of 20 years

of implementation, the net total pension assets is expected to be about GEL 44 Billion, which will be around 21% of the projected nominal GDP in that year.

Table 16: Scenario 2a

Contribution Rates: 2% in 2012; 3% in 2013; 5% in 2014; 7% in 2015-7%; 10% in 2016-2032, of monthly salary

Net Return on Investment: 6%, compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	61.48	114.01	233.62	399.12	1,301.74	2,489.76	5,655.69
Investment income	2.34	8.26	20.31	42.19	365.99	1,136.55	3,702.40
Pension payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension assets	63.82	186.09	440.02	881.33	6,824.49	20,603.31	66,185.17
Investment Income / GDP	0.01%	0.03%	0.06%	0.11%	0.57%	1.06%	1.75%
Net Pension assets / GDP	0.24%	0.62%	1.32%	2.37%	10.68%	19.25%	31.25%
PIT Incentives for the year, if TEE	0.47	1.65	4.06	8.44	73.20	227.31	740.48
PIT Incentives for the year, if EET	12.76	24.45	50.79	88.26	333.55	725.26	1,871.62
Accumulated PIT Incentives, if EET	12.76	37.22	88.00	176.27	1,364.90	4,120.66	13,237.03

At the beginning of its 5th year, the net pension asset is expected to be around GEL 881 Million and about 2.37% of the projected nominal GDP. After a period of 20 years of implementation, the net total pension assets is expected to be about GEL 66 Billion, which will be around 31% of the projected nominal GDP in that year.

Table 17: Scenario 2b

Contribution Rates: 2% in 2012; 3% in 2013; 5% in 2014; 7% in 2015-7%; 10% in 2016-2032, of monthly salary

Net Return on Investment: 4%, compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	61.48	114.01	233.62	399.12	1,301.74	2,489.76	5,655.69
Investment income	1.55	5.44	13.31	27.51	231.28	692.92	2,155.83
Pension payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension assets	63.03	182.48	429.41	856.04	6,419.50	18,699.66	57,388.22
Investment Income / GDP	0.01%	0.02%	0.04%	0.07%	0.36%	0.65%	1.02%
Net Pension assets / GDP	0.24%	0.61%	1.29%	2.30%	10.05%	17.47%	27.09%
PIT Incentives for the year, if TEE	0.31	1.09	2.66	5.50	46.26	138.58	431.17
PIT Incentives for the year, if EET	12.61	23.89	49.39	85.33	306.60	636.54	1,562.30
Accumulated PIT Incentives, if EET	12.61	36.50	85.88	171.21	1,283.90	3,739.93	11,477.64

At the beginning of its 5th year, the net pension asset is expected to be around GEL 850 Million and about 2.3% of the projected nominal GDP. After a period of 20 years of implementation, the net total pension assets is expected to be about GEL 57 Billion, which will be around 27% of the projected nominal GDP in that year.

7.5 Expected Amount of Pension Payments

7.5.1 A major concern in a DC pension scheme is the ability to accumulate pension savings that pay adequate and decent amount of (supplementary) pension to the participant.

7.5.2 To illustrate the expected pension payments, the authors calculated the potential accumulation of pension savings and the estimated amounts of corresponding pension payments in two different scenarios. The first is the average annual salary increases at 2.5% (Tables 18a and 18b) and the second is the average annual salary increases at 5% (Tables 19a and 19b).

Table 18a: Pension Savings Accumulation

Basic Assumptions:

Annual salary increase of 2.5%, on average

Contribution rate is 7.5% of monthly salary or wage

Annual Net return of pension assets is 6%

Scenario	Monthly Salary at Entry	Ave. Monthly Contribution	Principal	Earnings	Total
1	400 GEL; savings horizon 40 years	50.55	24,264.92	56,258.58	80,523.50
2	400 GEL, savings horizon 30 years	44.15	15,894.97	22,820.98	38,715.95
3	400 Gel, saving horizon 20 years	38.32	9,196.07	7,421.27	16,617.34
4	600 GEL, saving horizon 30 years	65.85	23,707.46	34,231.47	57,938.93
5	600 GEL, saving horizon 20 years	57.48	13,794.12	11,131.89	24,926.01
6	800 GEL, saving horizon 20 years	76.63	18,392.15	14,842.52	33,234.67
7	1000 GEL, saving horizon 30 years	109.76	39,512.43	57,052.46	96,564.89
8	1000 GEL, saving horizon 20 years	95.79	22,990.19	18,553.16	41,543.35

Using the data from Table 18a the amounts of pension payments are calculated.

Table 18b: Expected Amount of Pensions (Pay-out Stage)

Basic Assumption – Pay-out Stage

Annual rate of interest is 6%, simple

	10 years certain		Pension of Life – Male		Pension for Life Female	
Scenario	Monthly	Yearly	Monthly	Yearly	Monthly	Yearly
1	886	10,710	725	8,455	644	7,328
2	426	5,149	348	4,065	310	3,523
3	183		150	1,745	133	1,512

	10 years certain		Pension of Life – Male		Pension for Life Female	
Scenario	Monthly	Yearly	Monthly	Yearly	Monthly	Yearly
		2,210				
4	637	7,706	521	6,084	464	7,195
5	274	3,315	224	2,617	199	2,268
6	366	4,420	299	3,490	266	3,024
7	1,062	12,843	869	10,139	773	8,787
8	1,007	5,525	374	4,362	332	3,780

Table 19a: Pension Savings Accumulation

Basic Assumptions:

Annual salary increase of 5%, on average

Contribution rate is 7.5% of monthly salary or wage

Annual Net return of pension assets is 6%

Scenario	Monthly Salary at Entry	Ave. Monthly Contribution	Principal	Earnings	Total
1	400 GEL; savings horizon 40 years	90.60	43,487.92	76,863.71	120,351.63
2	400 GEL, savings horizon 30 years	66.44	23,917.99	28,793.04	52,711.03
3	400 Gel, saving horizon 20 years	49.60	11,903.74	8,632.56	20,536.30
4	600 GEL, saving horizon 30 years	99.66	35,876.98	43,189.57	79,066.55
5	600 GEL, saving horizon 20 years	74.40	17,855.62	12,948.84	30,804.46
6	800 GEL, saving horizon 20 years	99.21	23,809.49	17,263.12	41,072.61
7	1000 GEL, saving horizon 30 years	166.10	59,794.96	71,982.61	131,777.57
8	1000 GEL, saving horizon 20 years	124.00	29,759.36	21,581.40	51,340.76

Using the data from Table 19a the amounts of pension payments are calculated.

Table 19b: Expected Amount of Pensions (Pay-out Stage)

Basic Assumption: Pay-out Stage

Annual rate of interest is 6%, simple

	10 Years Certain		Pension of Life – Male		Pension for Life Female	
Scenario	Monthly	Yearly	Monthly	Yearly	Monthly	Yearly
1	1,324	16,007	1,083	12,637	963	10,952
2	580	7,011	474	5,535	422	4,797
3	226	2,731	185	2,156	164	1,869
4	870	10,516	712	8,302	633	7,195
5	339	4,097	277	3,234	246	2,803
6	452	5,463	370	4,313	329	3,738
7	1,492	18,037	1,221	14,240	1,085	12,341
8	581	7,027	476	5,548	423	4,808

To calculate the expected amount of lifetime pension benefits, the authors used the mortality table currently utilized in Georgia. This indexes shows that the average life span is 78 years for men and 82 years for women, and therefore at a universal retirement age of 65 years male pensioners are expected to receive pension payments for 14 years and females for 18 years following date of retirement.

7.6 Pillar II Pensions: Support Economic Development and Create a Healthy Impact on Social Considerations and Fiscal Constraints

7.6.1 On the part of the GoG, a Mandatory Savings Pension System has the ability to deliver the following:

Advantages and Functions	Contribution to Economic Growth, Social Considerations and Fiscal Requirements
Addresses the myopia of workers by requiring them to set aside, on a regular basis, a fraction of their current earnings in a pension savings account	High and increasing volume of long-term personal savings generate long-term assets for investments that are directed to support increased national productivity and competiveness resulting to increased state revenue
Eases the moral hazard by encouraging and incentivizing people to work and save in order for them to self-provide additional income at retirement (in addition to the minimal benefits they will receive from the state pension)	Same as above. In addition, the supplemental savings will provide additional income at retirement allowing pensioners to maintain their life habits and consumption appetites resulting in reduced social pressures.
Spurs economic growth and expansion	Availability of long-term savings fuels increased national productivity, investments in entrepreneurial capital and activities and robust growth of the labor market which are the core elements of economic growth and expansion. Increased tax base for personal income tax and increased consumption translate to increased revenue collection. In addition, increased national private savings eases dependency on foreign capital cash inflow.
Increases employment and expands the labor market	Growth in the labor sector increases domestic private consumption resulting to increased PIT, VAT and other excise tax revenues. A robust labor market greatly reduces government's socio-economic problems.
Funding, governance and private administration of supplemental pension removes/reduces political influence and manipulation of pension savings and enables the government to shift a large burden of providing pensions to the private sector.	Effective social protection mechanism by delineating the management of pension assets to the private sector; shielding pension savings from adverse impacts of political risks, changes in legislation and/or changes in governmental administration and /or policies.
Funding of pensions come exclusively from private individual savings	Fiscal transfers are not necessary. Private pensions are strictly based on "self-provision"
The introduction of Pillar II facilitates reforms in the	Rationalization of state pension benefits is

Advantages and Functions	Contribution to Economic Growth, Social Considerations and Fiscal Requirements
state pensions particularly in respect of tempering and/or controlling the generosity of state pensions to ensure long-term sustainability.	necessary to ensure the long-term sustainability of the state pensions and to improve the country's fiscal position[42].
Development, growth and expansion of the capital market.	Please see Section 7.8 below for a brief summary of how Pillar II supports the development, growth and expansion of the capital market.

7.6.2 Pillar II Pensions and its Advantages to the Participants

Functionalities	Advantages to the Participants
Pillar II pension enforces strict maintenance of accurate and prompt record keeping. The preparation and issuance of participants' ISA statements enhances and strengthens transparency in pension administration.	ISA create a strong "sense of ownership" on the part of the participant(s) in the assets accumulated in his/her individual pension savings account.
The DC characteristic of Pillar II directly links contributions to pension benefits.	Significant support and participation from the formal sector; removes incentives for early retirement, thus resulting to positive effects on labor supply, labor earnings, and the savings rate.
Pre-funding of pension obligations; pension assets are privately managed, invested in assets that are segregated from the other assets of pension entities and protected against garnishments	Increased safety, security and profitability of pension assets. Pre-funding provides assurance that a pension fund corpus is created and maintained at all times to match pension liabilities
Prudential norms of regulation and supervision	Value added to safety, security, and profitability of pension assets and viability of the pension schemes. Greater protection of the interests of pension participants.
Fiduciary duties and responsibilities of persons holding responsible positions in the pension provider, asset management and asset custodian companies	The fiduciary liability of persons holding responsible positions ensures heightened protection of pension assets and pension participants

7.7. Oppositions and Threats to Robust Development of Pillar II Pension

Oppositions and Threats	Solutions
Political sensitivity (usually a natural reaction whenever performance of personal activity is forced by government).	Strong political support for public awareness on the benefits of pension for securing income at retirement. Incentivized savings mechanisms that promote savings for "self-provision" of pensions.
Public apprehensions that pension benefits and entitlements under the state pension would eventually stop.	Government's assurance that Pillar II Pension benefits will not replace, but will only supplement, pension entitlements under the state pensions.

[42] See: Ms. DeliaVelculescu, IMF, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", 2010.

Oppositions and Threats	Solutions
Mandatory savings pensions do not guarantee the amount of retirement income. Participants with low income and with short period to make savings may not be able to save for decent amount of pension when they retire.	The mandatory character of the Pillar II Pension could apply only to income earners that will have at least 20 years to save (45 years and below) and to those earning monthly income of at least GEL 400 (see also calculation of pensions under Tables 18a, 18b, 19a and 19b).
If there is already a Pillar III platform there is no need for a Pillar II pension.	Require workers to set aside a fraction of their income to build up their pension. Voluntary pensions are designed for higher income individuals or for pension schemes established by employers for the benefit of their employees. Not all workers are fortunate to have their employers establish employee pension plans. Moreover, the voluntary character of Pillar III Pension does not attract personal savings by lower and middle-income earners.
The costs of administering the pension scheme decrease the value of pension assets, thus reducing individual participant's savings. Pension administration, including those related to enrolling participants, collection of contributions, record keeping and maintenance of individual pension savings accounts, would involve costs, in addition to service fees of asset managers and asset custodians.	These costs are even higher in the case of voluntary pensions where pension participation is individually solicited. Most countries in initiating private pension system adopted the following solutions: • Pillar II Pension administration is given to a Trust established by the Government. This set up reduces the costs related to enrolling participants and collecting of contributions. • Central record keeping – only one IT system needs to be installed and maintained. Central record keeping not only to reduce cost but also to ensure that accounting and reporting of individual accounts are standardized for all participants. • Not-for-profit legal entities. Private pension fund entities (founders) are organized and ran as not-for-profit entities and are not permitted to engage in any kind of business activity other than as pension provider, such as in Chile and most Latin American countries. • Management and custody of pension assets are performed by the private sector and they robustly compete in terms of fees and return of investment.

For supplemental reading, a more detailed analysis of the strengths, weakness, opportunities and threats (SWOT) of both the Mandatory and Voluntary Pension Systems are included in Annex 4.

7.8 Pillar II Pension and Capital Market Development[43]

7.8.1 A private, fully funded Pillar II Pension System is expected to improve the efficiency of saving and investment decisions as well as deepen capital markets. Some studies indicate the following positive outcomes:

- Enlarging the capital market;
- Improvements in the regulation and transparency of capital markets;
- Better corporate governance practices;
- Improvements in financial innovation;
- Lower cost of capital and security-price volatility;
- Higher quality of investment decisions and increased financial integration.

7.8.2 For a detailed discussion of how the Pillar II Pension influences and drives the development of the capital market please see Annex 5.

7.8.3 Nevertheless, private pension funds may also lead to more short-term risk-taking behavior by banks that may exacerbate volatility in times of high financial stress, while neglecting small firms in favor of investments in large companies. Some important preconditions for pension reform include: a strong regulatory framework, a sound banking sector, a strong insurance sector, and sound macroeconomic policies. These mechanisms, together with flexible investment decisions, are crucial to reinforce the pension funds' beneficial effects on the capital market's development.

7.9 Operational Challenges of Mandatory Savings Pension

7.9.1 Broadening and deepening the reach of pension products particularly in the informal labor sector.

7.9.2 Increasing the level of financial literacy of the population, especially those living in the rural areas.

7.9.3 Countering the trend of middle aged income earners leaning heavily on family transfers at retirement rather than starting savings, although at somewhat late stage.

7.9.4 Providing decent amount of retirement income under the DC schemes.

7.9.5 Creating awareness among the general public and key civil society stakeholders to generate the confidence in the new pension system.

7.9.6 General aversion to taking investment risk versus guaranteed returns offered under the old system.

7.9.7 Developing the capacity of the capital market and banking sectors to absorb investment of pension assets.

7.9.8 Balancing regulations, for banking, capital market, and pensions with promotion of optimal returns of pension assets.

VIII-CONCLUSIONS AND SUMMARY OF RECOMMENDATIONS

[43] See: Ms. DeliaVelculescu, IMF, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", 2010.

8.1 Conclusions

8.1.1 A Mandatory Savings Pension system ensures increased national private savings, generates long term capital that could be ploughed into the economy on a array of various programs that creates employment, increases domestic productivity, eases the long-term fiscal burden of the state pension and social assistance programs, to mention a few.

8.1.2 A well-structured Mandatory Savings Pension System facilitates the attainment of, but not limited to, the following long -term policy objectives of the GoG:

- Creation of a pension system that covers the whole population - The development and implementation of a Mandatory Savings Pension System in Georgia will result to increased retirement income of workers who save for their pensions. It will prime the rationalization of the State Pension System to ensure its long- term sustainability. It will also sensitize the framework and development of a voluntary pension system.
- Long-term solutions - The best pension policy catalyzes and creates a pension system that has long-term sustainability. This system will also simultaneously addresses immediate and recurring socio-economic and political pressures as well as fiscal budgetary constraints consistent with the development of a market economy and changing demographics.
- Promote economic development- The pension system promotes accumulation of long-term savings that can be used to increase national productivity, enhanced investment in entrepreneurial capital and create a robust labor market. These activities will support Georgian economic growth and are far better than relying on mechanisms that are similar to government borrowings.
- A Mandatory Savings Pension System generates predictable accumulation of long-term assets for investment that pushes the development of the capital market. Pension providers and asset managers need to continually seek investment instruments that give the participants the optimum return (income) for their pension savings.

8.1.3 Current Georgian demographics indicate an increasing number of people above 65 years of age (elderly). The current dependency rate of two elderly per every 10 people within the working ages or 15 to 64 years of age offers the best time to establish a Mandatory Savings Pension System for wage and income earners to save and provide additional retirement income under the principle of self-provision

8.1.4 The interest of the GoG and the private sector to create and establish long-term capital resources to spur investment and financial intermediation is currently very high.

8.1.5 A Mandatory Savings Pension System would help ease political pressure regarding the availability of long-term funds to finance infrastructure development that is essential to develop and grow the economy.

8.1.6 As the Pillar II Pension is a mechanism to pre-fund future pension benefits that only occur in the long-term (minimum of 20 years), it generates higher private and national saving that also reduces Georgia's reliance on foreign capital flows.

8.2 Summary of Recommendations

8.2.1 The GoG should establish a Mandatory Savings Pension System as a supplement to benefit entitlements from the State Pension Program and to complement the functioning of the Voluntary Non-State Pension Funds. This Pillar targets the

working force, particularly the low and medium salary or wage earners who would otherwise neglect to save and provide themselves a stream of retirement income.

8.2.1 Convene a high level consultative group to start deliberating on policy related options for the following activities: a. to introduce and develop a private pensions (both Mandatory and Voluntary); and b. to identify and address challenges and pre-conditions necessary to put in place in the development and/or implementation of a mandatory pension system.

8.2.2 Convene a working group to create a road map for establishing a Mandatory Pension and to draft the legal and regulatory framework for a Mandatory Savings Pension System.

8.2.3 The current legislative and regulatory framework of Voluntary Non-State Pension funds would, of similar importance, need to be upgraded and refined in order for this Pension System to perform and achieve the purposes of saving for supplementary pension.

8.2.4 Consider a regulatory platform for DC private pensions (whether Mandatory or Voluntary) that cover at a minimum the following:

- Statutory capital requirements;
- Fit and proper norms in:
  - ✓ Licensing of pension providers;
  - ✓ Licensing of asset managers;
  - ✓ Licensing of asset custodians;
  - ✓ Licensing of entities engaged in the business of maintaining record of pension transactions relating to pension assets and in generating the individual pension savings account of participants.

8.2.5 Consider the promulgation of specific regulations of the Non-State Pension Fund particularly in matters relating to risk-based reserving (funding) of pension liabilities, disclosure requirements, investment of reserve assets, and segregation of pension assets from the general assets of insurers. These mechanisms would provide the foundations for the eventual regulatory synchronization of both Mandatory and Voluntary Private Pensions and enable insurers to design annuity products for the individual pension market.

ANNEXES:

Annex 1A – Illustrative Scenarios of Mandatory Savings Pension

Annex 1B – Illustrative Scenarios of Voluntary Savings Pensions

Annex 2 – Analysis of Mandatory Savings Pensions in ECC countries

Annex 3 – Basic Exposure Draft of Pension Reform

Annex 4 – Establishing Multi-Pillar Pensions: Lessons Learned for Georgia and SWOT Analysis of Mandatory Savings (Pillar II) and Voluntary Savings (Pillar III) pensions for Georgia

Annex 5 – Overview of Pension Reform for Georgia

Annex 6 – Report of the Policy Management Consulting Group (PMCG), Georgia on pension initiatives

ANNEX 1 A

Illustrative Scenarios of Mandatory Savings Pension Performance

A. Participants: Employees in the Formal Sector:

1) Monthly salary, or wage is 400 GEL or more

2) 15 to 45 years of age at the effective implementation date of the pension system

Scenario 1a

Contribution Rate: 7.5% of Monthly Salary or Wage

Net Return on Investment is 6% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	230.54	285.04	350.43	427.63	976.31	1,867.32	4,241.76
Investment Income	8.78	25.54	47.08	74.41	335.89	935.10	2,902.26
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	239.31	549.88	947.40	1,449.44	6,180.28	16,882.72	51,808.87
Investment Income as a Percentage of GDP	0.03%	0.09%	0.14%	0.20%	0.53%	0.87%	1.37%
Net Pension Assets as a Percentage of GDP	0.90%	1.84%	2.85%	3.90%	9.67%	15.77%	24.46%
Personal Income Tax (PIT) Incentives for the Year if Tax Regime is Taxed-Exempt-Exempt (TEE	1.76	5.11	9.42	14.88	67.18	187.02	580.45
PIT Incentives if Tax Regime is Exempt-Exempt-Taxed (EET)	47.86	62.11	79.50	100.41	262.44	560.48	1,428.81

Accumulated PIT Incentives if Tax Regime is EET	47.86	109.98	189.48	289.89	1,236.06	3,376.54	10,361.77

Scenario 1b

Contribution Rate: 7.5% of Monthly Salary or Wage

Net Return on Investment is 4% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	230.54	285.04	350.43	427.63	976.31	1,867.32	4,241.76
Investment Income	5.82	16.79	30.70	48.13	209.31	563.44	1,674.67
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	236.36	538.19	919.32	1,395.08	5,733.48	15,145.92	44,522.56
Investment Income as a Percentage of GDP	0.87%	0.96%	1.05%	1.15%	1.53%	1.74%	2.00%
Net Pension Assets as a Percentage of GDP	0.89%	1.80%	2.76%	3.76%	8.97%	14.15%	21.02%
PIT Incentives for the Year if Tax regime is TEE	1.16	107.64	183.86	279.02	1,146.70	3,029.18	8,904.51
PIT Incentives for the Year if Tax Regime is EET	47.27	60.37	76.23	95.15	237.12	486.15	1,183.29
Accumulated PIT Incentives if Tax Regime is EET	47.27	107.64	183.86	279.02	1,146.70	3,029.18	8,904.51

Scenario 2a

Contribution Rates: 2%-2012; 3%-2013; 5%-2014; 7%-2015; 10%-2016-2032-10%,

of Monthly Salary or Wage

Net Return on Investment: 6% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	61.48	114.01	233.62	399.12	1,301.74	2,489.76	5,655.69
Investment income	2.34	8.26	20.31	42.19	365.99	1,136.55	3,702.40
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Net Pension Assets	63.82	186.09	440.02	881.33	6,824.49	20,603.31	66,185.17
Investment Income as a Percentage of GDP	0.01%	0.03%	0.06%	0.11%	0.57%	1.06%	1.75%
Net Pension Assets as a Percentage of GDP	0.24%	0.62%	1.32%	2.37%	10.68%	19.25%	31.25%
PIT Incentives for the Year if Tax Regime is TEE	0.47	1.65	4.06	8.44	73.20	227.31	740.48
PIT Incentives for the Year if Tax Regime is EET	12.76	24.45	50.79	88.26	333.55	725.26	1,871.62
Accumulated PIT Incentives, if Tax Regime is EET	12.76	37.22	88.00	176.27	1,364.90	4,120.66	13,237.03

Scenario 2b

Contribution Rates: 2%- 2012; 3%- 2013; 5%- 2014; 7%- 2015; 10%-2016-2032-10%,

of Monthly Salary or Wage

Net Return on Investment: 4% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	61.48	114.01	233.62	399.12	1,301.74	2,489.76	5,655.69
Investment Income	1.55	5.44	13.31	27.51	231.28	692.92	2,155.83
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	63.03	182.48	429.41	856.04	6,419.50	18,699.66	57,388.22
Investment Income as a Percentage of GDP	0.01%	0.02%	0.04%	0.07%	0.36%	0.65%	1.02%
Net Pension Assets as a Percentage of GDP	0.24%	0.61%	1.29%	2.30%	10.05%	17.47%	27.09%
PIT Incentives for the Year if Tax Regime is TEE	0.31	1.09	2.66	5.50	46.26	138.58	431.17
PIT Incentives for the Year if Tax Regime EET	12.61	23.89	49.39	85.33	306.60	636.54	1,562.30

Accumulated PIT Incentives if Tax Regime is EET	12.61	36.50	85.88	171.21	1,283.90	3,739.93	11,477.64

Scenario 3a

Contribution Rate: 10% of Monthly Salary or Wage

Net Return on Investment: 6% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	307.38	380.05	467.24	570.17	1,301.74	2,489.76	5,655.69
Investment Income	11.70	34.05	62.78	99.22	447.85	1,246.80	3,869.68
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	319.08	733.18	1,263.20	1,932.59	8,240.38	22,510.29	69,078.50
Investment Income as a Pecentage GDP	0.04%	0.11%	0.19%	0.27%	0.70%	1.16%	1.83%
Net Pension Assets as a Percentage of GDP	1.20%	2.46%	3.79%	5.20%	12.90%	21.03%	32.61%
PIT Incentives for the Year if Tax Regime is TEE	2.34	6.81	12.56	19.84	89.57	249.36	773.94
PIT Incentives for the Year if Tax Regime is EET	63.82	82.82	106.00	133.88	349.92	747.31	1,905.07
Accumulated PIT Incentives if Tax Regime is EET	63.82	146.64	252.64	386.52	1,648.08	4,502.06	13,815.70

Scenario 3b

Contribution Rate: 10% of Monthly Salary or Wage

Net Return on Investment: 4% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	307.38	380.05	467.24	570.17	1,301.74	2,489.76	5,655.69
Investment Income	7.76	22.39	40.94	64.17	279.09	751.25	2,232.90
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Net Pension Assets	315.14	717.58	1,225.76	1,860.10	7,644.64	20,194.56	59,363.42
Investment Income as a Percentage of GDP	0.03%	0.08%	0.12%	0.17%	0.44%	0.70%	1.05%
Net Pension Assets as a Percentage of GDP	1.18%	2.40%	3.68%	5.01%	11.97%	18.87%	28.03%
PIT Incentives for the Year if Tax Regime is TEE	1.55	4.48	8.19	12.83	55.82	150.25	446.58
PIT Incentives for the Year if Tax Regime is EET	63.03	80.49	101.64	126.87	316.17	648.20	1,577.72
Accumulated PIT Incentives if tax Regime is EET	63.03	143.52	245.15	372.02	1,528.93	4,038.91	11,872.68

B. Participants: Workers in the Informal Sector:

1) **Monthly taxable earnings is 400 GEL or more**
2) **15 to 45 years of age at the effective implementation date of the pension system**

Scenario 4a

Contribution Rate: 7.5% of Monthly Taxable Earnings

Net Return on Investment: 6% compounded quarterly

Participation rate: 10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 -2032

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	4.50	12.04	31.85	62.87	285.27	645.56	1,772.32
Investment Income	0.17	0.75	2.28	5.56	69.54	249.06	949.43
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	4.68	17.46	51.60	120.02	1,311.01	4,552.93	17,094.46
Investment Income as a Percentage of GDP	0.00%	0.00%	0.01%	0.01%	0.11%	0.23%	0.45%
Net Pension Assets as a Percentage of GDP	0.02%	0.06%	0.15%	0.32%	2.05%	4.25%	8.07%

In Million GEL	2012	2013	2014	2015	2020	2025	2032
PIT Incentives for the Year if Tax Regime is TEE	0.03	0.15	0.46	1.11	13.91	49.81	189.89
PIT Incentives for the Year if Tax Regime is EET	0.94	2.56	6.83	13.69	70.96	178.92	544.35
Accumulated PIT Incentives if Tax Regime is EET	0.94	3.49	10.32	24.00	262.20	910.59	3,418.89

Scenario 4b

Contribution Rate: 7.5% of Monthly Taxable Earnings

Net Return on Investment: 4% compounded quarterly

Participation rate: 10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 - 2032

