PENSIONS IN IRAQ:

ISSUES, GENERAL GUIDELINES FOR REFORM, AND POTENTIAL FISCAL IMPLICATIONS
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### Regional Indicators

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### List of Abbreviations

- **DB**: Defined Benefit
- **DC**: Defined Contribution
- **DDR**: Disarmament, Demobilization, and Reintegration
- **GDP**: Gross Domestic Product
- **MENA**: Middle East and North Africa region
- **PROST**: Pension Reform Options Simulations Toolkit
- **SOE**: State-Owned Enterprises
- **SPS**: State Pension System
- **SSS**: Social Security System
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Executive Summary

The Iraqi mandatory public pension system is composed of two separate funds, which together cover 15 percent of the labor force -- mostly public sector workers -- and capture resources equivalent to 4-5 percent of GDP. The so-called State Pension System (SPS) covers civil servants, the military and security forces, and employees in state-owned enterprises (SOEs). The Social Security System (SSS) covers workers in the private sector. All schemes were designed as defined benefit arrangements with essentially pay-as-you-go financing. Pension payments account for the largest share of social protection spending other than direct food ration subsidies. In 2005 pension payments could have attained 5 percent of GDP. This is among the highest levels of spending in the region.

The Iraqi pension system is exposed to two different types of problems. First, there are problems emerging as a result of the war and the implementation of a series of emergency policies. Second, there are inherent problems that are structural to the system and that would have had to receive attention under any circumstance. This note discusses these problems, presents a framework for reform, and assesses the fiscal implications of alternative policy interventions. The main findings and policy recommendations are summarized below.

Key challenges

*Emergency payments are putting growing pressure over the budget.* Emergency policies implemented after the war replaced regular pensions with emergency “flat” payments which are capturing an ever-growing share of resources (over 3.5 percent of GDP in 2004). These payments have been diversified across various categories of workers and now range between ID 80,000 per month (USD 53) and ID 200,000 per month (USD 133). They have been paid directly from the Ministry of Finance budget, with very limited contributions from current workers or firms. Clearly, it is important to normalize the pension payments as soon as possible to contain costs and the accumulation of additional pension debt. However, going back to the old pension formulas would not be helpful. The underlying formulas on which payments are based have several problems that are discussed next.

*At the structural level the pension schemes face problems in terms of efficiency, equity and financial sustainability.* These can be summarized as follows: (i) a mandate in terms of income replacement that is too ambitious and precludes an efficient diversification of savings for retirement; (ii) benefit formulas and eligibility conditions that damage incentives and make the system vulnerable to adverse distributional transfers; (iii) a dual system that increases administration costs, affects the mobility of the labor force and distorts the labor market; (iv) implicit rates of return on contributions that are above sustainable levels and compromise the long-term viability of the system, even in the absence of an aging population; and (v) weak governance structures and administrative capacity.

*A mandate that is too ambitious.* The benefits promised to recipients – the income replacement at retirement – is very ambitious, averaging about 80 percent of the last salary across all levels of income. This level of income replacement is among the highest in the region and is unlikely to be affordable, as it would imply high contributions rates and/or public transfers. Moreover, the large mandate implies that individuals, particularly at the top of the earnings distributions do not have incentive to diversify sources of savings for retirement. This will lead to an inefficient management of financial and mortality risks.

*Badly designed benefit formulas and eligibility conditions.* The current system does not follow best practice in terms of design. Pensions are based on salaries earned only during the last few years, indexation mechanisms for pensions are ad-hoc, and there is a misalignment between the contribution
rate the retirement age and the accrual rate. The consequence is that individuals have incentives to evade and game the system and for retirement over work. In addition, with current formulas the implicit rates of return that individuals receive on contributions depend on career histories and retirement-enrollment strategies. As a result, there is a large variation of implicit rates of return across individuals that can generate regressive distributional transfers (i.e., from low to high income individuals).

A dual system with limited coverage that fragments the labor market. A dual system is first a source of inequalities since provisions tend to differ between schemes – with civil servants receiving more generous benefits. Dualism also increases the costs of managing the pension system and, more importantly, restrains the movement of the labor force (due to lack of transferability of pension rights between different funds and important differences in benefits) thus precluding an efficient allocation of resources. As Iraq transits to a market economy and the role of the private sector expands, a dual pension system is likely to become a drag. At the same time, the fact that the current system for private sector workers only covers 1 percent of the labor force is a cause of concern. The low coverage rate seems to be explained by low institutional capacity to enforce collection and an increase in the number of self employed and individuals working for small enterprises, or family business, where current contribution rates might not be affordable.

Implicit rates of return on contributions that are not financially sustainable. The implicit rates of return on contributions that the “old” pension system offers to plan members are above sustainable levels. Today, the two pension schemes have an implicit pension debt estimated at between 60 to 90 percent of GDP. This debt reflects the pension rights accrued to date by current plan members (i.e., it excludes emergency payments). It is a debt that the government has already issued and unless it defaults on it, appropriate financing mechanisms will be necessary. A return to the “old” benefit formulas and eligibility conditions will imply further accumulation of pension debt that threatens the welfare of future generations, who would need to finance this debt through higher taxes of reductions in the non-pension budget (e.g., education and health). It is important to emphasize that even if the government returned its reserves to the SSS, around $19 billion or 0.04 percent of GDP, these would contribute little or nothing to solve the financial problems.

Weak governance structures and administrative capacity. Both the SSS and the SPS were managed in the context of a centralized economy, with non-functioning markets and with little contact with the rest of the world. The current staff is not equipped to properly manage a modern pension fund and is ill prepared to design and implement necessary reforms. While no formal survey of administrative capacity has been conducted, there are obvious problems in terms of record-keeping and payment systems, outdated information technologies, and the seeming deterioration of infrastructure in the post-war. Section 5 of the Annex discusses proposed measures to improve administration of the pension system and defines some key questions in the form of a pension administration survey questionnaire to analyze practices and experiences of existing systems in Iraq.

A framework for reform

A first priority is to rationalize emergency flat payments. Over the short term, plan members should continue to retire on the basis of these payments. Benefit formulas and indexation mechanisms, however, need to be rationalized to avoid discretion and contain costs.

In parallel, Iraq needs to start working on the design of the new system, necessary legislation and implementation plan. A multi-sector high-level Steering Committee would need to be put in place with the mandate to design a multi-year integrated reform program and implementation plan – which

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1 The accrual rate is defined as the percentage of the measure of income used to compute the pension (e.g., average of the last two years) that the worker receives for each year of contribution.
includes transition mechanisms and demands in terms of investments in institutional and administrative capacity.

The new pension system would need to respond to the following five principles: (i) provide adequate and affordable pensions for plan members; (ii) be financially self-sustainable, (iii) allow for transparent and equitable redistribution; (iv) minimize economic distortions; and (v) incorporate best practices in terms of management and administration.

A reform program that achieves these goals would have to consider the following interventions:

- The current schemes would be closed to new entrants, and the current plan members along with the new entrants would start contributing and accruing rights in the new system.
- The rights accrued to date in the old system by current employees would be respected and the associated pension liability made explicit by the government. Various policy options are discussed below in section 3.1.
- Former employees with pension rights retiring before the implementation of the new law would continue to be covered by “flat” pension payments – along with current beneficiaries.
- The implicit debt associated with the payment of the emergency “flat” pensions would also be made explicit by the government and would be financed out of general revenues.
- If the new pension remains financed on a pay-as-you-go basis, its pension liabilities would be made explicit by investing new contributions in government debt – appropriately remunerated. This mechanism would provide a transparent financing mechanism of the implicit debt of the current system: accrued rights of current employees plus “flat” emergency payments. It would also impose fiscal discipline.
- To deal with the issue of coverage the government will consider the implementation of a new non-contributory system for the long-term poor and the design of integrated schemes (with lower contribution rates) targeted to individuals with limited savings capacity. These additional mechanisms will be necessary even if the stronger link between contributions and benefits in the new system improves incentives to enroll and contribute and even if administrative capacity to enforce collection is strengthened.

Potential fiscal implications

There are three sources of costs to the government associated with the reform proposal: (i) payments to current retirees (i.e., the emergency flat payments); (ii) the cost of the basic-universal pension; and (iii) payments of the implicit pension debt with current contributors. The analysis has focused on the case where contributions to the new system are invested in government debt. In this case, the surplus of the new pension fund is transferred to the central budget (adding to the government pension debt), while the deficits are financed by the central budget (subtracting from the government pension debt). At all times the debt of the government with the pension fund is explicit in its accounts.

