

CENTRAL BANK OF ARMENIA



Business Case for Foreign Insurers

Yerevan 2006

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1. Introduction

Following an uneven emergence from the strictures of the communist system Armenia is poised to establish itself as a dynamic, competitive economy.

Central to Armenia's development aspirations is an integrated package of financial sector reforms being championed by the Armenian Government. These include:

- Introduction of a funded national pension scheme;
- Integration of Armenia's capital market infrastructure with those in Western Europe; and
- Legislative reforms to the regulatory framework in line with the EU directives designed to establish an efficient and effective financial industry.

In preparing these reforms, the Government of Armenia has drawn on lessons, both positive and negative, from the experience of other transition and emerging countries. The Armenian reforms have been carefully thought through to ensure a balance between the roles of the public and private sectors and to ensure that the reforms are introduced at a pace that the financial system can absorb. Emphasis has been placed on strengthening the integrity and efficiency of the sector.

The overall ambition is to establish a new policy framework, which combined with global opportunities could substantially and qualitatively change the pace of development in the financial sector and accelerate the catch up process with the developed markets. To this end the Government of Armenia believes that the current knowledge gap is a major impediment to development and that foreign entry of reputable financial institutions will help bring the necessary know-how and management culture.

The insurance sector poses some special challenges to the development plan. Insurance provides specialized services in risk management and risk pooling that are integral to financial sector development. The insurance industry in Armenia currently consists of a large number of small, undercapitalized institutions that manage risk by reinsuring virtually all their exposures with overseas reinsurance companies. For this industry to play its proper role in financial sector development it will be necessary for there to be significant consolidation within the existing industry and for the industry to develop the skills needed to operate in a modern Western economy. The proposed introduction in 2008 of a new capital regime for insurance companies should force some industry consolidation. However, it is the view of the Armenian Government that development of the necessary skills is only likely to occur through the introduction of a small number of internationally-recognized insurers.

The purpose of this document is to present the information necessary for potential [investors](#) to assess the business case for establishing an insurance business in Armenia.

2. Background

a) Armenian Economy

Armenia spans 30 thousand square kilometers, with a resident population of approximately 3 million people. A further 5 million Armenians live abroad. The Armenian economy has experienced sustained, low-inflationary growth over the past decade, with solid monetary and fiscal underpinnings:

- GDP in 2005 was approximately \$US5 billion and in 2006 is expected to be approximately \$US6.2 billion;
- Growth in the past 5 years has averaged 12.3% per annum - it has averaged 8.7% over the decade since 1996;
- The average inflation rate since 1998 has been 2.3%;
- Government expenditure in 2005 was 25% of GDP and the Government's consolidated budget deficit was 1.5% of GDP;
- Short-term interest rates are low, with the short-term Treasury bill rate currently around 4%;
- Fitch and Moody's have issued sovereign ratings BB and Ba2 respectively, which puts Armenia above many neighboring countries, and many CIS and Central European countries.

The fastest growing sectors of the economy are: mining (copper and molybdenum); metallurgy (aluminum and ferromolybdenum); diamond cutting; information technology; construction; food processing industries; agriculture; services; and energy.

Armenia is a very open economy, with trade accounting for just under 70% of GDP. The Armenian dram (AMD) is freely floating. There have been no restrictions on capital flows or foreign exchange transactions for over a decade and, in February 2003, Armenia joined the WTO. Armenia's major trading partners are: the EU (mainly Belgium and Germany) 38%; Russia 14%; Israel 8%; and the United States 6.6%. Reflecting the large Armenian population abroad, foreign remittances make up approximately 22% of foreign exchange earnings. Foreign capital inflows are also strong. Foreign investment is present in nearly all sectors, with a strong presence from the USA, Germany, Greece, UK, Israel, Switzerland, Russia, India, Belgium and France.

Armenia is considered to be the most liberalized and open economy among those of the former Commonwealth of Independent States (CIS). According to the 2006 Index of Economic Freedom published by the Heritage Foundation, Armenia is rated 27th among 157 countries – far ahead of other CIS countries.

b) Armenian Financial Sector

The financial sector in Armenia is relatively small and the level of intermediation is very low. Total assets of the financial sector are around \$US1.2 billion or 20% of GDP. Credit to the private sector is less than 9% of GDP. The financial structure is dominated by the banking sector, with 21 banks, 17 insurance companies, 18 securities' brokers and dealers, and about 41 listed companies. Banking services account for almost 95-98 percent of financial transactions.

The Banking Sector has gone through several stages of consolidation during which the number of banks declined from 75 to the current 21. Banks are largely foreign owned with wide ranging geographic representation. HSBC, which accounts for nearly 15% of total banking assets, is the only widely-recognized large foreign investor in the banking sector. This year HSBC celebrates its 10th anniversary in Armenia and, on the basis of sustainable economic expansion and new business opportunities, has declared its intent in further expansion.

Notwithstanding major consolidation in 2001-2003 (during which about 15 banks were closed down) the performance of the banking system has been impressive, with capital and assets growing on average by 42% and 27% per annum respectively. Banks are expanding into new financial products' markets, especially into different types of consumer credit and mortgage markets. Mortgage lending has accelerated markedly since 2004, with the volumes increasing by a factor of 4 over the last 18-months, compared with consumer lending which has grown on average by 60% per annum.

The Insurance Sector has also started to consolidate. Since the beginning of 2006 the CBA has withdrawn the licenses of 5 insurance companies due to non-compliance with capital and other regulatory requirements. By mid 2006 total assets of the insurance sector were around \$US21 million, with capital of around \$US13 million.

The Pension System is operated on a solidarity (Pay-As-You-Go) principle. Average pension levels are around \$US20-25 per month – a replacement rate of around 20%. However, social contributions, which are integrated into the income tax system, are also low, with the combined pension and tax rate subject to a 25% maximum. As a result of the low pensions and very strong family support levels the Government's fiscal balance is maintained and there are no outstanding arrears or obligations. Impending reforms will transform this sector (see Attachment 2).

Capital Markets are at a nascent stage of development with a total market capitalization level of less than 2% of GDP. Listings have been driven by the massive privatization of industry through voucher issuance to the public following the breakdown of the old Soviet Union. There has been no market entry since this privatization exercise due to the lack of both discipline and incentives. The CBA recently issued new rules of listing which allow companies with a capital base of less than USD 1 million to de-list from the stock exchange. Since then, the number of listed companies has declined from 196 to 41. This number is expected to decline further, which should leave a core market of dedicated issuers that are prepared to maintain quality and discipline.

At the same time, the new focused developmental approach to capital markets has revitalized new entries. Many companies have started issuing corporate bonds with the objective of offering IPOs in the medium term. Many companies and banks have also made efforts to enter into the international capital markets. Five have already initiated agreements with Fitch and Moody's to obtain international ratings¹.

¹ Some of the applicant companies might get investment grade ratings, as the country ceiling for foreign currency bank deposits is Ba3. The local currency guideline (the highest possible rating that could be assigned to obligors and obligations denominated in local currency within the country), and the local currency bank deposit ceiling are at A3 and Baa1 respectively.

c) Legal Structure and Current Regulatory Framework

The legal and regulatory framework of the banking system is advanced and meets the standards of international best practice. It provides sufficient supervisory and regulatory powers to the CBA to ensure that banks do not take excessive risks, while providing sufficient freedom for banks to develop new business. The recent track record of low loan-loss provisioning (which in the Armenian case has not exceeded 2% of assets) is evidence of the strength of the banking sector.