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	4.50	12.04	31.85	62.87	285.27	645.56	1,772.32
Investment Income	0.11	0.49	1.50	3.64	44.20	153.25	561.63
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	4.62	17.15	50.50	117.01	1,240.70	4,171.50	15,063.59
Investment Income as a Percentage of GDP	0.00%	0.00%	0.00%	0.01%	0.07%	0.14%	0.27%
Net Pension Assets as a Percenage of GDP	0.02%	0.06%	0.15%	0.32%	1.94%	3.90%	7.11%
PIT Incentives for the Year if Tax Regime is TEE	0.02	0.10	0.30	0.73	8.84	30.65	112.33
PIT Incentives for the Year if Tax Regime is EET	0.92	2.51	6.67	13.30	65.89	159.76	466.79
Accumulated PIT Incentives if Tax Regime is EET	0.92	3.43	10.10	23.40	248.14	834.30	3,012.72

Scenario 5a

Contribution Rates: 2%- 2012; 3%- 2013; 5%- 2014; 7%- 2015; 10%- 2016-2032, of Taxable Earnings

Net Return on Investment: 6% compounded quarterly

Participation rate: 10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 - 2032

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	1.20	4.81	21.24	58.68	380.36	860.75	2,363.10
Investment Income	0.05	0.26	1.20	4.00	87.37	324.89	1,254.99
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	1.25	6.32	28.75	91.43	1,655.62	5,946.12	22,603.81
Investment Income as a Percentage of GDP	0.00%	0.00%	0.00%	0.01%	0.14%	0.30%	0.59%
Net Pension Assets as a Percentage of GDP	0.00%	0.02%	0.09%	0.25%	2.59%	5.55%	10.67%
PIT Incentives for the Year if Tax Regime is TEE	0.01	0.05	0.24	0.80	17.47	64.98	251.00
PIT Incentives for the Year if Tax Regime is EET	0.25	1.01	4.49	12.54	93.55	237.13	723.62
Accumulated PIT Incentives if Tax Regime is EET	0.25	1.26	5.75	18.29	331.12	1,189.22	4,520.76

Scenario 5b

Contribution Rates: 2%- 2012; 3%-2013; 5%-2014; 7%- 2015; 10%-2016-2032, of Taxable Earnings

Net Return on Investment: 4% compounded quarterly

Participation rate: 10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 - 2032

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	1.20	4.81	21.24	58.68	380.36	860.75	2,363.10
Investment Income	0.30	0.17	0.79	2.63	55.77	200.47	743.74
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	1.23	6.22	28.24	89.55	1,573.17	5,463.04	19,954.04
Investment Income as a Percentage of GDP	0.00%	0.00%	0.00%	0.01%	0.09%	0.19%	0.35%

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Net Pension Assets as a Percentage of GDP	0.00%	0.02%	0.08%	0.24%	2.46%	5.10%	9.42%
PIT Incentives for the Year if Tax Regime is TEE	0.01	0.03	0.16	0.53	11.15	40.09	148.75
PIT Incentives for the Year if Tax Regime is EET	0.12	1.00	4.41	12.26	87.23	212.24	621.37
Accumulated PIT Incentives, if Tax Regime is EET	0.25	1.24	5.65	17.91	314.63	1, 092.61	3,990.81

Scenario 6a

Contribution Rate: 10% of Monthly Taxable Earnings

Net Return on Investment: 6% compounded quarterly

Participation rate: 10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 onwards

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	6.01	16.05	42.47	83.82	380.36	860.75	2,363.10
Investment Income	0.23	0.99	3.05	7.41	92.71	332.08	1,265.90
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	6.23	23.28	68.79	160.03	1,748.02	6,070.57	22,792.62
Investment Income as a Percentage of GDP	0.00%	0.00%	0.01%	0.02%	0.15%	0.31%	0.60%
Net Pension Assets as a Percentage of GDP	0.02%	0.08%	0.21%	0.43%	2.74%	5.67%	10.76%
PIT Incentives for the Year if Tax Regime is TEE	0.05	0.20	0.61	1.48	18.54	66.42	253.18
PIT Incentives for the Year if Tax Regime is EET	1.25	3.41	9.10	18.25	94.61	238.57	725.80
Accumulated PIT Incentives if Tax Regime is EET	1.25	4.66	13.76	32.01	349.60	1,214.11	4,558.52

Scenario 6b

Contribution Rate: 10% of Monthly Taxable Earnings

Net Return on Investment: 4% compounded quarterly

Participation rate: 10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 -2032

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	6.01	16.05	42.47	83.82	380.36	860.75	2,363.10
Investment Income	0.15	0.66	2.00	4.85	58.94	204.33	748.84
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	6.16	22.86	67.33	156.01	1,654.26	5,561.99	20,084.78
Investment Income as a Percentage of GDP	0.00%	0.00%	0.01%	0.01%	0.09%	0.19%	0.35%
Net Pension Assets as a Percentage of GDP	0.02%	0.08%	0.20%	0.42%	2.59%	5.20%	9.48%
PIT Incentives for the Year if Tax Regime is TEE	0.03	0.13	0.40	0.97	11.79	40.87	149.77
PIT Incentives for the Year if Tax Regime is EET	1.23	3.34	8.89	17.74	87.86	213.01	622.39
Accumulated PIT Incentives, if Tax Regime is EET	1.23	4.57	13.47	31.20	330.85	1,112.40	4,016.96

C. Participants: Employees in the formal sector and workers in the informal sector:

1) **Monthly salary, wages and taxable earnings are 400 GEL or more**
2) **15 to 45 years of age at the effective implementation date of the pension system**
3) **Participation rate of workers in the informal sector is as follows:**

10% - 2012, 20% - 2013, 40% - 2014, 60% - 2015; 90% - 2016 - 2032

Scenario 7a

Contribution Rate:

Formal Sector: 7.5% of Monthly Salary or Wages; Informal Sector: 7.5% of Monthly Taxable Earnings

Net Return on Investment: 6% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025
Contributions	235.04	297.07	382.29	490.50	1,261.57	2,512.88
Investment Income	8.95	26.28	49.37	79.97	405.42	1,184.16

Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	243.99	567.34	998.99	1,569.46	7,491.29	21,435.65
Investment Income as a Percentage of GDP	0.03%	0.09%	0.15%	0.22%	0.63%	1.11%
Net Pension Assets as a Percentage of GDP	0.92%	1.90%	3.00%	4.23%	11.73%	20.02%
PIT Incentive for the Year if Tax Regime is TEE	1.79	5.26	9.87	15.99	81.08	236.83
PIT Incentive for the Year if Tax Regime is EET	48.48	64.67	86.33	114.09	333.40	739.41
Accumulated PIT Incentive if Tax Regime is EET	48.80	113.47	199.80	313.89	1,498.26	4,287.13

Scenario 7b

Contribution Rate:

Formal Sector: 7.5% of Monthly Salary or Wages

Informal Sector: 7.5% of Monthly Taxable Earnings

Net Return on Investment: 4% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025
Contributions	235.04	297.07	382.29	490.50	1,261.57	2,512.88
Investment Income	5.94	17.29	32.20	51.76	253.52	716.68
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	240.98	555.33	969.82	1,512.08	6,974.17	19,317.42
Investment Income as a Percentage of GDP	0.02%	0.06%	0.10%	0.14%	0.40%	0.67%
Net Pension Assets a Percentage of GDP	0.91%	1.86%	2.91%	4.07%	10.92%	18.05%
PIT Incentive for the year if Tax Regime is TEE	1.19	3.46	6.44	10.35	50.70	143.34
PIT Incentive for the Year if Tax Regime is EET	48.20	62.87	82.90	108.45	303.02	645.91
Accumulated PIT Incentive if Tax Regime is EET	48.20	111.07	193.96	302.42	1,394.83	3,863.48

Scenario 8a

Contribution Rate:

Formal Sector: 2%- 2012; 3%-2013; 5%- 2014; 7%- 2015; 10%- 2016-2032 of Monthly Salary or Wages

Informal Sector: 2%- 2012; 3%-2013; 5%- 2014; 7%- 2015; 10%- 2016-2032 of Monthly Taxable Earnings

Net Return on Investment: 6% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	62.68	118.83	254.86	457.80	1,682.10	3,350.51	8,018.78
Investment Income	2.39	8.52	21.51	46.19	453.36	1,461.43	4,957.39
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	65.06	192.41	468.77	972.76	8,480.11	26,549.43	88,788.98
Investment Income as a Percentage of GDP	0.01%	0.03%	0.06%	0.12%	0.71%	1.37%	2.34%
Net Pension Assets as a Percentage of GDP	0.24%	0.64%	1.41%	2.62%	13.27%	24.80%	41.92%
PIT Incentive for the Year if Tax Regime is TEE	0.48	1.70	4.30	9.24	90.67	292.29	991.48
PIT Incentive for the Year if Tax Regime is EET	13.01	25.47	55.27	100.80	427.09	962.39	2,595.23
Accumulated PIT Incentive if Tax Regime is EET	13.01	38.48	93.75	194.55	1,696.02	5,309.89	17,757.80

Scenario 8b

Contribution Rate:

Formal Sector: 2%- 2012; 3%-2013; 5%- 2014; 7%- 2015; 10%- 2016-2032, of Monthly Salary or Wages

Informal Sector: 2%- 2012; 3%-2013; 5%- 2014; 7%- 2015; 10%- 2016-2032, of Monthly Taxable Earnings

Net Return on Investment: 4% and compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	62.26	118.83	254.86	457.8	1,682.10	3,350.51	8,018.78
Investment Income	1.58	5.61	14.10	30.14	287.05	893.39	2,899.56
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Net Pension Assets	64.26	188.70	457.65	945.59	7,992.66	25,162.70	77,342.25
Investment Income as a Percentage of GDP	0.01%	0.02%	0.04%	0.08%	0.45%	0.83%	1.37%
Net Pension Assets as a Percentage of GDP	0.24%	0.63%	1.37%	2.55%	12.51%	22.57%	36.51%
PIT Incentive for the Year if Tax Regime is TEE	0.32	1.12	2.82	6.03	57.41	178.68	579.91
PIT Incentive for the Year if Tax Regime is EET	12.85	24.89	53.79	97.59	393.83	848.78	2,183.67
Accumulated PIT Incentive if Tax Regime is EET	12.85	37.74	91.53	189.12	1,598.53	4,832.54	15,468.45

Scenario 9a

Contribution Rate:

Formal Sector: 10% of Monthly Salary or Wages

Informal Sector: 10% of Monthly Taxable Earnings

Net Return on Investment: 6% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025
Contributions	313.39	396.10	509.71	654.00	1,682.10	3,350.51
Investment Income	11.93	35.04	65.82	106.63	540.56	1,578.88
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	325.32	756.45	1,331.99	2,092.62	9,988.39	28,580.86
Investment Income as a Percentage of GDP	0.04%	0.12%	0.20%	0.29%	0.85%	1.47%
Net Pension Assets as a Percentage of GDP	1.22%	2.54%	4.00%	5.63%	15.63%	26.70%
PIT Incentives for the Year if Tax Regime is TEE	2.39	7.01	13.16	21.33	108.11	315.78
PIT Incentives for the Year if Tax Regime is EET	65.06	86.23	115.11	152.33	444.53	985.88

Accumulated PIT Incentives if tax Regime is EET	65.06	151.29	266.40	418.52	1,997.68	5,7`16.17

Scenario 9b

Contribution Rate:

Formal Sector: 10% of Monthly Salary or Wages

Informal Sector: 10% of Monthly Taxable Earnings

Net Return on Investment: 4% compounded quarterly

In Million GEL	2012	2013	2014	2015	2020	2025
Contributions	313.39	396.10	509.71	654.00	1,682.10	3,350.51
Investment income	7.91	23.05	42.94	69.02	338.02	955.58
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	321.30	740.44	1,293.09	2,016.11	9,298.90	25,756.56
Investment Income as a Percentage of GDP	0.03%	0.08%	0.13%	0.19%	0.53%	0.89%
Net Pension Assets as a Percentage of GDP	1.21%	2.48%	3.88%	5.43%	14.56%	24.06%
PIT Incentives for the Year if Tax Regime is TEE	1.58	4.61	8.59	13.80	67.60	191.12
PIT Incentives for the Year if Tax Regime is EET	64.26	83.83	110.53	144.60	404.02	861.22
Accumulated Pit Incentives if Tax Regime is EET	64.26	148.09	258.62	403.22	1,859.78	5,151.31

ANNEX 1B

Illustrative Scenarios of Voluntary or Non-state Pension Performance

A) Scenario 1: *Voluntary Pension Performance-Formal Sector*

Scenario 1a

Participant's monthly income: GEL 1000 or more

The average amount of annual contribution: 1000 GEL

Net investment return: 6% compounded quarterly

Withdrawal rate: 30% from annual contributions taken up in the following calendar quarter

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	5.00	11.44	19.45	29.07	61.68	76.95	91.92
Participation Rate	5%	10%	15%	20%	30%	30%	30%
Investment Income	0.19	0.67	1.51	2.81	16.69	39.49	91.16
Withdrawals	0.00	1,50	3.43	5.84	18.50	23.09	27.58
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	5.19	15.80	33.33	59.37	310.74	710.25	1,608.82
Investment Income as a Percentage of GDP	0.00%	0.00%	0.00%	0.01%	0.03%	0.04%	0.04%
Net Pension Assets as a Percentage of GDP	0.02%	0.05%	0.10%	0.16%	0.49%	0.66%	0.76%
Personal Income Tax (PIT) Incentives for the Year if Tax Regime is Taxed-Exempt-Exempt (TEE)	0.04	0.13	0.30	0.56	3.34	7.90	18.23
PIT Incentives for the year if Tax Regime is Exempt-Exempt-Taxed (EET)	1.04	2.42	4.19	6.38	15.67	23.29	36.62
Accumulated PIT Incentives if Tax Regime is EET	1.04	3.16	6.67	11.87	62.15	143.05	321.76

Scenario 1b

Participant's monthly income: GEL 1000 or more

Contribution Rate: 7.5% of gross salary

The average amount of annual contribution: 1000 GEL

Net investment return: 6% compounded quarterly

Withdrawal rate: 30% from annual contributions taken up in the following calendar quarter

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	7.68	19.72	37.53	62.64	225.91	467.84	1,102.04
Participation Rate	5%	10%	15%	20%	30%	30%	30%
Investment Income	0.29	1.11	2.71	5.46	45.99	146.79	501.37
Withdrawals	0.00	2.30	5.92	11.26	67.77	140.35	330.61
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	7.97	26.51	60.76	117.67	877.28	2,706.00	9,061.32
Investment income as a Percentage of GDP	0.00%	0.00%	0.01%	0.01%	0.07%	0.14%	0.24%
Net Pension assets as a Percentage of GDP	0.03%	0.09%	0.18%	0.32%	1.37%	2.53%	4.28%
PIT incentive if Tax Regime is TEE	0.06	0.22	0.54	1.09	9.20	29.36	100.27
PIT incentive if Tax Regime is EET	1.59	4.17	8.05	13.62	54.38	122.93	320.68
Accumulated PIT incentives if Tax Regime is EET	1.59	5.30	12.15	23.53	175.46	541.20	1,812.38

B) Scenario 2: *Voluntary Pension Performance-Informal Sector*

Scenario 2a

Participant's monthly taxable income: GEL 1000 or more

The average amount of annual contribution: 1000 GEL

Net investment return: 6% compounded quarterly

Withdrawal rate: 30% from annual contributions taken up in following calendar quarter

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	4.03	9.38	16.22	24.85	60.31	78.70	93.52
Participation Rate	5%	10%	15%	20%	30%	30%	30%
Investment Income	0.15	0.55	1.25	2.37	4.00	6.26	11.90

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Withdrawals	0.00	1.21	2.81	4.87	18.09	23.61	28.06
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	4.19	12.90	27.56	49.92	283.92	678.71	1,567.99
Investment income as a Percentage of GDP	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%
Net Pension Assets as a Percentage of GDP	0.02%	0.04%	0.08%	0.13%	0.44%	0.63%	0.74%
PIT Incentives for the Year if Tax Regime is TEE	0.03	0.11	0.25	0.47	0.80	1.25	2.38
PIT Incentives for the Year if Tax Regime is EET	0.84	1.98	3.50	5.44	12.86	16.99	21.08
Accumulated PIT Incentives if Tax Regime is EET	0.84	2.58	5.51	9.98	56.78	135.74	313.60

Scenario 2b

Participant's monthly taxable income: GEL 1000 or more

The average amount of annual contribution: 5% of taxable income

Net investment return: 6% compounded quarterly

Withdrawal rate: 30% from annual contributions taken up in the following calendar quarter

In Million GEL	2012	2013	2014	2015	2020	2025	2032
Contributions	4.78	12.46	24.11	41.22	171.13	376.39	885.14
Participation Rate	5%	10%	15%	20%	30%	30%	30%
Investment Income	0.18	0.70	1.73	3.55	32.71	111.20	391.63
Withdrawals	0.00	1.43	3.763	7.23	51.34	112.92	265.54
Pension Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Pension Assets	4.96	16.69	38.79	76.33	626.10	2,056.64	7,086.97
Investment Income as a Percentage of GDP	0.00%	0.00%	0.01%	0.01%	0.05%	0.10%	0.18%
Net Pension Assets as a Percentage of GDP	0.02%	0.06%	0.12%	0.21%	0.98%	1.92%	3.35%
PIT Incentives for the Year if Tax Regime is TEE	0.04	0.14	0.35	0.71	6.54	22.24	78.33

In Million GEL	2012	2013	2014	2015	2020	2025	2032
PIT Incentives fir the Year if Tax Regime is EET	0.99	2.63	5.17	8.95	40.77	97.52	255.25
Accumulated PIT Incentives if Tax Regime is EET	0.99	3.34	7.76	15.27	125.22	411.33	1,417.39

ANNEX 2

Analysis of Mandatory (Pillar 2) Pension Systems of Central Eastern European and Latin American Nations

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
Age of member	A. Mandatory for those born after Dec. 31, 1968 aged 30 years old & below. B. Voluntary for all other citizens	A. Mandatory for people entering the workforce before age 35 years old. B. Individuals who were employed when the law was implemented have the option to participate and 50% of them opted to join.	A. Mandatory for those born after Jan 1, 1972 and aged 35 yrs old and above B. Voluntary for those individuals born between Jan 1, 1963 and Dec 31, 1971 or 45 years old	A. Mandatory for those born after Jan 1, 1967 and 35 years old B. Voluntary for all others	A. Mandatory for all workers in the formal sector, below 65 years old for men and 60 years old for women. B. Voluntary for all self-employed and free-lance workers	A. Mandatory for all workers who were 25 years old as of end of 1995. B. Voluntary for self-employed and free-lance workers
Retirement Age	60 years old for women & 65 years old for men	60 years old for women & 65 years old for men	60 years old for women & 65 years old for men	60 years old for men & 55 years old for women	60 years old for women & 65 years old for men	65 years old for both men and women
Contribution Rate	7.3% of monthly wage and salary	8% of gross salary plus up to 2% as additional contribution.	2% of gross salary but will rise to 6% by 2016	6% out of the 14% social tax is transferred to the pensions of those born after January 1,	10% of gross taxable wage and salary There is an additional premium	10% of gross salary There is an additional

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
				1967. The remaining 8% goes to the basic and insured benefits administered by the Russian Pension Fund. Additional contributions up to an amount fixed by law are allowed. The state matches the amount placed as an additional contribution.	for disability insurance.	premium for disability insurance.
Collection of Contribution	Centralized with the Social Security Institution [Zakład Ubezpieczeń Społecznych, (ZUS)]	Directly to pension companies	Centralized with the National Pension and Social Insurance Authority through the Tax Collection System	Centralized with the Russian Pension Fund, which annually transfers pension contributions to private pension entities selected by participants.	Employers collect and remit the pension contributions to the Pension Fund administrator selected by a plan contributor or member	Employers collect and remit the pension contributions to the Pension Fund administrator selected by a plan contributor or member
Record Keeping	Pension Company	Pension Company	Pension Company	Pension Company	Pension Company	Pension Company
Benefits – Savings	If a member dies before	If a participant dies before	If a participant dies before	If a participant dies before retirement,	If a participant dies before retirement,	If a participant dies before

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
Accumulation Phase	retirement, 50% of the account balance is deposited to the pension account of the surviving spouse while the other 50% passes as an inheritance	retirement, the account balance is paid to legal heirs as an inheritance	retirement, the account balance is paid to legal heirs as an inheritance Insured benefits may be offered by the pension fund company	the account balance is paid to legal heirs as an inheritance	the account balance is paid to legal heirs as an inheritance	retirement, the account balance is transferred to the retirement account of his or her qualifying dependent
Guarantees	Account balance cannot be less than the accumulated contributions	No guarantees	Account balance cannot be less than the accumulated contributions	No guarantees. Account balance is solely dependent on the investment performance of the pension assets	State guarantees minimum pension for those who have contributed for at least 20 years. State also guarantees pension if the Pension Fund administrator becomes insolvent	No guarantees
Pension Provider (PP)	Private, or the Open Pension Funds (OFEs), managed by Pension Fund Management Companies (PTE)	Private Pension Funds (PPFs)	Private Pension Funds (PPFs)	Non-state, or private, pension funds (NSPF), which must be a not-for- profit entity. Participants may also opt to have their mandatory pensions with the Russian	Private Pension Fund administrators solely dedicated to managing pension funds	Pension Fund administrators

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
				Pension Fund.		
Prudential Regulations: • **Capital paid in**	Regulated	Regulated	Euro 4 million	Regulated	Regulated	Regulated
• **Reserves**	100% funded	• The funding reserve is 95.51% and must be at least 95.5% • The operational reserve is 4.44% • The liquidity reserve is 0.05%	100% funded	100% funded	100% Funded	100% funded
• **Solvency regime**	None		None	Asset back-up not less than RUR 50 million or Euro 1.1 million	Not Available	Not Available
• **Independent Audit**	Required on an annual basis Determination of all guaranteed	Required on an annual basis	Required on an annual basis Determination of all guaranteed	Required on an annual basis	Required on an annual basis Determination of all guaranteed liabilities	Required on an annual basis Determination of all guaranteed

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
• **Actuarial** • **Regulator**	liabilities Komisja Nadzoru Finansowego (KNF)	Hungarian Financial Services Authority	liabilities Comisia de Supraveghera a Sistemului de Pensil Private (CSSPP).	Federal Financial Market Services	Superintendencia de Administradores de Fondos de Pension (SAFP)	liabilities Sperintendencia de Pensiones, Valores y Seguros
Investment of Pension Funds	Regulation of asset types and diversification	Regulation of asset types and diversification	Regulation of asset types and diversification; requirement for Independent asset custodian	Regulation of asset types and diversification; requirement for Independent asset custodian Asset management companies invest pension assets	Regulation of asset types but not regulated as to diversification	Regulation of asset types but not regulated as to diversification During the first five years, pension assets are required to be invested by government securities
Portability	Yes with certain fees	Yes after at least six months with a particular PPF	Yes with certain fees	Yes with certain restrictions	Yes at any time	Yes after three years with the Pension Fund administrator
Tax Regime	Exempt, Exempt, Taxed (EET)	Taxed, Exempt, Exempt (TEE) and contributions in excess of	EET	EET with certain conditions	EET	EET

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
		regulatory minimum are taxed				
Guarantee Fund	• 0.1% of Net Asset Value (NAV) for basic guarantee plus • 0.4% of NAV for additional guarantees Separate legal entity	0.4% of quarterly contributions which amount should at least be 0.1% but not more than 1.5% of the total combined assets of PFs. Separate legal entity	0.3% per year of assets under management (AUM) Separate legal entity	Proposed but legislation is not in place	Government assumes responsibility for paying pension liabilities in the event the Pension Fund Administrator becomes insolvent	A guarantee fund is being considered
Revenue of Pension Providers (PPs), Including Fees to other Service Providers	1. Fees based on AUM which are scaled from .045% to .015% depending on the size of the AUM 2. 3.5% of	1. Fees based on AUM which is scaled down from 0.8% in 2008 to 0.4% by 2014. No fee to participate in the Pension Fund	1. Administration fees which are not to exceed 2.5% of monthly contribution	1. Asset Management Fee (AMF) which is not more than 10% of investment income. No AMF is paid if NAV decreased compared to prior NAV.	1. No limits on fees provided that all fees are uniform for all participants in a particular pension fund	1. Not to exceed 0.233% of AUM

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
	contributions		2. Asset management fee which is not more than .05% of AUM per month	2. For Non-state pension fund (NSPF) fees should not be more than 15% of investment income minus AMF. 3. Custodian of pension assets are not more than .1% of average NAV for a given year		
Expenses of PPs	Regulated: 1. Supervision cost up to .1% of contributions 2. . 7% of contributions 3. Guarantee fund payments up to .1% of NAV for basic	Regulated: 1. Supervision fees paid to the regulator: • Fixed: HUF 2 million or Euro 7,500 • Variable: .025% of market value				Regulated: 1. Commission to Pension Administrator not exceeding 1% of contributor's salary

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
	guarantees and .4% of NAV for additional guarantees 4. ZUS, for cost of collecting contributions which is not more than .8% of contributions Not Regulated: • Acquisition costs, including costs of marketing • General management costs including salaries • Minimum required rate of return and elimination of deficits	AUM				
Guaranteed Rate of Return	The greater of: a. 50% of the weighted		The greater of: a. 50% of the weighted	No guaranteed minimum rate of return.		

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
	average rate of return of all OFEs, or b. the weighted average rate of return minus 4%		average rate of return of all OFEs, or b. the weighted average rate of return minus 4%			
Distribution	Agents and brokers		A. Tied agency forces B. Multi-level agency forces operated by brokers C. Bank branches D. Union organizations	Banks, brokers, agent network, and corporate sales among others.	Agents and brokers working for the Pension Fund Administrator	Agents and brokers working for the Pension Fund Administrator
Pension Payout Options	Fixed period annuity or life annuity	Lump sum option for those participants of less than 15 years and a fixed annuity for all others	Annuity payments is intended in the proposed legislation	Life annuity mechanics still to be legislated by government.	Life annuity or scheduled payments from the Pension Fund Administrator. Early retirement is also allowed if accumulated balance is more than 50% of the member's total salary for the last ten years and that pension payment is	Annuity for life or period certain Early retirement is possible if the account balance of pension savings is sufficient to pay a monthly annuity of at least 70% of the member's salary

Particulars	Poland	Hungary	Romania	Russia	Chile	Bolivia
Year Started	**1999**	**1998**	**2008**	**2002**	**1988**	**1997**
					more than 110% of minimum pension.	
Entire Person System	Pillar 1 or old age Pillar 2 Pillar 3	Pillar 1 or old age Pillar 2 Pillar 3	Pillar 1 or old age Pillar 2 Pillar 3	Pillar 1 or old age Pillar 2 Pillar 3	Pillar 1 or old age Pillar 2 Pillar 3	Pillar 2 Pillar 3

ANNEX 3

Working Notes on

Mandatory Savings Pension

Pillar 2

First Exposure Draft, June 2011:

This First Exposure Draft discusses prerequisite steps for designing a pension reform framework to be implemented by the Government of Georgia (GoG). This Exposure Draft intends to request and gather comments, suggestions and other input from concerned parties and institutions in respect of pension reform. This Exposure Draft hopes to build consensus on whether a mandatory pension system for workers will serve the goals and objectives of the GoG.

Pension is a crucial part of social protection. The basic objective therefore is to seek an efficient pension system that combines both government entitlements provided by the state pension programs, and pension benefits created under the principle of "self provision" or private pensions. On one hand, the state pension, which is funded by fiscal transfers, is designed to protect the elderly and the disabled from absolute poverty, that is: inability to meet basic or minimum for subsistence living. On the hand, the pension benefits created by individual savings, that is, through self-provision are supplemental benefits to protect the elderly and disabled from relative poverty, such as a sudden or material fall in consumption, when these population groups are no longer able to earn regular income.

Georgia's current pension systems consist of a state pension and a voluntary pension savings plans known as the non-state pension funds. Georgia is yet to consider a mandatory savings pension system directed at those who are employed; either hired or self-employed, the majority of whom will be most vulnerable to relative poverty after their working years.

The Reform Objectives:

A. The structure of contributions and benefits:

A pension system could be designed with three basic structural dimensions:

1. The pension system or a component is either mandatory or voluntary;
2. The pension system can either be a defined contribution or defined benefit;
3. The pension system can either be a funded or an unfunded, "pay as you go" (PayG), arrangement.