The preliminary calculations show that net transfers from the central budget to pay pensions (net of the contributions in the new pension system that are transferred to the central budget) would start at around 2.7 - 3.2 percent of GDP in the first year of the reform. These numbers depend on the age and wage distribution of current contributors. The largest expenditure item is the payment of the emergency flat pensions. These alone would initially represent over 3.7 percent of GDP.² The basic

² The projections presented in this policy note might be underestimating the true value of emergency flat payments as they were conducted using 2004 data. Preliminary data for year 2005 suggest higher spending levels – an additional one percent of GDP.
pension, on the other hand, could remain below 1 percent of GDP. Thus, in the absence of the transfer of contributions from the new pension system, the necessary transfers would attain 4.5 – 4.6 percent of GDP. However, initially, the new system would display a surplus that could range between 1.3 to 2 percent of GDP. This surplus would be invested in government debt thus helping finance the implicit pension debt of the old system, as well as the basic universal pension.

Government payments to the new pension system could remain flat at 2.7 percent of GDP until 2010, declining afterwards, or increase to up to 4 percent of GDP and then decline. The observed path will depend, in part, on the current age distribution of the population of plan members. In all cases, payments for the basic pension would remain below 1 percent of GDP, while the share of emergency “flat” payments declines continuously. However, by around years 2010-2015 the new pension system would start to generate a deficit that also needs to be covered by the government. As previously explained, this deficit is related to the pension rights that individuals accrued under the old system. Covering the deficit is therefore equivalent to repaying the implicit pension debt of the old system. In all cases, government payments to the new system will eventually disappear as the new scheme converges to a sustainable path.

In conclusion, the reform proposal developed in this note can control the accumulation of new implicit pension debt while providing a mechanism to finance part of the pension liability of the old system. This is done by closing the old pension systems, enrolling current and new members into a new system that is financially self-sustainable, and investing the initial surplus of the new system in government debt. In the absence of reform, the current system would continue to generate ever growing deficits, and therefore demand ever growing transfers from the government. These are inequitable since they would benefit only a minority of the population: workers in the formal sector of the economy, in their large majority civil servants and the military.
1. BACKGROUND

The Iraqi mandatory public pension system is composed of two separate “funds.” The so-called State Pension System (SPS) that covers civil servants, the military and security forces, and employees in state-owned enterprises (SOEs); and the Social Security System (SSS) that covers workers in the private sector. The SPS seems to manage different schemes, each associated with different occupational groups (e.g., employees in the central administration and teachers). Both the SPS and the SSS are defined benefit schemes essentially financed on a pay-as-you-go basis.\(^3\)

Excluding the military, the SPS and SSS, cover roughly 15 percent of the labor force, the large majority being public sector workers. Indeed, from a total of 1.1 million workers accruing pension rights with the SPS or the SSS, 1 million are civil servants or employees in state-owned enterprises (see Table 1). Only around 76 thousand workers in the private sector currently are enrolled in the SSS. This represents a mere 1 percent of the labor force. *Hence, pension reform in Iraq is really about reforming the schemes for civil servants and the military.*

| Table 1: Contributions and Beneficiaries in the Iraqi Pension System, December 2004\(^4\) |
|-----------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Contributors                                  | Military         | Civil Servants  | Private Sector  | Total           |
| Share labor force                             | 1,045,000        | 343,711         | 14,125          | 1,072,791       |
| <25 years                                     | 13.8%            | 210,651         | 6,108           | 620,825         |
| survivors                                     | 117,462          | 180,778         | 8,017           | 231,049         |
| >25 years                                     | 52,421           | 21,538          | 6,108           | 220,917         |
| Total expenditures (ID million)               | 347,578          | 419,489         | 11,683          | 1,405,987       |
| Shares GDP                                    | 0.84%            | 1.01%           | 0.03%           | 3.40%           |
| Average monthly benefit (ID)                  | 90,344           | 101,706         | 68,929          | 109,216         |
| Memo item                                     | GDP in 2005 (billion) | 41,406        | GDP in 2004 (billion) | 30,853         |

Source: Ministry of Finance and Ministry of Labor.

*After the cease of major military operations in Iraq, the Coalition Provisional Authority replaced regular pensions with emergency “flat” payments that are now capturing an estimated 3.5 percent of GDP. At the same time, the SSS reserves (ID 19 billion – less than half a percentage point of GDP) were frozen in Al Rafaidin Bank (the Central Bank). Since then, emergency payments have been supported by the state budget. For the last three quarters of 2003 (April-December), the emergency payment was set at USD 20 per month (around ID 30,000) and was increased to USD 27 per month in the first quarter of 2004. In the second quarter of 2004, the emergency payments were increased significantly and diversified in two different amounts: individuals having 25 or more years of service received USD 67 per month, and those having less than 25 years of service received USD 50 per month. In the third quarter of 2004, pensions in the state scheme were again increased and diversified in four categories according to job position and number of dependents. Monthly benefits now range between ID 80,000 per month (USD 53) and ID 200,000 per month (USD 133) (see Table 2).*

\(^3\) See Annex 4 for a summary description of the parameters of the system.

\(^4\) The data that have been received so far regarding the demographic structure and the finances of the pension system remain limited.
Table 2: Current Level and Distribution of Emergency Payments (ID Thousand per Month)

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<td>Public II</td>
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<td>Public IV</td>
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Note: For private sector workers’ emergency payments.
Source: Ministry of Finance.

This short policy note is being prepared at the request of the Government of Iraq to provide answers to three important policy questions: (i) how to phase out emergency payments and identify necessary financing mechanisms; (ii) what are the main challenges facing the Iraqi pension system and what types of reform could be considered; and (iii) how to design a retirement program for ex-members of the militia and demobilized soldiers. It is important to emphasize that the analysis presented in the note is heavily constrained by the lack of appropriate economic, financial, and demographic data on the pension funds. Still, the note is able to present general recommendations to guide necessary reforms, with emphasis on questions (i) and (ii).

The note starts by framing the main issues/challenges facing the Iraqi pension system (Section 2). It then proposes a possible strategy to address these challenges (Section 3), and to the extent possible, given available data, discusses some of the fiscal implications (Section 4).

2. Framing the Policy Problem

It is important to distinguish between two types of problems facing the Iraqi pension system. First, those problems emerging as a result of the war and the implementation of a series of emergency policies that were not evaluated properly. Second, those problems that are structural to the system and that would have had to be addressed in any circumstances. This section discusses these two categories of problems in turn.

2.1. Issues related to the Implementation of Emergency Policies

At a cost of close to 3.5 percent of GDP, while benefitting only 5 percent of the population, the flat emergency payments are starting to generate fiscal pressure. The government has committed to pay a certain level of benefits to current retirees, and those close to retirement might harbor expectations of receiving similar payments. In essence, the government has issued a debt with current retirees, one that is probably lower than under the old system, and now appropriate financing mechanisms will need to be devised. Three non-exclusive possibilities exist: (i) to use general revenues and, if needed, address cash-flow problems through borrowing; (ii) to use the contributions of current plan members; and (iii) to default on part of the debt, meaning reducing the payments to current beneficiaries – clearly an option that will find strong opposition.

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5 The payment of contributions seems to have been normalized in May 2004.
Initially, the flat pensions were designed to compensate pensioners whose pensions had been eroded by inflation. However, today, they are “penalizing” some of the new retirees in the public sector, thus creating pressures to go back to normal retirement rules or to further increase the flat payments.

The problem is, in part, the result of recent salary increases in the civil service. To illustrate the magnitude of this problem, it is useful to compare the ratio between the emergency flat payment and the regular pension for individuals with different levels of income and different lengths of service. As shown in the left panel of Figure 1, in general, for those civil servants earning more than 80 percent of the average salary in the public sector, the flat payment is below the regular pension. At the extreme, for civil servants with wages of two times the average, the flat pension could be half of the regular pension. This problem is not present in the private sector where flat payments are higher than regular pensions at least for workers earning up to two times the average wage of the private sector.

![Figure 1: Comparing Flat Payments to Regular Pensions](image)

Source: Authors’ calculations.

While it is important to normalize the pension payments as soon as possible, going back to the “old” pension formulas would be counterproductive. As discussed in the next section, these formulas have several problems that compromise the financial sustainability of the pension system and are a source of inefficiencies and inequities. At some point in time, individuals would need to start retiring under the rules of a reformed pension system. However, designing and implementing this new pension system will take time.

Costs are likely to increase by the demobilization of part of the military and the peace agreements with ex-members of the militia. In both cases, the government is proposing to provide pension benefits to those individuals that, given their age, would have difficulties re-entering the labor market. This increases the number of new pensioners over the short term, even if some do not have acquired pension rights and retire under special conditions.

An important question is therefore how to design efficient and sustainable Disarmament, Demobilization, and Reintegration (DDR) programs for military, security forces, and ex-members of the militia. In general, the strategy will depend on two factors: (i) whether a significant proportion of the individuals have accrued rights with the current pension system and (ii) their age – and therefore the likelihood that they will be able to re-integrate into the labor market. The key, however, is to internalize the cost of any special program so that the financial sustainability of the pension system is not compromised.