While the insurance law is generally in compliance with EU practice, the regulatory framework has not yet been fully implemented. Moreover, during the implementation process, several shortcomings and unnecessary restrictions have been identified that triggered the CBA to develop a new Insurance Law. This law will be in full compliance with the EU directives and international best practice.

The current legal structure and regulatory framework for capital markets is based on the US self-regulatory principles. After 10 years of thorough implementation it has been found to be inappropriate to Armenia as it led to significant over-regulation that has inhibited market development. The self-regulatory structure of the stock exchange and central depository has been particularly problematic. The key challenge has been to find a good balance between necessary arms-length regulation and incentives to attract capital market players. This policy choice has led current thinking towards the EU directives and best practice.

3. Financial Sector Development Plan

a) Objectives (see details in Attachment 1)

- Efficient, supportive financial institutions that are either part of the global chain of “brand names” or local institutions that are able to compete internationally in their own right;
- Competitive markets within the region and Western Europe;
- Balanced financial growth to support balanced economic growth;
- Government to play a catalytic role;
- Regulation to strengthen integrity and efficiency of the financial system.

b) Establishment of a Unified Regulatory Agency under the CBA

After extensive discussions the Government decided at the end of 2005 to transfer all the non-banking supervisory and regulatory functions of the financial sector to the CBA, including market conduct supervision. This decision was to create a well-coordinated and efficient supervisory and regulatory function in the period of fast growth that would prevent the improper transfer of risk among different financial sectors and institutions to exploit regulatory inconsistencies. The key outcomes sought by unifying these functions under the CBA were:

- Consolidation of supervisory functions under a well established, reputable and well managed institution;
- Ensuring its independence from political interference;

- Efficient cost management;
- Well coordinated risk management between different financial segments; and
- Aligning supervisory and regulatory functions with the developmental needs of financial markets.

The transfer of different supervisory and regulatory functions to the CBA was completed in the first quarter of 2005 without any disruption to financial markets.

c) Upgrading the Financial Sector and Regulatory Framework

Banking

- Accelerating further consolidation by introducing a small number of reputable foreign banks;
- Implementing corporate governance principles in accordance with international best practice;
- Broadening opportunities in other financial sectors under unified supervision;
- Moving towards risk-based supervision and providing incentives to banks to become more prudent; and
- Encouraging investment into new technologies and products.

Insurance

- Facilitating entry of reputable foreign financial institutions;
- Facilitating faster consolidation of domestic insurance companies by setting high prudential standards;
- Introducing mandatory insurance classes once local capacity is adequate (either through development of local skills or through the entry of foreign insurance firms);
- Improving statistics, distribution channels and the claim registration systems;
- Making the insurance legislation fully compatible with EU directives; and
- Developing a new regulatory framework to strengthen risk management in the Insurance sector.

Capital Markets

- Actively pursuing legal and regulatory changes to facilitate growth of the regional capital market and to attract a reputable European Stock Exchange (currently finalizing negotiations with the OMX);
- Approving a new Securities Market law that would reform the current self-regulatory structure of the market and would allow demutualization of the stock exchange and central depository;
- Encouraging the appearance of some benchmark companies;

- Continuing rating initiatives to upgrade transparency;
- Inducing “family” ownership to evolve into corporate ownership; and
- Ensuring relevant market conduct regulation.

Other Financial Sector Related Reforms

- The fully operational Financial Intelligence Unit (FIU) at the CBA is intended to ensure that Armenia maintains its reputation of being remote from Money Laundering and Terrorist Financing (ML/TF) through good relation-building with the reporting entities and law enforcement bodies;
- The new sovereign rating and pension reforms should underpin growth in the government debt market; and
- The CBA has embarked on a long-term plan to raise supervisory effectiveness associated with implementing the Basel II principles.

d) Pension Reform² – (details in Attachment 2)

After two years of extensive consultations the Government approved and announced a major pension reform program. The reforms propose a very radical new pension scheme, which combines a flat basic pension from Government budget with a fully funded national pension scheme for all the population below the age of 45 years. The intention is to transfer the pension system from its current PAYG basis to a fully-funded and privately managed pension system within the next 20 years.

The concept of reform was developed on the basis of careful long-term actuarial projections, which showed quite manageable transition costs and significant improvement of the system in the longer term, both in terms of replacement ratios and the fiscal drain of financing a more advanced pension system. Institutionalizing available national savings and channeling them through sound and viable investment channels is one of the primary goals of the pension reform.

The new system targets a minimum 40% replacement ratio from the different types of pensions. The current social and income tax-based scheme would be integrated under a flat single income tax of 25%. A new 10% tax rate will be introduced for those in the new system. These latter contributions will be accumulated in individual pension accounts. These accumulated assets will be centrally administered and privately managed by well-established asset managers.

The system will be introduced in 2008, which allows another 2 years of preparation. During this period the Government will ensure that appropriate infrastructure and institutions are put in place to smoothly run the new system. The Government has drafted a Pension Framework Law which is expected to be approved by the end of 2006. This Law will set the basis for the reforms.

² The detailed Implementation Plan for Pension Reform in the Republic of Armenia, prepared with the assistance of the World Bank is available at the CBA upon request.

4. Outlook for the Insurance Market

a) Current Market

The current level of insurance penetration in both life and non-life business is extremely low at around 0.2% of GDP (compared with developed insurance markets where combined penetration can be in excess of 10%). The Development Plan is targeting penetration levels of 1% of GDP for each of life and non-life insurance by 2017 and is putting in place policy reforms to support these objectives.

In dollar terms, non-life insurance premiums are currently around \$US12 million, while life insurance premiums are negligible. Achieving the target penetration levels would increase combined premium income to around \$US100 million at today's prices by 2017. These significant increases cannot be expected to occur without major changes in the underlying drivers of the market from their current configuration.

The current stagnant state of the insurance market is the result of a number of factors. On the demand side there has been a lack of confidence in the insurance industry:

- Under the Soviet system, insurance was regarded by the community as a tax due to the non-delivery of benefits to policyholders (though population used voluntary life insurance products);
- Development of sectors such as motor vehicle insurance was inhibited by a lack of confidence in the systems and processes for resolving liability following accidents.

On the supply side there has been a lack of expertise in the industry:

- Under the Soviet financial framework there was no incentive to develop underwriting skills;
- In the absence of underwriting skills there has been little or no innovation in designing insurance products to meet consumer needs;
- Due to the small size of the country there are potential concentrations of risk in the corporate sector;
- There has been a lack of reliable data for actuarial computations and proper pricing of risk;
- There has been insufficient capital in the industry to absorb risks.

Together, these shortcomings have led to risk management by reinsurance, with the industry acting more as brokers than as underwriters.

b) Addressing the Deficiencies of the Current Market³

Demand Side Considerations (all calculations in this section are based on assumptions about the industry as well as the final shape of Government policies, and are thus indicative only).

i) Life Insurance Business:

- *Death and disability cover associated with the national pension reforms⁴* – we estimate conservatively that premiums associated with this form of insurance could be between \$US14 million and \$US16 million from the start of the scheme in 2008, rising thereafter at the rate of wage increases to around \$US43 million by 2017. This compares with total premiums for all forms of life and non-life insurance businesses combined in 2005 of \$US12 million.
- *Asset management services associated with the national pension reforms* – We estimate that the total fee income associated with this activity could be between \$US5 million and \$US6 million in the first year of operation of the new scheme in 2008, rising to around \$US17 million by 2017.
- *Retirement annuities arising from the national pension reforms* – We estimate that pension fund balances likely to convert to annuities will be around \$US30 million in the year 2017, when participants under the new scheme will first begin to retire. When the new scheme reaches maturity in 2040, the total pool of funds available for investment into retirement income streams (including life annuities) should be in the order of \$US680 million per annum.

ii) Non-Life Insurance Business:

- *Introduction of compulsory classes of insurance* – The CBA and GoA have been actively considering the introduction of compulsory classes of insurance. To avoid undermining public confidence in the market it has been decided to introduce compulsory classes only after regulatory reforms have been implemented, the capitalization of the market has been strengthened adequately, and skill levels have been boosted by the introduction of foreign expertise.