The pension provision consist of two stages

1. The saving or accumulation stage
2. The pay-out of distribution stage

Both of these stages may span long periods of time. Pension savings are exposed to uncertainties in the economic cycle, although the long-term nature of pension savings allows for long term investment of pension assets that withstand cyclical market patterns.

B. Mandatory versus Voluntary

1. Clear rationales exist for choosing either a mandatory or voluntary pension system.

2. Fundamentally, governments use three primary policy rationales to justify mandatory pensions:
    - **Myopia:** The workers, or labor force, are short-sighted, and unless forced will not save enough for their retirement
    - **Moral Hazard:** The workers will not save because they expect the government to financially support them when they retire
    - **Wealth Redistribution:** A powerful mechanism for redistribution of income from higher income to lower income among workers and pensioners
3. Incentivizing. All savings and earnings in a mandatory pension system need to be incentivized, as savings are compulsory. Typically, tax incentives related to contributions or earnings, or both, and, if warranted, even the pension payments are given to those who save for their retirement. The most common tax regimes used to incentivized pension savings are EET, EEE, or TEE[44]. The incentives' rationales are based on the following policy considerations:
    - In the case of myopia, the incentives are intended to encourage workers to save and self-provide for their retirement income.
    - In the case of moral hazard, the incentives are to prevent workers from subverting public interest if and when they become perpetual parasites on a country's resources and national budget. This behavior deprives the government of resources that would otherwise be earmarked to implement other essential socio-economic programs.
    - In the case of wealth redistribution, a mandatory pension system eases the fiscal burden on a government by creating alternative financing sources. In this way, a government has more resources to implement its desired wealth redistribution objectives.

C. Defined Contribution (DC) versus Defined Benefit (DB)

1. The choice between DC and DB is just like choosing between a funded and a pay as you go (PayG) system. In many countries, DB schemes are suffering from serious funding deficiencies because the amount of benefits, expressed as replacement income, are guaranteed by the plan sponsor or provider. The amount of a pension is not connected with the amount of savings, but rather on the ability to provide a dedicated fund to match the pension liabilities. These liabilities represent (a) benefits accruing to members before they retire as well as (b) pension benefits that are yet to be paid out during the payout stage.
2. Under a DC system, all workers' retirement accounts are established and maintained to fund their pensions. The pension benefit depends on: (a) the level and timing of pension contributions; (b) the rate of returns on those contributions or savings; and (c) the type or form by which the benefits are paid out, such as life annuity, regular payments for certain periods or lump-sum payment, among others.

[44] EET means: contributions are exempt for personal income tax (PIT); earnings from those contributions are exempt from PIT and distributions or pensions are taxed; TEE means: contributions are taxed, earnings from those contributions are exempt from PIT and distributions or pensions are exempt from PIT. EEE means: contributions are exempt, earnings from those contributions are exempt, and distributions or pensions are exempt, from PIT.

3. In an employment based DB scheme, the accrual of benefits and the calculation of replacement rates do not have direct relationships with the period of time of making contributions but rather on the manner of funding pensions which is based on number of years of service and salary history of the member.
4. Because of the difficulties of maintaining full funding status of a DB, the scheme practically takes nature of a PayG.

D. Funded versus PayG

1. In a funded system, members' contributions are invested to ultimately fund and capitalize the retirement income of each member or cohort.
2. In a PayG scheme, the pension of a cohort is funded and paid out from the contributions of other cohorts who are not yet entitled to pension. This creates a vicious circle, as the amount of contributions, over time, will not be adequate to pay for the accruing and outstanding pension benefit payments.
3. A funded system can eliminate, or at least reduce, a pension system's vulnerability to adverse demographic trends and political pressures.
4. The benefits of the DC funded pension are maintained, reported and reflected in the individual pension savings accounts of each participant. Such is not true in a PayG scheme.
5. A DC scheme is always a pre-funded pension system.
6. In a broader context, prefunded pension schemes can catalyze national private savings. The effect of increased national private savings is increased capital resources that is funneled in the economy and mobilized to generate employment, development the growth of the capital market and provide additional fuel for expanding the economy.

E. Challenges to Implementing a Mandatory Savings Pension System

1. The biggest challenge is securing sustained public trust in the system due to the long period of time within which the saved assets are "locked-in", and therefore not easily accessible prior to retirement.
2. The best way to gain sustainable public trust is the implementation and enforcement of regulations that ensures adequate protection of participants' and pensioners' interests. Some of these regulations and policies may include:
    - Transparency in pension fund administration and governance;
    - Prescribing. and enforcement of, fiduciary duties of all persons in positions of responsibility in pension fund providers, such as in matters relating to collection of contributions, asset management, custody of pension assets and record keeping functions;
    - Prompt and accurate delivery of individual pension savings account statements;
    - The stability and efficiency of the legal and regulatory framework;
    - Prudence, quality and fairness of regulations and oversight procedures.

F. The critical functions for ensuring an efficient DC fully funded pension system are as follows:

1. Collection of contributions;
2. Asset management ensuring the safety and security of pension assets;

3. Complete, accurate and timely record keeping;
4. Payment of pension benefits.

Any of these functions can be performed either by the public or private sectors. Prudence dictates that the chosen sector is capable of performing the functions efficiently. However, it is becoming increasing apparent, and proven through years of experience, that the private sector is more efficient in dispensing these functions and where norms and standards of accountability, governance and responsibility are implemented internally and strengthened by regulations. In any case, privately managed pensions must be regulated and supervised by the government.

G. The policy options for creating public trust and confidence in a mandatory savings pension system (DC) are listed below:

- Basic Foundation: Protection of participants' and pensioners' interests

➢ Issue: Pension Fund Governance

1. Appointment of pension fund board members;
2. Evaluation and removal of board members;
3. Board independence;
4. Board duties and roles;
5. Institutional and individual capacities of the pension fund entity and the board members;
6. Participants' have specific and reserved rights in the pension fund's governance;
7. Fiduciary duties and responsibilities;

➢ Issue: The Administration of a Pension Fund

Policy options may include:

1. The creation and organization of a pension fund is prescribed and governed by legislation. It is preferred and desirable that pension funds are: (a) legal entities; (b) should not-for-profit entities. Pension fund entities should not be formed as limited liability companies, partnerships or single proprietorships.
2. A pension fund may be organized solely for providing pensions.
3. The qualifications and proper requirements for pension fund founders are established by governmental legislation or regulation.
4. The founders create and organize the pension fund's governing board.
5. The qualification and proper requirements of the governing board members are prescribed by governmental legislation or regulation.
6. The articles of association, by-laws and pension fund's rules are to be registered with the regulatory authority.
7. No amendment to the articles of association, by-laws and pension rules will come in effect unless approved by the regulator.
8. The governing board needs to appoint an administrator and operating officials of the pension fund.
9. The functions of asset management, asset custodianship, and record keeping may be outsourced. The governing board members maintain responsibility for the performance and results of any outsourced function

10. The asset managers, custodians and record keepers satisfy legal and regulatory requirements.
11. The law establishes the minimum duties and responsibilities of the founders, governing board members, administrators and persons holding responsible positions in the pension fund.
12. The procedures relating to appointment, substitution or replacement of board members, administrators, and persons holding responsible positions in the pension fund is specified governmental legislation.

- Issue: Prudential Administration and Management of a Pension Fund

  Policy options:

  1. Responsibilities would include ensuring:
     - Proper and accurate enrolment of pension participants;
     - Due and prompt collection of pension contribution;
     - Safe, secure and profitable investment of pension assets;
     - Proper, up to date and accurate record keeping and accounting;
     - Maintenance of up to date and accurate individual accounts and prompt reporting to participants;
     - Fair and prudential practices in the solicitation, marketing and advertisement of pension fund products and services
  2. Establishing and maintaining systems of internal control and risk management appropriate to the size, complexities and nature of the pension assets and liabilities;
  3. Installation and maintenance of IT systems appropriate to the size and requirements of pension fund participants and the regulator;
  4. Administrative management and operation of the pension fund are clearly defined;
  5. Contracting for and in behalf of the governing board are clearly defined and delineated;
  6. Advise and keep the board informed of the affairs, activities and requirements of managing and operating the pension fund;
  7. Other duties that will be specified in the law or regulation, pension by-laws and directions of the governing board.

- Issue: Fiduciary duties of providers and intermediaries of pensions

  Policy Options:

  1. Fiduciary duties require a level of care that is above ordinary care;
  2. A fiduciary places the interest of persons to whom he/she owes fiduciary duties over and above other interest including his/her self interests;
  3. Fiduciary responsibilities are personal and corresponding fiduciary liabilities attach automatically in cases of breach whether they arise out of acts or failure to act or negligence in performing fiduciary duties and in carrying out fiduciary responsibilities;

4. The mechanisms for ensuring that fiduciary duties are performed and that due indemnification of participants in cases of breach of fiduciary duties (liabilities) are defined and prescribed by law and/or regulation.

- Issue: Conflict of interest and Related Transactions

  Policy options:

  1. Legal and regulatory mechanisms are in place to identify the founder(s) of the following entities: the pension fund, the asset management companies, the asset custodians, and record keeping entities. These institutions perform the various operational functions of the pension fund in the event that these roles are outsourced by the pension fund's board.
  2. Specific rules and regulations prescribe minimum the criteria and responsibilities of significant shareholders and persons in positions of responsibility as well as related parties.
  3. Specific rules and regulations are in place to prevent and or restrict to prudential minimum pecuniary transactions between and among the significant shareholders, persons in positions of responsibility, related parties and interests, the pension entity, administrator, asset management companies, asset custodians and record keeping companies.
  4. Regulations are in place to ensure that the governing board exercises oversight over the activities of the following entities: the administrator, the asset management company, the asset custodian and the record keeping company.

- Issue: Transparency and Disclosure

  Policy options:

  1. Participants in the pension fund are entitled to transparency and minimum information disclosure from the pension fund entity on the following issues:
     - The pension scheme's rules;
     - The background and qualification of the following: founders, governing board members, administrators, senior management, asset managers, asset custodians and record keeping companies;
     - Management discussion and analysis of the following factors: a. pension assets' investment performance; b. the inherent and potential risks impacting the pension assets; and c. the pension fund's liabilities;
     - The aggregate unit shares consisting of the pension fund as well as the value per unit shares;
     - The net asset value (NAV) per unit share. This information should be accessible to all members participants on a day-to-day basis;
     - Abstract of the pension funds' financial statements and comparative figures for the last two preceding years if applicable.
     - The nature of the investment risks and the advisability of a particular investment strategy in terms of general characteristics and risk tolerance parameters applicable to the participants, if the pension fund offers more than one pension product differentiated as to investment strategies such as: (a) conservative; (b) balanced; (c) growth; or (d) aggressive,

- Issue: Solicitation, Sales, Marketing and Advertisement

Policy options:

1. Regulations are in place that prescribe appropriate qualification of solicitors, agents, and brokers of pension contracts;
2. Licensing requirements, including continuing education, of solicitors of pension products;
3. Advertisements and sales brochures detailing pension products are accurate while regulations must be in place that define prohibited forms of advertisement;
4. Regulations that define the liabilities of solicitors of pension products and the indemnification mechanism for fraudulent and improper sales practices;
5. Consider prescribing a Code of Conduct for agents, and brokers of pension fund products.

- Issue: Prudential Asset Management

Policy options:

1. Licensing and supervision of asset management companies;
2. Regulations are in place that prescribe fit and proper requirements of persons holding responsible positions in the asset management companies;
3. Law or regulations prescribes minimum capital and surplus requirements of asset management companies;
4. Regulations are in place to define bases and extent of asset management fees and charges;
5. Regulations are in place to subject asset management companies to regulatory oversight.

- Issue: Custody of Pension Assets

Policy options:

1. Licensing and supervision of asset custodians;
2. Regulations are in place prescribing appropriate qualifications for asset custodians;
3. Law or regulations prescribe minimum capital and surplus requirements of asset custodians;
4. Regulations that define bases and extent of asset custodians' fees and charges are in place;
5. Regulations that subject asset custodians to regulatory oversight are in place.

- Issue: Administration, Accounting, Internal and External Auditors

Policy options:

1. Record keeping and issuance of individual account statements standards;
2. Adherence to International Accounting Standards (IAS);
3. Adherence to International Financial Reporting Standards (IFRS);
4. Regular valuation of asset and liabilities;
5. An effective and thorough internal audit;
6. Independent external audits;

7. Full investment and operational activities disclosures to pension fund members and the general public;

- Issue: Government Oversight and Supervision

  Policy options:

  1. Autonomy for the pension regulatory body;
  2. Regulations for investing pension assets, such as the type, quality, diversification, and minimum liquidity among other requirements;
  3. Risk-based evaluation of assets and liabilities;
  4. Acceptable investment strategies of pension assets;
  5. Default investment strategies for those nearing retirement;
  6. Default investment strategies for those who are incapable of making investment decisions;
  7. Financial reports including monthly, quarterly and annual submissions;
  8. Off-site and on-site inspections.

Issue: Enforcement

  Policy options:

  1. Regulatory interventions;
  2. Continuing fit and proper standards;
  3. Capital adequacy
  4. Funding and reserving requirements;
  5. Regulatory actions.

- Issue: Laws, Rules and Protection Mechanism on Winding up and Liquidation of Pension Funds

  1. Existing law on winding up and liquidation of commercial entities will apply, or
  2. A new special law on winding up and liquidation of pension funds, asset management companies, asset custodians and record keeping entities, is needed.

ANNEX 4

Second Exposure Draft: July 27, 2011

This paper includes a comparative analysis of strengths, weaknesses, opportunities and threats (SWOT) of Pillar II Mandatory Savings and Pillar III Voluntary Savings Pensions that may apply to Georgia per the request of the Deputy Minister of Finance Mr. Papuna Petriashvili.

Establishing a Multi-Pillar Pension System: Lessons Learned for Georgia

Inclusive of an Analysis of Strengths, Weaknesses, Opportunities and Threats of Pillar II Mandatory Savings and Pillar III Voluntary Pensions

Abbreviations:

DB	Defined Benefit Pension
DC	Defined Contribution Pension
EC	European Commission
ENAPI	European Neighborhood and Partnership Instrument
EU	European Union
FDI	Foreign Direct Investment
GEPLAC	Georgian - European Policy and Legal Advising Centre
GoG	Government of Georgia
IMF	International Monetary Fund
MLHSA	Ministry of Labor, Health and Social Affairs
MOF	Ministry of Finance
NBG	National Bank of Georgia
PIT	Personal Income Tax
PayG	Pay-as-You-Go
WB	World Bank

Brief Introduction

The Rationale Behind Pensions:

The world's population is increasingly aging due to improved longevity and declining birth rates. The demographic landscape continues to change as the number of people aged 65 and above continues to increase. Georgia is also experiencing this demographic trend. The challenges to securing and ensuring reasonably adequate pensions for Georgians in the

near and long term need to be addressed while the demographic ratio[45] is still at reasonable levels.

There are three principal sources for retirement income:

- Government social security or public pension
- Private pension
- Individual pure savings

On one hand, governments are facing increasing budgetary pressures for their respective social security and public pensions systems and on the other hand, individual pure savings are not reliable sources for retirement income especially for lower income populations who are unable to save. Moreover, those who have the resources to set aside money in pure savings are not truly saving for their pensions, as these funds are easily accessible for purposes other than income at retirement. Hence, most countries look upon private pension plans as efficient mechanism to fill in the gap.

This paper examines private pensions, such as mandatory and voluntary savings arrangements, while analyzing how and when these schemes would best complement and supplement each other and whether private pensions can enhance the sustainability of the public (state) pension system.

In order to illustrate the benefits of multi-pillar pension systems for Georgian citizens and residents, an analysis of the strengths, weaknesses, opportunities and threats (SWOT) of mandatory and voluntary systems is included in this report.

Private Pensions:

Private pension funds are either (a) mandatory or (b) voluntary. Private pensions differ in many ways from public or social security pensions. In the Georgian case, the fundamental differences are:

- The Georgian Government's state pensions operate under pay-as-you-go (PayG) system while private pension funds are and must remain fully funded. Therefore, in private pensions, the value of all pension assets is equal to the amount of pension liabilities, at any given time. Assets that cover the pension liabilities are maintained in specific types of investments which are separated from all other assets of the pension provider.
- State pensions rely solely on transfers from the state budget while private pensions are capitalized by contributions and earnings from those contributions (pension savings) made by or on behalf of the participants. Direct funding of the liabilities of defined benefit plans comes from the plan sponsor, usually, the employer.
- State pensions' operations depend on the Georgian Government's unpredictable options, while private pension funds operate under prudent supervision by the government. This oversight ensures transparent governance of pension funds, prudence in the investing and safeguarding of pension assets, prompt and accurate provision of information to participants/pensioners, and transparent payment/distribution of pensions. These benchmarks lead to the development and growth of safe, stable, secure and sustainable private pensions, which are important components to ensuring stability of the country's financial services sector.

[45] Demographic ratio is the ratio of elderly, considered 65 years and over, to people aged 15 to 64. In Georgia, this ratio was approximately three elderly for every ten individuals of working ages or 15 to 65 years of age as of end of 2010.

Private pensions are of two types: (a) Defined Contribution (DC) and (b) Defined Benefit (DB) plans.

- Defined Benefit plan (DB) - A pension scheme that provides retirement benefits in guaranteed amounts. In the case of employment or work-related (occupational) DB plans, a member's pension benefit is calculated based upon a formula (or set of formulae) that is/are linked to the member's wage or salary, duration of employment, indices or other employment factors. The method for determining the amount and duration of pension is detailed in specific provisions in the pension plan regulation or agreement. Portability of accrued pension benefit is, as a rule, restricted and only allowed under complicated vesting rules[46].
- Defined Contribution plan (DC) - A pension arrangement where participants (or other persons or entities in their behalf) make regular contributions to a pension fund. The contributions are invested and earn income. The total contributions and investment income are accumulated in the individual pension savings account of each participant. As a matter of best practice, a participant decides how his/her pension savings are invested. The amount of assets accumulated in the individual pension savings account will capitalize the purchase of an annuity or other payment arrangements that will provide the participant with an income stream during his/her retirement. Portability of one's pension assets during the savings or accumulation period is the general rule.

The distinction between DB and DC plans is critical regarding the amount of pension benefits as well as for determining the manner and the level of funding of the accruing pension liabilities. Several examples are below:

- In a DB scheme, the pension fund liability, at any given time, is equal to the present value of future pension benefits. The amount is actuarially determined in a manner that is consistent with the terms and conditions specified in the underlying pension plan or agreement, including vesting rules. The pension benefit is an amount fixed and/or determinable under terms and conditions spelled out in the pension plan regulation or agreement. The benefit is guaranteed.
- In a DC scheme, the pension fund liabilities correspond to the total amount of all participants' contributions and earnings of those contributions that are accumulated in the participants' individual pension savings accounts as of any given day. The amount of the pension benefit is not guaranteed as pension payments to a participant on retirement depend on the amount of pension savings he/she has accumulated in his/her individual savings account.

Many private DB plans have converted to DC schemes while almost all recent and new private pension funds are being established as DC schemes. The gradual disappearance of DB schemes becomes more and more imperative due to difficulties of maintaining the funding level that will ensure the sustainability of the pension plan. In addition, prudential regulations of DB pensions do not anymore allow "book reserves"[47] for pension liabilities.

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[46] Occupational DB pensions work under different vesting rules. The term "vesting" or "vested" refers to the amount of benefits or rights a member in a DB pension plan has earned at certain periods or events during his/her membership in the pension scheme. Vested rights will not be forfeited or lost by the member even if he/she terminates membership in the pension scheme.

[47] The amount of pension liabilities is recognized in the balance sheet of the plan sponsor as reserves or provisions for occupational pension plan benefits. While some assets may be held in separate accounts for the purpose of financing benefits, these assets are not legally or contractually pension plan assets. Most countries do not allow this method of financing. Those that do usually require these plans to be insured against bankruptcy of the plan sponsor through insolvency guaranty arrangement. Reference: OECD Pension Glossary.

Regulations also ensure that pension assets are separated from the other assets of the plan sponsor and that the bankruptcy or the potential of bankruptcy of the plan sponsor will not affect the pension rights of members. These controls make more difficult to comply with the prudential norms of operation and supervision standards applicable to DB pension schemes.

The Rationale for Reforming the Georgian Pension System – the Multi-Pillar Pension Systems:

This report explores and details options for the Georgian Government (GoG) to align its pension system with a multi – pillar one. In multi-pillar systems, a mandatory savings pension would complement and supplement the current state pensions as well as the non-state pension funds[48], or voluntary schemes that are currently marketed in Georgia.

Following the World Bank Model of three Pillars of Pensions, the pension system for the GoG will be anchored in the following platforms[49]:

- Pillar I – The current state (public) pension
- Pillar II – A mandatory savings private pension which is a DC scheme
- Pillar III – The voluntary savings private pension that will either be a DC or DB and now in effect under the Georgian Law on Non-State Pension Assurance and Provision[50].

Regarding objectives, the multi-pillar pension system could be structured as follows[51]:

- The first pillar is a publicly managed unfunded Defined Benefit system with the limited objectives of reducing poverty among the elderly and disabled.
- The second pillar is a mandatory Defined Contribution, a fully-funded pension system that facilitates income smoothing[52] and accumulation of savings among all income groups.
- The third pillar is a voluntary savings system that would provide additional protection for those individuals not involved in the second pillar or for those individuals who voluntarily set aside specific savings for additional retirement income.

The ideal pensions systems consist of:

- A publicly managed, unfunded, and defined benefit pillar, which is tax or contribution financed and should take care of poverty and redistributive concerns [Pillar 1];
- A privately managed, fully funded, and defined contribution pillar, which takes care of income replacement and is financed by earnings-related contributions [Pillar 2] which is mandatory; and
- A voluntary saving for old-age in the form of savings assets, insurance contracts, etc. [Pillar 3].

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[48] World Bank, "Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth" World Bank Policy Research Report, 1994

[49] The word "platform", in the context of this report, refers to a program or policy that is structured to provide good opportunity for doing something.

[50] Georgian Law on Non-state Pension Assurance and Provision, October 30, 1998, No 1679 - IS

[51] World Bank, "Averting the Old Age Crises: Policies to Protect the Old and Promote Growth", World Bank Policy Research Report. 1994

[52] People postpone certain consumption when they are young and earning, save a portion of their current earnings, so that they can consume more than their reduced earnings permit especially in old age.

From these definitions, we discern that Pillar II and Pillar III are private pensions and Pillar 1 is a public pension. The author recognizes, and will consistently adopt, the above definitions in this report.

The multi-pillar pension systems establish the necessary mechanisms for a comprehensive pension reform by the GoG. The multi-pillar pensions deepen and broaden the reach of the pension system to the majority of, if not all, Georgian citizens and bona-fide residents. This multi- pillar pension system "allows a better diversification of risks and thus provides better protection to individuals who may be vulnerable of economic shocks".[53]

The need to reform Georgia's pension system to effectively tackle poverty reduction is discussed in Part II – Annex to the European Neighbourhood and Partnership Instrument (ENAPI) an EU Report on Georgia on National Indicative Programme, 2011 – 2013. On page 18, sub-points on "Expected Results" and "Indicators of Achievements", this Report stressed the need to include the implement "improved social safety nets and protection, as outlined in the 'Georgia without poverty' programme and continued pension reform".

Greater longevity and the decline in birth rates in Europe have increased the dependency ratio in the region. As early as 1997 the EU was concerned about the fiscal constraints to sustainable social security pensions because of the increasing old age population of member states. The current demographic trend in Georgia is leading towards the same phenomenon, population ageing. The European Commission (EC) issued a Green Paper in 1997[54] discussing the need for the EU community to find ways and means to reform their pension systems by advancing the importance of supplemental pensions and observed that:

> "Although the long term effects of the ageing process on public budgets are rather uncertain and depend on the way the economy and society adapt to the process, there is likely to be significant pressure for an increase in public expenditure in the years ahead. Much of the pressure will fall on public social security pension schemes, which account for by far the most significant proportion of pensions in Europe, since expenditure on them is highly dependent on the age structure of the population".

In the paper "Pension Reforms in Emerging Europe: The Uncertain Road Ahead" (2010), Ms. Delia Velculescu, of the IMF, aptly stated that:

> "A number of Emerging European economies reformed their pension s systems in the late 1990s and early 2000s by adopting multi-pillar pension framework aimed to improve long-run fiscal sustainability and lead to better macroeconomic outcomes that would result to higher national saving rates and increased labor participation. The reform initiatives involved mostly the introduction and establishment of Pillar II a mandatory, pre-funded, defined-contribution second pillar pension system. This private component, in conjunction with the public first pillar, was expected to help diversify risks, supplement old-age income for pensioners that was being tightened under the public pension schemes, and help with the development of capital markets"[55].

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[53] Mark Dorfman, Richard Hinz, David Robalino and Robert Holzmann, "The Financial Crisis and Mandatory Pension Systems in Developing Countries", World Bank Pension Primer December 2008

[54] European Commission, "Supplementary Pensions in the Single Market: A Green Paper", 1997

[55] See: Delia Velculescu, IMF, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead, 2010

Both Pillar I and Pillar III pensions exist in Georgia in nascent stages. What remains is the creation and implementation of Pillar II pensions. The proposed Pillar II pensions will neither supplant nor replace the state pensions (Pillar I) nor will it render obsolete the voluntary non-state pensions (Pillar III). Rather, a Pillar II platform[56] would help to reform the Pillar I system to ensure its long-term fiscal sustainability while also facilitate the alignment of the Pillar III pension with the World Bank Pillar III Model, so that these three pension systems complement and supplement one other.

The Pillar I:

The current state pensions of the GoG would remain to be an anti-poverty pillar that provide a minimum income in old age (or disability or other status defined by legislation), for the pensioners' basic consumption needs for subsistence. Pillar I would also encompass all pensions and social assistance programs that are currently administered by the Ministry of Labor, Health and Social Affairs (MLHSA). It would remain to be a non-contributory, unfunded PayG system.

As private pensions gain healthy momentum and Pillar II, or mandatory savings pensions, start attaining maturity, "means-tested"[57] benefits may gradually be phased – in for determining eligibility to receive state pensions. To a large extent, a "means-tested" public pension reduces fiscal transfers and provides a balancing cushion to the fiscal constraints in funding the state pensions. "Means-tested benefit" is a benefit that is paid only if the recipient's income falls below a certain level[58].

Pillar I pensions should remain to be non-contributory so that there would be no need to impose social contributions which will unnecessarily create additional financial burdens especially in the labor sector.

"Means tested" public pension is not without opponents, the most common arguments against it are in the following perspectives:

- The political appeal of state pension is diminished because some people who are eligible for pensions on "means tested" parameters would consider the benefits as "welfare" rather than pensions.
- If and when the amount of pension is generous, one's initiative to save for his/her retirement income is diminished. In addition, some people may even spend whatever they have or hide their true income in order to qualify for the minimum threshold of "means-testing".
- "Means-testing" should not apply to government social benefits and pensions given for disability and/or special group status such as war veterans, among others.
- The implementation of "means-testing" would increase the administrative cost for providing state pensions while also creating windows for corrupt practices.

In order to manage fiscal constraints, governments have been apt to adopt "means-testing" to determine eligibility for receiving state pensions and to ensure the pension program's

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[56] The word "platform", in the context of this report, refers to a program or policy that is structured to provide good opportunity for doing something.

[57] In its "Ninth Review Under the Stand By Agreement" with Georgia, dated May 24, 2011, the IMF suggested for continuing "non-contributory" nature of Georgian state pension and the gradual phasing in of "means-testing" in the eligibility criteria for one to receive state pension benefits.

[58] See Glossary, page xxii, "Averting Old Age Crisis: Policies to Protect the Old and Promote Growth", A World Bank Policy Research Report, 1994

sustainability. Governments that adopt "means-testing" often consider the long-term sustainability of their state pensions more important than addressing the disadvantages associated with "means-testing". Governments, however, often take steps to address the issues opposing "means-testing" criteria described above.

It would be expedient for GoG to rationalize its state pensions by taking into account the underlying principles of Pillar I, most of which are already enshrined in Article 3 of the Georgian Law on State Pensions[59].