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6 There have also been discussions about introducing early retirement programs to help restructure State Owned Enterprises.
2.2. STRUCTURAL ISSUES

The pension system in Iraq, as in other countries in the region, faces structural problems that compromise its financial sustainability, reduce economic efficiency, and create sources of intra- and intergenerational inequalities.

A first problem is the dual structure of the pension system. Several countries in the region have a dual pension system with separate schemes for civil servants and other workers. A dual system is first a source of inequalities since provisions tend to differ between schemes – with civil servants usually receiving more generous benefits. Dualism also increases the costs of managing the pension system and, more importantly, restrains the movement of the labor force (due to lack of transferability of pension rights between different funds) thus precluding an efficient allocation of resources. As Iraq transits to a market economy and the role of the private sector expands, a dual pension system would become a drag. Even in the current situation, the mobility of the labor force within the public sector is likely to be restricted given the multiplicity of pension schemes within the SPS.

The second problem is related to the mandate of the pension system, which seems too large and onerous. Indeed, both the SPS and the SSS target very high replacement rates, close to 100 percent of the last salary (a 2.5 percent annual accrual rate\(^7\) in the case of the SSS and a 2.8 percent accrual rate in the case of the SPS) for the average full-career worker.\(^8\) These are among the highest gross replacement rates observed in the region (see Figure 2). This large mandate of the pension system might not be affordable. Moreover, the large mandate reduces incentives to diversify the sources of savings for retirement, particularly among middle- and high-income workers, and thus precludes an efficient management of financial and longevity risks.

The Iraqi pension system is accumulating unsustainable pension liabilities as a result of the misalignment between the contribution rates, the targeted replacement rates, and the retirement age. This misalignment is captured in Figure 3. The line in the figure represents the combinations between the accrual rate and the contribution rate that can generate a financially sustainable pay-as-you-go

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\(^7\) The accrual rate is defined as the share of the income measure that the individual receives upon retirement for each year of contribution. The income measure is the pre-retirement income that is used as a reference to calculate the pension (e.g., the average of the last two years of salaries). The pension is therefore equal to the accrual rate times the income measure. The pension divided by the last salary gives the replacement rate.

\(^8\) Section 4 of the Annex provides a summary of the main parameters the old pension system.
system, given a retirement age. The current combinations in both systems (2.5/17 percent and 2.8/10 percent) are well above the line. Basically, to finance benefits corresponding to the current accrual rate, the contribution rate for old age pensions (i.e., without taking into account disability and survivorship pensions) would need to be set at over 30 percent of the covered wage. This level of taxation would negatively affect the competitiveness of the economy and could reduce the demand for labor while expanding the informal sector. In the case of the schemes for civil servants and the military, the government, by covering the current deficit, is paying implicitly the extra contributions. This policy, however, can be regressive, as public resources are used to benefit a few civil servants with high earnings. Moreover, the demand for public resources will continue to increase and will crowd out the production of other public goods and services potentially of higher social value (e.g., health and education).

Figure 3: Misalignment of the Accrual Rate, Contribution Rate, and Retirement Age

Note: Calculations are for retirement age 60. The line gives all the possible combinations of the contribution rate and the accrual rate that would generate a sustainable earnings-related scheme financed on a “pay-as-you-go” basis in Iraq. The implicit assumption is that the sustainable implicit real rate of return on contributions is 3.5 percent per year.

Source: Authors’ calculations.

Current benefit formulas and eligibility conditions also generate negative incentives and make the system vulnerable to adverse distributional transfers within generations. There are three key problems: (i) there are no fair penalties for early retirement; (ii) pensions are calculated on the basis of the last salary; and (iii) there is no automatic indexation for pensions. The lack of penalties for early retirement discourages work while increasing the cost of the system. Indeed, as the retirement age decreases, the misalignment with the contribution rate and the accrual rate is amplified. The fact that the benefit formulas are back-loaded (benefits calculated on the average of the last few monthly salaries) generates incentives to strategically manipulate wages and/or promotions (in the case of the public sector) prior to retirement. Moreover, this type of formula generates a high variance in rates of return on contributions that opens the door to adverse distributional transfers within generations. Finally, the lack of automatic pension indexation generates two types of risks that make the system and retirees vulnerable to the vagaries of politics. If adjustments are too high, then the financial sustainability of the pension system is compromised. If adjustments are too low, then the welfare of retirees is affected.

The calculations assume that the sustainable real rate of return that the system can pay on contributions is 3.5 percent per year, a rough estimate of the long-term growth rate of the economy.

In the SPS contribution rates vary with the level of income. The maximum contribution rate is 10 percent.
The low coverage rate of the scheme for private sector workers is another cause of concern.\textsuperscript{11} The problem is only explained in part by the high unemployment rate. Indeed, out of a labor force of 6.1 million workers, only 4.8 million have a job. From them, 1.3 million are in the public sector. That leaves around 3.5 million workers operating in the private sector. Yet, only 2.5 percent of them are enrolled in the SSS. Social Security System managers report high levels of evasion. Basically, employers are under-reporting their numbers of employees in order to remain below the minimum of three, above which firms are mandated to enroll in the SSS. The main cause of the low coverage rate, however, seems to be a reflection of a large pull of low-income, self-employed individuals and casual or seasonal workers. In fact, official reports put at 23.5 percent of the labor force (around 1.6 million workers) the share of the underemployed: individuals in unregistered jobs, but who report receiving an income in the labor market. Furthermore, experiences of other countries in the region show that the lack of labor coverage contributes to a high cost of pension scheme per participant due to the limited ability to mobilize economies of scale in administration: small systems are not cost-effective.

A final issue of concern has to do with governance structures and administrative capacity. Both the SSS and the SPS were managed in the context of a centralized economy, with non-functioning markets and with little contact with the rest of the world. The current staff is not equipped to properly manage a modern pension fund and is ill prepared to design and implement necessary reforms. While no formal survey of administrative capacity has been conducted, there are obvious problems in terms of record-keeping and payment systems, outdated information technologies, and the seeming deterioration of infrastructure in the post-war. Section 5 of the Annex discusses proposed measures to improve administration of the pension system and defines some key questions in the form of a pension administration survey questionnaire to analyze practices and experiences of existing systems in Iraq.

3. General Guidelines for Reform

Iraq has today a unique opportunity to fundamentally review the design of its pension system to improve financial sustainability, efficiency, and equity. This section discusses a general strategy to achieve these goals. The main components of the strategy can be summarized as follows:

1. Within a period of one to two years, a new pension system would be designed and implemented. This new pension system would respond to the following criteria: (i) provide adequate and affordable pensions for plan members; (ii) be financially self-sustainable, (iii) allow for transparent and equitable redistribution; (iv) minimize economic distortions; and (v) incorporate best practices in terms of management and administration.

2. The current schemes would be closed to new entrants, and the current plan members along with the new entrants would start contributing and accruing rights in the new system.

3. The rights accrued to date in the old system by current employees would be respected and the associated pension liability made explicit by the government. Various policy options are discussed below in section 3.1.

4. Former employees with pension rights retiring before the implementation of the new law would continue to be covered by “flat” pension payments – along with current beneficiaries. These payments, however, would need to be rationalized to contain costs while still providing an adequate pension.

\textsuperscript{11} Under the current circumstances the fact that the pension system has limited coverage is actually a positive factor. Indeed, since the pension system is not financially sustainable, each new member worsens its long-term financial position. However, as the system is reformed, it is important to consider policies to expand coverage.
5. The implicit debt associated with the payment of the emergency “flat” pensions would also be made explicit by the government and would be financed out of general revenues.

6. If the new pension remains financed on a pay-as-you-go basis, its implicit pension debt would be made explicit by investing new contributions in government debt – appropriately remunerated. This mechanism would provide a transparent financing mechanism of the implicit debt of the current system: accrued rights of current employees (points 4) plus “flat” emergency payments (point 5). It would also impose fiscal discipline.

7. A new non-contributory scheme, also financed out of general revenues, could be created to provide a basic pension to all individuals reaching a certain age (e.g., age 65). Both, members outside and inside the contributory scheme would be eligible for this basic pension. However, in order to control costs, for individuals in the contributory scheme, the basic pension would be reduced by a fraction of their earnings-related or contributions-related pension. Individuals benefiting from the “flat” emergency payment scheme will not be eligible for this new basic pension.

8. Any incentives package for military or ex-members of the militia that falls outside the rules of the new pension law, the new non-contributory scheme, or the “flat” emergency payments would require separate financing mechanisms and would not be managed by the new pension fund.

3.1. Financing Emergency Payments and the Implicit Pension Debt with Current Plan Members

The Iraqi pension system has accumulated an implicit pension debt that is outside a sustainable path. The first part of this debt is given by the pensions that need to be paid to current retirees – it is being recognized in form of the flat emergency payments. The second part is given by the pension rights accrued to date by current contributors who have not yet retired. Basically, the pension system made generous pension promises to civil servants and military personnel that were not backed by assets and that could not be paid simply through employers/employees contributions. This is a problem common to many countries in the region. Jordan recently tackled the problem by closing the schemes for the military and civil servants to new entrants and having them join an integrated pension system. The pensions of current beneficiaries, and the future pensions of those plan members who remained in the “old” system, are being financed out of general revenues. Over the short term this implies higher expenditures, but very large savings over the medium and long terms. Indeed, if the system had continued to expand its deficit would have become explosive.