The first compulsory class that is likely to be introduced is motor vehicle third party liability (TPL). We estimate conservatively that annual premium income from compulsory TPL would be between \$US20 million and \$US25 million if it were introduced in 2008, increasing to around \$US52 million by 2017. This compares with total non-life insurance premiums of just under \$US12 million in 2005. Comprehensive motor vehicle insurance also has considerable potential and could add a further \$US10 million in premiums by 2008 if penetration can be raised from its current very low level of 2% to a modest 20%. As newer Western vehicles replace the aging Russian stock, average premiums will increase, as will penetration as motor vehicle finance becomes more extensive.

- *Other compulsory classes of insurance* – Other compulsory classes, including public liability and worker's compensation, may be introduced at a later stage,

³ For the details and assumptions underlying the calculations in this section, see Attachment 3.

⁴ It is highly possible that the Government will transfer this risk to private insurance company(s), but the decision has not been made yet.

although these may need to wait until there is evidence that the insurance market has developed the requisite underwriting skills.

- *Property insurance* - The second main area of potential growth in the non-life insurance sector is property insurance. Given the current boom in building and construction, the demand for investment grade assets that should emerge with the pension reforms, and the proposed legislation to enable securitization of mortgages (and other assets), we expect that premiums in this market sector could increase from its current level of \$US5.5 million to over \$US8 million in 2008 and to over \$US30 million by 2017⁵.

Comment [JC1]: I am not sure what this footnote is referring to??

Supply Side Considerations

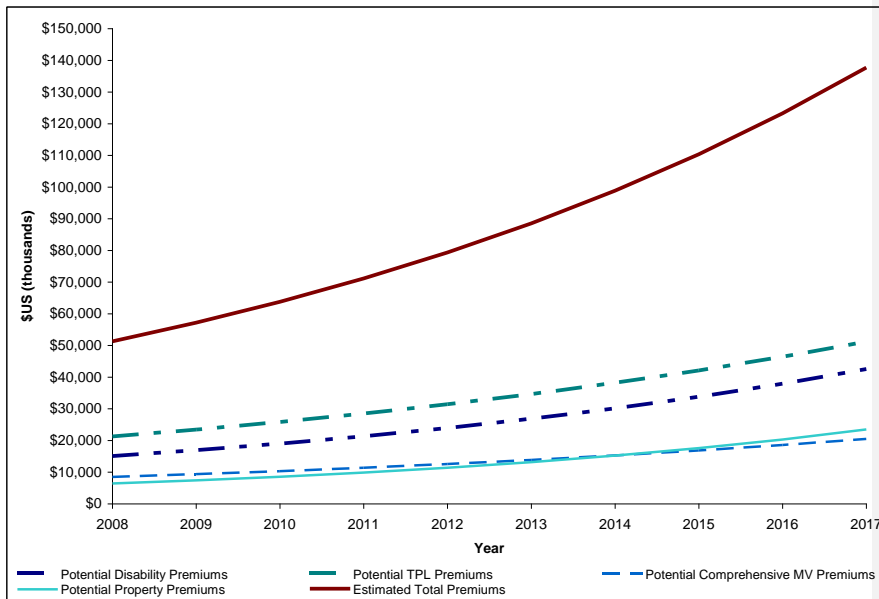
- Developing the supply side of the insurance market requires development of underwriting skills. This will be pursued through industry rationalization and an invitation to selected foreign insurers to bring their expertise to Armenia.
- The development of underwriting skills will also be supported by regulations limiting the extent to which local insurers can rely on outward reinsurance to manage their risks. These new regulations will provide sufficient flexibility to address situations where excessive concentrations of risk might otherwise occur.
- The CBA intends to sponsor the development of an integrated industry database of events and individual histories to underpin insurance analysis.
- The new regulatory framework will include raising minimum capital requirements as well as imposing governance and risk management standards as a means of encouraging consolidation of existing players into a smaller number of well-run and adequately-capitalized companies capable of absorbing risk. The framework will also address current weaknesses in claims processes.

Upside Potential

The projections in this paper suggest that by as early as 2008, the estimated premium market for both life and non-life insurance will be over \$US50 million, excluding the potential growth in the asset management industry. This implies an increase of over 400% in total premiums from their level in 2005. (See Chart 1 below.) While these projections may appear on the surface to be optimistic, we believe they are in fact conservative.

⁵ On the basis of international experience the applied fee is 1 percent of wages with upside potential.

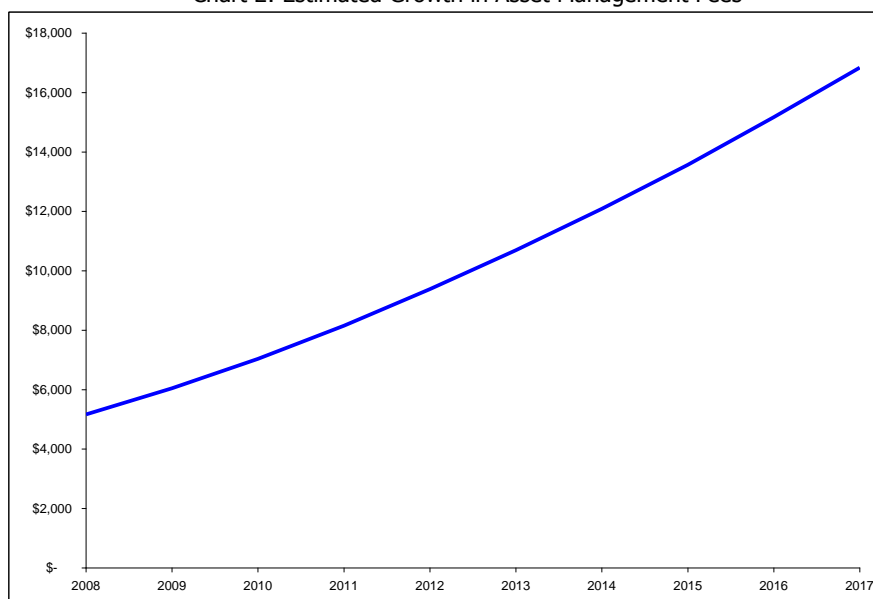
Chart 1: Estimated Growth in the Insurance Premiums Market



The projections rely predominantly on the assumption that the pension reforms and compulsory TPL are both introduced in 2008. These are both highly probable, provided the GoA and CBA are successful in attracting a small number of strong foreign participants into the industry. However, there are other factors that could boost the insurance market significantly.

- The estimates of savings flows into the proposed pension scheme have very conservative underpinnings. In particular, it is likely that the new scheme will encourage employers and employees to disclose wage payments more accurately. An increase in reported wages could have a significant upward impact on the estimates of funds flows into the system.
- The asset management industry is potentially much greater than that implied by even the most optimistic pension reform projections. At present, the household savings ratio in Armenia is a robust 25%. While this generates around \$US1.5 billion per annum of new investible funds, very little of this is invested in the local market. To put this into perspective, the entire stock of financial sector assets in Armenia is currently only \$US1.2 billion. While the new pension scheme will prompt some substitution of pension assets for private savings, the fact remains that there is an enormous pool of investment capacity that could be tapped by the industry if there is sufficient confidence in its capability and integrity. A strong and innovative industry should be able to access some of this potential (see Chart 2 below):

Chart 2: Estimated Growth in Asset Management Fees



- A serious inhibiting factor in the current insurance market is the lack of confidence on the part of policyholders in the value of their policies. The introduction of compulsory classes of insurance in a strong regulatory environment should help restore confidence in these markets, thereby providing opportunities for new policies, especially in the area of liability insurance, parts of which are likely to be considered as future compulsory classes.