- Pension rights of every eligible residents irrespective of nationality, race, sex, language, religion, political views, social origin, property holdings or other economic or social status, unless restricted by "means-tested" standards, if any, are established and protected
- The state pension programs endure financial sustainability with minimum impact on the macroeconomic fundamentals of the state
- Poverty reduction
- Effective social justice
- Old age pension is guaranteed to be at least compatible with the minimum budget for the basic (subsistence) needs of a pensioner. Any amount more that this basic need is provided by individuals themselves through private pension savings.

Countries with increasing elderly populations are facing mounting fiscal pressure to pay Pillar I, state pensions benefits. Pension reforms that reduce the cost of pensions from the state budgets necessitate shifting large part of pensions to the private sector. Amidst these reform initiatives, the World Bank developed the Multi-Pillar Pension Model[60]. The goal of the Multi-Pillar systems is to separate the major objectives of retirement plans

In addition, it is helpful to make reference to the *IMF Ninth Review under the Stand-By Agreement* with Georgia, dated May 24, 2011, in respect of which they are relevant to the current GoG's state pensions. In its review, the IMF advised the GoG to consider strategies, among others, the following:

- Limit and/or phase-in "means testing" in any decision to increase (the amount of old age basic) pension.
- On the inquiry of the GoG about the merits of a contributory (public/state) pension scheme, the IMF advised that while such a scheme is envisaged as a supplemental plan, "however care should be taken that the scheme is not tied to short-term considerations, such as introducing social contribution (social tax) to finance the increase in pension"[61].

The Georgian state pensions provide benefits not correlated to either the income earned or the employment history or the financial means of a pensioner. Rather, a pensioner's eligibility and amount of benefits are determined by legislation.

In addition, the Georgian state pension programs are not burdened with outstanding obligations for the payment of defined, accrued, vested, or guaranteed benefits. Moreover,

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[59] See Article 3, Georgian Law on State Pensions, Law Number 2442-RS, December 23, 2005, Effective January 1, 2006

[60] World Bank, "Averting the Old Age Crisis: Policies to Protect Old Age and Promote Growth", a World Bank Policy Research Report, 1994

[61] See point 8, page 8 of the *IMF Ninth Review Under the Stand-By Agreement* with Georgia, dated May 24, 2011

the state pensions' programs are financed by allotments from the Georgian state budget, not from specific social contributions.

The Pillar II:

Pillar II is a mandatory savings pillar that provides benefits only to contributors (participants). In general, it provides the most benefits to those who contribute most.[62] Contributions to this Pillar are "earnings-based" and pension savings of workers, both in the formal and informal sectors, are primarily the object of this pillar. There are three fundamental rationales of public policy used by governments in respect of implementing Pillar II pensions:

- **Myopia.** Workers (labor force) are shortsighted and unless forced, they will not save for their retirement.
- **Moral hazard.** Workers will not save because they believe that the government will provide them support upon their retirement.
- To foster and encourage increased national private savings.

The implicit assumption is that government knows best and without compulsion, individuals make mistakes that they later come to regret. Therefore, governments force workers to save enough to avoid any drastic fall in their standards of living during retirement. Savings are "locked-in" and generally accessible only on retirement, and these same arguments apply to withdrawals during retirement[63],

Governments are sensitive about implementing any mandatory policies but this sensitivity will be temporary once citizens understand that Pillar II is an effective system for increasing pension benefits through "self-provision". Governments also need to properly inform citizens that Pillar II pensions do not replace or substitute benefits provided under the state pension programs. Rather, Pillar II pensions are meant to remove political influence and manipulation of pension savings by clearly delineating the management and custody of pension assets to the private sector. It also shields pension savings from political risks such as changes in legislation, and the tendency of politicians to make short-term promises of better pension benefits, at the cost of future workers/taxpayers.

Some experts debate the effectiveness of Pillar II to provide decent pension to low-income individuals or and to those approaching retirement age. There is validity to such arguments on the basis that in Pillar II, those who contribute most benefit the most. Hence, pension savings accumulate in larger amounts for the young, as they have a longer time horizon to save and the highly paid individuals who contribute in larger sums. To address these concerns, Pillar II should ensure "income smoothing" or additional income during retirement. For Georgia, it would be appropriate to consider the following guiding principles in structuring the Pillar II pensions:

- Mandatory participation applies only to those that will have at least 20 years to save before retirement. If retirement age is 65, all workers 45 years or younger at the time Pillar II pensions take effect are ideally required to participate. Workers above 45 years can participate on voluntary basis or may save for their retirement income in the voluntary Pillar III schemes.

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[62] Larry Willmore, "Three Pillars of Pensions? A Proposal to End Mandatory Contributions", DESA Discussion Paper No. 13, June 2000,United Nations

[63] Larry Willmore, "Three Pillars of Pensions? A Proposal to End Mandatory Contributions", DESA Discussion Paper No. 13, June 2000,United Nations

- Mandatory participation would apply only to individuals who are earning at least 400 GEL a month. Workers earning less than 400 GEL a month may, however, participate on a voluntary basis so that they may start building their pension savings and in anticipation that, through the years, their monthly salary or income reaches or exceeds 400 GEL. At that time, they already have an active Individual Pension Savings Account.
- Tax incentives to Pillar II contributions need to be considered to support the compulsory requirement to save. The amount of annual contributions that enjoy tax incentives needs to be capped at the lower of a fixed percentage of salary or income and a maximum amount to be fixed by law. For example, contributions not more than 10% of salary or taxable income and or 6,000 GEL, whichever is lower, is tax not subject to tax.
- The same tax incentives may be given to those who are more than 45 years of age whether they build their pensions savings under Pillar II or under Pillar III.

Pension tax regimes may be one of the following: (a) EEE - contributions are ***exempt***, earnings from those contributions are ***exempt,*** and pay-outs are ***exempt,*** from personal income tax (PIT); (b) TEE – contributions are ***taxed,*** earnings are ***exempt*** from PIT and pay-outs are ***exempt*** *from PIT;* and (c) EET – contributions are ***exempt*** *from PIT,* earnings are ***exempt*** *from PIT* and pay-outs are ***taxed***.

Tax incentives, whether on EEE, TEE or EET tax regime, should not unnecessarily distort the macro-economic fundamentals of the GoG.

There are also arguments as to the need for mandatory contributions for pension given the existence of voluntary savings pension system[64], similar to the non-state pension funds mainly provided by insurance companies, which can accommodate contributions for private pensions. However, voluntary savings pensions do not require restricted access to savings and deposits may be used for purposes other than pension. In addition, contributions/deposits in a voluntary pension scheme are irregular and unpredictable. Moreover, the voluntary character of Pillar III pensions would not attract savings from lower income earners who have greater need to save a portion of their earnings for retirement. An effective pension system is one that ensures the following:

- Provision of retirement income that will enable the pensioner to fulfill his/her consumption and basic needs[65];
- Generates long term capital that can be mobilized to expand economic growth and development and;
- Promotes increased national private savings especially for income earners who are able to set aside part of their wages or earned income to capitalize a revenue stream during their post employment or retirement years;

A pension system based mainly on voluntary savings would not and will not achieve the above-described objectives because: (a) saving is dependent on willingness and affordability so that only a few and mostly those who earn more money or are wealthy will save; (b) the amount of savings and its accumulation are not predictable; (c) the volatility of voluntary

[64] Ibid: Mr. Willmore's proposal to end mandatory contributions is, in the opinion of the author, in the context that certain conditions exist such as: where benefits under Pillar I are generous and or Pillar II pension is combined with Pillar I, or where savings under Pillar III is robust and used by those desiring to have additional income at retirement.

[65] It is ideally the function and objective of the state pension programs to provide benefits that will cover the basic needs of a pensioner.

savings does not allow for long-term use of capital; and (d) the accessibility of the savings for purposes other than retirement income is undeterred even in cases where withdrawal penalties are imposed.

Opponents to Pillar II pensions likewise argue that the costs of administering the pension scheme decrease the value of pension assets, thus reducing individual participant's savings. Indeed, pension administration, including those related to enrolling participants, collection of contributions, record keeping and maintenance of individual pension savings accounts, would involve costs, such as fees paid for asset management and asset custodial services. But these costs and expenses also exist, and typically at higher levels, in the case of Pillar III (voluntary) pensions. An up-front large capital expenditure is required to set up an IT based system to maintain accurate records for each participant's individual savings account. In order to manage and decrease these costs, some countries adopted the following model control mechanisms:

- The administration of Pillar II pension is given to a private trust established by the Government as an autonomous entity. The board of trustees consists of private individuals who undergo rigid screening to ensure that they adhere to high "fit and proper" standards. This set up reduces the costs related to enrolling participants and collecting contributions. As the market expands, provision of Pillar II pension may be opened to private founders to ensure optimum competition.
- Central record keeping: only one IT system needs to be installed and maintained. Central record keeping reduces cost and ensures that all accounting and reporting procedures of individual accounts are standardized for all participants. For example, in India a central record-keeping agency was selected in a competitive bid, while in Poland and other EEC, record keeping is a function of pension fund administration and this function may be a core task assigned to the trust.
- Not-for-profit legal entities: private pension fund entities (founders) for Pillar II pensions operate as not-for-profit entities and are not permitted to engage in any kind of business activity other than as pension providers, such as in Chile and most Latin American countries.
- Competition is dynamic in asset management and asset custodianships. The management and custody of pension assets by the private sector is one of the primary functions of private pensions.

There may also be certain adverse results that are associated with Pillar II pensions if proper safeguards are not in place. Ms. Anita Schwarz, the lead economist for the World Bank for Europe and Central Asia Region, points out the following unexpected outcomes from Pillar II pensions[66]:

- The system [Pillar II] is not as immune to political interference, as hoped.

  (Note by author: this condition was recently observed in some EEC countries that established privately managed Pillar II pensions where pension contributions of those cohorts who chose to transfer to privately managed Pillar II come from a part of the social tax. The reduced part of the social tax proved to be inadequate to pay for existing pension liabilities as well as for the pensions of cohorts that remained in and retire under the state managed social security pensions. Governments resorted to internal borrowings to fund the contributions allocated for private pensions. Moreover,

[66] Anita M Schwarz, Senior Economist of the World Bank, "*New Realities of Pension Policy in Central Europe" presented at*, the EBRD Conference on "Pension Systems in Emerging Europe: Reform in the Age of Austerity", London, 1 April 2011.

during the recent economic downturn (2008), as quick measure to fill in the funding inadequacy for the social security pensions, transfers from the social tax to the private pension providers [contributions to the private mandatory savings pensions] were either temporarily reduced or stopped.)

- Limited financial literacy of participants limits competition among funds
- Debt-financing of transition costs leads to unsustainable debt levels
- Management of pension funds are more costly than expected in some countries
- Overly conservative portfolios resulting in lower rates of return.

However the "transition costs (leading) to unsustainable debt levels" would not apply to Georgia because there are no pre-existing pension obligations. In addition, Political interference is safeguarded with appropriate legislative protection and strengthened private asset management and custody. The introduction of Pillar II pension creates a new pre-funded pension system which is and will remain to be funded by private savings in the form of new contributions and investment earnings.

The maintenance of accurate records is central for the effective administration of Pillar II mandatory savings pension. The preparation and issuance of participant's individual savings account statements enhances and strengthens transparency in pension administration. In addition, the individual pension savings accounts create for the participant(s) a strong "sense of ownership" of the accumulated assets in his/her individual savings account. In addition, a transparent pension administration and management combined with a strong sense of participants' ownership translate into high credibility of, and increased public confidence in, the pension system.

The Defined Contribution characteristic of Pillar II directly links contributions to pension benefits. This characteristic encourages significant support and participation from the formal labor sector and removes incentives for early retirement, thus resulting in positive impacts upon labor supply, labor earnings, and the saving rate[67].

A Pillar II pension system facilitate reforms in Pillar I (state pensions) as necessary means to improve the country's fiscal position[68] particularly in respect of tempering and/or controlling the generosity of state pensions taking into account its long term sustainability amidst increases in population ageing.

Pillar II would increase national savings and eases reliance on foreign capital in-flow, most of which build into the country's external debt portfolio. The need to increase national savings is crucial for Georgian economic development and growth. For instance, Cordonnier (2008)[69] for GEPLAC, correctly observed that:

> "(T)he drop in private saving (according to IMF, private savings fell from 13.8 percent of GDP in 2005 to 6.3 percent in 2007) becomes a serious cause for concern–we are once again forced to reiterate our recommendation to develop ***a "compulsory" system of long-term private savings***, patterned on the best international benchmarks and, especially, the Chilean system of pension funds, as soon as possible. Without such an increase in savings, not only the strategic project of transforming Tbilisi into a regional financial hub will remain a dream–despite the manifest comparative advantages of Georgia in this field". *(Highlighting by author)*

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[67] See: Lindbeck and Persson, WB, 2002

[68] Delia Velculescu, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", 2010. IMF

[69] Christophe Cordonnier, "Financing Georgian Industry" GEPLAC, 2008

Pillar II pensions facilitate development and growth of the capital market. Ms. Delia Velculescu elaborated on this topic in her paper entitled *Pension Reforms in Emerging Europe: The Uncertain Road Ahead*[70], the essence of which is summarized below:

Private Pillar II Systems and Capital Market Development

Private, fully-funded pillar II pension systems are expected to improve the efficiency of saving and investment decisions, including deepening capital markets. (S)ome studies provide support in favor of specific outcomes:

1. ***A larger size of the capital market***: Funded pension systems lead to an increase in personal savings, especially if there are constraints that do not allow individuals to borrow against future pensions (Corsetti and Schmidt-Hebbel, 1997, Poterba et al 1996, World Bank, 1993). If not offset by larger fiscal deficits, national saving and investment could also rise, with beneficial effects on growth, as documented empirically for Chile (Holzmann, 1997, and Corbo and Schmidt-Hebbel, 2003).

2. ***Improvements in regulation and transparency of capital markets***: Pension funds' demand for financial instruments helps drive investor protection regulations. The quality and timeliness of information to investors is likely to improve as demand from pension funds corresponding to the higher quality of requirements imposed by pension funds; the creation of risk-rating systems also improves transparency (see empirical evidence provided in Walker and Lefort, 2002).

3. ***Better corporate governance practices***: Higher demand and more stringent requirements by pension funds serve to improve regulations aimed at minimizing conflicts of interest risk and strengthening rights of minority shareholders (see Blake and Orszag, 1998, Iglesias 2000, del Guercio and Hawkins, 1999).

4. ***Improvements in financial innovation:*** The significant size of investments by pension funds lead to the development of institutions, such as custodians, clearing mechanisms, electronic trading platforms, corporate bonds, indexed instruments, and index futures (see Bodie, 1990).

5. ***Lower cost of capital and security-price volatility***: The higher risk tolerance and longer investment horizon of pension funds implies that risk premia would fall, lowering the cost of capital (Walker and Lefort 2002).

6. ***Higher quality of investment decisions, and increased financial integration***: As private pension funds hold a greater proportion of long-term assets, they can better pool and diversify risks, have access to better information, and could diversify portfolios, leading to greater financial market integration.

Nevertheless, private pension funds may also lead to more risk-taking by banks, short-term and herding behavior that may exacerbate volatility at times of high financial stress, and neglect of small firms in favor of investments in

[70] Delia Velculescu, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", 2010. IMF

large companies. Some important preconditions for pension reform include: a strong regulatory framework, a sound banking sector, a strong insurance sector, and sound macroeconomic policies—which, together with flexibility of investment decisions, are crucial in reinforcing the pension funds' beneficial effects on capital market development.

Fiduciary Duties and Responsibilities:

A fiduciary duty is the highest standard of loyalty and care. It is a legal obligation of one party (the fiduciary) to act in the best interest of another (entrustor). The obligated party is typically a "fiduciary" someone entrusted with the care of money or property.

For private pensions, such as Pillar II and Pillar III, it is essential that the fiduciary's[71] duties and responsibilities are defined and prescribed for members of the pension fund's governing bodies, board of trustees/directors, administrators, asset managers and asset custodians. Fiduciary duties and responsibilities must also apply to any person holding a responsible position in any of the above-mentioned entities.

Pillar II Pensions Framework: Foremost in Pensions Reform Initiatives:

Partial List of Countries that Have Included Pillar II (Mandatory Savings Pensions) in Their Reforms

Country	Year started	Mandatory	Voluntary	% DB	% DC
Central Eastern Europe/East Central Asia					
Czech Rep.	1994		X		100
Estonia	2002	X			100
Hungary	1998	X	X		100
Poland	1999	X			100
Kazakhstan	1998	X			100
Bulgaria	2002	X	X		
Croatia	2002	X	X		
Kosovo	2002	X	X		
Latvia	2001	X	X		
Lithuania	2004		X		
Macedonia	2006	X			
Romania	2008	X	X		

[71] In particular, any person responsible for the investment, control, or disposition of assets held by the plan would be considered a fiduciary.

Country	Year started	Mandatory	Voluntary	% DB	% DC
Russia	2002	X	X		
Slovak Rep.	2005		X		
Turkey	2001	X (O)	X		
Ukraine	N/A	X	X		
Azerbaijan	1992	X			
Belarus	N/A	X			
Moldova	2011	X			
Uzbekistan	1998	X			
Armenia	Law Passed in 2011, Effective 1/1/2014	X	X		100
Latin America					
Argentina	1994	X			100
Bolivia	1997	X			100
Brazil	1977		X (O)		100
Chile	1981	X			100
Columbia	1994	X			100
Costa Rica	2001	X	X		100
El Salvador	1998	X			100
Peru	1993	X			100
Mexico	1998	X			100
Uruguay	1996	X			100
North America					
Canada	1965		X (O)	84	16
USA	1947		X (O)	71	29
Western Europe					
Netherlands	1952	X (O)		95	5

Country	Year started	Mandatory	Voluntary	% DB	% DC
Sweden	1967/2000	X (O)	X (O)	95	5
U.K.	1834		X (O)	79	21
Asia & the Pacific					
Australia	1992	X (O)		10	90
Hong Kong	2000	X (O)			100
India	2004	X	X		

X – Anyone fulfilling the participation eligibility criteria as prescribed by law is required to participate.

O – An occupational pension in which only employees of a single employer sponsor or employees of several employers in a trade association may participate.

The Pillar III:

Pillar III is a voluntary pension system, where anyone with legal capacity to contract regardless of working status, age employed or unemployed, whether earning wage or income or not, can participate.

The Pillar III system provides the platform where:

- Individuals who are not employed or earning income can build their in pension savings in pension fund products available in the voluntary market.
- Individuals, who are not required by law to enroll in the mandatory Pillar II pension, may save for their retirement income. For example, Pillar II prescribes minimum salary/income levels as well as minimum and maximum age levels for compulsory participation. Workers who fall outside of the prescribed age and income levels may voluntarily participate in the Pillar II pension or build their pension funds under the Pillar III voluntary pensions.
- Workers who are enrolled in the Pillar II pensions may still voluntarily save under the Pillar III pension funds in amounts exceeding the mandatory contribution rates/levels in order to provide for themselves additional pension benefits.
- Occupational DB pension schemes may be designed and provided.
- Individuals who prefer to save in a pension fund offering a better investment return and safety that is generally realized when pension assets are pooled and placed in diversified investments.
- Individuals desiring more flexibility to use pension savings for other purposes, including ability to receive lump sum payment on retirement.

In addition, contributions to a DC voluntary pension may also be tax exempt. In the event that they are tax-incentivized, a maximum amount of all pension contributions to both Pillar II pensions and all Pillar III plans is prescribed. However, the tax authorities incur additional administrative costs for monitoring all individual voluntary contributions to ensure that incentives are given only to contributions up to a fixed maximum amount; as well as for

monitoring early withdrawals[72] so that the tax incentives given for pension contributions and savings attributable to the amounts withdrawn are recovered.

The occupational pension plans established under the Pillar III platform is an agreement between the plan sponsor (employer) and the members/participants. Best practices would require that the MLHSA approves all occupational plans and regulates all sponsor-member contractual relationships created there in. The financial services regulator (the National Bank of Georgia, as per legislation) regulates the funding of pension liabilities, investment, custody and segregation of pension assets and, in the case of DC schemes, including the maintenance and reporting of each participant's individual pension savings account.

Myth or Reality of the Three Pillars of Pension:

One deficiency attributed to the Multi-Pillar model is their inability to provide universal retirement income security, particularly in developing countries where large portions of the work force are not formally employed.

There are arguments that old age income security was better achieved under the principle of solidarity where pensions and other social benefits are financed by social taxes, paid largely by employers and, minimally, by employees. Solidarity functions on the basis that the workers of today are paying for the pensions of the elderly, while the pensions for today's workers will be paid by the workers of tomorrow.

While application of the solidarity principle in pensions is noble but the social cost to sustain these pension schemes continually increases and without hope that such funding costs will ever be reduced. Many governments are realizing that it is difficult to sustain fiscal payments for pensions as the number of elderly increases and the number of workers decreases. Many countries in the EEC and ECA, where pensions operated and financed under the solidarity principle, have, one after the other, reformed their state pensions with the principal objective of transferring significant part of their responsibilities to pay pensions to private pensions. The reforms were typically carried by:

- Unbundling the social tax and separating the contributions for pensions from other social benefits. Workers were allowed to stay in the current social pension structure and/or move their pension accumulations to mandatory private pensions. These countries retain the administration and payment of old age pension benefits of the social security pensions. For example, in Poland the social tax is 19.5%, out of which 7.5% was determined and set aside to separately pre-fund Pillar II pensions.
- Giving workers (contributors) the option to transfer their pension accumulations to mandatory private pensions.
- Introducing voluntary private pension funds.

The reforms practically addressed and negated the criticisms on Pillar II and Pillar III private pensions: the myth of sustainable solidarity based pension system, and the reality of self-provision for pension. We are driven back to the Three Pension Pillars.

[72] Early withdrawal refers to taking out all or part of a pension savings before retirement

STRENGTH, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS

Mandatory Savings Pension (Pillar II) and Voluntary Savings Pension (Pillar III)

Important notes:

- The tabular SWOT analysis below is framed on the basis that Pillar II (mandatory) and Pillar III (voluntary) private pensions are alternative and stand-alone systems.
- However, this report advocates and continues to advocate that both mandatory and voluntary pension schemes, together with the state pensions, must co-exist as supplementary and complementary platforms for the provision of pensions. Such multi-pillar pensions will be the most effective and comprehensive system for Georgia.
- The strength, weaknesses, opportunities and threats tabulated below are presented and discussed in relevant sections in the first part of this report.

Mandatory Savings	Voluntary Pensions
Strengths	**Strengths**
Responsibility for providing a major part of retirement income is shifted to the salaried workers and income earners.	Ability to offer many types of pension products and investment options. However, investment option choices are also a weakness if disclosure at the point of sale is inadequate.
The employment income directly correlates with both the amount of contributions and the amount of retirement income (pension). Income or earnings based contributions, ideally would provide a healthy replacement income at retirement so that the pensioner may continue his normal level of consumption post employment.	Ability to participate is not dependent on whether the participant is a wage or income earner. Neither is the amount of contribution related to one's salary on earnings. Pension contributions may be made in any amount and at any time.
Pension funding does not require fiscal transfers. Contributions come from private resources.	Pension funding does not require fiscal transfers. Contributions come from private resources
Broader and deeper reach (penetration) of pensions particularly in the targeted low and middle income groups	A platform to enroll individuals who are not required to participate in the mandatory pensions
Runs in parallel with the objectives of public pension on poverty reduction as it supplements the benefits provided by the state pensions for the pensioner	Efficient platform for employer sponsored (occupational) pension plans as well as high income individuals. Serves as "safe haven" for wealthier individuals.
Safe and secure management of pensions. Providers of mandatory pension schemes are not allowed to engage in any business other than managing and operating the mandatory pension scheme, resulting in a very high level of protection for participants.	Life insurers are more effective in implementing the pension pay-out stage particularly in respect of pension payments in the form of annuities. Pension fund founders, especially in the

Board members and officers of the Pension Fund entity need to have specialized expertise in investment, accounting, legal and financial matters. All service providers are to be subjected to rigid "fit and proper" requirements; fiduciary duties and responsibilities and adherence to heightened norms (codes) of conduct.	accumulation stage, are subject to rigid "fit and proper" requirements. For instance, fiduciary duties and responsibilities and adherence to heightened norms (codes) of conduct, must be required as well as maintaining pension savings assets in segregated and physically separated accounts and custody.
Lower and controllable levels of acquisition/distribution cost	
Transparency in managing pensions and assets is enhanced and strengthened with the timely delivery of accurate Individual Pension Savings Account Statement to each participant. The Individual Statements also create a strong sense of ownership on the part of the participant in the assets that are accumulated in his/her pension savings account.	For DC schemes, transparency in managing pensions and assets is enhanced and strengthened with the timely delivery of accurate Individual Pension Savings Account Statement to each participant.
Cost efficient enrollment processes add value to participants' savings so that participation rate in the lower income and vulnerable group is broad and deep.	
Substantive contractual provisions are defined by legislation, such as the level and frequency of contributions, portability of pensions, pension payments, participants' rights, etc.	Generally, private contract between insurers (pension providers) and participants. More freedom/flexibility in making pension contributions/ deposits as well as withdrawals.
The accumulation of funds is predictable and dynamic and it is reasonable to approximate that the accumulated savings will be a major component of GDP.	Political sensitivities are low.
Ability to build long term capital for mobilization that supports many economic activities that accelerate economic growth.	Ability to build and conserve long-term funds, especially during the payout stage of pensions, in respect to annuity reserves of pensions that are payable for life or for long-term periods.
Open windows for developing growth-oriented long term government bonds for infrastructure and development.	
Long term benefits to the government - more taxes are generated as the volume of wage and income earners increase with the	

improvement in the labor market.	
Supports the development and growth of the capital market	Supports the development and growth of the capital market
Weaknesses	**Weaknesses**
Inability to provide universal old-age income security when large portions of the workforce are not covered by formal schemes. Reaching the self-employed and others in the informal labor sector is a huge challenge.	Inability to provide universal old-age income security when large portions of the work force are not covered by formal schemes. Although voluntary pensions are meant to attract the workers in the informal sector, the costs to reach and enroll them in the system would be very high, further reducing the future pension amounts.
Long periods of time where the savings are "locked-in" for pension and the economic uncertainties that impact the value of pension assets over time scares many participants.	Savings may not be intended to be "locked-in" for retirement income. Short-term savings in a pension fund is expensive for participants.
Politically sensitive as forced savings does not appeal to the general population especially to the low-income or low salaried individuals.	Acquisition/distribution costs are high especially when soliciting enrollment of individual participants. For instance, many "hidden" back-end costs to participant exist.
Benefits directly correlate to contributions resulting in lower pension benefits for low-income workers in comparison to the amount of pensions of higher salaried participants.	Greater ease for participants for withdrawing all or part of their savings may result in not attaining retirement income targets
Some restrictions and costs for transferring accumulated savings from one pension fund company to another may be involved, if there are multiple pension providers.	Private contract between insurers (pension providers) and participants/sponsors. Restrictions on portability of pensions and the fees for making a transfer from one pension provider to another are usually high.
Public sector needs to commit resources for awareness and confidence building.	Because of its voluntary nature, market conduct norms and mechanisms for the adequate protection of participants pose one of the greatest regulatory challenges.
Amount of pension is not guaranteed	Amount of DC pension is not guaranteed
Opportunities	**Opportunities**
Strengthens the financial system with the steady and predictable flow of long-term	The responsibility for providing a major part of retirement income is shifted to private

investible assets	individuals
Attraction of FDI from professional asset managers and other providers of ancillary services such as asset custodians and record keeping companies among others. Also, accelerated transfer of skills and knowledge in the investment and wealth management areas.	Supports increased financial knowledge and skills acquisition for pension fund provider, asset managers as well as the general public.
Pushes and primes the development and growth in the capital markets	The robust growth of long-term savings stimulates the development of capital markets
Drives the rationalization of the state pensions programs ensuring their long –term sustainability	If market penetration is deepened, it could run efficiently in parallel with the objectives of public pension on poverty reduction. But see weakness: higher cost of distribution.
Mandatory participation of workers in both the public (civil service) and private sectors.	Use of pension fund schemes for employers to attract and retain the best human resources.
Provides the right platform to establish and develop a pension guarantee fund to stimulate increased public confidence.	Provide the right platform to establish and develop a pension guarantee fund for increased public confidence.
Threats	**Threats**
Failure to optimize investment income due to lack of investment instruments in an undeveloped capital market	Too much motivation for profit may lead to lower benefits to participants.
Volatility in the labor market – long periods of not being employed, even for young workers, would lead to low levels of pension savings accumulation.	Inherent conflict of interest. The physical segregation of pension assets from the general assets of the insurer or bank that provides pensions requires increased supervisory oversight.
Credibility issues in the private sector as pensions necessitate long-term commitments	Private sector credibility issues

Challenges:

- Political sensitivities in respect to the “forced” nature of mandatory pensions. The sensitivities may disappear quickly or may linger for some time especially when adjustments to salaries and earnings do not cope with inflation. There is a need to conduct public information campaign in all forms of mass media, employees’ groups and trade associations.