The recommendation in the case of Iraq is to allow the new pension system to “start fresh.” This implies making the current implicit debt of the system explicit and then identifying appropriate financing mechanisms. The general recommendation is that the flat payments continue to be financed out of the general budget and that, when current plan members retire, the government finances the part of their pension that was accrued under the old system. Below, these two financial operations are discussed in more detail.
3.1.1. Emergency pension payments

In the absence of new beneficiaries, the costs of the flat pensions as a share of GDP should fall rapidly, disappearing within the next 40 to 50 years. How exactly these costs will evolve over time depends on the current distributions by age and sex of the population of beneficiaries across the different categories. Hence, if the majority of current beneficiaries is relatively old, then payments would phase-out sooner than if most beneficiaries were relatively young. Currently, there are no data regarding these distributions. Hence, in this policy note different scenarios were considered (see Figure 4).

However, because the design and implementation of the new system will take time, it is desirable that those individuals retiring in the interim continue to be covered by the flat emergency payments. The alternative would be to go back to the “old” benefit formulas, but this would simply complicate the transition process and could generate large inequalities between new and current retirees.

Extending emergency payments to new entrants will certainly increase government expenditures over the short-term, but the effect on the stream of payments over the medium term would not be dramatic. Under the assumption that within the next two years the stock of individuals receiving emergency payments, in all categories, expands at 20 percent annually – a pessimistic assumption – total expenditures as a share of GDP could approximate 4.5 percent of GDP. The share of expenditures in GDP, however, would then fall, reaching 3.5 percent by year 2010 (see Figure 5).

Clearly, it is desirable to control costs, and the most efficient mechanism would be to avoid fully indexing benefits with inflation. Indeed, with expected double digit inflation rates, limited indexation can have non-negligible effects on the stream of payments. For instance, in the extreme assumption that current benefits are not indexed, that is they are kept constant at current levels, total expenditures will rapidly fall below 3.5 percent of GDP. By year 2010, total expenditures as a share of GDP, would have been almost halved, relative to the case where benefits are fully indexed with prices (see

Figure 4: Evolution of Emergency Payments for Current Retirees

Note: See Appendix 3 for a description of the assumptions regarding the growth rate of real GDP and inflation. The “fat” line reflects different assumptions regarding the age distribution of current beneficiaries.

Source: Authors’ calculations.

12 See footnote 2.
Figure 6). This however would adversely affect the standards of living of the retirees. An appropriate balance needs to be found.

Figure 5: Evolution of Emergency Payments With New Entrants in Next Two Years

Note: See Appendix 3 for a description of the assumptions regarding the growth rate of real GDP and inflation. The “fat” line reflects different assumptions regarding the age distribution of current beneficiaries.
Source: Authors’ calculations.

Figure 6: Effect of Indexation on the Dynamics of Emergency Payments

Note: See Appendix 3 for a description of the assumptions regarding the growth rate of real GDP and inflation. The “fat” line reflects different assumptions regarding the age distribution of current beneficiaries.
Source: Authors’ calculations.

Another mechanism to control costs is not to grant flat pensions to demobilized soldiers and ex-members of the militia who can re-enter the labor market. Instead, government interventions ought to include adequate short-term income support and retraining.
3.1.2. The implicit pension debt with current plan members

In exchange for their contributions to date, current plan members have accumulated pension rights. For instance, an individual who has been contributing for 20 years to the SSS has acquired the right to receive a pension roughly equal to 50 percent of his/her salary at retirement. The implicit debt that the fund has with this individual is the present value of future pension payments after retirement.

Preliminary estimates suggest that accrued to date liabilities with current plan members are in the order of 60 to 90 percent of GDP. The large majority of this implicit debt is related to the scheme for public sector workers. Indeed, accrued to date liabilities for private sector workers seem to be very small, in the order 1 percent of GDP – in part due to very limited coverage of the scheme and lower wages. These numbers, however, need to be interpreted with caution due to still-large uncertainties surrounding the data used in the calculations (see Appendix 3 for a description of the various assumptions). The value of this debt could only be reduced through an implicit default. That is by not recognizing in full the accrued rights of individuals. For instance, by reducing retroactively accrual rates. This policy, however, would face considerable social opposition and political resistance.

The first step in the reform process would be to formalize the implicit pension debt with current employees. Basically, the government would acquire a formal debt with the pension fund, would recognize an appropriate interest rate on this debt.

The second step is to define the repayment and financing mechanism for this debt. Two approaches can be considered here that would depend on the form that the new pension system takes. These are discussed next.

A fully funded system. If the new system is fully funded, the government would need to pay in full its pension liability with each individual when they retire. Assuming that most individuals retire at age 60, preliminary calculations suggest that the costs of the “recognition bonds” maturing each year would start at 1.3 to 9 percent of GDP, declining to 1.3 to 5 percent of GDP by year 2010, depending, among other factors, on the age distribution of current contributors (see Table 3 and Table 4). The last recognition bond would mature around year 2050. The government would need to finance the payment of this debt out of general revenues or by borrowing from the new pension fund, if the latter decides to invest part of the new contributions in government debt.

A pay-as-you-go system. If the new system remains financed on a pay-as-you-go basis, the government could time the payment of its pension debt with the financing needs of the fund. The recommendation in this case is to invest all the contributions to the new pension system in government bonds that are appropriately indexed. One possible index is the growth rate of GDP. The pension fund would “cash” its government bonds as needed to cover pension payments. In this case, transfers from the central budget to the new pension system would not start within the next 5 to 10 years. On the contrary, during these years the government would be borrowing contributions that can help finance the payment of the emergency “flat” pension. Basically, the proposed mechanism allows for a transparent financing of the pension debt of the current system, while imposing fiscal discipline – in the sense that the pension liabilities in the new system will not be hidden, but backed by explicit government debt. Another virtue of this strategy is that, over time, the pension fund can diversify

13 These estimates are sensitive to different assumptions such as the age distribution of current contributors and the sex-age profile of wages. Given still incomplete data, the numbers need to be interpreted with caution. Nonetheless, the calculations are useful to give an idea of the order of magnitude of the yearly cost of serving the implicit pension debt as well as the trends.
away from public debt through marketable securities, implicitly transforming itself into a fully funded scheme.

The fiscal impacts of both strategies are discussed in more detail in Section 5.

### 3.2. Designing the New Pension System

Three reasons usually are cited to justify government interventions in the area of pensions: poverty, imperfections in capital markets, and myopia. In terms of poverty, the problem is that some individuals do not have the means to save enough for retirement and it is desirable that governments assist in the financing of a basic pension.

Regarding imperfect capital markets, the issue is that individuals might not have access to proper savings instruments (e.g., some banks demand a minimum level of income to open an account or do not have offices in rural areas), available instruments can be too risky (e.g., banks are not properly regulated), or individuals cannot insure against the risk of longevity (e.g., annuity markets do not exist). It is good policy then to develop long-term savings schemes and pull longevity risks. As capital markets develop and good banks and annuity markets appear, the role of the government can diminish, giving more room to individual choice and allowing for a better diversification of risks.

The third reason, myopia, is more difficult to handle. The argument goes that individuals might have trouble planning for the future and under-save when young, only to regret it later. Governments can then mandate enrollment into a contributory scheme, thus committing individuals to a minimum level of savings. Individual myopia, however, is a difficult thing to correct through “forced savings.” The problem is that not all individuals have the same preferences and while for some the mandate of the public pension system (i.e., the contribution rate) might be optimal, for others it can be too high and thus welfare-decreasing. Presumably, except for individuals at the bottom of the income distribution, there is no good reason to consider public pensions the only source of savings for retirement.

Given these objectives, policy makers and the society at large need to address two fundamental questions: (i) *what should be the mandate of the public pension scheme, that is, the distribution of targeted replacement rates across levels of income?* And (ii) *how to deliver this mandate?* The latter implies making choices about financing mechanisms and institutional arrangements. Each of these elements is discussed next.