5. Invitation

In view of the changes taking place in the Armenian financial system and the opportunities afforded by the planned national pension scheme, we believe there are exceptional opportunities for an insurance company such as xxx to be a part of these exciting developments.

This document is an invitation to xxx to participate in the exciting period ahead for the Armenian insurance market. The CBA and GoA would welcome a proposal from xxx to establish a licensed insurance business in the local market and any comments or suggestions on the proposed business and regulatory framework for the industry.

Attachment 1

Upgrading the Financial Sector

The Overall Vision

Third Generation Reform of the Armenian financial sector rests on the Government's conviction that the sector has the potential to become a locomotive of growth and a source of improving governance and discipline in the economy. In this context, mobilizing and institutionalizing domestic savings is a key policy challenge. Effective mobilization of available household savings (at about 25 percent of GDP) through intermediation is the key to reaching a steady state economy. The current discussions within the official sector, as well as with private and international stakeholders, are poised to provide the momentum for a comprehensive and ambitious financial sector reform program.

In an era of global opportunities this reform program is aimed at creating a new policy framework that will substantially and qualitatively change the pace of development in the financial sector and accelerate the catch-up process with mature markets. Such an objective requires a proactive and outcome-oriented policy framework that actively utilizes international best practice.

The essence of the policy is to engage in transnational, financial institutions-led development and international integration of Armenia's financial markets. Our ambition is for Armenia to become a place for international brands to operate from and, to that end, we are aggressively promoting their entry into the country. We do not offer privilege to any domestic financial institutions. High-quality foreign direct investment from developed countries is a top priority under the new policy framework.

Armenia is known for its large, relatively well-educated and wealthy Diaspora. The Diaspora's potential should be matched with strong human potential available in Armenia through provision of cutting-edge financial products and services. Strong private developmental partners with imposing discipline and strong reputation are key to this policy. If successful, Armenia can aspire to become a financial center in the region on the back of its enhanced institution building capacities.

The need for enhanced institution-building also applies to the non-financial business sector, which must create the foundation for fulfilling these ambitious objectives in the financial sector.

Where we stand currently

The financial sector of Armenia has gone through two stages of consistent and sustained reforms since the collapse of the Soviet Union. These were:

- (i) cleaning up the banking system by imposing appropriate prudential and capital requirements, and by fully privatizing the state-owned banks;

- (ii) facilitating further consolidation in the banking system and developing the legal and regulatory framework for capital markets and other financial infrastructure.

During the 15 years of transition, financial sector reforms in Armenia have achieved substantial progress, especially in the banking sector. There were clear achievements, but also shortcomings, which have required that the reforms continue into a third phase.

Achievements to date

- Stellar economic growth has been accompanied with low, stable inflation, for which there is a strong political consensus;
- The capital account was fully liberalized in 1996 without side effects;
- A sound legislative and regulatory framework for the financial system has been developed, in compliance with international best practice;
- Sufficient financial infrastructure is in place to meet current demands (e.g., a real time electronic payments and settlement system);
- Major and important consolidation in the banking system has been achieved. Banks are mostly sound and are growing quickly;
- As a result of strong supervision and regulation, financial discipline prevails. Unified supervision will take this to a new level;

Shortcomings of the strategy to date

- There are still capacity constraints in both the public and private sectors;
- The knowledge gap is large and the catch-up process in this regard has been slow;
- Investment capital inflows by reputable foreign investors has been limited, thereby creating skill shortages and delaying the institutionalization of a market economy culture and management and acceleration of learning processes;
- Financial infrastructure has developed unevenly;
- Banking consolidation is not yet complete;
- Banks and other financial institutions are short of capital to invest in new products and services, resulting in insufficient competition;
- The real sector is not sufficiently transparent, and a large portion of savings are not yet available to the financial sector;
- Due to a lack of enthusiasm for faster change, financial market participants verge on complacency.

Lessons Learned

The lessons summarized below have helped shape the strategy of the Central Bank and the Government in their efforts to upgrade the financial sector (See the Vision of the CBA at www.cba.am):

- Well-designed outward-looking policies are the best way forward. For a small open economy, high-quality foreign direct investment reduces the knowledge gap faster and thus provides better access to FDI;
- A regional perspective should always be on the agenda regardless of impediments;
- The speed of reforms is not as important as the implementation of comprehensive, well-designed, and publicly debated reforms. It is better to set ambitious benchmarks and to achieve them gradually in a well-sequenced way than to destroy confidence by implementing them poorly;
- Different sectors of the financial system should be well-integrated, and cross-sectoral risks well managed. IT-supported financial products, services and infrastructure should drive integration and internationalization;
- Long-term benefits should be made visible to counteract short-term costs of reforms. Success stories should be well demonstrated and promoted;
- Business conduct supervision and integrity of the system is a precondition for final success and critical to establishing trust in the financial sector.

The Third Generation Reforms take into account the lessons learned and address the problems of the entire financial system, i.e. banking, insurance, capital markets and private pension schemes. Further, the Government's decision to create a unified supervisory body under the Central Bank (CBA) will successfully consolidate the reform process in the financial sector. The main lessons of past reforms have persuaded the policymakers to become more proactive and outward looking in their policies, and to set ambitious but realistic long-term targets for eventual internationalization of Armenia's financial markets. As stated, the authorities consider that attracting foreign direct investment by reputable transnational financial firms is the best way to achieve these objectives. In this context, among other institutional measures, integrity and maintaining remoteness of Armenia from money laundering and terrorist financing are seen as key.

Opportunities

While overcoming the existing shortcomings will be a challenge, their presence also opens new opportunities both for the private sector and policy makers. The progress so far has set a strong foundation for addressing the remaining shortcomings. Some of the shortcomings, however, are related to the need for more sophisticated market institutions, instruments and infrastructure, which will create opportunities in the private sector.

Long-standing price stability and double-digit growth have increased household wealth. Housing prices are the leading factor in wealth creation. Wages and salaries are also

growing quickly and, with total factor productivity growing even faster, these developments have led to real wealth creation, rather than inflation.

There is a large amount of private savings that could be brought into the financial sector. National savings have spiked from almost zero to 25 percent of GDP since 2000. According to some rough estimates, accrued national savings for the past 5-6 years is about USD 3-4 billion, which has not been fully reflected in the balance sheets of financial intermediaries.

There are also large amounts of private transfers from abroad and cash dollars held by households that are not channeled through intermediation. According to recent Central Bank estimates, in 2005 households keep over US\$ 1.1 billion equivalent in foreign currencies (USD, EUR and RUR), and USD 350 million equivalent in local currencies in cash at home. The foreign currency component is likely to be understated and does not include other stored valuables that would otherwise be monetized in the financial system.

In addition, nearly all households own their homes. Consumer finance and mortgage lending, however, appear to have developed slowly.

In addition to the large Diaspora, Armenia also features large numbers of seasonal workers (mainly to South Russia and Moscow). Consequently, annual remittances of nearly USD 1 billion feed into the economy. Only about 60% of these flows are served by the financial system.