- Building confidence in the system's credibility. The core issues to address in this challenge are good governance and market discipline that ensure the long-term safety, security and profitability of the pension savings. Regulatory intervention are needed for the following functions and roles:
    - Governance: screening and monitoring of every person in a position of responsibility in the pension fund entity, asset management firms and asset custodians; laws and regulations that prescribe fiduciary duties and responsibilities of every person holding positions of responsibility in the pension fund entity, asset management firms and asset custodians; strong and independent audit; strict compliance and enforcement of "fit and proper" standards;
    - Sales practices: adherence to a code of market conduct; registration/licensing of agents; minimum requirements of education and training, testing; clarity and truth in advertising such as in brochures, illustrations and sales materials;
- Protection of participants and pensioners
- Regulations, such as that adopted in Chile when it introduced the multiple funds in 2002, require that the investment strategies applicable to older workers are limited to the more conservative funds. As a result, in Chile, 80% of the members who are reaching retirement age within 5 years are invested in one of the two most conservative portfolios and have been largely shielded from losses during the international financial crisis as well as from the volatility of prices of pension assets.[73]
- Improving the management of financial risks. For the funded (second and third) Pillars, the recent global economic crisis should prompt renewed focus and attention on the importance of well-developed risk management and governance standards and integrate these standards into the regulation and supervision of pension funds. In addition, governments and private sector firms should explore various mechanisms to better shield participants' pension savings from the impact of account fluctuations as they approach retirement. These could include the introduction of age based/life-cycle portfolios, which require low and middle-income workers to switch part of their balances to less risky investments as they approach retirement. Default age- and earnings-related asset allocations are also important in light of the observed inertia of contributors.[74]
- Building and developing institutional and human resource capacities of banks and financial institutions and upgrading regulations of the financial sector.
- Developing annuity products that support the objectives of pension savings (deferred annuities) and pension distributions (immediate annuities).
- Supporting the development of the Georgian capital market. A dynamic capital market provides access to the investment options for pension assets and at the same time prompts issuers of securities to implement high levels of transparency and corporate governance. Adherence to sound market conduct standards will further ensure the safety and security of pension assets.

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[73] Mark Dorfman, Richard Hinz, David Robalino and Robert Holzmann, "The Financial Crisis and Mandatory Pension Systems in Developing Countries", World Bank Pension Primer December 2008

[74] Ibid.

- Addressing alternative options the GoG could put in place to support participants and pensioners in the event that economic (monetary/purchasing power) values of pension assets drop substantially or in the event of an extraordinary depreciation of the Georgian Lari.

Financial Analysis and Projections for Georgian Pillar II and Pillar III Pension Funds

(Georgia specific statistics and analytical studies are still being completed)

ANNEX 5

Third Exposure Draft; August 15, 2011

On the request of the Business Association of Georgia, discussion of the advantages and functionalities of Pillar II Pensions in respect to: (a) supporting economic development and expansion; (b) its impact on social considerations and (c) its effects on fiscal constraints, as well as discussion of (d) how Pillar II pensions can influence the development and growth of the capital market, (e) functionalities of Pillar II and its advantages to the participants and (f) main oppositions and threats to robust development of mandatory savings (Pillar II) pensions, are highlighted in this paper.

The Business Association of Georgia

&

The Economic Prosperity Initiative

Overview of Pension Reform for Georgia:
Multi-Pillar Pension Systems

August 2011

Tbilisi

Contents

[75] The word "platform", in the context of this report, refers to a program or policy that is structured to provide good opportunity for doing something

1. Brief Introduction

1.1 Basis for Pension Reforms

1.1.1 The demographic landscape the world over is shifting as the number of people aged 65 years and above continues to increase. This change is due to increases (improvements) in life expectancy and decreases in fertility rates.

1.1.2 In 1990, demographic dependency ratio, that is the ratio of pensioners to working population, of the EU10[76] was around 17 percent, relative to a projected demographic dependency ratio of 63 percent compared to an average of 30 percent projected increase in the demographic dependency ratios for the Euro Area during this period[77].

1.1.3 Georgia established and operates a new state pension system to provide for the elderly, persons with qualifying disability, spouse of deceased breadwinner, selected groups of public servants, etc., while providing modest social assistance to selected social sector groups.

1.2 Sources of Pensions

1.2.1 There are three principal sources for pensions:

- Government social security or public pension
- Private pension
- Individual pure savings

1.2.2 Governments' social security or public pensions is and will continue to be under increasing funding pressure. Individual pure savings, on the other hand, are not reliable source of retirement income, especially for lower income individuals because whatever pure savings they make are often used for multiple purposes other than for their retirement income.

1.2.3 Hence, most countries look upon private pension plans in reforming their pension system as means to transfer the public burden of managing and paying pensions to private individuals and pension funds. Benefits from private pensions that supplement the public pension entitlements strengthen the public pension system's long-term sustainability.

1.3 Private Pensions

1.3.1 Private pension funds are either mandatory or voluntary. Private pensions differ in many ways from public or social security pensions. In Georgia, among the fundamental differences are:

Public (State) Pensions	Private Pensions
Provides minimum subsistence benefits for poverty alleviation	Supplements minimum subsistence benefits provided by state pensions as additional source of providing retirement income so that the retiree is able to meet other consumption needs and to avoid

[76] In 2004, 10 countries joined the European Union (EU)—eight of the formerly Communist Central and East European (CEE) countries (Czech Republic, Hungary, Poland, Slovakia, Slovenia, Latvia, Lithuania, and Estonia) plus Cyprus and Malta

[77] See: Delia Velculesco, IMF-"Pension Reforms in Emerging Europe: The Uncertain Road Ahead" 2010

Public (State) Pensions	Private Pensions
	drastic fall in his/her standard of living,
Unfunded, pay as you go (PAYG)	Fully funded at all times. Pre-funding of pension liabilities come from private savings
Exposure to political, fiscal and social pressures	Based on the principle of "self-provision" so that pensions depend on the amount the participant/member had saved for his/her retirement.
Pension payments come from fiscal transfers	Participants' private savings are used to pay pension benefits and no fiscal transfer is involved.
Eligibility criteria, as well as amount, manner and time of payments, depends on government	Functioning is based on permanent legislation that prescribes minimum prudential provisions of contracts relating to pension savings accumulation and pension payments.
Unregulated and unsupervised	Regulated and supervised
An effective social safety net for poverty reduction and alleviation. The minimum benefit amounts of pensions have very little, if not, negative, impact, to economic growth and expansion.	Increases long-term national private savings that can be used for long-term investments that can finance activities to increase national productivity, entrepreneurial and capital investments and employment.
Public pension system is not intended to support financial sector development, but for poverty alleviation.	Private pensions catalyze growth and development of the financial sector by accumulating long-term investible assets that prompt robust activities in the capital market and financial services sectors.

2. The Need for Pension Reforms in Georgia

2.1 The Multi-Pension Systems

2.1.1 An effective pension system is one that ensures:

- Provision of retirement income to enable the pensioner to fulfill his/her consumption needs[78];

[78] Ideally, a state pension program provides benefits that will cover a pensioner's basic needs and private pensions to cover for additional consumption needs.

- Generation of long-term capital that will catalyze increased financial sector growth and development;
- Increased national private savings especially among income earners who allocate a portion of their earnings to their pension savings accounts in order to provide themselves with income stream during their retirement years

2.1.2 The World Bank Multi-Pillar pension model[79] was used as a basis of pension reforms in Latin American countries and in the EU10 states. It was also the model adopted in the pension reforms of Kazakhstan in 1999, Russia in 2002, and Armenia in 2011, to mention a few.[80] An important component of the Multi – Pillar pension system is the mandatory savings pension that co-exists with state pensions as well as the voluntary pension schemes.

2.1.3 Following the World Bank's Multi-Pillar pension models the pension reform for the GOG, could be anchored on the following platforms:[81]

- Pillar I – The current state pension
- Pillar II – A mandatory savings private pension which is a Defined Contribution (DC) scheme
- Pillar III – The voluntary private pension which is either a DC or a Defined Benefit (DB) scheme. Voluntary pensions currently exist in Georgia under the legal framework of the Law of Georgia on Non-State Pension Assurance and Provision[82].

2.2 Purposes and Objectives of Multi-Pillar Pension Systems

2.2.1 As to purposes and objectives, the multi-pillar pension systems could be structured as follows[83]:

Pillar I – State Pension	Pillar II – Mandatory Savings Pensions	Pillar III – Voluntary Savings Pension
Publicly managed DB pensions for poverty alleviation and wealth redistribution	Supplemental benefits to Pillar I entitlements for income smoothing[84] of pensioners to enable them to at least maintain their consumption appetites and lifestyles during their	Enables individuals who do not fall under the mandatory savings under Pillar II as well as higher income individuals to save for their retirement to enable them to maintain their life styles

[79] World Bank, "Averting the Old Age Crises: Policies to Protect the Old and Promote Growth", World Bank Policy Research

[80] Section 3.8 of this report contains a list of countries that reformed their pension systems.

[81] The word "platform", in the context of this report, refers to a program or policy that is structured to provide good opportunity for doing something.

[82] October 30, 1998, No 1679 - IS

[83] World Bank, "Averting the Old Age Crises: Policies to Protect the Old and Promote Growth", World Bank Policy Research

[84] People postpone certain consumption when they are young and earning, save a portion of their current earnings, so that they can consume more than their reduced earnings permit especially in old age.

Pillar I – State Pension	Pillar II – Mandatory Savings Pensions	Pillar III – Voluntary Savings Pension
	retirement. Privately managed system.	during their retirement. Privately managed.
Financed by fiscal transfers	Financed by earnings-related savings and investment income	Financed through personal savings, assets, and purchase of annuity contract on voluntary basis.

2.2.2 The Multi-Pillar pension systems establish the necessary enabling and complete platforms for a comprehensive pension reform of the Government of Georgia (GoG). These pension systems deepen and broaden the reach to significantly large part, if not all, Georgian citizens and bona-fide residents for them to enjoy the benefits of pensions. According to the World Bank 2008 Pension Primer[85], the Multi-Pillar pension systems, "allows better diversification of risks and thus provides better protection to individuals, who may be vulnerable of economic shocks". A pension reform that encompasses the Multi-Pillar pension systems is consistent to establishing Georgia without Poverty, by developing more efficient social safety nets[86].

2.2.3 Pillar I and Pillar III pension systems, at their nascent stages, already exist in Georgia. What remains is the creation and implementation of Pillar II. The proposed Pillar II pension will not supplant or replace the state pensions (Pillar I) nor will it render obsolete the voluntary non state pensions (Pillar III).

2.2.4 The implementation of Pillar II, however, would necessarily provide critical insights on how the existing state pension may also be reformed to ensure its sustainability as well as to prime the harmonization of the current voluntary non-state pensions with the principal objectives of World Bank Pillar III model, so that all three (3) pillars complement and supplement each other.

2.3 A Glimpse of Pensions Reforms in Europe

2.3.1 The dependency ratios in Europe have increased due to improved longevity and the general decline in birth rates. The current Georgian demographics reflect a similar trend. A Green Paper issued as early as 1997 exhorted the EU community to reform their pension systems by advancing the importance of supplemental pensions and observed that:

> "Although the long term effects of the ageing process on public budgets are rather uncertain and depend on the way the economy and society adapt to the process, there is likely to be significant pressure for an increase in public expenditure in the years ahead. Much of the pressure will fall on public social security pension schemes, which account for by far the most significant

[85] Mark Dorfman, Richard Hinz, David Robalino and Robert Holzmann, "The Financial Crisis and Mandatory Pension Systems in Developing Countries", World Bank Pension Primer, December 2008,

[86] ENAPI "European Neighborhood and Partnership Instrument: Georgia, National Indicative Programs 2011 to 2013"; p17

proportion of pensions in Europe, since expenditure on them is highly dependent on the age structure of the population"[87].

2.3.2 In her paper *Pension Reforms in Emerging Europe: The Uncertain Road Ahead*, Ms. Delia Velculescu stated that:

"A number of Emerging European economies reformed their pension systems in the late 1990s and early 2000s by adopting multi-pillar pension framework aimed to improve long-run fiscal sustainability and lead to better macroeconomic outcomes that would result to higher national saving rates and increased labor participation. The reform initiatives involved mostly the introduction and establishment of Pillar II a mandatory, pre-funded, defined-contribution second pillar pension system"[88].

3. The Pillar II Pension System

3.1 Overview of the current pension platforms in Georgia

3.1.3 Before discussing the advantages, benefits and functioning of Pillar II pension system the following basic features of the current state pensions (Pillar I) and voluntary non state pension funds (Pillar III) should be analyzed:

State Pensions – Pillar I	Non State Pension Funds – Pillar III
Beneficiaries are determined by legislation, for example: all residents 65 years of age or over, persons with disability, and retirees from selected civil service groups, among others.	Beneficiaries are the participants or buyers of non-state pension fund contracts.
Administered by the Ministry of Labor, Health and Social Affairs (MLHSA)	Provided and administered by insurance companies subject to regulation and supervision by the National Bank of Georgia
Non contributory – financed exclusively by public revenue or fiscal transfers	Contributory- pension is determined by the amount of accumulated savings of individual participants. There is no known DB pension fund scheme at this time.
It will be challenging to maintain the programs' long-term sustainability without imposing additional taxes and or social contributions.	The voluntary savings plans have almost no restriction regarding withdrawals before retirement. There is high risk that a member or participant will not be able to accumulate sufficient pension assets for retirement.
It is finance by public expenditure while the minimal amounts of pensions have no effect to economic growth and development.	While fostering and promoting private savings, the accumulation of pension assets for long-term investment has been very low. The amount and timing of savings are not predictable for optimal long-term investment of pension assets.

[87] European Commission "Supplementary Pensions in the Single Market: A Green Paper, European Commission", 1997, COM(97)283

[88] Delia Velculescu, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead", 2011,p.1

3.2 The Bases and Concepts of Pillar II Pension

3.2.1 Pillar II is a forced savings pillar and, in general, it provides the most benefits to those who contribute most[89]. Contributions to this pillar are earnings-based. The primary objective of this pillar is to require workers, both in the formal and informal sectors, to set aside part of their earnings to finance their retirement incomes.

3.2.2 Governments use three policy rationales for implementing mandatory Pillar II Pension

- Myopia: workers are shortsighted and, unless forced, will not save for their retirement.
- Moral hazard: workers will not save because they expect the government to support them support when they retire.
- Economic growth: Increased individual private savings accumulate long-term capital that can be invested to increase national productivity, investment in economic capital and infrastructure that bring about a robust labor market.

3.2.3 The implicit assumption is that: without compulsion, individuals make mistakes that they later regret. So government must compel each worker to save enough to avoid any drastic fall in their standards of living during retirement.

3.2.4 The need to increase national savings is crucial for the economic development and growth of Georgia. Cordonnier[90] for GEPLAC, rightfully observed that:

> "(T)he drop in private saving (according to IMF, private savings fell from 13.8 percent of GDP in 2005 to 6.3 percent in 2007) becomes a serious cause for concern–we are once again forced to reiterate our recommendation to develop ***a "compulsory" system of long-term private savings***, patterned on the best international benchmarks and, especially, the Chilean system of pension funds, as soon as possible. Without such an increase in savings, not only the strategic project of transforming Tbilisi into a regional financial hub will remain a dream–despite the manifest comparative advantages of Georgia in this field". *(Highlighting by author)*

3.2.5 A pension system based mainly on voluntary savings would not and will not achieve the above-described objectives because:

- The amount of savings is not necessarily for the long-term;
- Accumulation of assets, both in terms of amounts and timing, for long term investment are unpredictable;
- The volatility of voluntary savings does not allow for long-term use of capital;
- Savings are used for multiple purposes besides retirement income;
- The voluntary characteristic logically allows lump sum payments at retirement, and therefore savings are not intended for regular periodic pension payments following retirement.

3.3 Pillar II Pension System Supports the Government

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[89]; Larry Willmore "Three Pillars of Pensions? A Proposal to End Mandatory Contributions" DESA Discussion Paper No. 13, United Nations, June 2000

[90] Christophe Cordonnier, "Financing Georgian Industry", GEPLAC, 2008

Advantages and Functions	Economic Growth, Social Considerations and Fiscal Requirements
Addresses workers' myopia by requiring them to set aside part of their current earnings in a pension savings account	Increased volume of long-term personal savings generates long-term assets that can be invested to increase national productivity that will enhance state revenue
Eases the risk of moral hazard by incentivizing people to save in order to have supplemental income at retirement in addition to the minimal benefits they receive from the state pension when they retire	Same as above. In addition, the supplemental savings will provide additional income at retirement allowing pensioners to maintain their life habits and consumption appetites and in turn reduce social pressures.
Spurs economic growth and expansion	Availability of predictable accumulation of long term-savings catalyzes increased national productivity, investments in entrepreneurial capital and activities and enables robust growth in the labor market, which are key elements of economic growth and expansion. Economic and labor expansion increases the tax base and individual consumption resulting to increased revenue collection. In addition, increased private national savings eases dependency on foreign capital inflows.
Increases employment and expands the labor market	Increases the base of personal income tax (PIT) while boosting domestic private consumption resulting to increased PIT, VAT and other excise tax revenues. In addition, a robust labor market greatly reduces government's socio-economic problems.
Private administration of supplemental pension reduces political influence and fiscal malfeasance of pension savings while enabling the government to shift a large burden of pension provisions to the private sector.	Private sector's management of pension funds is an effective social protection mechanism, as pensions will be shielded from political risks, changes in legislation and or changes in government policies and administration.
Pension funding comes exclusively from private individual savings	Fiscal transfers are not necessary to fund payments of Pillars II and III pensions as pensions are strictly based on "self-provision"
The introduction of Pillar II will facilitate reforms in the state pensions particularly in respect of addressing population ageing and resulting fiscal constraints by tempering and or	Sensitization and rationalization of state pension benefits is necessary to ensure the long-term sustainability of state pensions and to improve the country's fiscal

Advantages and Functions	Economic Growth, Social Considerations and Fiscal Requirements
reducing the generosity in state pensions taking into account the sustainability of the state pension programs.	position[91].
Development, growth and expansion of the capital market.	Please see section 3.6 below for a brief summary of how Pillar II supports the development, growth and expansion of capital markets

3.4 Pillar II Pension and its Advantages to the Participants

Functions	Advantages to Participants
Pillar II Pension enforces strict compliance to accurate and prompt record keeping. The preparation and issuance of participant's individual pension savings account statements, enhances and strengthens transparency in pension administration.	Individual pensions savings accounts creates a sense of "ownership" on the part of the participant(s) in the assets accumulated in his/her individual savings account.
The defined contribution characteristic of Pillar II directly links contributions to pension benefits.	Significant support and participation from the formal sector reduces the incentives for early retirement, thus resulting to positive effects on labor supply, labor earnings, and the savings rate.
Pre-funding of pension obligations; pension assets are privately managed, invested in assets that are segregated from the other assets of the pension entity and participants' savings are protected against garnishments	Increased safety, security and profitability of pension assets. Pre-funding ensures that a fund is created and maintained at all times to match pension liabilities. Pension rights cannot be forfeited.
Prudent regulatory and oversight norms	Regulation enhances the safety and security of pension assets and monitors the viability of the pension scheme resulting to greater protection of pension participants.
Fiduciary duties and responsibilities of persons holding responsible positions in the pension provider, asset management and asset custodian, entities	The fiduciary liability of persons holding responsible positions ensures heighten protection of pension assets and pension participants

3.5 Oppositions and Threats to Robust Development of Pillar II Pension

[91] See: DeliaVelculescu, IMF "Pension Reforms in Emerging Europe: The Uncertain Road Ahead". 2010

Oppositions and Threats	Solutions
Political sensitivity that is usually a natural reaction whenever performance of personal activity is forced by government.	Strong political support for public awareness on the benefits of securing pension benefits through incentivized savings mechanism of "self-provision" for pension
Public apprehension that pension benefits and entitlements under the state pension would eventually stop.	Government's assurance that Pillar II pensions benefits will not replace, but will only supplement the pension entitlements under the state pensions.
Mandatory savings pensions do not guarantee the amount of retirement income. Participants with low income and with short period to make savings may not be able to save for decent pension when they retire.	The mandatory character of Pillar II pension could apply only to income earners that will have at least 20 years to save (45 years and below) and to those earning monthly income of at least 400 GEL.
If there is already a voluntary pension (Pillar III) platform there is no need for a mandatory savings (Pillar II) pensions	Voluntary pensions are designed for high income individuals or for pension schemes established by employers that likewise contribute to the pension savings. Moreover, the voluntary character of Pillar III pension do not attract savings by lower income earners who have more need to save a portion of their earnings for their retirement.
The costs of administering the pension scheme decrease the value of pension assets, thus reducing individual participant's savings. Indeed, pension administration, including those related to enrolling participants, collection of contributions, record keeping and maintenance of individual pension savings accounts, would involve costs; in addition to asset management and asset custodial service fees.	These costs are even higher in the case of voluntary pensions where pension participation is individually solicited. Most countries in initiating private pension system adopted the following solutions: • Pillar II pension administration is given to a Trust established by the Government. This set up reduces the costs relating to enrolling participants and collecting contributions. • Central record keeping – only one IT system needs to be installed and maintained. Central record keeping not only to reduce costs but also to ensure that accounting and reporting of individual accounts are standardized for all participants. • Not-for-profit legal entities. Private pension fund entities (founders) are organized and ran as not-for-profit entities and are not permitted to engage in any kind of business activity other than as pension provider, such as in Chile and most

Oppositions and Threats	Solutions
	Latin American countries. • Management and custody of pension assets are performed by the private sector and they robustly compete in terms of fees and return of investment.

3.6 Private Pillar II Systems and Capital Market Development[92]

Private, fully funded Pillar II Pension systems are expected to improve the efficiency of saving and investment decisions while also expanding capital markets. Some studies provide support in favor of specific outcomes

1. ***A larger capital market***: Funded pension systems lead to increased personal savings, especially if there are constraints that do not allow individuals to borrow against future pensions (Corsetti and Schmidt-Hebbel, 1997, Poterba et al 1996, World Bank, 1993). If not offset by larger fiscal deficits, national saving and investment could also rise, with beneficial effects on growth, as documented empirically for Chile (Holzmann, 1997, and Corbo and Schmidt-Hebbel, 2003).
2. ***Improvements in regulation and transparency of capital markets***: Pension funds' demand for financial instruments helps drive investor protection regulations. The quality and timeliness of information to investors is likely to improve corresponding to the higher quality of requirements imposed by pension funds; the creation of risk-rating systems also improves transparency (see empirical evidence provided in Walker and Lefort, 2002).
3. ***Better corporate governance practices***: Higher demand and more stringent requirements by pension funds serve to improve regulations aimed at minimizing conflicts of interest risk and strengthening rights of minority shareholders (see Blake and Orszag, 1998, Iglesias 2000, del Guercio and Hawkins, 1999).
4. ***Improvements in financial innovation:*** The significant size of investments by pension funds lead to the development of institutions, such as custodians, clearing mechanisms, electronic trading platforms, corporate bonds, indexed instruments, and index futures (see Bodie, 1990).
5. ***Lower cost of capital and security-price volatility***: The higher risk tolerance and longer investment horizon of pension funds implies that risk premia would fall, lowering the cost of capital (Walker and Lefort 2002).
6. ***Higher quality of investment decisions and increased financial integration***: As private pension funds hold a greater proportion of long-term assets, they can better pool and diversify risks, have access to better information, and could diversify portfolios leading to greater financial market integration.

Nevertheless, private pension funds may also lead to more risk-taking by banks, short-term and herding behavior that may exacerbate volatility at times of high financial stress, and neglect of small firms in favor of investments in large companies. Some important preconditions for pension reform include: a strong regulatory framework, a sound banking

[92] DeliaVelculescu, IMF, "Pension Reforms in Emerging Europe: The Uncertain Road Ahead". 2010. This subsection 3.6 was drawn from "Box 1: Private Pillar II Systems and Capital Market Development" of the above cited report.

sector, a strong insurance sector, and sound macroeconomic policies—which, together with flexibility of investment decisions, are crucial in reinforcing the pension funds' beneficial effects on capital market development.

3.7 PRIVATE PENSION SYSTEMS IN SELECTED COUNTRIES

Country	Year started	Mandatory	Voluntary	% DB	% DC
Central & Eastern Europe & Central Asia					
Czech Rep.	1994		X		100%
Estonia	2002	X			100%
Hungary	1998	X	X		100%
Poland	1999	X			100%
Kazakhstan	1998	X			100%
Bulgaria	2002	X	X		
Croatia	2002	X	X		
Kosovo	2002	X	X		
Latvia	2001	X	X		
Lithuania	2004		X		
Macedonia	2006	X			100%
Romania	2008	X	X		
Russia	2002	X	X		
Slovak Rep.	2005		X		100%
Turkey	2001	X (O)	X		
Ukraine	N/A	X	X		
Azerbaijan	1992	X			100%
Belarus	N/A	X			100%
Moldova	2011	X			100%
Uzbekistan	1998	X			100%
Armenia	Law Passed in 2011, Effective 1/1/2014	X	X		100%

Country	Year started	Mandatory	Voluntary	% DB	% DC
Latin America					
Argentina	1994	X			100%
Bolivia	1997	X			100%
Brazil	1977		X (O)		100%
Chile	1981	X			100%
Columbia	1994	X			100%
Costa Rica	2001	X	X		100%
El Salvador	1998	X			100%
Peru	1993	X			100%
Mexico	1998	X			100%
Uruguay	1996	X			100%
North America					
Canada	1965		X (O)	84%	16%
USA	1947		X (O)	71%	29%
Western Europe					
Netherlands	1952	X (O)		95%	5%
Sweden	1967/2000	X (O)	X (O)	95%	5%
U.K.	1834		X (O)	79%	21%
Asia & the Pacific					
Australia	1992	X (O)		10%	90%
Hong Kong	2000	X (O)			100%
India	2004	X	X	NA	NA

X – Open pension fund, anyone can participate.

O – Occupational pension fund. Membership is restricted to employees of sponsoring employer or group of employers.

4. The Pillar III Pension System

4.1 Pillar III is the voluntary pension system where anyone with legal capacity to enter into contract, regardless of working status, age, employed or unemployed, earning wage or income, can participate.

4.2 The Pillar III system is a platform where:

- Individuals who are not employed or earning income but have current funds to set aside can build their pension savings in pension funds that are available in the voluntary market.
- Individuals who are not required by law to enroll in the mandatory Pillar II Pension may save for their retirement income. For instance, Pillar II Pension prescribes a minimum level of salary or income as well as the minimum and maximum ages of workers to participate. Workers who fall outside of the prescribed age and income parameters may, on a voluntary basis, still participate in the Pillar II Pensions or build their retirement funds under the Pillar III Pensions.
- Workers who are enrolled in the Pillar II Pensions may still save under the Pillar III Pension Funds, on a voluntary basis, in amounts exceeding the mandatory contribution rates and levels in order to create supplemental pension benefits.
- Occupational DB pension schemes.
- Individuals who would prefer to save in a pension fund for better return and safety that is generally realized in pooled and diversified investment of pension assets.

  Individuals who want more flexibility to use pension savings for purposes other than income at retirement, including the ability to receive lump sum payment on retirement.