#### 3.2.1. Choosing the mandate of the pension system in Iraq

To illustrate the variation in choices regarding income replacement patterns at the international level it is useful to look at the experiences of OECD countries. Countries such as Canada, Denmark, and the United Kingdom focus on the providing earnings during retirement that are considered *adequate relative to average standards of living* in the country. As a result, pension values across levels of income are flat (see left panel Figure 7) and can range between 30 to 50 percent of economy wide average earnings. Implicitly, the focus in these countries is on preventing poverty during old age; their pension systems play an “adequacy” function. At the other extreme, countries like Luxembourg, Italy, Sweden, and Finland focus on providing earnings during retirement that are *adequate relative to pre-retirement income*. In essence, these countries target a given replacement rate of pre-retirement income and therefore pension values increase with earnings. In these countries the pension system plays more an “insurance” function. Several of these countries, however, impose a ceiling on the covered wage, so that pension values become flat for individuals with earnings above the ceiling (see right panel Figure 7).
The first step for the Iraqi society is to make explicit choices about the objectives and mandate of the new pension system, basically to balance adequacy and insurance functions. Three parameters are important: (i) the targeted replacement rate for the average full-career worker – that is the ratio of the pension relative to pre-retirement income; (ii) the value of the minimum pension guarantee; and (iii) the ceiling on the covered wage.

Factors to consider when making these choices include changes in consumption patterns during old-age, minimum consumption levels (i.e., the poverty line), as well as the existence of other formal or informal income support systems – for instance the role of the family. At the end, choices necessarily reflect social preferences and cultural values. These choices, however, need to be affordable. Pension promises that need to be financed by a 40 percent contribution rate are unlikely to be supported by the economy.

As a reference, Iraqi policy makers can consider the choices in other countries. For instance, a review of twenty-four high income (OECD) countries, ten countries in Eastern Europe and Central Asia, and nine countries in Latin America and the Caribbean, suggest an average replacement rate for the average full-career worker of 57 percent of pre-retirement income. In the same sample of countries the average minimum pension guarantee offered by the pension system is close to 20 percent of average earnings. Finally, on average, pension systems impose a ceiling on the covered wage of 3.5 times average earnings.\textsuperscript{14}

In summary, Iraq could consider:

- A targeted gross replacement rate for the full-career worker (40 years of contributions) that falls in the 50 percent to 60 percent range. Indeed, under normal circumstance, it is reasonable to expect that after retirement the same standard of living could be preserved with 80 percent of pre-retirement income. The mandatory pension system then would deliver 50 to 60 percent of pre-retirement income, while the remaining 30 to 20 percent becomes a responsibility of the individual. Indeed, there is little justification for having the public pension system as the only source of income for retirement, particularly for middle and high income workers.

- A ceiling on the covered wage of 2 to 3.5 times average earnings. This would allow high-income individuals to better diversify sources of savings for retirement.

\textsuperscript{14} For a review of income replacement patterns around the world see Robalino et al. 2005.
• A basic pension that represents 15 percent to 20 percent of average earnings. This basic pension would also be available to individuals outside the contributory scheme.

3.2.2. Delivering the mandate: choosing the institutional organization and the financing mechanism

The first decision to be made relates to the institutional organization of the pension system. Ideally, the new pension system in Iraq would be integrated both in terms of system parameters and administration. Basically, a single pension fund would exist that provides the same treatment to all workers, irrespective of their occupation and the sector in which they operate (public or private). As already mentioned, this integrated scheme would facilitate the mobility of the labor force, reduce administration costs, and be more equitable.

The second decision has to do with the type of financing/risks distribution mechanisms. Around the world two basic alternatives have evolved and often co-exist: earnings-related schemes (traditional defined benefits, points systems, or notional accounts) -- which are usually financed on a pay-as-you-go basis, and defined contributions schemes – usually fully funded.  

It is often argued that earnings-related schemes with pay-as-you-go financing are less demanding in terms of institutional capacity and market conditions, and that therefore these should be preferred in medium-low and low-income countries, or countries emerging from a state of conflict. According to this view, fully-funded defined contribution schemes should only be considered when at least three conditions are met: (i) the macroeconomy is stable and the fiscal stance of the government is able to absorb transition costs; (ii) even if capital markets are incomplete there exists a core of sound insurance companies and banks, which implies a proper regulatory and supervisory framework; and (iii) the government is committed to structural reforms in the financial sector.

There are, however, four counter arguments. First, both schemes can be as demanding in terms of institutional capacity. For instance, there is little difference in terms of the need for proper record-keeping and collection system setup in both systems. Moreover, when full technical capacity is not present in-house, some components of the administrative processes can be outsourced. Second, in terms of market demands, macroeconomic stability is also important for earnings-related schemes. Countries with a large and unsustainable explicit public debt, for instance, would be ill advised to implement DB arrangements that could add implicit liabilities. Third, the absence of a deep and liquid capital market and a core of sound banks and insurance companies could also be overcome by diversifying investments abroad. Fourth, when governance structures are weak, earnings-related schemes are more prone to political risks. For instance, arbitrary changes to benefit formulas and eligibility conditions that serve political purposes and that negatively affect the long-term financial sustainability of the scheme and thus the welfare of future generations.

With these considerations, two countries in the region, Lebanon and West Bank–Gaza, are opting for defined contribution arrangements, even though in neither case institutional capacity is up to speed. While Lebanon does have a relatively well developed financial sector, West Bank–Gaza does not. In both cases, one of the motivations to introduce a DC scheme was to protect the pension system from political interferences. In Lebanon, an additional motivation was the already high level of the explicit public debt (over 177 percent of GDP). To overcome the lack of administrative capacity, both countries will be outsourcing certain administrative procedures and the management of part of the funds to the private sector, including foreign companies.

15 See Holzmann et al. (2005) for a discussion on a typology of pension systems.

16 Creating the necessary institutional capacity is essential for the proper functioning of the reformed pension system in Iraq. Annex 5 discusses the issues involved and presents a questionnaire to assess current administrative practices.
Hence, in this note, no definite position is taken regarding the type of system that the Iraqi society should adopt. Whichever the choice, it is necessary that the implementation follow best practices. Some of these are discussed next.

**An earnings related (defined benefit) scheme financed on a pay-as-you-go basis.** A defined benefit scheme that is well designed can be: (i) financially self-sustainable; (ii) equitable; and (iii) preserve incentives to diversify savings, work, and contribute. Briefly, the design of the new Iraqi pension system would need to take into account the following recommendations:

**Choosing accrual rates, retirement ages, and the contribution rate.** The important point to keep in mind is that there are mathematical relationships between these three parameters that need to be respected if the system is to be financially sustainable and efficient. Hence, *only two out of the three parameters can be chosen “by policy.”* The third parameter then needs to be computed on the basis of the other two. The recommendation is to proceed as follows:

- Given the targeted replacement for a reference worker (say an individual entering the system at age 20 and retiring at age 60), the necessary accrual rate is defined. For instance, if the targeted for this reference worker is 60 percent, then the accrual rate would be 1.5 percent per year. This would be the accrual rate for individuals retiring at age 60, which in this example is considered the “normal” or “reference” retirement age.

- Given the accrual rate (1.5 percent) and the normal retirement age (60), the contribution rate would need to be computed to take into account life expectancies at retirement and the potential growth rate of the covered wage bill (which approximates the sustainable rate of return that can be afforded by the system). For this example, the necessary contribution rate would be around 17 percent (Annex 1 presents a table linking the accrual rates, the contribution rates, and the retirement age).

- It is important to provide flexibility to individuals to retire before the “normal” age. However, the accrual rate received by these individuals would need to be adjusted downwards, to maintain the mathematical relationship with the retirement age, and the contribution rate. Hence, individuals retiring before age 60 would receive “actuarially fair adjustments” to the accrual rate. An individual retiring at age 55, for instance, would receive an accrual rate equal to 1.32 percent (see Annex 1).

- Similarly, an individual retiring after the “normal” retirement age would receive a higher accrual rate. For instance, in our example, an individual retiring at age 65 would be allowed to receive an accrual rate of 1.74 percent (see Annex 1).

- It is important to notice that as life expectancies at different retirement ages increase, the value of the parameters would need to change. Basically, the table presented in Annex 1, which was used in the previous examples would need to be updated. To keep contribution rates constant and avoid negative effects on labor markets, accrual rates for each retirement age would need to be reduced. Or, in order to maintain the same accrual rate (i.e., the same level of income replacement) individuals would need to retire later. In other words, as life expectancy increases, to receive the same level of income replacement out of the system individuals would need to work longer. The recommendation is to review the table presented in Annex 1 every five years.

**Defining the measure of earnings.** In a well-designed defined benefit scheme, all salaries and bonuses and work contracts of all types should be included in the calculation of the pension. This eliminates incentives to strategically manipulate wages; it improves incentives to contribute; and it eliminates inequities as the implicit rates of return that individuals receive on their contributions do not depend on wage histories. However, *all past wages should be revalorized* – meaning adjusted to
take into account inflation and gains on labor productivity. A good revalorization factor is the growth rate of the average covered wage.

**Indexing pensions.** Pensions should be automatically indexed to preserve their purchasing power (i.e., indexed to inflation). Automatically means that yearly adjustments should not be subject to discretion or negotiation.

**The fully-funded define-contribution system.** In a DC scheme, the pension received by individuals depends on the capital accumulated in their individual accounts. The replacement rate, that is the ratio between the pension and the last salary, would depend on the contribution rate, and the difference between the growth rates of wages and the rate of return on investments. Annex 2 provides a table giving the replacement rates that individuals could receive in Iraq as a function of the retirement age and the contribution rate. The assumption used is that the rate of return on investments is two percentage points above the growth rate of wages.