The reason for such a high component of cash is two fold: lack of "physical" access to the formal banking system; and lack of trust in locally-owned banks. The sophistication of Armenian customers is such as to require high-quality products and services, which the domestic banks and other financial institutions have not sufficiently been able to accommodate.

The success story of HSBC illustrates the unsatisfied demand for more sophisticated products and the role that foreign expertise can play in providing them. In a very short period of time HSBC collected a significant portion of the market's deposit base. Sound macroeconomic and financial policies and the new ambitious financial sector reform package have convinced HSBC to expand after 10 years of successful business in Armenia.

The growing interest and engagement by the European enterprises in the region and their aggressive global consolidation, especially in the EU, have raised awareness of and interest in the region. Armenia's current financial policy framework has generated good opportunities for dedicated investors looking for better-performing markets for their increased liquidity, including vis-à-vis the region.

Armenian policy makers are open minded to regional integration and have been promoting discussion on the topic. They are trying to build strong institutions to lead in this process. Armenia is well situated to lead the institution building process because of its highly educated labor force. A good example is the invitation to OMX Group (Nordic and Baltic Stock Exchanges) by the Central Bank of Armenia to study and implement the Baltic capital markets' integration approach in the Caucasus region.

Aiming for Significant Outcomes through Public-Private Partnership

To implement the third generation reforms and to explore all the opportunities stated above, the financial sector policy makers of Armenia have declared a necessary precondition to be changing attitudes and behavior. Different catalytic engagements to improve corporate governance in banks are a good example. With the financial help of the Dutch public-private partnership NFX and EBRD, ABN-AMRO is set to choose two systemically important banks in Armenia to help build world-class management and corporate governance practices, with the aim to making these banks into role models for the rest of the industry.

Appropriate incentive structures and success stories can lead these reforms. The reform endeavors in different financial sectors that are summarized in section 3 of the main report emphasize the need to be globally competitive. Building a private-public partnership with healthy domestic and reputable foreign institutions through the process of development is going to be the main driving force in the reform process. This should increase accountability of the policy makers and encourage engagement by reputable investors in the early stages of the reforms.

In terms of outcomes, we envisage all elements of the financial sector developing proportionately over the next decade or so, but with the banking system and financial conglomerates dominating. Banks should continue to consolidate and provide a wide variety of financial products, including insurance and stock market products. Development of the capital markets is critical to the vision. Capital markets should grow in parallel with the opportunities provided by pension reforms (see Attachment 2). Our longer-term goal is for the stronger Armenian businesses to become internationally traded companies. Financial products based on advanced communications infrastructure and Internet access should engage the entire population, including those in remote regions.

Attachment 2

The National Pension Reforms

Introduction

This attachment details the Government of Armenia's strategy for pension reform. It describes the future pension scheme and the sequence of implementation actions.

The Government adopted a new pension reform strategy on May 26th of 2006, following the earlier Decree on Conceptual Approaches to Republic of Armenia Pension Reforms. The strategy rests on meeting the preconditions for developing the new National Pension Reforms Strategy specified in the Decree. These include improving the current system and developing the infrastructure for the future pension scheme.

After careful consideration of more than 20 short and long-term actuarial scenarios (of between 70 and 75 years) with different macroeconomic and pension system characteristics, the Government opted for a solution that combined realistic replacement ratios of pensions with macroeconomic and fiscal sustainability.

The adopted pension scheme is a result of extended multilateral discussions and consultations. It is the outcome of lengthy and enthusiastic discussions both within the official sector (between the Government, the Central Bank and other state governance bodies), and in open forums organized by interested NGO's. Actuarial analyses of the future pension scheme conducted by independent NGOs fully support the approach taken by the Government. While developing the scheme, the Government consulted regularly with international organizations and experts who helped to forge a consensus on the optimal framework.

The Framework for Pension Reforms

The pension reform framework includes the design and introduction of the new pension scheme and the role that the old pension scheme will play under the new scheme. The framework sets out clear definitions of disability pensions, survivor's pensions and other non-occupational pensions. One of the critical elements of the reform framework is the clear definition of social contributions to both old and new schemes, and the ways in which the benefits in the different schemes will be funded.

Description of the New Pension Scheme

The objective of the Government's strategy is to create a scheme that will ensure income for aged or elderly people that is somewhere between the poverty threshold and full replacement of salary or income prior to retirement. In order to achieve this, the Government will introduce a new multi-pillar pension scheme to be funded from different sources. Introduction of the new scheme will start from January 2008.

The Government has defined rules according to which citizens of different age groups can shift to the new pension scheme. Citizens under the age of 30 at the commencement of the new scheme will mandatorily shift to the new system; citizens in the 30 to 45-year age group will be given a choice of staying with the old scheme or

moving to the new scheme (once a citizen in this age group chooses the new scheme they can never return to the old system). Citizens above the age of 45 will stay with the old scheme. The mandatory inclusion of individuals below 30 years of age is intended to strike a balance between the need to ensure that the new scheme develops quickly and the need to ensure that each individual's account has sufficient assets to provide an adequate retirement income.

The new pension scheme will include the following four pillars: (a) minimum old age social benefit; (b) basic pension; (c) compulsory private defined contribution pension; and (d) voluntary defined contribution or defined benefit pension.

Minimum Old Age Social Benefit

This flat pension is paid to citizens who, for whatever reason (e.g. poverty or extended periods of unemployment), do not accumulate sufficient savings in their pension accounts to provide an adequate pension. The Government will legislate eligibility criteria and procedures for receiving social services under the minimum old age social benefit. These procedures will be constantly updated to take account of changing circumstances. Adoption of the law and procedures is not an urgent matter and may be introduced in 10-15 years following the reform. However, to make its promises more transparent, these amendments may be enacted in the medium term (3-5 years).

The minimum old age social benefit will be a flat benefit. Given that this pension will not become operative until the new scheme has been in operation for 15-20 years, the Government will define its size in the medium term. In any case, the threshold will be defined separately by law and will be indexed to inflation as long as the level of well-being does not undergo significant qualitative change.

The minimum old age social benefit will be paid from State Budget funds. Recipients of benefits may not receive additional income or pensions from other sources, including the mandatory and voluntary systems. For a person to receive the minimum old age social benefit, all alternative income, the rights to receiving it, and all amounts accumulated in the private pension scheme are transferred to the State Budget prior to awarding the pension.

Basic Pension

The basic pension provides the floor to the new scheme. Citizens contributing to the compulsory defined contribution scheme and not receiving minimum old age social benefits are entitled to this pension. The Law defines its size. It is transferred from the State Budget to the personal account of the retiree in the mandatory defined contribution fund. Subject to fiscal availability, the size of this pension may be linked to the size of funds accumulated in the mandatory defined contribution scheme. Otherwise, a flat amount around the size of the minimum old age social benefit will be paid the retirees with 25 years of employment history, with an additional flat amount per annum added for each extra year of employment history. This pension is also indexed to inflation.

Entitlements to this pension should arise approximately 18 years after the introduction of the new scheme, as citizens below the age of 45 who chose to move to the new scheme begin to reach retirement age. Nevertheless, in order to make the reform outcomes more tangible, the Government will define the procedures for approving the

basic pension amount upon introduction of the new scheme, which will be updated regularly on the basis of fiscal availability.

Mandatory defined contribution pension⁶

This pension is considered the foundation of the reform and is paid from funds accumulated in personal citizen accounts opened with the centralized pension administration and interest income accrued over the life of the individual's contributions from asset management by private asset managers. Members of the new scheme pay 10 percent of their salaries on a monthly basis to their personal accounts and choose an asset manager(s). Recipients of this pension also receive the basic pension. Citizens entitled to this pension cannot receive minimum old-age social benefits but can receive additional pension benefits from voluntary pension contributions (see below).