5. Weaknesses and Threats of the Pillar II and Pillar III Pension Schemes

Pillar II-Mandatory Savings	**Pillar III-Voluntary Pensions**
Weaknesses	**Weaknesses**
Inability to provide universal old-age income security as large segments of the work force are not covered by formal schemes Reaching the self-employed and others in the informal labor sector is a huge challenge	Inability to provide universal old-age income security where large portions of the work force are not covered by formal schemes. The costs to reach and enroll participants in the system are comparatively high because participation is solicited, servicing of several schemes requires special skills. Also costs related to individually solicited and serviced business further reduce the future amount of pensions.
Politically sensitive as forced savings does not appeal to the general population especially to the low-income individuals.	Acquisition and distribution costs are high especially for membership solicitation resulting in many “hidden” back-end costs to participant.
Benefits are linked to contributions resulting in lower pension benefits for low-income workers compared to the pensions of high–	Greater ease for participants in taking out all or part of their savings (withdrawal) may result to non attainment of retirement income

income participants.	targets
Some restrictions and costs exist for transferring accumulated savings from one pension fund company to another.	A private contract exists between insurers, or the pension providers, and participants/sponsors. The pension funds have restrictions and high fees for transferring funds from one pension provider to another.
Public sector needs to commit resources for awareness and confidence building.	Because of its voluntary nature, a mechanism for regulating market norms to ensure adequate protection of participants needs to be continually developed.
The pension amount is not guaranteed	The DC pension amount is not guaranteed
Threats	**Threats**
Failure to optimize investment income due to lack of investment instruments in an undeveloped capital market	Too much motivation for profit may lead to lower benefits to participants
Volatility in the labor market such as long periods of unemployment, even for young workers, would result to low levels of pension savings accumulation.	Conflict of interest is inherent. The physical segregation of pension assets from the general assets of the insurer or bank that provides pensions requires increased supervisory oversight
Credibility issues in the private sector particularly because pensions involve long-term commitments	Credibility issues particularly in the private sector

6. Conclusions

6.1 A mandatory savings pension system ensures increased national private savings and catalyzes long-term capital generation that can be reinvested in the economy for an array of programs. For instance, increased capital may generate employment opportunities; increase domestic productivity, as well as easing the long-term fiscal burden of the state pension and social assistance programs.

6.2 A well structured mandatory savings pensions facilitates the following long-term policy objectives of the Georgian Government:

6.2.1 Creation of a pension system covering the entire population**:** The development and implementation of a mandatory savings pension in Georgia will result to increased retirement income of workers who save for their pensions';

6.2.2 A mandatory savings pension system facilitates the rationalization of the state pension to ensure its long-term sustainability and brings about needed changes in the legal and regulatory framework of the non-state pension funds resulting to the development of the voluntary pension system, as a whole.

6.2.3 Long term solutions**:** The best pension policy is one that leads to creating pension systems that are sustainable in the long term and at the same time addresses immediate and recurring socio-economic and political pressures as well as fiscal or budgetary constraints associated with changing demographics in Georgia.

6.2.4 Promote economic development**:** The pension systems promote accumulation of long- term savings that can be used to increase national productivity, augment capital investment and create a robust labor market. These gains are preferable to relying on alternative financing mechanisms such as government borrowings.

6.2.5 A mandatory savings pension system generates predictable long-term assets for investment. This capital accumulation catalyzes capital market development and human competencies in the financial services sectors as pension providers and asset managers continually seek investment instruments that give the optimum investment returns of participants' pension savings.

6.3 Georgia's demographic trends indicate an increasing number of people above 65 years of age or elderly. The current dependency ratio of 2:10 offers the best time to establish a mandatory savings pension system for wage and income earners to save for additional retirement income. Please note that the average dependency rates in the EU 10 countries when they considered including Pillar II in their pension reforms was 17% or a ratio of 1.7:10.

6.4 The Georgian Government and private sectors are interested in creating and establishing long-term capital resources to catalyze investment and financial sector growth.

6.5 A mandatory pension system would help ease political pressure in respect to many issues relating to availability of long-term funds to finance infrastructural developments which are essential for economic growth.

ANNEX 6

The following pages include the report on Pension Development in Georgia by PMCG.

USAID FROM THE AMERICAN PEOPLE | GEORGIA

PENSION DEVELOPMENT IN GEORGIA

FINAL REPORT

Thursday, March 29, 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Deloitte Consulting LLP.

PENSION DEVELOPMENT IN GEORGIA

FINAL REPORT

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

CONTRACT NUMBER: AID-114-C-10-00004

DELOITTE CONSULTING LLP

USAID/CAUCASUS

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DATA

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ii. Project Information

Project Title	Pension Development
Location of Project	Tbilisi, Georgia
Starting Date	July 11, 2011
End Date	August 26, 2011
Project Objective	The goal of this assignment was to conduct a comprehensive analysis of demographic and macroeconomic data essential for pension development to estimatethe potential sources of accumulated savings.

ABSTRACT

The goal of this assignment was to conduct a comprehensive analysis of demographic and macroeconomic data essential for pension development to estimate the potential sources of accumulated savings.

The study reviewed the current public pension system and analyzed the existing Georgian pension system and potential supplementary pension systems, such as the World Bank Pillar II[1] (Pillar II) or mandatory pension savings and the World Bank Pillar III[2] (Pillar III) or voluntary pension systems. This report forecasts the development of the mandatory and voluntary pension systems by producing and composing mandatory pension savings and voluntary pension scenarios.

PMCG was contracted by EPI to perform the following tasks: gathering, organizing and analyzing demographic and economic data and indicators from the National Statistics Office of Georgia (Geostat), National Bank of Georgia (NBG) and Social Service Agency (SSA). Based on this statistical data, PMCG developed estimates and projections.

Keywords: Demographic and socioeconomic indicators: population (births and deaths), labor force participation, number of employees in formal and informal (self-employed) sectors, Real and Nominal gross domestic product (GDP), GDP deflator, consumer price index (CPI), wages/salaries and incomes (for self-employed) and the number of pensioners receiving public pension payments.

[1] According to our assumption, Pillar II is a mandatory pension savings scheme. Participation is mandatory for employees below the age of 45 with a monthly salary/income of Georgia Lari (GEL) 400 or more.

[2] According to our assumption, Pillar III is a voluntary pension scheme where participants in the non- governmental pension funds are employees with a monthly salary/income of over GEL 1000.

ABBREVIATIONS

CPI	Consumer Price Index
Geostat	National Statistics Office of Georgia
GoG	Government of Georgia
NBG	National Bank of Georgia
Nominal GDP	Gross Domestic Product in current prices
Real GDP	Gross Domestic Product in constant prices
SSA	Social Service Agency

CONTENTS

I. EXECUTIVE SUMMARY

The Georgian state pension system has been in existence for a long time providing monthly pensions to elderly, registered as aged 65 years for men and 60 years for women, the disabled, surviving spouses and dependents of family breadwinners, internally displaced people and others specified by the Georgian legislation. The current pension system in Georgia is a universal pay-as-you-go pension model where payouts are allocated from the state budget.

The current voluntary private pension schemes are not designed to generate capital for long-term investments. This is primarily due to the participants' ability to access and withdraw their savings from the accumulated pension fund sources for purposes other than retirement income. Currently, the amount of total assets of voluntary pension funds is insignificant, which makes it difficult to factor them in any type of investment decisions. In addition, Georgian citizens do not receive any tax incentives for making pension savings in non- state pension funds.

There are many pros and cons for implementing either a Pillar II or a Pillar III supplementary pension system, and both Pillars provide a decent retirement income. Pillar II is strictly a defined contribution scheme where an individual's savings, such as contributions and earnings, accumulate to finance his or her retirement income. Alternatively, Pillar III may be a defined contribution scheme or a defined benefit plan where pension is a guaranteed amount and the pension fund provider finances the accruing pension liabilities.

The goal of this assignment was to conduct a comprehensive analysis of demographic and macroeconomic data essential for pension development to estimate the potential sources of accumulated savings.

The study reviewed the current state pension system and analyzed the potential for developing a Georgian supplementary Voluntary Pension System.This report forecasts the development of the Mandatory and Voluntary Pension Systems by producing and composing scenarios in respect of savings and asset accumulation under a mandatory pension savings and voluntary pension.

The initial tasks involved gathering, organizing and analyzing demographic and economic data and indicators from Geostat, NBG and SSA. Based on these statistical data, we developed our estimatesand projections.

All the calculations, such as assumptions, estimations, and projections, were conducted in an MS Office Excel program and explanations of these calculations are provided in this report. To provide additional clarity for these calculations, the Excel workbook is attached to this report in Annex 4.

The following were analyzed: Demographic data such as population births and deaths, calculation of labor force participation, number of employees in formal and informal, self-employed, sectors and pension beneficiaries. The employment indicators, such as labor force, hired employees and self-employed, have been estimated to define participants in the Pillar II and Pillar III systems. In order to predict the growth of wages, salaries and self-employed incomes and the current pension payments PMCG also examined CPI, Real and Nominal GDP.

II. APPENDICES

A. BACKGROUND

B. METHODOLOGY

C. FINDINGS

D. CONSIDERATIONS

E. ADDITIONAL INFORMATION

A. BACKGROUND

CURRENT PENSION SYSTEM

The current Georgian pension system is a universal "pay-as-you-go" pension model. According to the State Pension Act of Georgia, elderly Georgian citizens, legislated as men over 65 years of age and women over 60 years of age, must register with aregional branch of the SSA in order to receive old agepension. During the last few years, the amount of pension payments has increased, and since September 15, 2011, the current pension payment increased from GEL 80 per month to GEL 100 per month. The regular increase in the monthly pension benefits does not correlate to economic growth, but instead it is based on the Georgian Government (GoG)'s commitment to supporting its elderly, disabled, survivors, and IDPs citizens.

There are several factors that impact thedevelopment of the Georgian state pension system, such as the global impact of the US sub-prime mortgage crisis, and sovereign debt credit crunch in the Euro zone.

The current Georgian state pension system supports various populations groups such as the elderly, the disabled, internally displaced people, and surviving spouses of breadwinners among others.

A general trend is that while the number of state pension beneficiaries decreased over time, the numbers of elderly pensioners are increasing.

Table 1: The State Pension Recent Statistics

	2008	2009	2010	2011 (August)	2011[3]
State pension beneficiaries	842,246	838,493	835,901	828,203	828,203
State pension payments, mInimum	647,5	741,7	781,4	516,9	581,5
Old-age pension beneficiaries	658,310	659,964	662,288	662,978	662,978
Single pension payment	55-70	80	80	80	100
Old-age pension payments[4], minimum	509,4	599,6	634,5	423,5[5]	795,6[6]
Pension/GDP, percent	2,9	3,5	3,1	2,7	3,4[7]

[3] Not statistical data, but an estimated calculation is presented for 2011.

[4] Actually paid during the years.

[5] During January – August, 2011.

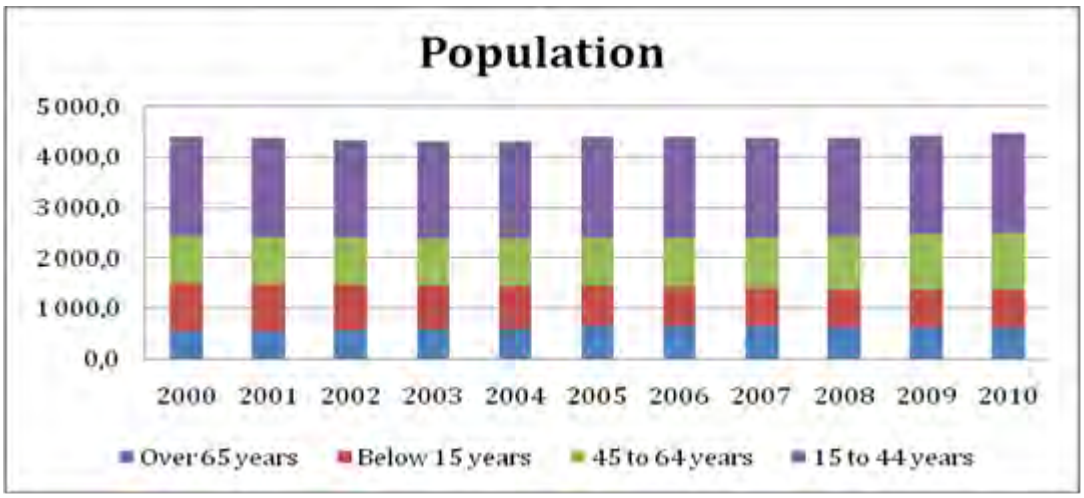
[6] Implicit amount based on the number of pensioners by August 2011.

Source: SSA

POPULATION

Since 2007, the total population of Georgia has increased from 4,382 million in 2007 to 4,469 million in 2010. The population of both men and women age 15 and over has also grown from 3,591 million in 2005 to 3,710 million in 2010. In addition, the 45 to 64 years age group increased from 0,969 million in 2005 to 1,120 million in 2010. However, the 15 to 44 age group's growth rate shifted in the last six years as the number of men increased from 2005 to 2010 while the number of women decreased. Since 2002, the Georgian population between the ages of 45 to 64 has increased which will lead to a larger elderly population in the near future. Since 2002, the number of pensioners declined slightly that was caused by a sliding scale in the younger generation, aged 45 to 64 years old, during the years 1989 to 2002. This data is synopsized below in Table 2.

Diagram 1: Population 2000-2010



Source: Geostat

Table 2: Demographic Statistics, 2005-2010

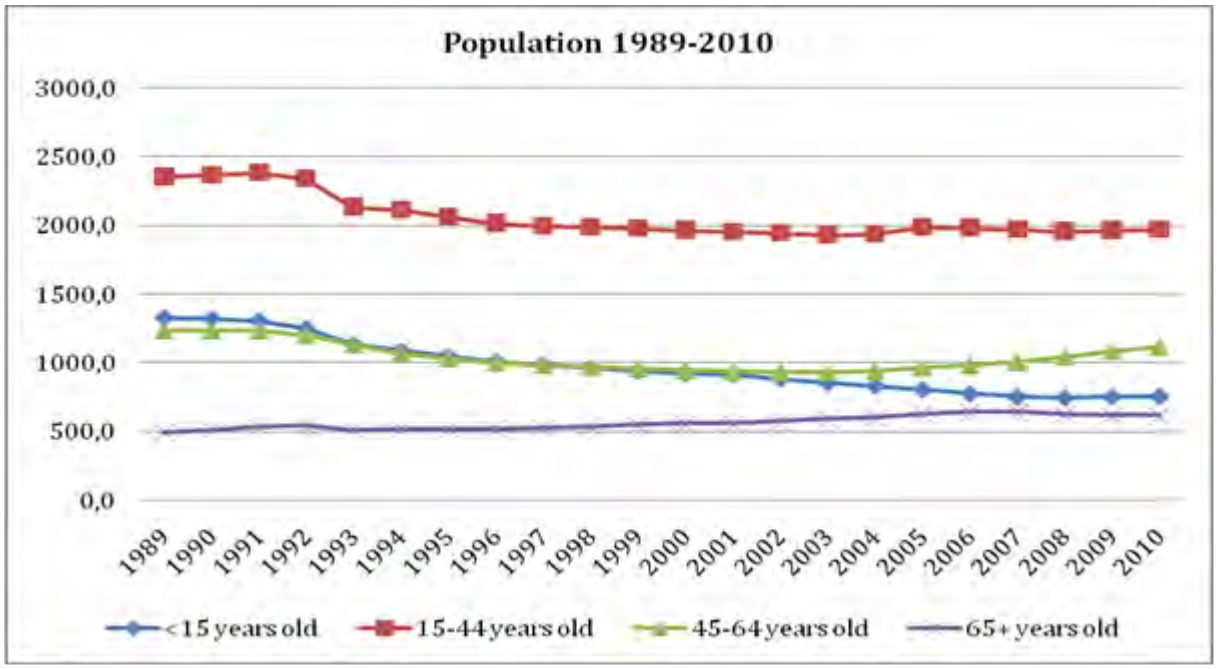
	2005	2006	2007	2008	2009	2010
POPULATION (total)	**4 401,3**	**4 394,7**	**4 382,1**	**4 385,4**	**4 436,4**	**4 469,3**
Male	**2 083,9**	**2 079,5**	**2 078,4**	**2 080,8**	**2 108,9**	**2 127,4**
Female	**2 317,4**	**2 315,2**	**2 303,7**	**2 304,6**	**2 327,5**	**2 341,9**
POPULATION over 15 years	**3 591,3**	**3 615,5**	**3 627,1**	**3 635,8**	**3 679,9**	**3 709,8**

[7] Nominal GDP for 2011 is not an actual value.

	2005	2006	2007	2008	2009	2010
Male	**1 663,2**	**1 673,5**	**1 682,8**	**1 685,4**	**1 710,2**	**1 727,0**
Female	**1 928,1**	**1 942,0**	**1 944,3**	**1 950,4**	**1 969,7**	**1 982,8**
POPULATION below 15 years	**810,0**	**779,2**	**755,0**	**749,6**	**756,5**	**759,4**
Male	**420,7**	**406,0**	**395,6**	**395,4**	**398,7**	**400,3**
Female	**389,3**	**373,2**	**359,4**	**354,2**	**357,8**	**359,1**
POPULATION from 15 to 44 years	**1 991,0**	**1 986,4**	**1 973,8**	**1 958,1**	**1 967,8**	**1 972,7**
Male	**976,0**	**974,9**	**973,8**	**967,5**	**975,9**	**981,7**
Female	**1 015,0**	**1 011,5**	**1 000,0**	**990,6**	**991,9**	**991,0**
POPULATION from 45 to 64 years	**969,4**	**985,8**	**1 010,4**	**1 047,4**	**1 090,2**	**1 120,5**
Male	**442,9**	**450,3**	**462,6**	**478,4**	**499,1**	**512,5**
Female	**526,5**	**535,5**	**547,8**	**569,0**	**591,1**	**608,0**
POPULATION over 65 years old	**630,9**	**643,3**	**642,9**	**630,3**	**621,9**	**616,6**
Male	**244,3**	**248,3**	**246,4**	**239,5**	**235,2**	**232,8**
Female	**386,6**	**395,0**	**396,5**	**390,8**	**386,7**	**383,8**
POPULATION from 15 to 64 years	**2 960,4**	**2 972,2**	**2 984,2**	**3 005,5**	**3 058,0**	**3 093,2**
Male	**1 418,9**	**1 425,2**	**1 436,4**	**1 445,9**	**1 475,0**	**1 494,2**
Female	**1 541,5**	**1 547,0**	**1 547,8**	**1 559,6**	**1 583,0**	**1 599,0**

Source: Geostat

Diagram 2: Population of Georgia since 1989



Source: Geostat

ECONOMIC INDICATORS

The Georgian economy was negatively impacted by both the 2008 War and the world financial crisis, resulting in a decline in real GDP by 3.8%, after experiencing growth of 2.4% in 2008. While the Georgian economy grew by 6.4**%** in 2010, the country also registered an average annual inflation, or CPI change, of 7.1% up from 1.7% in 2009. This increase in inflation was due to higher international prices for commodities and agricultural products.

Table 3: Basic Economic Indicators, 2005-2010[8]

	2005	2006	2007	2008	2009	2010
GDP (nominal), minimum	11621,0	13790,0	16994,0	19075,0	17986,0	20791,0
GDP (real), minimum	8561,4	9365,0	10521,0	10774,7	10365,6	11026,5
GDP (real), changes	9,6%	9,4%	12,3%	2,4%	-3,8%	6,4%
GDP deflator changes	7,9%	8,5%	9,7%	9,6%	-2,0%	8,7%
GDP deflator index (base year - 2000)	135,7	147,3	161,5	177,0	173,5	188,6
GDP per capita nominal	2689,1	3133,1	3866,9	4352,9	4101,3	4686,5

[8] Source: The International Monetary Fund, http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/weorept.aspx?pr.x=50&pr.y=14&sy=1994&ey=2016&scsm=1&ssd=1&sort=country&ds=.&br=1&c=915&s=NGDP_R%2CNGDP_RPCH%2CNGDP%2CNGDP_D%2CNGDPRPC%2CNGDPPC%2CPPPGDP%2CPPPPC%2CPPPSH%2CNGSD_NGDP%2CPCPI%2CPCPIPCH%2CLUR%2CLP&grp=0&a=#cs11. This table was used for projections of CPI and real and nominal GDP.

GDP per capita real	1981,1	2127,7	2394,0	2458,8	2363,7	2485,5
CPI, index (base year - 2000)	132,5	144,6	158,0	173,8	176,8	189,4
Average inflation rate	8,3%	9,2%	9,2%	10,0%	1,7%	7,1%

LABOR FORCE[9]

The Georgian active labor[10] force forms the backbone of the country's working population has declined since 2006. In 2009, the active labor force increased by 3.9% from 2008, and approximately 53% of the working population was self-employed, mainly in agriculture, trade and services. While the active labor force declined by 2.4% between 2009 and 2010, the number of hired employees increased by 8% from 2008 to 2010 and the self-employed decreased by 2.1%. As a result of the 2008 War and the economic crisis, the Georgian unemployment level increased from 13.3% to 16.9 % from 2007 to 2009 and slightly declined to 16.3% in 2010. According to Geostat, the average nominal monthly salary of Georgian hired employees grew rapidly during the last few years to GEL 535 in 2008 and GEL 609 in 2010, as compared to GEL 368 in 2007 and GEL 277 in 2006. The general salary increase for governmental and civil positions created more public interests for these jobs while also generating a rise in private sector salaries.

Table 4: Employment Statistics

**** In thousands***	**2006**	**2007**	**2008**	**2009**	**2010**
Total Population	4,401.3	4,394.7	4,382.1	4,385.4	4,469.3
Labor Force (aged 15 years and over)	2,021.8	1,965.3	1,917.8	1,991.8	1,944.9
Average Monthly Earnings (GEL)	277.9	368.1	534.9	556.8	609.4
Employed	1,747.3	1,704.3	1,601.9	1,656.1	1628.1
Hired	*603.9*	*625.4*	*572.4*	*596.0*	618.6
Self-employed	*1,141.6*	*1,078.8*	*1,028.5*	*1,059.0*	1007.1
Not-identified	*1.8*	*0.1*	*1.1*	*1.2*	1.2
Unemployed	274.5	261.0	315.8	335.6	318.3
People Beyond the Labor Force	1128	1138.6	1145.2	1139.3	1083.3
Activity Rate[11] *(%)*	62.2	63.3	62.6	63.6	64.2
Unemployment Rate *(%)*	13.6	13.3	16.5	16.9	16.3
Employment Rate by Age Groups *(%)*	53.8	54,9	52.3	52.9	53.8

[9] All statistical data is from Geostat

[10] Active labor force refers to female between age 15 and 60 and/or male between age 15 and 65

[11] According to the Geostat standard measurement, the activity rate is a ratio of the total labor force to the number of total labor force and the people beyond the labor force.

* In thousands	2006	2007	2008	2009	2010
15-24 years	23.0	21.4	23.1	22.7	24.2
25-34 years	56.8	59.5	55.9	54.6	56.5
35-44 years	68.9	70.7	68.1	68.8	70.6
45 years and over	59.5	61.1	56.9	58.0	58.3

Source: Geostat

Table 5: Employment Statistics (in thousands)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Active Labor by Years	**1972,8**	**1939,3**	**2049,2**	**2113,3**	**2104,2**	**2050,8**	**2041,0**	**2023,9**	**2021,8**	**1965,3**	**1917,8**	**1991,8**	**1944,9**
Male	1035,4	1021,7	1062,2	1093,6	1109,6	1082,0	1069,7	1074,4	1085,8	1031,8	1028,0	1071,3	1037,1
Female	937,4	917,6	987,0	1019,7	994,6	968,7	971,3	949,5	935,9	933,5	889,7	920,5	907,9
Employed	**1728,5**	**1694,4**	**1837,2**	**1877,7**	**1839,2**	**1814,9**	**1783,3**	**1744,6**	**1747,3**	**1704,3**	**1601,9**	**1656,1**	**1628,1**
Male	905,3	879,1	945,5	966,7	954,1	957,9	926,5	915,2	920,4	888,1	855,6	877,6	851,4
Female	823,2	815,3	891,7	911,0	885,1	857,0	856,9	829,4	826,8	816,2	746,3	778,6	776,7
Hired/salared labors	**724,4**	**697,5**	**683,9**	**654,3**	**650,9**	**618,5**	**600,9**	**600,5**	**603,9**	**625,4**	**572,4**	**596,0**	**618,6**
Male	374,9	370,7	354,4	336,0	333,0	323,6	304,4	314,1	316,5	331,9	313,1	317,4	318,3
Female	349,6	326,8	329,5	318,3	317,9	294,9	296,5	286,4	287,4	293,5	259,2	278,5	300,2
Self-emploeyd	**987,1**	**918,6**	**1041,2**	**1136,1**	**1184,9**	**1195,2**	**1180,8**	**1143,3**	**1141,6**	**1078,8**	**1028,5**	**1059,0**	**1007,1**
Male	520,6	472,9	536,0	584,0	618,4	633,4	620,8	600,5	602,6	556,2	541,5	559,0	531,5
Female	466,6	445,7	505,2	552,0	566,5	561,7	560,1	542,8	539,0	522,6	487,0	500,0	475,6
Undefined	**17,0**	**78,4**	**112,1**	**87,3**	**3,4**	**1,3**	**1,6**	**0,8**	**1,8**	**0,1**	**1,1**	**1,2**	**2,4**
Male	9,9	35,5	55,1	46,7	2,7	0,8	1,3	0,6	1,4	0,0	1,0	1,2	1,6
Female	7,1	42,9	56,9	40,7	0,7	0,4	0,2	0,2	0,4	0,1	0,1	0,1	0,8
Unemployed	**244,2**	**244,9**	**212,0**	**235,6**	**265,0**	**235,9**	**257,6**	**279,3**	**274,5**	**261,0**	**315,8**	**335,6**	**316,9**
Male	130,0	142,6	116,7	126,9	155,5	124,2	143,2	159,2	165,4	143,7	172,4	193,7	185,6
Female	114,2	102,3	95,3	108,7	109,5	111,7	114,4	120,1	109,1	117,3	143,4	141,9	131,2
People beyond labor force	**1044,0**	**1086,9**	**1092,3**	**1077,7**	**1135,3**	**1048,4**	**1105,9**	**1136,1**	**1228,0**	**1138,6**	**1145,2**	**1139,3**	**1083,3**

B. METHODOLOGY

In order to analyze and appropriately project demographic, employment and economic indicators and trends, PMCG utilized statistical employment and population data from the National Statistical office of Georgia (Geostat) or their on-line web site at www.geostat.ge. In several cases, Geostat prepared statistical information for this report which is not available on their website.

PMCG used the birth and mortality rate from the last 50 years to project population growth for the next half century. PMCG then used these results to create the Population Growth Table.

Employment growth is related to population growth and is estimated as a ratio of the average number of employees to the total labor force. In order to calculate the average ratio of a particular age group, PMCG considered the proportion of that age group to the total labor force.

For the projection of the average monthly salary, PMCG took into account the projected economic growth and average inflation.

GDP growth rate for the next 20 years is based on the average growth rate over last 15 years and the CPI growth rate is based on the International Monetary Fund (IMF) forecast. These two indicators are directly connected to the projections of the average salary and public pension level.

More detailed explanations of these analyses are presented below.

POPULATION GROWTH

The year-by-year Georgian population growth is calculated according to both the mortality and fertility rates. The population time series does not imply any shocks or disturbances over the projected period. The live birth rate for the last period was approximately 14.4 per 1,000 people according to data from the European Economic Community (EEC) and former Soviet countries. The Georgian population demonstrated a positive growth trend while the birth rate of 14.4 per 1,000 is a modest coefficient and may increase in future. According to Projected Population Growth Table 6, the total Georgian population will increase from 4,469 million in 2010 to 4,676 million in 2032 to 5,680 million in 2062. The Georgian population'sgrowth from 2012-2032 is mainly due to increases in the following age groups: (a) below 15 years old group; (b) 45 to 64 years old group; and (c) over 65 years old group. The 15 to 44 year old population group will decline by an average of 0.8% until 2037 because Georgia experienced a negative population growth trend during the last 20 years in the below 15 years old age group.