As in the case of a DB system, given the targeted replacement rate for a full-career worker, and expectations regarding the growth rate of wages and the rate of return on investments, policy makers need to choose the proper contribution rate. The higher the rate of return on investments, the lower the contribution rate that is required to achieve the targeted replacement rate.

**The implementation of such a scheme will require important choices regarding institutional arrangement, management and regulations.** For instance, should the system be centralized and managed by the public sector or decentralized and managed by the private sector. Lebanon and West Bank Gaza are opting for centralized public administration, with essential functions outsourced to the private sector – including the management of assets. There is some evidence that this system can generate lower administrative costs. But, successful centralized administration will depend on the ability of the new system to observe best practices in terms of governance, accountability and investment policies. Other countries such as Mexico have a decentralized management of individual accounts, including investments, but the collection of contributions is centralized. There are also important issues to resolve during the pay-out phase, involving mainly the issuance of annuities. Can an annuity market evolve in Iraq over the medium-term? Should the public fund issue the annuity and manage the necessary mathematical reserves? At this stage this note does not develop these issues further but all will need to be carefully discussed when developing the reform program.

### 3.2.3. Introducing a basic pension

As previously discussed, the main objective of the basic pension is to protect individuals from poverty. The way this pension is provided and financed varies considerably around the world. Two common approaches are: (i) a top-up to the earnings-related pension to reach a certain minimum; and (ii) a flat universal basic pension (or citizen’s pension, as some countries call it). Here we discuss the pros and cons of both schemes and propose an alternative for Iraq.

The main problem with the “top-up” approach is that it reduces incentives to contribute, particularly among low income workers. The incentive problem is exacerbated as the value of the minimum pension increases. For instance, take the case of a system offering at age 65 a minimum pension equivalent to 30 percent of the average wage and with an accrual rate of 1.5 percent. A full-career worker (i.e., somebody who joined the system at age 20) earning 50 percent of the average wage would receive a 60 percent replacement rate and therefore a pension equivalent to the minimum after 40 years of contributions. Individuals in this case would have all the incentives to contribute as little as possible since any additional year of contribution does not bring an increase to the pension that

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18 Upon retirement the capital of an individual is transformed into a pension for life. The operation mainly involves estimating the life expectancy of the individual. This pension is called an annuity.
they would receive. Implicitly, individuals face a 100 percent marginal tax rate on their pension. This case is illustrated in the left panel of Figure 8 for a minimum pension of 20 percent of average earnings.

The flat universal pension approach does not generate incentives problems since all individuals receive the same amount, irrespective of the value of their earnings-related pensions, but it is costly. Financial costs can be reduced if the flat pension is targeted as a function of assets and/or earnings (both pension and non-pension earnings), but targeting is administratively complex and also costly. This second approach is illustrated in the second panel of Figure 8.

A third alternative, which is proposed in the case of Iraq, is to introduce a basic pension that is offered to all individuals reaching a certain age (say 65 years of age) and that is financed from the central budget, but that is “taxed” as a function of the earnings-related pension. In other words, individuals within the contributory pension system would see the basic pension reduced as a given proportion of their earnings-related or contributions-related pension (e.g., a 30-cent reduction in the basic pension for each one-Dinar increase in the earnings-related pension). This mechanism achieves two things. First, it preserves incentives to contribute since the basic pension is taxed at a rate below 100 percent. Second, it controls administrative costs without having to implement complex means-test procedures. Figure 9 illustrates how this basic pension would operate.
3.2.4. Retirement programs for ex-militia members or demobilized soldiers

The approach to follow will depend on the age of the individual and whether he/she has accumulated pension rights. Four cases can be distinguished:

1. *Individuals with pension rights earned under the old system and who meet eligibility conditions for a pension.* They would adhere to the rules imposed by the current emergency payment system and the new legislation for the pension scheme. If complementary pensions or lump sums are to be provided as incentives, the associated costs should be internalized and be assumed by the central budget.

2. *Individuals who have acquired pension rights, but who can be reintegrated to the labor market.* They need to receive financial support during the transition and appropriate retraining programs and be guaranteed the transferability of their pension rights or provided with, possibly, a one-time, lump-sum compensation. Once reintegrated, they should resume contributions.

3. *Individuals without pension rights who are close to the retirement age.* They would be eligible for the new basic pension. Special early retirement programs could be created for these individuals where the age for eligibility is reduced. These programs would be financed out of the general budget.

4. *Individuals without pension rights who can re-integrate into the labor market.* They would need to receive financial support and retraining and ideally join the new pension system.

4. Summary of Financial and Fiscal Impacts

Even in the absence of the armed conflict, the Iraqi pension system would have had to be reformed. It was financially unsustainable and had accumulated an implicit debt that at some point would have had to be repaid. The system was also prone to adverse distributional transfers within generations and created several economic distortions (e.g., low incentives to diversify savings, incentives for retirement over work, little mobility of the labor force).

Iraq now has the opportunity to start “fresh” and put in place a new pension system that is financially self-sustainable, efficient, and equitable. This final section assesses the potential fiscal implications of a reform program along the lines discussed in Sections 3 and 4. For the calculations it is assumed that the new system will be a defined benefit system with the following parameters:¹⁹

- The contribution rate set at 17 percent.
- An accrual rate of 1.5 percent (per year), which provides a 60 percent replacement rate for the average full-career worker.
- A reference retirement age at age 60, and actuarially fair penalties for retirement at earlier ages.
- A minimum pension guarantee of 15 percent of average earnings, which is offered to all individuals above age 65, but that is reduced as a function of the earnings-related pension.

The section starts by reviewing the finances of the new system and then discusses fiscal implications.

¹⁹ See Annex 3 for a description of the methodology and assumptions used in the calculations.
4.1. Finances of the new system

The new system would start by generating a surplus (i.e., contributions would be higher than pension expenditures) between 1 and 2 percent of GDP depending on the age distribution of current contributors20 (see Figure 10). This is because at the beginning, there would be few retirees. In the current proposal, this deficit would be invested in government debt, to help finance the pension of current beneficiaries (i.e., those receiving emergency flat payments).

Over time, as the number of retirees increases, a deficit would be observed, around years 2010 or 2015. In the case of the “young” distribution of contributors (average age is 33) the deficit could attain a peak of around 1 percent of GDP by year 2030. This deficit is explained by the pension rights that individuals accrued under the old system. In other words, the deficit reflects the implicit pension debt of the old system, which needs to be financed by the central budget. Over the long run, however, the system should converge to a sustainable path. For the “old” distribution (average age is 39) the deficit of the system would pick at around 2 percent of GDP by year 2020. Again, over time, the system would converge to a sustainable path.

Figure 10: Evolution of the Cash-Balance of the New Pension System

![Figure 10](image)

Note: The “young” distribution has an average age of 33. It corresponds to the SSO in Iran, the youngest system in the non-gulf countries of the Middle East. The “old” distribution has an average age of 39 and corresponds to the NSSF in Lebanon, the oldest scheme in the region.

Source: Authors’ calculations.

4.2. Fiscal implications

There are three sources of costs to the government associated with the reform proposal: (i) payments to current retirees (i.e., the emergency flat payments); (ii) the cost of the basic-universal pension; and (iii) payments of the implicit pension debt with current contributors. Regarding the last point, the analysis has focused on the case where new contributions are invested in government debt. In this case, the surplus of the pension fund is transferred to the central budget (adding to the government pension debt), while the deficits are financed by the central budget (subtracting from the government pension debt). At all times the debt of the government with the pension fund is explicit in its accounts.

The preliminary calculations show that net transfers from the central budget to pay pensions – net of the contributions in the new pension system that are transferred to the central budget – would start at around 2.7 - 3.2 percent of GDP in the first year of the reform. As previously mentioned, these

---

20 As discussed in Annex 3, age and wage distributions are based on estimates for other countries in the region.
numbers depend on the age and wage distribution of current contributors (see Table 3 and Table 4). The largest expenditure item is the payment of the emergency flat pensions. These alone would initially represent 3.7 percent of GDP. The basic pension, on the other hand, could remain below 1 percent of GDP. Thus, in the absence of the transfer of contributions from the new pension system, the necessary transfers would attain 4.5 – 4.6 percent of GDP. However, initially, the new system would display a surplus that could range between 1.3 to 2 percent of GDP. This surplus would be invested in government debt thus helping finance the implicit pension debt of the old system, as well as the basic universal pension.