The framework envisages enabling citizens to acquire a private life insurance annuity.

Voluntary defined contribution or defined benefit pension

The voluntary pension scheme works in a similar manner to the compulsory defined contribution scheme, but on a voluntary basis. The size of social contributions and the way in which this pension will be paid out is determined on the basis of the agreement signed between the pension fund and the citizen. According to the agreement, pensions may be paid directly from the pension funds or through acquisition of a life insurance annuity. Pension insurance in this case may be bought as both defined contribution and defined benefit pension.

The Role of the Old Pension Scheme

Citizens who remain in the old scheme (either by mandate because they were over 45 or by choice if they were between 30 and 45) remain under the rules of the current scheme and receive benefits on retirement based on the existing formula. Citizens who move to the new scheme (regardless of whether or not they make contributions) cannot go back to the old scheme and would only have a claim on the minimum old-age social benefit under the new scheme in the event that their accumulated savings under the new scheme are inadequate.

In order to keep the reform process simple and prudent, the Government does not plan any changes to the existing pension scheme other than measures aimed at raising the pensions, and others measures envisioned under the Poverty Reduction Strategy Program (PRSP) of the Government.

It is assumed that those who have moved to the new scheme will receive higher pensions than those in the old scheme. In any case, as citizens in the old scheme will not make social contributions from their income for compulsory accumulation, the latter may buy voluntary pension insurance from private pension funds in the form of voluntary defined contribution or defined benefit pensions.

⁶ For details of Pillar II design see the World Bank report on The Implementation Plan for Pension Reform in the Republic of Armenia prepared by Guillermo Larrain (ex-head of Chilean pension superintendence)

Disability and Survivor's Pensions

The pension scheme will cover disability and survivor's pensions, envisaging not only direct government provision, but also acquisition of life insurance products from the insurance industry. Calculations show that through acquisition of life insurance it is possible to substantially increase replacement ratios for disability and survivor pensions.

The law will specify the list of businesses which, given the risk profile of their activities, must mandatorily insure their employees.

Under the measures to introduce the new scheme the Government will publish the arrangements for these new opportunities, but the dates of introduction will depend on development of life insurance institutions.

Social Security for Agricultural Sector Employees and Self-Employed

The Government will introduce a separate pension scheme for the employees of these two sectors. In contrast to wage earning employees, the employees of this sector do not have stable monthly income and the latter is seasonal in nature. The main feature of that scheme will be that they will be voluntary, and the social contributions for this group of employees will be defined from annual income or, in the case of more frequent contributions, e.g. monthly or quarterly, on the basis of notional annual income.

The principles of the new pension scheme will apply fully to this group. This means that employees in these two sectors will also be eligible to receive the minimum old-age social benefit.

Income Tax and Social Contributions

Currently, wage-earning employees pay part of their income tax as a social contribution/tax, and the remaining part as income tax. The total combined tax rate is 25 percent of personal income. Both tax categories are calculated separately by the employer and paid to the State Budget. The State Budget thereafter allocates part of the collected tax amount to the State Fund for Social Insurance (SFSI), which pays the pensions.

The current integrated system of social contributions (regressive) and income tax (progressive) and their aggregate 25 percent rate is an effective system and will be retained until the new pension scheme develops. However, in order to simplify the administration of social contributions and income tax, these two types of taxes will be unified under a flat income tax and will be transferred to the State Budget.

Under the pension reform social contributions will be eliminated and the current 25 percent combined flat tax will be paid directly to the State Budget, as an income tax. This new income tax system will apply to both the participants of the new scheme and those remaining in the old scheme. Employers will continue to file tax reports and payment for wage earning employees until the newly established, self-declaration system is fully functioning. After the new pension scheme has matured and the self-declaration income tax system is fully operational, tax-filing obligations will be transferred to the employees.

Under the proposed new option the law will require that employers increase nominal salaries of employees in the amount of currently paid social contributions. This does not change the amount of obligations to the budget, so neither the citizens nor the employers will incur income losses. Instead employers benefit since tax administration will be streamlined for them.

As state pensions will be financed from income and other general taxes (if necessary) each type of state defined benefit pension will be separately planned and reflected in the State Budget expenditures. This will ensure the accountability and resilience of the system to pro-cyclical budgetary pressures.

within addition to the combined income tax, participants in the new pension scheme will pay 10 percent additional contributions through their employers to the mandatory accumulation pension accounts in the centralized pension administration (current 3 percent plus new 7 percent).

This accumulated amount will be centrally administered and managed by a small group of licensed private asset managers. Individuals will choose their own manager from among this group. Contributors will regularly receive comprehensive and understandable information about the performance of their accounts from the centralized administrator. Regular, freely available personal pension account statements will mandatorily include information on the size of actual accumulated funds and the interest income received from management of these funds.

Receiving Pension Benefits

All state-guaranteed pensions will be paid directly from the State Budget according to the size and list of retirees issued by the State Fund for Social Insurance. To ensure a high quality service for all types of pensions the state pension will also be paid through personal accumulation accounts in centralized administration. In case the Government decided to outsource disability and survivors' pensions, the latter benefits will be directly paid from life insurance companies.

Benefit or pension payouts from personal accumulation accounts will be paid through a reputable bank or postal service to the pensioners' bank account or address. If, after a thorough design study, the OMX Group (Nordic and Baltic Stock Exchanges) decides to take equity participation in the Central Depository of Armenia, the record keeping of personal accumulation accounts may be outsourced to the depository (such a system effectively operates in Estonia).

Contributors to the mandatory accumulation pension scheme will receive pension payouts in one of two ways after reaching the legal age of retirement. The worker will use his/her accumulated funds to (a) buy an annuity or (b) withdraw money from his/her personal accumulation account according to a pre-set formula (programmed withdrawals). The legal framework will allow for the gradual appearance of additional options such as deferred annuities or annuities with vesting periods.

Monthly payouts under the programmed withdrawal program will be calculated on the basis of a specific life expectancy set in law. Members who elect to purchase a life insurance annuity will be allowed to purchase part of the annuity before the retirement

age in order to enable pensioners to benefit from better market conditions during their active employment period.

Unused accumulated funds can be transferred to the heirs of retirees after their death. In the case of funds received in cash, the relatives will be taxed at a flat tax rate. Heirs will enjoy tax exemption if the inherited funds are transferred to their own personal accumulation pension accounts.

The Role of the State Fund for Social Insurance

As part of the reform, the Government of Armenia is considering restructuring the SISF into two divisions. The first division will manage all state-defined benefits; that is, the old system plus the Minimum Old Age Benefit and the Basic Pension. The second division will function as a centralized administrator for the mandatory accumulation system. It will organize the collection of contributions and centralized record keeping (if not outsourced to the OMX), will channel individual's portfolio choices to private asset managers and advise the general public on pension related issues.

A critical aspect of the SISF reform involves introducing new corporate governance principles. One Board with two managerial wings, or a two Board system, are currently being considered.

As the new scheme matures and capital markets expand, the role of the SFSI may need to be reviewed. However, this is unlikely to happen during the first five years after launching the reform. Moreover, the international experience has clearly demonstrated the benefits of the centralized administration approach if best practice corporate governance is exercised.

Next Steps

Following adoption of the New Pension Reforms Strategy, the Government is finalizing both the recently circulated draft Pension Reform Framework Law and the detailed Pension Reform Plan which outlines all structural and institutional changes.