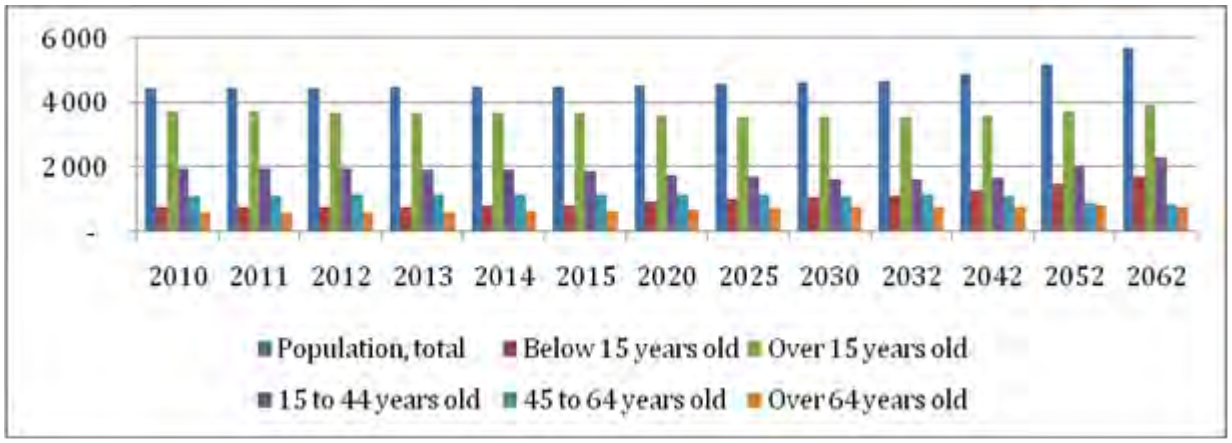
As the fertility rate recently increased, PMCG fixed it at 14.4%, although it can be increased by 10-year periods, per 1,000 people, regardless of gender affiliation. This has persuaded PMCG to project a birth growth with the same rate, which has increased the population number in the long-run forecast (it is especially distinct in the population below 15 years).

Table 6: Population growth by age (in thousands)

Population	2010	2011	2012	2013	2014	2015	2020	2025	2030	2032	2042	2052	2062
Total	**4 469**	**4 472**	**4 477**	**4 481**	**4 486**	**4 491**	**4 525**	**4 574**	**4 643**	**4 676**	**4 888**	**5207**	**5680**
Male	2 127	2 130	2 134	2 137	2 141	2 145	2 171	2 207	2 252	2 273	2 397	2576	2830
Female	2 342	2 342	2 343	2 344	2 345	2 346	2 354	2 367	2 391	2 403	2 491	2631	2850
Below 15	**759**	**769**	**771**	**783**	**797**	**816**	**925**	**1017**	**1093**	**1124**	**1297**	**1497**	**1727**
Male	400	402	406	411	418	427	481	526	565	582	671	774	893
Female	359	361	366	372	379	389	444	491	527	543	626	722	833
Over 15	**3 710**	**3 709**	**3 706**	**3 698**	**3 689**	**3 675**	**3 600**	**3 557**	**3 550**	**3 552**	**3 591**	**3710**	**3953**
Male	1 727	1 729	1 728	1 726	1 723	1 718	1 690	1 681	1 687	1 691	1 726	1801	1936
Female	1 983	1 981	1 978	1 972	1 966	1 957	1 910	1 876	1 863	1 860	1 865	1909	2017
15 to 44	**1973**	**1962**	**1951**	**1933**	**1917**	**1891**	**1775**	**1695**	**1639**	**1620**	**1669**	**1998**	**2308**
Male	982	979	975	968	962	951	899	865	839	831	857	1021	1177
Female	991	983	976	965	955	940	876	829	799	789	811	977	1130
45 to 64	**1121**	**1134**	**1140**	**1148**	**1151**	**1153**	**1159**	**1136**	**1134**	**1151**	**1132**	**900**	**869**
Male	513	519	522	526	528	530	539	535	544	556	556	448	437
Female	608	615	618	621	623	623	620	601	590	596	576	451	432
Over 64	**617**	**613**	**615**	**617**	**622**	**632**	**667**	**726**	**778**	**780**	**790**	**812**	**776**
Male	233	231	231	231	233	237	252	280	304	305	313	332	322
Female	384	382	384	385	389	395	414	445	474	475	477	480	454

Source: Geostat

Diagram 1: Population growth projection (in thousands)



AVERAGE INFLATION AND ECONOMIC GROWTH

For 2012, the average expected inflation rate is 7.9% and the real GDP growth rate is estimated at 6%. In order to avoid disturbances and be more optimistic, PMCG assumed the

economic growth would plateau at 6%[12] until 2032, then decrease to 5% in 2033 and remain stagnant until 2062. The average inflation rate has been projected to be7.9% in 2012, 6.25% in 2013, 5.8% in 2014, 5.5% in 2015, and 5.4% in 2016. PMCG used the April 2011 IMF report as a reference in projecting inflation rates (April 2011). PMCG further assumed that the expected average annual inflation rate from 2017 to 2023 would be fixed at 5% and decrease to 4% from 2024 to 2062. These two indicators correlate to projections of the average salary and public pension levels[13].

Table 7: GDP and Average Inflation Projection

	2010	2011	2012	2013	2014	2015	2020	2025	2030	2032	2042	2052	2062
Real GDP growth	6,4%	5,5%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	5,0%	5,0%	5,0%
Average Inflation	7,1%	12,6%	7,9%	6,25%	5,8%	5,5%	5,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%
Nominal GDP, minimum GEL	20 791	23 577	26 617	29 839	33 289	37 139	63 886	07 046	174 288	211 810	510 708	231 400	2 969 105

EMPLOYMENT ASSUMPTIONS

In order to project scenarios for Pillar II[14], PMCG projected a year-by-year increase in the labor force and accounting for age-based ratios for each of the labor categories ("GEL400+ formal" and "GEL400+ informal"). According to this analysis, the participants using this pension scheme are between 15 to 44 years of age and formally employed as well as 25 to 44 years of age and self-employed. Therefore, in 2012 Pillar II Pension system members are in the15 to 44 years old age group and the Table below accounts for year-by-year age increases.

The formally employed labor force projection is a product of the total labor force and the average ratio of the hired employees. For calculations of the average ratio of a particular age group, the specific age group rate, or the share of the age group in total labor, is taken into consideration. For example, the last five-year average employment rate for the hired labor group in the 15 to 44 years age group is 18.6% and by multiplying it with the total labor force, PMCG determined the number of formally employed people in the 15 to 44 years age group.

In order to project the average monthly salary, PMCG took into account the projected economic growth and average inflation. The average annual growth of monthly average salary from 2011 to 2032 is likely to be 12.2% and is lower than the last four-year average annual of 22.8%. Despite the fact that economic growth and average inflation do not automatically result to a change in the salary level, these macroeconomic parameters impact long-term salary growth.

[12] Based on average economic growth rate 5.93% from 1995 to 2010

[13] Average projected salary at ***t*** period is calculated as the product of estimated average inflation and economic growth rates at ***t*** period times the average projected salary at ***t-1*** period. Calculation is presented in the subsection 'Wages and Incomes' (p. 13). Different estimations of Public Pension Payments are presented in the section 'Projections of Current Pension System Development' (p.15).

[14] The same assumptions are applied in calculation of average salary and number of employees with salary of above GEL 1,000 that is used in Pillar III scenarios

Diagram 2: Average monthly salary growth

Source: Geostat

Based on the assumptions for Pillar II, the projected participants are employees with a monthly salary over GEL 400 before personal income tax (PIT). These participants are labeled as 'GEL 400+formal' for hired employees and 'GEL 400+informal' for the self-employed. In order to calculate the number of 'GEL 400+ formal' PMCG needed to know the 'GEL 400+formal' average monthly salary level and PMCG assumed that the formal labors' salaries are normally distributed. Once PMCG know both the average monthly salaries for the total salary basket and any standard deviations in the average monthly salaries for the years 2006 to 2010 from Geostat, PMCG estimated the percentage of male and female employees with salaries above GEL 400. The same approach is conducted with salaries aboveGEL 1,000 for Pillar III participation.

The next step is to estimate the number of 'GEL 400+formal' employees. As stated above, PMCG calculated the ratios of male and female hired employees with salaries above GEL 400 corresponding to the years 2006 to 2010. By using a linear regression, as shown in diagrams 5 and 6, PMCG determined the linear trend for male and female formal employees with salaries over GEL 400. For instance, in case of male R^2=0.68 and in case of female R^2=0.99 of the stated ratios and knowing the total number of hired employees PMCG calculated the number of hired employees with the salary above 400 GEL.

Diagram 3: Linear trend of male hired employees with salaries above GEL 400

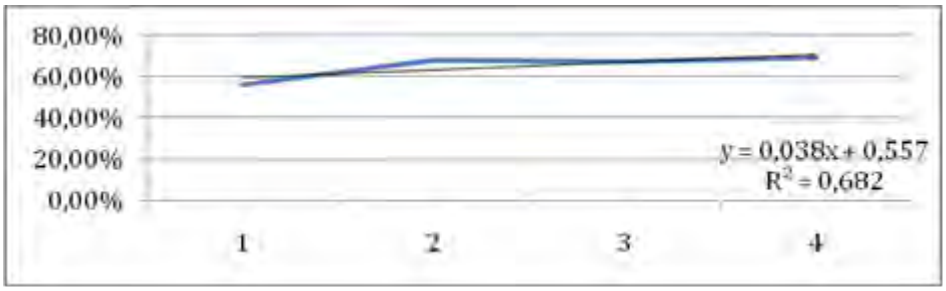
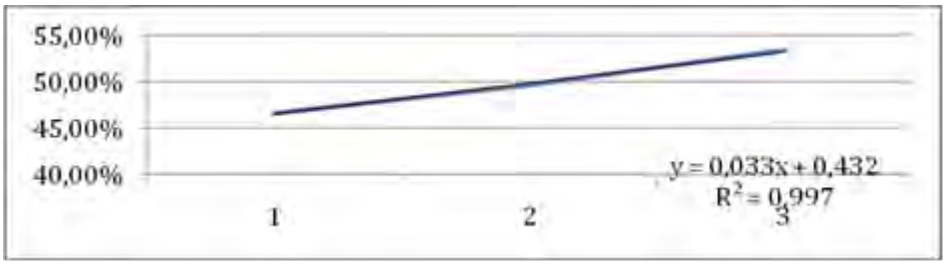


Diagram 4: Linear trend of female hired employees with salaries above GEL 400



According to the same linear equation, PMCG proposed that 94% of hired male employees will have wage or salaries of GEL 400 and above in six years, and 90% of females will have GEL 400 and above in 11 years.

In order to calculate the average salaries for men and women with salaries above GEL 400, PMCG used the same standard deviations of the hired employees' average monthly salaries from 2006–2010. PMCG obtained this data from Geostat and used them to calculate approximate percentage of hired employees with salaries above GEL 400.

In order to calculate the mean for monthly salaries above GEL 400, PMCG assumed that the average monthly salaries below GEL 400 are GEL 300 for men and GEL 200 for women. By using the percentage of hired employees with the salaries above GEL 400 and assumed average salary of the employees under GEL 400, PMCG has calculated the average monthly salary for the employees above GEL 400. The calculation is shown in Annex 4, cells J60-62 in the spreadsheet entitled "GEL400+Formal".

PMCG calculated the average monthly salaries above GEL 400 in 2010 for men with the following formula:

Average monthly salary above GEL 400 =	Average monthly salary — (1 percent of employed men with salaries above GEL 400)*GEL 300/percent of employed men earning above GEL 400

For example:

M – Average Salary (762.9)

U – Average salary below GEL 400 (GEL 300 by our assumption)

A - Average salary over GEL 400 (that we need to find out)

U% - Share of employees with a salary over GEL 400 (31% as calculated)

A% - Share of employees with a salary over GEL 400 (69% as calculated)

U*U% + A*A% = M

A*A% = M - U*U%

A = (M - U*U%) / A%

A = (762.9 – 300*31%)/69%

The low participation rate of the self-employed participants in the Pillar II Mandatory Pension system is not always expressed in the statistical data. However, PMCG propose the self-employed participate in the Pillar II Pension system.

PMCG obtained statistical data detailing the parameters of income earnings for self-employed people from Geostat in order to estimate self-employed average monthly earnings as well as the number of self-employed people earning over GEL 400. Although Geostat's data may not be completely precise and reliable as the gathering information from households has some difficulties, PMCG however applied this data in the calculations. A full 81% of the self-employed people live in the rural areas while 19% reside in Tbilisi, small cities, and towns. PMCG assumed that the number of self-employed participants is only 15% of the rural population and 50% of the urban population. PMCG suggests that these self-employed participants will receive tax incentives for their contributions to the mandatory pension system, and average tax incentivized income is assumed to be about 22% of total taxable income of self-employed participants (0,81*0,15+0,19*0,5).

Based on the above-mentioned information, PMCG projected the annual salary funds for the employees earning above GEL 400 and applied this information to the Pillar II Pension scenarios.

As PMCG know the number of mandatory participants, as detailed in Annex 4, cells 65-67 in the spreadsheets "GEL400+Formal" and "GEL400+Informal",PMCG were able to calculate contributions as detailed in Annex 4, cells 78-79; 84-85; and 90-91 in the spreadsheets "GEL400+Formal" and "GEL400+Informal".

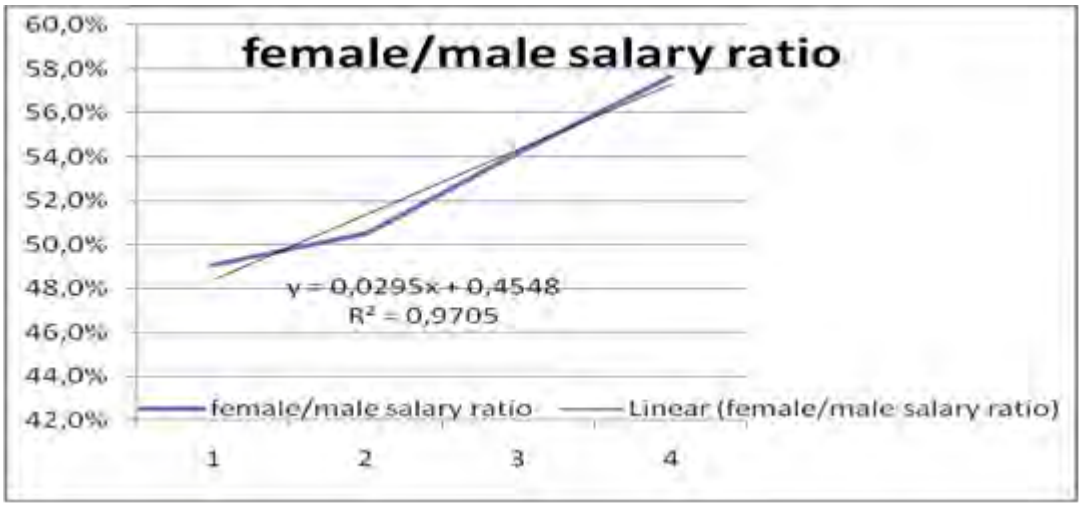
So for the total informal sector, the self-employed participants' average tax incentivized income intended for the Mandatory Pension System is assumed to be 22%. The number of self-employed participants is adjusted again because of the assumed participation rate, which varies in different scenarios. The net investment return is considered 6% and 4%, net for both formal and informal sectors.

WAGES AND INCOMES

The average salary growth in the projections is correlated to economic growth and average inflation rates as salary growth is related to changes in these economic indicators. Based upon this assumption, the calculated average annual growth of the average salary from 2011 to 2032 is about 12.2% and the average for the last four years is 22.8%.

In order to calculate the estimated average annual salary from 2012 to 2032 for the male hired employees, PMCG multiplied the previous year's salary with average inflation and economic growth rates. For instance, as $W_{(t+1)}=W_{(t)}*(1+\pi_{(t+1)})*(1+g_{(t+1)})$, where π denotes a rate of average annual inflation and g – the annual economic growth. In order to project females' average salary, PMCG used a linear equation detailing the last four years of female to male salary ratios (Diagram 5) in order to make a linear regression of female employees' average salary growth. The female to male average monthly salary ratio in 2010 was 57.5%. Using the linear trend of the stated equation, PMCG assumed that the ratio would be increased over nine years from 60.2% in 2011 to 83.8% in 2019 and will be remain constant until 2032.

Diagram 5: hired female to male salary ratio



C. FINDINGS

CURRENT PENSION SYSTEM DEVELOPMENT– STATE PENSION

This section reviews the current state pension system and the potential impact of population aging on pension expenditures while considering the projected impact of aging.

There are three assumptions for calculating the pension payments:

a) Yearly adjusted to $CPI_{(t-1)}$ or to $CPI_{(t-1)}$ and economic $growth_{(t-1)}$

b) Every two years adjusted to $CPI_{(t-1)*(t-2)}$ or to $CPI_{(t-1)*(t-2)}$ and economic $growth_{(t-1)*(t-2)}$

c) Every five years adjusted to $CPI_{(t-1)*...*(t-5)}$ or to $CPI_{(t-1)*...*(t-5)}$ and economic $growth_{(t-1)*...*(t-5)}$

Tables 8 and 9 show pension amounts accounting for the above-mentioned adjustments.

Only the CPI-adjusted pension payments, especially those adjusted over five years, showed little increase and will be much lower than actual payments during that time.

Table 8: Pension Amounts (projection)

	2011	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted to CPI	100	113	121	129	136	175	222	270	292
Two years adjusted to CPI	100	100	121	121	136	167	222	259	280
Five years adjusted to CPI	100	100	100	100	100	144	184	230	280

Both the CPI and the economic growth adjusted pension payments provide a more realistic picture.

Table 9: Pension Amounts (projection)

	2011	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted to CPI and Economic Growth	100	114	131	147	165	284	480	782	950
Two years adjusted to CPI and Economic Growth	100	100	135	135	170	263	496	733	890
Five years adjusted to CPI and Economic Growth	100	100	100	100	100	191	328	550	895

Once PMCG made some assumptions with respect to the minimum old-age pension payments and projected the pension-age population growth, PMCG can calculate the annual funding requirements for the pension system. The number of pensioners is shown in the Table 10 below.

Table 10: Number of Old-age Pensioners (projection)

in thousands	2010	2011	2012	2013	2014	2015	2020	2025	2030	2032
Number of Pensioners (Male 65+, Female 60+)	**662,3**	**663,0**	**670,5**	**673,8**	**681,1**	**690,4**	**738,5**	**793,4**	**820,1**	**823,4**

By multiplying the above-shown payments with the number of pensioners, PMCG has calculated total annual old age pension expenditures:

Table 11: Pension Expenditures (In million GEL)

In million GEL	2011	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted to CPI	690	906	982	1 053	1 128	1 553	2 110	2 653	2 881
Two years adjusted to CPI	690	805	982	993	1 128	1 479	2 110	2 551	2 770
Five years adjusted to CPI	690	805	809	817	828	1 273	1 752	2 268	2 770

Table 12: Pension Expenditures (In million GEL)

In million GEL	2011	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted to CPI and economic growth	690	920	1 058	1 201	1 365	2 515	4 570	7 691	9 385
Two years adjusted to CPI and Economic Growth	690	805	1 093	1 105	1 411	2 335	4 724	7 211	8 799
Five years adjusted to CPI and Economic Growth	690	805	809	817	828	1 696	3 123	5 408	8 841

In case of a CPI-adjusted pension system, there is a projected negative trend for pension expenditures as percentage of nominal GDP from 2011 to 2032. Once PMCG adjust pension payments to the CPI and the economic growth rates, PMCG arrive at a positive projection during this period.

Table 13: Pension Expenditures/GDP ratio

		2011	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted to CPI	Pension/Nom. GDP	2,9%	3,4%	3,3%	3,2%	3,0%	2,4%	2,0%	1,5%	1,4%
Two years adjusted to CPI	Pension/Nom. GDP	2,9%	3,0%	3,3%	3,0%	3,0%	2,3%	2,0%	1,5%	1,3%
Five years adjusted to CPI	Pension/Nom. GDP	2,9%	3,0%	2,7%	2,5%	2,2%	2,0%	1,6%	1,3%	1,3%

Table 94: Pension Expenditures/GDP ratio

		2011	2012	2013	2014	2015	2020	2025	2030	2032
Yearly adjusted to CPI and Economic Growth	Pension/Nom. GDP	2,9%	3,5%	3,5%	3,6%	3,7%	3,9%	4,3%	4,4%	4,4%
Two years adjusted to CPI and Economic Growth	Pension/Nom. GDP	2,9%	3,0%	3,7%	3,3%	3,8%	3,7%	4,4%	4,1%	4,2%

		2011	2012	2013	2014	2015	2020	2025	2030	2032
Five years adjusted to CPI and Economic Growth	Pension/Nom. GDP	2,9%	3,0%	2,7%	2,5%	2,2%	2,7%	2,9%	3,1%	4,2%

The projected number of Georgian pensioners will continue to increase as the elderly population grows. If PMCG takes into account that the minimum nominal pension payment after September 15, 2011 is GEL 100 per pensioner, the amount of pension expenditures will likewise increase in the future.

The number of pensioners will increase from 2012 to 2032 and the resulting shift in the nominal pension level will demand additional budgetary expenditures. The projected ratio for the CPI-adjusted pension expenditures to nominal GDP is declining, as demonstrated in Table 13, while the ratio of projected pension expenditures adjusted to the CPI economic growth to nominal GDP is rising as shown in Table 14.

PILLAR II[15]

As the Georgian population ages, governmental spending for pensions will continue to rise. This is politically controversial issue formany countries, such those in the former Soviet Union, with substantial pension related expenditures.

Pillar II and Pillar III Pension scenarios are based on the past and current statistical data of Georgian socioeconomic indicators and related analytical projections of these indicators. Calculations (assumptions, estimations, projections, etc.) have been conducted in an MS Office Excel program. To further clarify, the Excel workbook is attached in Annex 4.

The result Tables detailingthe calculation results are presented in Annex 1.

PILLAR III[16]

The current voluntary private pension schemes are not designed to generate long-term capital for long-term investments. This is primarily due to the ability of the participants' to withdraw their savings from the accumulated sources for purposes other than retirement income. Currently, the amount of voluntary pension fund assets is insignificant. It is also remarkable that there are no tax incentives for pension savings.

[15] Pillar II scenarios are presented in Annex 1. All calculations are presented in Annex 4.

[16] Pillar III scenarios are presented in Annex 2 (withdrawals from accumulated assets) and Annex 2-2 (withdrawals from annual contributions only). All calculations are presented in Annex 4.

Table 15: Private Pension schemes in 2010

	Founder	Contributions (GEL)	Number of valid agreements as at 31/12/2010	Number of participants	Number of participants, receiving pension	Pension paid (GEL)	Amounts withdrawn from pension schemes	Pension reserves as at 31/12/2010 (GEL)	Income from investment of pension reserves
1	JSC Insurance Company Aldagi BCI	1 662 570	217	5 412	0	0	745 111	4 949 031	512 158
2	JSC GPI Holding	696 320	11 440	11 429	0	0	415 215	2 712 945	238 320
3	JSC Insurance company Imedi-L	34 398	7	38	0	0	192	253 374	24 571
4	Insurance Company TAO Ltd	0	0	0	0	0	40 105	0	0
5	International Insurance Company IRAO Ltd	0	0	0	0	0	0	0	0
6	Insurance Company Partner Ltd	0	0	0	0	0	0	0	0
	Total	**2 393 288**	**11 664**	**16 879**	**0**	**0**	**1 200 623**	**7 915 350**	**775 049**

D. CONSIDERATIONS

- The period from 2012 to 2032 projects positive growth in the number of pensioners. The increase in nominal pensions will demand additional budget expenditures. As the ratio of CPI-adjusted pension expenditures to nominal GDP is declining, as shown in Table 13, and the ratio of CPI and economic growth adjusted pension expenditures to nominal GDP is rising, as shown in Table 14, PMCG can assume that public pension levels will increase more than the average inflation rate.
- Over the next 20 years, Georgia will experience a population growth in the following age groups: a. below 15 yearsold; b. 45 to 64 years old; and c. over 65 years old. The data projects that the 15 to 44 years old age group will declineby .8% on average until 2037. The data also indicates that the 15 years and below age group will also decrease in size. This demographic trend from 2012 to 2036 will be reflected in the 45 to 64 years age group, as this age group will decrease from 2037 to 2057. In addition, the Georgian pensioners' age group will decline in size after 2055. This data is further detailed in Table 6.
- As the average projected salary growth correlates to both economic growth and the average inflation rate salary growth is related to these economic indicators. Due to this assumption, the average salary will grow by 12% from 2011 to 2032. The average salary growth rate from 2007-2010 is 22.7%.
- Pillar II Pension systems allow for an accumulation of net pension assets and these assets will reach 32.6% of GDP by the end of 2032. Pillar II can provide a source of investment for different financial instruments.
- There is another source for the accumulation of pension assets once the government rolls back 1/2th (i.e. 10 percentage points) or 1/4th (i.e. 5 percentage points) of PIT[17] towards the individual accumulation accounts of the pension system participants as shown in Table 16.

Table 16: Government contribution to Public Pension system

	2012	2015	2020	2025	2030	2032
PIT	1 593	2 223	3 823	6 406	10 430	12 676
GOG Contribution 1/4 PIT	398	556	956	1 602	2 608	3 169
GOG Contribution 1/2 PIT	796	1 111	1 912	3 203	5 215	6 338

[17] PIT – Personal Income Tax

THE PENSION SYSTEM'S PROS AND CONS

	Public Pension/Current System	**Pillar II**	**Pillar III**
Advantages	• Easy to implement • Sustai[na]ble pension payments • Can be adjuste[d] to inflation • Low administrative costs	• Accumulated pension savings and a source for investment • Income-related savings and pension payments	• Available for all categories • Relatively easy to supervise • Not strictly Income-related contributions and pension payments
Disadvantages (risk factors)	• Depending on economic, political and other factors • Not adequate to the income • Pension payments regardless of work history, economic status or financial needs of pensioners • No availability of pension savings accumulation	• Long-term supervision is needed • Lack of investment infrastructure • Possible unpredictable inflation • Unpredictable risk factors such as pension scheme's failure or company bankruptcy among others • Problems with participation of informal sector • Manipulation factors, such as tax evasion and gaps in labor contract, among others, between employer-employee • Increased administrative and compliance costs • Inequality regarding to low-income people • Pension contributions can be invested in other instruments • Constrains such as penalties and fees, with regard to early withdrawal	• Small amount of accumulated pension assets • Lack of investment infrastructure • Possible unpredictable inflation • Unpredictable risk factors such as a pension scheme's failure or a company's bankruptcy • Long-term supervision is needed

E. ADDITIONAL INFORMATION

ANNEX 1: PILLAR II SCENARIOS

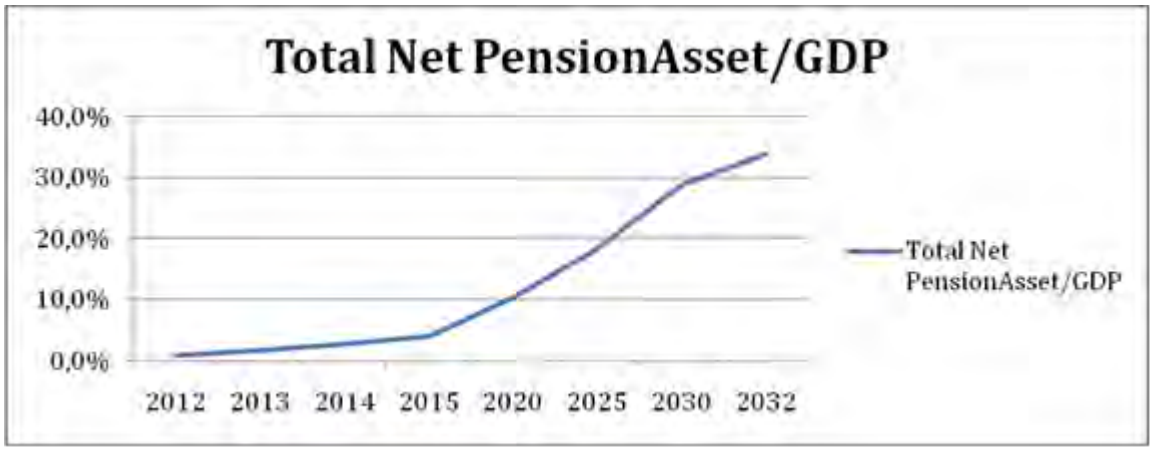
- **Scenario 1a– Formal Sector**
  - Mandatory participation: 15 to 45 years old on the effective date of the pension and with monthly gross salary or wage of GEL 400 or more;
  - Contribution rate: 7.5% percent of salary or wage;
  - Net investment return: 6% compounding quarterly;
  - Amounts of PIT incentive[18],[19]

Table 1: Scenario 1a

Mln. GEL. Formal Sector-Pillar II, Scenario 1 a								
R=6%, Contribution 7,5%	2012	2013	2014	2015	2020	2025	2030	2032
Contributions	231	285	350	428	976	1 867	3 367	4 242
Investment income	9	26	47	74	336	935	2 145	2 902
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	239	550	947	1 449	6 180	16 883	38 386	51 809
Net Pension assets / GDP	0,9%	1,8%	2,8%	3,9%	9,7%	15,8%	22,0%	24,5%
Amount of PIT incentives (Accumulated) EEE	48	110	189	290	1 236	3 377	7 677	10 362
Amount of PIT incentives (Accumulated) EET	48	110	189	290	1 236	3 377	7 677	10 362

During the next 20 years, the net total pension assets will be increased to GEL 49 billion and compose 33.8% of projected nominal GDP.