Government payments to the new pension system could remain flat at 2.7 percent of GDP until 2010, declining afterwards, or increase to up to 4 percent of GDP and then decline. Again, the observed path will depend, in part, on the current age distribution of the population of plan members. In all cases, payments for the basic pension would remain below 1 percent of GDP, while the share of emergency “flat” payments declines continuously. However, by around years 2010-2015 the new pension system would start to generate a deficit that also needs to be covered by the government. As previously explained, this deficit is related to the pension rights that individuals accrued under the old system. Covering the deficit is therefore equivalent to repaying the implicit pension debt of the old system. In all cases, government payments to the new system will eventually disappear as the new scheme converges to a sustainable path.

There are four important messages from the analysis:

- The implicit pension debt of current pension system, estimated at between 60 and 90 percent of GDP, has already being incurred and, unless the government defaults on it, it will need to be repaid and appropriate financing mechanisms are required.

- The reform proposal developed in this note can control the accumulation of new implicit pension debt while providing a mechanism to finance part of the pension liability of the old system. This is done by closing the old pension systems, enrolling current and new members into a new system that is financially self-sustainable, and investing the initial surplus of the new system in government debt.

- In the absence of reform, the current system would continue to generate ever growing deficits, and therefore demand ever growing transfers from the government. These are inequitable since they would benefit only a minority of the population: workers in the formal sector of the economy, in their large majority civil servants and the military.

- It is important to emphasize that even if the government returned its reserves to the SSS (around ID 19 billion or 0.04 percent of GDP), these would contribute little or nothing to solve the financial problems. Indeed, the reserves represent only 2 to 4 percent of the implicit pension liability of the SSS.
Table 3: Expected Fiscal Impacts of Reform Under Young Distribution of Contributors (% GDP)

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<td><strong>Emergency payments to current retirees (1)</strong></td>
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<tr>
<td>Public sector</td>
<td>3.45%</td>
<td>3.63%</td>
<td>3.38%</td>
<td>3.14%</td>
<td>2.92%</td>
<td>2.70%</td>
<td>1.86%</td>
<td>1.18%</td>
<td>0.29%</td>
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<td>0.04%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>0.02%</td>
<td>0.01%</td>
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<td><strong>Payment of basic pension</strong></td>
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<tr>
<td>If &gt;60 (2)</td>
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<td>0.92%</td>
<td>0.92%</td>
<td>0.88%</td>
<td>0.84%</td>
<td>0.73%</td>
<td>0.68%</td>
<td>0.69%</td>
<td>0.83%</td>
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<td>If &gt;65</td>
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<td>0.58%</td>
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<td>0.56%</td>
<td>0.54%</td>
<td>0.48%</td>
<td>0.46%</td>
<td>0.44%</td>
<td>0.55%</td>
<td>0.47%</td>
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<tr>
<td><strong>Deficit of new system (3)</strong></td>
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<tr>
<td></td>
<td>0.00%</td>
<td>-1.91%</td>
<td>-1.61%</td>
<td>-1.37%</td>
<td>-1.09%</td>
<td>-0.86%</td>
<td>0.00%</td>
<td>0.51%</td>
<td>0.98%</td>
<td>-0.19%</td>
<td>-1.16%</td>
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<tr>
<td><strong>Demand for fiscal support (1)+(2)+(3)</strong></td>
<td>3.48%</td>
<td>2.67%</td>
<td>2.72%</td>
<td>2.73%</td>
<td>2.73%</td>
<td>2.70%</td>
<td>2.60%</td>
<td>2.38%</td>
<td>1.95%</td>
<td>0.64%</td>
<td>-0.53%</td>
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**FINANCES OF REFORMED SYSTEM**

**Accounts for public sector**

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<td>1.52%</td>
<td>1.15%</td>
<td>1.06%</td>
<td>1.08%</td>
<td>1.20%</td>
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<td>0.05%</td>
<td>0.09%</td>
<td>0.13%</td>
<td>0.16%</td>
<td>0.20%</td>
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<td>Payments to Survivors</td>
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<td>2.18%</td>
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**Accounts for private sector**

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<td>0.07%</td>
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<td>0.10%</td>
<td>0.15%</td>
<td>0.28%</td>
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<tr>
<td>Payments to Old Age Beneficiaries</td>
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<td>0.00%</td>
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<td>0.46%</td>
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<tr>
<td>Current Balance</td>
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<td>Aggregate Balance</td>
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**Memo items**

**Implicit pension debt**

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<tr>
<td>Private sector</td>
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**Explicit pension debt**

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<td>62.87%</td>
<td>63.06%</td>
<td>63.23%</td>
<td>60.58%</td>
<td>58.30%</td>
<td>51.67%</td>
<td>47.98%</td>
<td>40.89%</td>
<td>34.52%</td>
<td>54.01%</td>
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<tr>
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<td>1.06%</td>
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<td>1.08%</td>
<td>1.14%</td>
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**Payment of implicit debt if DC scheme**

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<td>1.30%</td>
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<td>1.20%</td>
<td>1.26%</td>
<td>1.91%</td>
<td>2.05%</td>
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<td>0.00%</td>
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<tr>
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<td>1.28%</td>
<td>1.14%</td>
<td>1.15%</td>
<td>1.17%</td>
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<td>1.89%</td>
<td>2.03%</td>
<td>1.08%</td>
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**GDP (ID Trillion)**

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<td>GDP (ID Trillion)</td>
<td>41.4</td>
<td>53.1</td>
<td>61.9</td>
<td>70.5</td>
<td>83.0</td>
<td>96.7</td>
<td>175.8</td>
<td>262.7</td>
<td>483.7</td>
<td>1,578</td>
<td>5,147</td>
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Source: Authors’ calculations
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<tbody>
<tr>
<td><strong>Emergency payments to</strong></td>
<td>3.45%</td>
<td>3.63%</td>
<td>3.38%</td>
<td>3.14%</td>
<td>2.92%</td>
<td>2.70%</td>
<td>1.86%</td>
<td>1.18%</td>
<td>0.29%</td>
<td>0.00%</td>
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<tr>
<td>Private</td>
<td>0.03%</td>
<td>0.04%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>0.02%</td>
<td>0.01%</td>
<td>0.00%</td>
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<tr>
<td><strong>Payment of basic pension</strong></td>
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<tr>
<td>If &gt;60 (2)</td>
<td>0.88%</td>
<td>0.86%</td>
<td>0.84%</td>
<td>0.77%</td>
<td>0.71%</td>
<td>0.57%</td>
<td>0.55%</td>
<td>0.69%</td>
<td>0.81%</td>
<td>0.63%</td>
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<tr>
<td>Total</td>
<td>0.58%</td>
<td>0.58%</td>
<td>0.58%</td>
<td>0.55%</td>
<td>0.52%</td>
<td>0.39%</td>
<td>0.35%</td>
<td>0.41%</td>
<td>0.55%</td>
<td>0.47%</td>
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</tr>
<tr>
<td><strong>Deficit of new system</strong></td>
<td>-1.34%</td>
<td>-0.76%</td>
<td>-0.25%</td>
<td>0.21%</td>
<td>0.58%</td>
<td>1.74%</td>
<td>1.89%</td>
<td>0.92%</td>
<td>0.04%</td>
<td>-1.22%</td>
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<tr>
<td>(3) Demand for</td>
<td>3.48%</td>
<td>3.20%</td>
<td>3.51%</td>
<td>3.76%</td>
<td>3.93%</td>
<td>4.02%</td>
<td>4.18%</td>
<td>3.63%</td>
<td>1.90%</td>
<td>0.85%</td>
<td>-0.59%</td>
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<tr>
<td>fiscal support (1)+(2)+(3)</td>
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**FINANCES OF REFORMED SYSTEM**

**Accounts for public sector**

| Contributions               | 1.92%    | 1.78%    | 1.68%    | 1.52%    | 1.39%    | 1.03%    | 0.94%    | 1.04%    | 1.08%    | 1.17%    |
| Payments to Old Age         | 0.46%    | 0.80%    | 1.12%    | 1.34%    | 1.52%    | 2.05%    | 2.18%    | 1.46%    | 1.19%    | 0.96%    |
| Beneficiaries               |          |          |          |          |          |          |          |          |          |          |
| Payments to Survivors       | 0.11%    | 0.22%    | 0.32%    | 0.39%    | 0.45%    | 0.72%    | 0.66%    | 0.53%    | 0.37%    | 0.29%    |
| Total Expenditures          | 0.63%    | 1.07%    | 1.49%    | 1.78%    | 2.02%    | 2.80%    | 2.87%    | 2.04%    | 1.59%    | 1.29%    |
| **Current Balance**         | 1.29%    | 0.71%    | 0.19%    | -0.26%   | -0.62%   | -1.77%   | -1.93%   | -1.00%   | -0.51%   | -0.11%   |