To ensure the viability of the implementation process of the new Pension Reforms Strategy, the Government has set to the goal of presenting the draft Pension Reforms Framework Law to the Parliament in October 2006 and seeking its adoption within three months.

Attachment 3

Calculations and Assumptions Underlying Estimates of the Insurance Market Potential in Armenia

The projections in this attachment are based on broad averages and simple benchmarks. They are nevertheless indicative of the broad orders of magnitude that we believe should emerge from these markets in coming years under the GoA's reform initiatives. More precise estimates would require detailed analysis of each market segment and testing of the pricing assumptions. The invited reputable foreign insurance company should undertake its own due diligence.

Life Insurance Business

- **Death and disability cover associated with the national pension reforms**

At present, poverty level death and disability cover is provided through the national social welfare scheme. Benefits are funded through the consolidated revenue of the Government's budget. Under the proposed pension reforms (see Attachment 2) the national scheme will outsource the provision of death and disability insurance to the private market.

As with the current scheme, death cover will not provide lump-sum benefits but, rather, an income stream for the dependants of the deceased. Unlike the current scheme, the income stream provided from death and disability insurance will be linked to wages, with a minimum replacement rate of 50%. Individuals will be encouraged to purchase additional cover up to a maximum of 80% replacement. The calculations in this Attachment assume the minimum replacement rate of 50%.

While not all workers will join the new pension scheme⁷, the death and disability cover will be outsourced for both those who join the new scheme and those who remain in the old scheme. Thus, those who remain in the old scheme will enjoy an increase in these benefits, with the premium being paid by the Government from its social security budget. Workers in the new scheme will pay premiums via the scheme administrators from contributions collected.

A rough approximation of potential premiums from this market can be calculated from recent data on death and disability recipients and the proposed minimum level of replacement of 50% of wages under the new scheme. With average wages for employed workers in June 2005 at \$US1,800, a 50% replacement rate for death and disability suggests an average annual benefit of approximately \$900 in 2005 prices. In recent years, the number of individuals or survivors receiving either death or disability payments from the current Government-operated scheme has

⁷ As noted in Attachment 2, workers below the age of 30 will be required to join, workers above 45 will be required to remain in the existing scheme and workers between 30 and 45 will be given the choice of which scheme they prefer to join.

been around 10,000 per annum⁸. If we assume that claims expenses under such a scheme are around 75% of premiums, we can make a rough estimate of premium income of around \$US12 million in 2005 prices. If total wages continue to grow at the rate of recent years (at over 10% per annum) expected premium income in 2008, the first year of the new scheme, should be around \$US15 million, rising over time as wages and population increase to somewhere around \$43 million by 2017.

This estimate is likely to prove conservative in three respects:

- This estimate of premium income is equivalent to around 1.9% of wages which is arguably on the low side for death and disability insurance in other countries.
- To the extent that some individuals will elect to increase their level of cover from the minimum replacement rate of 50% premiums will increase commensurately.
- There is also a widely-held perception in Armenia that many workers and firms currently under-report wages - possibly significantly⁹. To the extent that the new pension scheme encourages workers to report wages more accurately in order to enjoy the benefits of the pension scheme the level of premiums will also increase.

In order to minimize fraudulent claims under this scheme it is proposed to establish a claims tribunal consisting of representatives from the industry, the public sector and the medical profession to adjudicate on dubious claims.

- **Asset management services associated with the national pension reforms**

The proposed national mandatory Pillar 2 pension scheme will consist of a single central administrative agency and up to (5) selected asset managers. Each of these asset managers will be allocated a base portion of three portfolios (distinguished by risk profile) to manage. Additional portfolio allocations above the base will be determined on the basis of performance.

It has been proposed that fees will be charged to members as a percentage of wages rather than as a percentage of funds under management. Thus, fees will be higher in the early years and lower in the later years compared with a fee structure based on funds under management. This should provide an incentive for asset managers to participate in the early years of the scheme while funds under management are relatively small.

⁸ The current Government-funded scheme provides two types of disability payments. "Social" disability payments are paid to workers who have either been disabled from birth or who were in the workforce for less than 5 years before being disabled. "Security" disability payments are paid to workers who are disabled after the initial qualifying period but who have not yet attained retirement age (death benefits are paid to a qualifying worker's dependants when the worker dies before attaining the retirement age). Only the "security" component is considered in this analysis, under the assumption that the Government will continue to fund the "social" element of the scheme.

⁹ This possibility is underscored by the unusually low recorded ratio of wages in GDP – currently less than 20%.

Actuarial estimates of funds under management and pension contributions over the first 10 years of the scheme are shown in Table1 below. These forecasts are based on a central, conservative scenario.

Table 1 – Contributions and Balances

Year	Contributions (USD m)	Ending Balance (USD m)	GDP Forecast (USD m)	Assets as % of GDP
2008	\$ 51.7	\$ 50.6	\$ 6,675	0.76%
2009	\$ 60.5	\$ 112.8	\$ 7,270	1.55%
2010	\$ 70.4	\$ 188.4	\$ 7,900	2.38%
2011	\$ 81.5	\$ 279.3	\$ 8,563	3.26%
2012	\$ 93.8	\$ 387.6	\$ 9,263	4.18%
2013	\$ 106.9	\$ 515.2	\$ 9,993	5.16%
2014	\$ 120.9	\$ 663.9	\$ 10,755	6.17%
2015	\$ 135.7	\$ 835.9	\$ 11,548	7.24%
2016	\$ 151.7	\$ 1,033.8	\$ 12,370	8.36%
2017	\$ 168.4	\$ 1,259.6	\$ 13,220	9.53%

While the exact fee structure has not yet been determined, it has been proposed that fees will be in the order of 1% of wages, which is equivalent to 10% of contributions to the new scheme. Thus, the fee pool in the first year of operation should be in the order of \$US5 million, rising to over \$US16 million per annum by 2017. As with other estimates, this figure is considered conservative to the extent that wages, a key driver of the actuarial estimates, are believed to be understated in the current national accounts figures.

It has been proposed that the fee pool be distributed to participating asset managers on the basis of a base fee plus a performance-related component. Without having exact numbers at this stage it would be reasonable to assume that the selected asset managers could each anticipate a minimum fee income in the first year of operations of around \$US1 million, increasing to a minimum in 2017 of around \$US3 million, with considerable upside for strong performance.

- **Retirement annuities arising from the national pension reforms**

In addition to the death and disability insurance associated with the new pension scheme the decision has been taken to outsource the provision of pension annuities to the private insurance industry.

Under the new scheme, individuals will have a choice at retirement between purchasing a life annuity from an insurance company or taking a programmed withdrawal from their pension fund. Any insurance company that qualifies for the role of funds manager will have access to a significant market, either as a provider of annuities or as an ongoing manager of the funds that remain in the scheme under the programmed withdrawal option.

In the latter case, fees will continue to accrue to the funds manager based on assets under management.

Since individuals over the age of 45 will remain within the existing social security system, annuities will not come on stream until the new scheme has been operational for approximately 18 years. Even at that stage, annuities will only be a significant consideration for higher-income individuals who have been able to accumulate substantial funds in a relatively short space of time. Thus, provision of life annuities is a long-term rather than a short-term growth area for the industry. Nevertheless, the long-term scale of this business could be significant.

By the end of 2025 there will be approximately 8,000 retirees who were aged 45 at the beginning of 2008. Of these, some will have elected to remain in the old scheme. Assuming that half of these choose the new scheme in 2008 there will be approximately 4,000 retirees with funds available for conversion to a retirement annuity at the end of 2008. For the purposes of providing a figure for funds available for conversion to annuities we assume further that 50% of these individuals choose the annuity option.