Diagram 1: Scenario 1a



- **Scenario 1b – Formal Sector**
  - Mandatory participation: 15 to 45 years old on the effective date of the pension and with monthly gross salary or wage of GEL 400 or more;
  - Contribution rate: 7.5% percent of salary or wage;
  - Net investment return: 4% compounding quarterly;

[18] EEE –Exempt, Exempt, Exempt stands for contribution, earnings and withdrawals tax exemptions

[19] EET – Exempt, Exempt, Taxed means exemption of contribution and earnings and taxed withdrawals

- Amount of PIT incentive

Table 2: Scenario 1b

Mln. GEL. Formal Sector-Pillar II, Scenario 1 b								
R=4%, Contribution 7,5%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	231	285	350	428	976	1 867	3 367	4 242
Investment income	6	17	31	48	209	563	1 253	1 675
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	236	538	919	1 395	5 733	15 146	33 376	44 523
Net Pension assets / GDP	0,9%	1,8%	2,8%	3,8%	9,0%	14,1%	19,1%	21,0%
Amount of PIT incentives (Accumulated) EEE	47	108	184	279	1 147	3 029	6 675	8 905
Amount of PIT incentives (Accumulated) EET	47	108	184	279	1 147	3 029	6 675	8 905

❖ Scenario 2a – Formal Sector

- Mandatory participation: 15 to 45 years old on the effective date of the pension and with monthly gross salary or wage of GEL 400 or more;
- Contribution rate: 10% percent of salary or wage;
- Net investment return: 6%, compounding quarterly;
- Amount of PIT incentive

Table 3: Scenario 2a

Mln. GEL. Formal Sector-Pillar II, Scenario 2a								
R=6%, Contribution 10%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	307	380	467	570	1 302	2 490	4 490	5 656
Investment income	12	34	63	99	448	1 247	2 860	3 870
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	319	733	1 263	1 933	8 240	22 510	51 181	69 078
Net Pension assets / GDP	1,2%	2,5%	3,8%	5,2%	12,9%	21,0%	29,4%	32,6%
Amount of PIT incentives (Accumulated) EEE	64	147	253	387	1 648	4 502	10 236	13 816
Amount of PIT incentives (Accumulated) EET	64	147	253	387	1 648	4 502	10 236	13 816

❖ Scenario 2b – Formal Sector

- Mandatory participation: 15 to 45 years old on the effective date of the pension and with monthly gross salary or wage of GEL 400 or more;
- Contribution rate: 10% percent of salary or wage;
- Net investment return: 4% compounding quarterly;
- Amount of PIT incentive

Table 4: Scenario 2b

Mln. GEL. Formal Sector-Pillar II, Scenario 2b								
R=4%, Contribution 10%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	307	380	467	570	1 302	2 490	4 490	5 656
Investment income	8	22	41	64	279	751	1 670	2 233
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	315	718	1 226	1 860	7 645	20 195	44 501	59 363
Net Pension assets / GDP	1,2%	2,4%	3,7%	5,0%	12,0%	18,9%	25,5%	28,0%
Amount of PIT incentives (Accumulated) EEE	63	144	245	372	1 529	4 039	8 900	11 873
Amount of PIT incentives (Accumulated) EET	63	144	245	372	1 529	4 039	8 900	11 873

- **Scenario 3a – Formal Sector**
  - Mandatory participation age: 15 to 45 years old on the effective date of the pension;
  - Contribution rate: 2% in 2012. 3% in 2013; 5% on 2014; 7% in 2015, 10% in 2016, of salary or wage;
  - Net investment return of: (a) 6% compounding quarterly;
  - Amount of PIT incentive

Table 5: Scenario 3a

Mln. GEL. Formal Sector-Pillar II, Scenario 3a								
R=6%, Contr. 2012-2%; 2013-3%; 2014-5%; 2015-7%; 2016-2032-10%	2012	2013	2014	2015	2020	2025	2030	2032
Contributions	61	114	234	399	1 302	2 490	4 490	5 656
Investment income	2	8	20	42	366	1 137	2 712	3 702
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	64	186	440	881	6 824	20 603	48 612	66 185
Net Pension assets / GDP	0,2%	0,6%	1,3%	2,4%	10,7%	19,2%	27,9%	31,2%
Amount of PIT incentives (Accumulated) EEE	13	37	88	176	1 365	4 121	9 722	13 237
Amount of PIT incentives (Accumulated) EET	13	37	88	176	1 365	4 121	9 722	13 237

- **Scenario 3b – Formal Sector**
  - Mandatory participation age: 15 to 45 years old on the effective date of the pension;
  - Contribution rate: 2% in 2012. 3% in 2013; 5% on 2014; 7% in 2015, 10% in 2016, of salary or wage;
  - Net investment return: (a) 4% compounding quarterly;
  - Amount of PIT incentive

Table 6: Scenario 3b

Mln. GEL. Formal Sector-Pillar II, Scenario 3b								
R=4%, Contr. 2012-2%; 2013-3%; 2014-5%; 2015-7%; 2016-2032-10%	2012	2013	2014	2015	2020	2025	2030	2032
Contributions	61	114	234	399	1 302	2 490	4 490	5 656
Investment income	2	5	13	28	231	693	1 599	2 156
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	63	182	429	856	6 419	18 700	42 677	57 388
Net Pension assets / GDP	0,2%	0,6%	1,3%	2,3%	10,0%	17,5%	24,5%	27,1%
Amount of PIT incentives (Accumulated) EEE	13	36	86	171	1 284	3 740	8 535	11 478
Amount of PIT incentives (Accumulated) EET	13	36	86	171	1 284	3 740	8 535	11 478

- **Scenario 4a – Informal Sector**
  - Mandatory participation age: 25 to 45 years old on the effective date of the pension;
  - Participation rate: 10% in 2012, 20% in 2013, 40% in 2014, 60% in 2015; 90% in 2016;
  - Contribution rate: 7.5% of taxable income;
  - Net investment return: 6% compounding quarterly;
  - Amount of PIT incentive

Table 7: Scenario 4a

Mln. GEL. Informal Sector-Pillar II, Scenario 4a								
R=6%, Contribution 7,5%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	5	12	32	63	285	646	1 337	1 772
Investment income	0	1	2	6	70	249	667	949
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	5	17	52	120	1 311	4 553	12 036	17 094
Net Pension assets / GDP	0,02%	0,06%	0,15%	0,32%	2,05%	4,25%	6,91%	8,07%
Amount of PIT incentives (Accumulated) EEE	1	3	10	24	262	911	2 407	3 419
Amount of PIT incentives (Accumulated) EET	1	3	10	24	262	911	2 407	3 419

- **Scenario 4b – Informal Sector**
  - Mandatory participation age: 25 to 45 years old on the effective date of the pension;
  - Participation rate: 10% in 2012, 20% in 2013, 40% in 2014, 60% in 2015; 90% in 2016;
  - Contribution rate: 7.5% of taxable income;
  - Net investment return: 4% compounding quarterly;
  - Amount of PIT incentive

Table 8: Scenario 4b

Mln. GEL. Informal Sector-Pillar II, Scenario 4b								
R=4%, Contribution 7,5%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	5	12	32	63	285	646	1 337	1 772
Investment income	0	0	2	4	44	153	398	562
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	5	17	51	117	1 241	4 171	10 716	15 064
Net Pension assets / GDP	0,02%	0,06%	0,15%	0,32%	1,94%	3,90%	6,15%	7,11%
Amount of PIT incentives (Accumulated) EEE	1	3	10	23	248	834	2 143	3 013
Amount of PIT incentives (Accumulated) EET	1	3	10	23	248	834	2 143	3 013

- **Scenario 5a – Informal Sector**
  - Mandatory participation age: 25 to 45 years old on the effective date of the pension;
  - Participation rate: 10% in 2012, 20% in 2013, 40% in 2014, 60% in 2015; 90% in 2016;
  - Contribution rate: 10% of taxable income;
  - Net investment return: 6%compounding quarterly;
  - Amount of PIT incentive

Table 9: Scenario 5a

Mln. GEL. Informal Sector-Pillar II, Scenario 5a								
R=6%, Contribution 10%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	6	16	42	84	380	861	1 782	2 363
Investment income	0	1	3	7	93	332	889	1 266
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	6	23	69	160	1 748	6 071	16 048	22 793
Net Pension assets / GDP	0,0%	0,1%	0,2%	0,4%	2,7%	5,7%	9,2%	10,8%
Amount of PIT incentives (Accumulated) EE	1	5	14	32	350	1 214	3 210	4 559
Amount of PIT incentives (Accumulated) EET	1	5	14	32	350	1 214	3 210	4 559

- **Scenario 5b – Informal Sector**
  - Mandatory participation age: 25 to 45 years old on the effective date of the pension;
  - Participation rate: 10% in 2012, 20% in 2013, 40% in 2014, 60% in 2015; 90% in 2016;
  - Contribution rate: 10% of taxable income;
  - Net investment return: 4% compounding quarterly;
  - Amount of PIT incentive

Table 10: Scenario 5b

Mln. GEL. Informal Sector-Pillar II, Scenario 5b								
R=4%, Contribution 10%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	6	16	42	84	380	861	1 782	2 363
Investment income	0	1	2	5	59	204	531	749
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	6	23	67	156	1 654	5 562	14 288	20 085
Net Pension assets / GDP	0,0%	0,1%	0,2%	0,4%	2,6%	5,2%	8,2%	9,5%
Amount of PIT incentives (Accumulated) EE	1	5	13	31	331	1 112	2 858	4 017
Amount of PIT incentives (Accumulated) EET	1	5	13	31	331	1 112	2 858	4 017

- **Scenario 6a – Informal Sector**
  - Mandatory participation age: 25 to 45 years old on the effective date of the pension;
  - Participation rate: 10% in 2012, 20% in 2013, 40% in 2014, 60% in 2015; 90% in 2016;
  - Contribution rate: 2% in 2012. 3% in 2013; 5% on 2014; 7% in 2015, 10% in 2016, of taxable income;
  - Net investment return: 6% compounding quarterly;
  - Amount of PIT incentive

Table 11: Scenario 6a

Mln. GEL. Informal Sector-Pillar II, Scenario 6a								
R=6%, Contr. 2012-2%; 2013-3%; 2014-5%; 2015-7%; 2016-2032-10%	**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions	1	5	21	59	380	861	1,782	2,363
Investment income	0	0	1	4	87	325	879	1,255
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	1	6	29	91	1,656	5,946	15,880	22,604
Net Pension assets / GDP	0.00%	0.02%	0.1%	0.2%	2.6%	5.6%	9.1%	10.7%
Amount of PIT incentives (Accumulated) EE	0	1	6	18	331	1,189	3,176	4,521
Amount of PIT incentives (Accumulated) EET	0	1	6	18	331	1,189	3,176	4,521

- **Scenario 6b – Informal Sector**
  - Mandatory participation age: 25 to 45 years old on the effective date of the pension;
  - Participation rate: 10% in 2012, 20% in 2013, 40% in 2014, 60% in 2015; 90% in 2016;
  - Contribution rate: 2% in 2012. 3% in 2013; 5% on 2014; 7% in 2015, 10% in 2016 of taxable income;
  - Net investment return: 4% compounding quarterly;
  - Amount of PIT incentive

Table 12: Scenario 6b

Mln. GEL. Informal Sector-Pillar II, Scenario 6b								
R=4%, Contr. 2012-2%; 2013-3%; 2014-5%; 2015-7%; 2016-2032-10%	2012	2013	2014	2015	2020	2025	2030	2032
Contributions	1	5	21	59	380	861	1 782	2 363
Investment income	0	0	1	3	56	200	527	744
Pension payments	-	-	-	-	-	-	-	-
Net Pension assets	1	6	28	90	1 573	5 463	14 167	19 954
Net Pension assets / GDP	0,00%	0,02%	0,1%	0,2%	2,5%	5,1%	8,1%	9,4%
Amount of PIT incentives (Accumulated) EE	0	1	6	18	315	1 093	2 833	3 991
Amount of PIT incentives (Accumulated) EET	0	1	6	18	315	1 093	2 833	3 991

ANNEX 2: PILLAR III SCENARIOS

Scenario 1: *Voluntary Pension System-Formal Sector*

Participant's monthly income: GEL 1000 or more

1. The average amount of annual contribution: GEL 1000
2. Net investment return: 6% compounding quarterly
3. PIT incentive: 100% of the premium paid
4. Withdrawal rate: 30% from accumulated assets

Table 1: Voluntary Pension-Formal Sector, Scenario 1

in Mln GEL. Formal Sector-Voluntary-Scenario-1									
Withdrawal rate 30%. R=6%. Annual contribution GEL 1000		2012	2013	2014	2015	2020	2025	2030	2032
Contributions		5.0	11.4	19.5	29.1	61.7	77.0	88.7	91.9
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.2	0.7	1.4	2.5	9.8	14.3	17.8	18.8
Withdrawals		-	1.6	4.7	9.6	57.0	81.1	99.6	104.8
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		5.2	15.7	31.9	53.9	190.0	270.2	332.1	349.5
Net Pension assets / GDP		0.02%	0.05%	0.1%	0.1%	0.3%	0.3%	0.2%	0.2%
Amount of PIT incentives (Accumulated) EEE		1.0	3.5	7.6	14.0	75.2	158.4	260.1	303.9
Amount of PIT incentives (Accumulated) EET		1.0	3.1	6.4	10.8	38.0	54.0	66.4	69.9

Scenario 2: *Voluntary Pension System-Formal Sector*

1. Participant's monthly income: GEL 1000 or more
2. Contribution Rate: 7.5%
3. Net investment return: 6% compounding quarterly
4. PIT incentive: 100% of the premium paid
5. Withdrawal rate: 30% from accumulated assets

Table 210: Voluntary Pension-Formal Sector, Scenario 2

in Mln GEL. Formal Sector-Voluntary-Scenario-2									
Withdrawal rate 30%. R=6%. Annual contribution Rate 7,5%		**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions		7.7	19.7	37.5	62.6	225.9	467.8	874.9	1,102.0
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.3	1.1	2.6	5.0	30.1	69.6	138.2	176.0
Withdrawals		-	2.4	7.9	17.6	179.3	406.2	796.8	1,012.9
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		8.0	26.4	58.6	108.6	597.7	1,354.1	2,656.1	3,376.3
Net Pension assets / GDP		0.03%	0.09%	0.18%	0.29%	0.94%	1.26%	1.52%	1.59%
Amount of PIT incentives (Accumulated) EEE		1.6	5.8	13.8	27.3	212.0	623.1	1,432.0	1,915.2
Amount of PIT incentives (Accumulated) EET		1.6	5.3	11.7	21.7	119.5	270.8	531.2	675.3

Scenario 3: *Voluntary Pension System-Informal Sector*

1. Participant's monthly income: GEL 1000 or more
2. The average amount of annual contribution: GEL 1000
3. Net investment return: 6% compounding quarterly
4. PIT incentive: 100% of the premium paid
5. Withdrawal rate: 30% from accumulated assets

Table 311: Voluntary Pension-Informal Sector, Scenario 3

in Mln GEL. Informal Sector-Voluntary-Scenario-1									
Withdrawal rate 30% . R=6%. Annual contribution GEL1000		**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions		4.0	9.4	16.2	24.9	60.3	78.7	89.9	93.5
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.2	0.5	1.2	2.1	3.4	5.0	6.6	8.1
Withdrawals		-	1.3	3.9	7.9	53.7	81.5	100.8	106.3
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		4.2	12.9	26.4	45.5	179.1	271.8	335.8	354.3
Net Pension assets / GDP		0.02%	0.04%	0.08%	0.12%	0.28%	0.25%	0.19%	0.17%
Amount of PIT incentives (Accumulated) EEE		0.8	2.8	6.3	11.7	68.8	152.8	255.7	300.3
Amount of PIT incentives (Accumulated) EET		0.8	2.6	5.3	9.1	35.8	54.4	67.2	70.9

Scenario 4: *Voluntary Pension System-Informal Sector*

1. Participant's monthly income: GEL 1000 or more
2. Contribution Rate: 5%
3. Net investment return: 6% compounding quarterly
4. PIT incentive: 100% of the premium paid
5. Withdrawal rate: 30%from accumulated assets

Table 4: Voluntary Pension-Informal Sector, Scenario 4

in Mln GEL. Informal Sector-Voluntary-Scenario-2									
Withdrawal rate 30% . R=6%. Annual contribution rate 5%		**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions		4.8	12.5	24.1	41.2	171.1	376.4	699.9	885.1
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.2	0.7	1.7	3.2	22.2	55.3	110.4	140.9
Withdrawals		-	1.5	5.0	11.2	131.4	321.6	636.1	811.0
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		5.0	16.6	37.4	70.7	437.9	1,071.9	2,120.3	2,703.4
Net Pension assets / GDP		0.02%	0.06%	0.11%	0.19%	0.69%	1.00%	1.22%	1.28%
Amount of PIT incentives (Accumulated) EEE		1.0	3.6	8.8	17.7	151.2	476.6	1,123.0	1,510.6
Amount of PIT incentives (Accumulated) EET		1.0	3.3	7.5	14.1	87.6	214.4	424.1	540.7

ANNEX 2-2: PILLAR III SCENARIOS

Scenario 1: *Voluntary Pension System-Formal Sector*

1. Participant's monthly income: GEL 1000 or more
2. The average amount of annual contribution: GEL 1000
3. Net investment return: 6% compounding quarterly
4. PIT incentive: 100% of the premium paid
5. Withdrawal rate: 30% from annual contributions

Table 1: Voluntary Pension-Formal Sector, Scenario 1

in Mln GEL. Formal Sector-Voluntary-Scenario-1(2)									
Withdrawal rate 30%. R=6%. Annual contribution GEL 1000		2012	2013	2014	2015	2020	2025	2030	2032
Contributions		5.0	11.4	19.5	29.1	61.7	77.0	88.7	91.9
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.2	0.7	1.5	2.8	16.7	39.5	73.8	91.2
Withdrawals		-	1.5	3.4	5.8	18.5	23.1	26.6	27.6
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		5.2	15.8	33.3	59.4	310.7	710.2	1,307.0	1,608.8
Net Pension assets / GDP		0.02%	0.05%	0.1%	0.2%	0.5%	0.7%	0.7%	0.8%
Amount of PIT incentives (Accumulated) EEE		1.0	3.5	7.7	14.0	78.6	178.8	322.9	394.0
Amount of PIT incentives (Accumulated) EET		1.0	3.2	6.7	11.9	62.1	142.0	261.4	321.8

Scenario 2: *Voluntary Pension System-Formal Sector*

1. Participant's monthly income: GEL 1000 or more
2. Contribution Rate: 7.5%
3. Net investment return: 6% compounding quarterly
4. PIT incentive: 100% of the premium paid
5. Withdrawal rate: 30% from annual contributions

Table 212: Voluntary Pension-Formal Sector, Scenario 2

in Mln GEL. Formal Sector-Voluntary-Scenario-2(2)									
Withdrawal rate 30%. R=6%. Annual contribution Rate 7,5%		**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions		7.7	19.7	37.5	62.6	225.9	467.8	874.9	1,102.0
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.3	1.1	2.7	5.5	46.0	146.8	364.0	501.4
Withdrawals		-	2.3	5.9	11.3	67.8	140.4	262.5	330.6
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		8.0	26.5	60.8	117.7	877.3	2,706.0	6,605.3	9,061.9
Net Pension assets / GDP		0.03%	0.09%	0.18%	0.32%	1.37%	2.53%	3.79%	4.28%
Amount of PIT incentives (Accumulated) EEE		1.6	5.8	13.8	27.4	219.2	678.2	1,643.8	2,246.5
Amount of PIT incentives (Accumulated) EET		1.6	5.3	12.2	23.5	175.5	541.2	1,321.1	1,812.4

Scenario 3: *Voluntary Pension System-Informal Sector*

1. Participant's monthly income: GEL 1000 or more
2. The average amount of annual contribution: GEL 1000
3. Net investment return: 6% compounding quarterly

6. PIT incentive: 100% of the premium paid
7. Withdrawal rate: 30% from annual contributions

Table 313: Voluntary Pension-Informal Sector, Scenario 3

in Mln GEL. Informal Sector-Voluntary-Scenario-1-2									
Withdrawal rate 30% . R=6%. Annual contribution GEL1000		**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions		4.0	9.4	16.2	24.9	60.3	78.7	89.9	93.5
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.2	0.5	1.3	2.4	4.0	6.3	8.9	11.9
Withdrawals		-	1.2	2.8	4.9	18.1	23.6	27.0	28.1
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		4.2	12.9	27.6	49.9	283.9	678.7	1,268.6	1,568.0
Net Pension assets / GDP		0.02%	0.04%	0.08%	0.13%	0.44%	0.63%	0.73%	0.74%
Amount of PIT incentives (Accumulated) EEE		0.8	2.8	6.3	11.8	71.6	170.9	314.1	384.8
Amount of PIT incentives (Accumulated) EET		0.8	2.6	5.5	10.0	56.8	135.7	253.7	313.6

Scenario 4: *Voluntary Pension System-Informal Sector*

1. Participant's monthly income: GEL 1000 or more
2. Contribution Rate: 5%
3. Net investment return: 6% compounding quarterly
4. PIT incentive: 100% of the premium paid
5. Withdrawal rate: 30%from annual contributions

Table 4: Voluntary Pension-Informal Sector, Scenario 4

in Mln GEL. Informal Sector-Voluntary-Scenario-2-2									
Withdrawal rate 30% . R=6%. Annual contribution rate 5%		**2012**	**2013**	**2014**	**2015**	**2020**	**2025**	**2030**	**2032**
Contributions		4.8	12.5	24.1	41.2	171.1	376.4	699.9	885.1
Participation Rate		5%	10%	15%	20%	30%	30%	30%	30%
Investment income		0.2	0.7	1.7	3.6	32.7	111.2	282.6	391.6
Withdrawals		-	1.4	3.7	7.2	51.3	112.9	210.0	265.5
Pension payments		-	-	-	-	-	-	-	-
Net Pension assets		5.0	16.7	38.8	76.3	626.1	2,056.6	5,135.7	7,087.0
Net Pension assets / GDP		0.02%	0.06%	0.12%	0.21%	0.98%	1.92%	2.95%	3.35%
Amount of PIT incentives (Accumulated) EEE		1.0	3.6	8.8	17.7	155.9	515.1	1,279.5	1,759.0
Amount of PIT incentives (Accumulated) EET		1.0	3.3	7.8	15.3	125.2	411.3	1,027.1	1,417.4

ANNEX 3: PENSION PAYMENTS[20]

Pension payments per GEL 1000 savings and for all pension systems' accumulated asset by 2032

Table 1

5 year Termed Pension Payments							
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**Total**
Savings accumulation	1 000						
Rate of Return	6%						
period in month	60						
Monthly payment per '000 of savings	19	231	231	231	231	231	**1 154**
Contribution rate	7,5%						
Total Pension Payments from total asset, mln	51 809	11 960	11 960	11 960	11 960	11 960	**59 798**
5 year Termed Pension Payments							
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**Total**
Savings accumulation	1 000						
Rate of Return	8%						
period	60						
Monthly payment per '000 of savings	20	242	242	242	242	242	**1 209**
Contribution rate	7,5%						
Total Pension Payments from total asset, mln	51 809	12 522	12 522	12 522	12 522	12 522	**62 612**

[20] Formal sector only

Table 2

10 year Termed Pension Payments												
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**Total**
Savings accumulation	1 000											
Rate of Return	6%											
period in month	120											
Monthly payment per '000 of savings	11	133	133	133	133	133	133	133	133	133	133	**1 326**
Contribution rate	7,5%											
Total Pension Payments from total asset, mln	51 809	6 868	6 868	6 868	6 868	6 868	6 868	6 868	6 868	6 868	6 868	**68 679**
10 year Termed Pension Payments												
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**Total**
Savings accumulation	1 000											
Rate of Return	8%											
period in month	120											
Monthly payment per '000 of savings	12	145	145	145	145	145	145	145	145	145	145	**1 446**
Contribution rate	7,5%											
Total Pension Payments from total asset, mln	51 809	7 493	7 493	7 493	7 493	7 493	7 493	7 493	7 493	7 493	7 493	**74 931**

Table 3

15 year Termed Pension Payments																	
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**2 043**	2 044	2 045	2 046	2 047	**Total**
Savings accumulation	1 000																
Rate of Return	6%																
period in month	180																
Monthly payment per '000 of savings	8	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	**1 511**
Contribution rate	8%																
Total Pension Payments from total asset, mln	51 809	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	5 220	**78 303**
15 year Termed Pension Payments																	
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**2 043**	2 044	2 045	2 046	2 047	**Total**
Savings accumulation	1 000																
Rate of Return	8%																
period in month	180																
Monthly payment per '000 of savings	9	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	**1 709**
Contribution rate	7,5%																
Total Pension Payments from total asset, mln	51 809	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	5 902	**88 530**

Table 4[21]

Life Annuity. By Geostat longevity table 14 years is taken for male																
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**2 043**	**2 044**	**2 045**	**2 046**	**Total**
Savings accumulation	1 000															
Rate of Return	6%															
period in month	168															
Monthly payment per '000 of savings	9	105	105	105	105	105	105	105	105	105	105	105	105	105	105	**1 473**
Contribution rate	7,5%															
Total Pension Payments from total asset, mln	**51 809**	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	5 451	**76 320**
Life Annuity. By Geostat longevity table 14 years is taken for male																
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**2 043**	**2 044**	**2 045**	**2 046**	**Total**
Savings accumulation	1 000															
Rate of Return	8%															
period in month	168															
Monthly payment per '000 of savings	10	118	118	118	118	118	118	118	118	118	118	118	118	118	118	**1 654**
Contribution rate	7,5%															
Total Pension Payments from total asset, mln	**51 809**	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	6 122	**85 712**

[21] Based on Geostat longevity table, 14 years lifetime is considered for male

Table 5[22]

Life Annuity. By Geostat longevity table 18 years is taken for female																				
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**2 043**	**2 044**	**2 045**	**2 046**	**2 047**	**2 048**	**2 049**	**2 050**	**Total**
Savings accumulation	1 000																			
Rate of Return	6%																			
period in month	216																			
Monthly payment per '000 of savings	8	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	**1 629**
Contribution rate	7,5%																			
Total Pension Payments from total asset, mln	51 809	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	4 690	**84 422**
Life Annuity. By Geostat longevity table 18 years is taken for female																				
	2 032	**2 033**	**2 034**	**2 035**	**2 036**	**2 037**	**2 038**	**2 039**	**2 040**	**2 041**	**2 042**	**2 043**	**2 044**	**2 045**	**2 046**	**2 047**	**2 048**	**2 049**	**2 050**	**Total**
Savings accumulation	1 000																			
Rate of Return	8%																			
period in month	216																			
Monthly payment per '000 of savings	10	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	**2 097**
Contribution rate	7,5%																			
Total Pension Payments from total asset, mln	51 809	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	6 037	**108 663**

[22] Based on Geostat longevity table, 18 years lifetime is considered for female

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