The key assumptions underlying the actuarial estimates of the pension scheme are that investments will accrue gross earnings at the rate of 6.8% per annum (tax free) and that administration expenses will be in the order of 1.5% on assets (note: this fee level is high and may need to be reduced – check scenarios). Using these figures, a 45-year old individual earning average wages in 2008 should accumulate an account balance of approximately \$US14,500 by 2025 (see Table 2 below). If 2,000 individuals elect to convert their balances to a life annuity the total demand for annuities in 2017 would be \$US29 million.

Table 2 – Accumulation for a Single Individual (USD)

Year	For One 45 Year old Individual starting in 2008				
	Ave Wage	Contribution	Earnings	Expenses	End Balance
2008	\$2,395.80	\$239.58	\$8.15	\$1.38	\$246.35
2009	\$2,635.38	\$263.54	\$25.71	\$3.70	\$531.91
2010	\$2,898.92	\$289.89	\$46.03	\$7.98	\$859.84
2011	\$3,188.81	\$318.88	\$69.31	\$12.90	\$1,235.14
2012	\$3,507.69	\$350.77	\$95.92	\$18.53	\$1,663.30
2013	\$3,858.46	\$385.85	\$126.22	\$24.95	\$2,150.42
2014	\$4,244.31	\$424.43	\$160.66	\$32.26	\$2,703.25
2015	\$4,668.74	\$466.87	\$199.69	\$40.55	\$3,329.27
2016	\$5,135.61	\$513.56	\$243.85	\$49.94	\$4,036.74
2017	\$5,649.17	\$564.92	\$293.71	\$60.55	\$4,834.81
2018	\$6,214.09	\$621.41	\$349.90	\$72.52	\$5,733.60
2019	\$6,835.50	\$683.55	\$413.13	\$86.00	\$6,744.27
2020	\$7,519.05	\$751.90	\$484.17	\$101.16	\$7,879.18
2021	\$8,270.95	\$827.10	\$563.91	\$118.19	\$9,152.00
2022	\$9,098.05	\$909.80	\$653.27	\$137.28	\$10,577.79
2023	\$10,007.85	\$1,000.79	\$753.32	\$158.67	\$12,173.22
2024	\$11,008.64	\$1,100.86	\$865.21	\$182.60	\$13,956.70
2025	\$12,109.50	\$1,210.95	\$990.23	\$209.35	\$15,948.53

We believe these estimates to be conservative, given that higher-earning individuals are more likely to elect to join the scheme rather than remain in the old scheme, and higher-income individuals are more likely to understand the benefits of a life annuity relative to a programmed withdrawal. Further, it has been proposed that individuals be offered the opportunity to convert part of their pension fund balances into deferred annuities prior to retirement in order to take advantage of perceived attractive financial conditions at the time. This may bring forward in time some of the sales of life annuities.

The size of the potential annuity pool should increase markedly after 2025 as a result of two factors: a) retiring cohorts will become larger due to population growth and erosion of the number of individuals who opt out of the new scheme in 2008, and b) balances available for conversion will increase rapidly as retirees will have spent longer in the scheme. For example, the actuarial projections suggest that a member who has been in the scheme for 36 years will accumulate a balance approximately 8 times that accumulated after 18 years. Even without accounting for these inherent growth factors the annuity pool should increase to more than \$US100 million by 20369.

The total pool available for purchasing annuities and programmed withdrawals should reach around two thirds of a billion US dollars when the scheme reaches maturity in 2040.

Non-Life Insurance Business:

Introduction of compulsory classes of insurance

- **Motor Vehicle Third Party Liability Cover (TPL)**

The motor vehicle insurance market in Armenia is currently very small, with total premiums written of \$US731,000 in 2005 for comprehensive cover and \$US32,000 for liability cover. The former covered 7,042 contracts at an implied average premium of \$US103 per contract. The latter covered a total of 690 contracts at an implied average premium of \$US46 per contract. These premiums are very low by international comparison, reflecting lower vehicle costs in Armenia than in Western countries, lower repair costs, and lower liability settlements. We have based the estimates below on the current cost structure for an implied average premium for TPL of around \$US50 per vehicle¹⁰.

With a current total number of registered vehicles in Armenia of 350,000 and an assumed average premium of \$US50 per vehicle in today's prices, total compulsory TPL premium income should be somewhere in the vicinity of \$US20 million to \$US25 million in 2008, increasing to between \$US50 to \$US60 million by 2017 (assuming the growth of motor vehicles is a modest

¹⁰ A more accurate evaluation of this market would require detailed assessment of the number of different types of vehicles (private, commercial, taxis, motor cycles, etc), the accident rate for each category, the cost of different accidents, and so on. For example, taxis tend on average to have many times more accidents than do private motor vehicles, motorcycles tend also to have more accidents than private vehicles but to involve lower costs per accident. These characteristics can vary widely from market to market.

5% per annum, compared with a projected economic growth rate of around 10%).

The total market for motor vehicle insurance has considerable upside potential. In the first place, it is reasonable to assume that, as confidence grows in the insurance market, the rate of take-up of comprehensive motor vehicle insurance will increase commensurately. This rate is currently only around 2% of all motor vehicles. The insured vehicles at present are largely those purchased under finance, since insurance is a requirement of finance. For example, if the take-up rate of comprehensive motor vehicle insurance increased from its current 2% penetration to 20%, premium income from this source in 2008 would increase to over **\$US8** million.

Second, the value of cars and repair costs is likely to rise significantly as the existing aged stock of Russian vehicles is replaced by newer, non-Russian vehicles. Not only will that increase the market scale for premiums for TPL, it will increase the need to finance motor vehicle purchases and therefore the market for comprehensive motor vehicle insurance.

- **Other Possible Compulsory Classes**

It is common in many countries to mandate certain types of liability insurance, including workers compensation and public liability for commercial businesses and public buildings. Unlike TPL, which involves short-tailed risks and is a relatively easy area for the industry to develop the necessary underwriting skills, liability insurance involves long-tailed risks and is considerably more demanding on underwriting skills. We have not included estimates of the potential for this type of insurance, as compulsion in these areas is only likely to follow after the market has developed the necessary skills and depth. They nonetheless present a considerable longer-term potential in the market.

- **Property Insurance**

Armenia already has a reasonably active property insurance market. The growth in this market has reflected the boom in property development in recent years. In 2005 there were 11,107 contracts written at an average premium of just over **\$US500** per contract (this average contract size includes both residential mortgaged properties and commercial buildings). Total premiums for property insurance in 2005 were **\$US5.5** million, roughly half the total premiums written for all types of life and non-life insurance business.

All residential mortgages issued by banks currently require mortgage insurance. Thus the potential for this market is linked to both the growth prospects in residential and commercial construction as well as to the potential boom in securitization of residential mortgages under the new legislation; as with bank mortgages, securitized mortgages will require property insurance for marketability of the underlying securities.

Even with a conservative growth estimate of **10%** for new mortgage lending and **5%** for the annual increase in premiums, the number of mortgages would double by 2012 and the level of premium income should increase

from \$US5.5 million in 2005 to over \$US8.5 million in 2008, and to over \$US30 million by 2017¹¹.

As with other estimates, we believe these rough estimates to be on the conservative side given the strength of the current property boom in Armenia and the impending introduction of both the pension reforms and legislation to underpin securitization.

¹¹ A more accurate assessment of the potential for this market requires separate analysis of the residential and commercial markets.