**Accounts for private sector**

| Contributions               | 0.06%    | 0.07%    | 0.08%    | 0.08%    | 0.11%    | 0.16%    | 0.30%    | 1.00%    | 2.89%    |
| Payments to Old Age         | 0.00%    | 0.01%    | 0.01%    | 0.01%    | 0.03%    | 0.04%    | 0.09%    | 0.25%    | 0.83%    |
| Beneficiaries               |          |          |          |          |          |          |          |          |          |          |
| Payments to Survivors       | 0.00%    | 0.01%    | 0.01%    | 0.02%    | 0.02%    | 0.05%    | 0.07%    | 0.12%    | 0.26%    | 0.64%    |
| Total Expenditures          | 0.01%    | 0.02%    | 0.02%    | 0.03%    | 0.04%    | 0.08%    | 0.12%    | 0.22%    | 0.54%    | 1.56%    |
| **Current Balance**         | 0.06%    | 0.05%    | 0.05%    | 0.05%    | 0.04%    | 0.03%    | 0.04%    | 0.08%    | 0.47%    | 1.34%    |

**Aggregate Balance**        | 1.34%    | 0.76%    | 0.25%    | -0.21%   | -0.58%   | -1.74%   | -1.89%   | -0.92%   | -0.04%   | 1.22%    |

**Memo items**

**Implicit pension debt**

| Public sector | 92.60% |
| Private sector| 2.25%  |

**Explicit debt**

| Public sector | 94.85% | 93.46% | 91.93% | 86.29% | 81.23% | 63.41% | 51.48% | 38.51% | 36.34% | 53.68% |
| Private sector| 2.25%  | 2.25%  | 2.25%  | 2.26%  | 2.18%  | 2.11%  | 2.07%  | 2.71%  | 7.93%  | 29.08% |

**Payment of implicit debt if DC scheme**

| Public sector | 9.26% | 7.38% | 6.81% | 6.10% | 5.51% | 3.06% | 1.76% | 0.40% | 0.00% | 0.00% |
| Private sector| 9.19% | 7.32% | 6.74% | 6.05% | 5.46% | 3.02% | 1.72% | 0.35% | 0.00% | 0.00% |

**GDP (ID Trillion)**

| 41.4 | 53.1 | 61.9 | 70.5 | 83.0 | 96.7 | 175.8 | 262.7 | 483.7 | 1,578 | 5,147 |

Source: Authors’ calculations
1. Accrual Rates as a Function of Retirement Ages and Contribution Rates in a DB Scheme

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Note: Assumes a 4% growth in wages and UN mortality rates for Iraq.
## 2. Replacement Rates as a Function of Retirement Ages and Contribution Rates in a DC Scheme

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Note: Assumes individual enters the system at age 20. The interest rate on investments is two points above the growth rate of wages.
3. BASIC ASSUMPTIONS

Estimates of the implicit pension debt for the existing pension system in Iraq (as stated by current law) as well as financial projections for the proposed reform were carried out with the World Bank’s Pension Reform Options Simulation Toolkit (PROST) model. Simulations were run for the period from 2004 to 2075, separately for the public sector (SPS) and the private sector (SSS) pension schemes. As no data is available on the age distribution of current contributors, two variants have been modeled for each scheme: with younger and older contributor populations (“young” and “old” cases). The youngest and oldest age distributions of contributors in public and private sectors across MENA countries (for which the data was available)\(^{21}\) were used as a basis for the “young” and “old” cases to get estimates of pension liabilities on the lowest and highest end respectively. The main data and assumptions are as follows.

3.1. DEMOGRAPHIC DATA AND ASSUMPTIONS

Population projections for Iraq are provided by the World Bank’s Population Unit. In line with the observed international trends, fertility and mortality rates are assumed to decrease over time. Based on these assumptions, the population is projected to grow from the current estimated 25.4 million to 51.2 million with life expectancy increasing from today’s 62.3 to 74.9 years by the end of the simulation period.

3.2. ECONOMIC DATA AND ASSUMPTIONS

*Evolution of GDP.* GDP in 2004 is set at ID 30,852.7 billion. Assumptions regarding real GDP growth rates and inflation are based on the International Monetary Fund (IMF) projections for Iraq (IMF Country Report, September 2004):

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</table>

*Real discount rate for present values calculations.* Set at 3.5 percent per year.

*Annual average wage in the private sector.* In 2004 it is set at ID 540 thousand (estimated by the Ministry of Labor and Social Affairs of Iraq). The currently observed rapid rise in wages in the private sector is taken into account by assuming an increase in the average wage in the private sector in 2005 to about 50% of the average wage in the public sector (a conservative estimate based on fragmentary information from the Iraqi media).

*Annual average wage in the public sector.* Excluding the military and police this average was in 2004 is set at ID 2,610 thousand (estimated based on the 2004 Budget). An increase to ID 3,815 is modeled in 2005 to incorporate latest data on the 2005 budget.

In the short term future, wage growth rates in the private sector are assumed to remain well below GDP growth rates due to high unemployment; in the long run, they are calibrated to allow the GDP labor share to gradually increase to around 60% and stabilize thereafter. Projected wage growth rates in the public sector are based on the assumption that the average wage of civil servants will converge

\(^{21}\) Data on contributors age distributions were available for Djibouti (CNR and OPS), Iran (CSRO and SSO), Jordan (SSC), Lebanon (civil service, military and NSSF), Morocco (CMR), West Bank and Gaza.
to the projected average wage in the private sector by around 2020 and grow at about the same rate thereafter, as shown in Figure 11.

3.3. DATA AND ASSUMPTIONS REGARDING THE PENSION SYSTEM

In PROST simulations for both SPS and SSS, all current beneficiaries as well as those expected to retire before 2006 (proposed year of reform) are excluded. They are assumed to continue receiving the flat (“emergency”) payments proposed to be phased out by the end of 2005; the cost of these “emergency” pension payments is estimated separately.

Reform starts in 2006. New rules are applied for those retiring after the reform. Pension rights accrued under the old system are assumed to be honored in full (100 percent) and paid out as a proportional benefit at the time of retirement.

Accrued-to-date liabilities to current contributors are calculated based on their pension rights under the rules stated by current law (see Annex 4 for the description of the current law). Only old age and survivorship pension programs are modeled, other programs such as disability, work injuries and occupational deceases, and health care are excluded.

The contribution rate in the proposed reform is 17 percent, out of which one-third is paid by employees and two-thirds by employers. A contribution ceiling is set at 3 times average wage in the public sector.

It is assumed that in the case of a deficit, this is financed from the general state budget. Any surplus is assumed to be transferred to the state budget to finance the payout of the implicit pension debt. Thus, no reserves can be accumulated in the pension system. However, the transfers to the central budget are registered as explicit government debt that earns interests.

3.3.1. Contributors

The total number of contributors in SSS in the base year is 76.2 thousand persons. For modeling purposes, those expected to retire in 2005 with the flat benefit are taken out so the initial stock of contributors includes only those who will retire under the new rules: 75.7 thousand persons in the “young” case and 73.8 thousand in the “old” case. Further, changes in the number of contributors in
the private sector are calibrated to make the combined (SSS and SPS) coverage rate increase in line with the GDP per capita growth, from the present 14-15 percent to 42-43 percent of the labor force by 2075.

The total number of contributors in SPS in the base year is 1,541 thousand persons (including state-owned enterprises, but excluding the military and police). Similar to SSS, those expected to retire in 2005 are excluded from the initial stock of contributors so the initial number of contributors used in the simulations is 1,527 thousand persons and 1,405 thousand persons in the “young” and “old” cases respectively. In the future, the number of individuals employed in the public sector is assumed to increase in proportion to population growth.

As mentioned above, the two variants of the initial age composition of contributors were modeled for both schemes. For SSS, the “young” distribution is based on the age distribution of contributors in the Jordan SSC pension scheme and the “old” distribution on that of the NSSF scheme in Lebanon (respectively the youngest and oldest age distributions of contributors among private pension schemes in the region). In the “young” case the average age is 33, in the “old” – 39.

For SPS, the CSRO pension scheme of Iran and the Lebanon civil service scheme have the two extreme distributions in terms of contributors age among regional civil servants schemes. These distributions are used as the basis for the “young” and “old” cases respectively. The average age is 38 in the “young” case and 47 in the “old”.

In all cases the share of women is assumed to be 50 percent. The assumed “young” and “old” age distributions of contributors are plotted in Figure 12. The projected total number of contributors in the new (merged) system is presented in the left panel of Figure 13, whereas the right panel shows the projected number of contributors in the merged system (“young” case) with a breakdown by sector (public and private).
3.3.2. Beneficiaries
The statutory retirement age in the reformed system is 60 for both genders. Most of the scheme members are assumed to retire between age 59 and 63 with an average length of service of 34-35 years. The projected total number of old age pensioners in the merged system for the two cases—“young” and “old”—is shown in Figure 14.

The benefit formula in the new system is assumed to be the following:

- No vesting period
- Annual accrual rate=1.5 percent (applied only to contributions paid after the reform)
- Lifetime average in reference wage calculations with wages valorized to nominal wage growth
- No maximum replacement rate and no maximum pension
- Penalties for early retirement – 4 percentage points reduction for each year before statutory retirement age, no limit on the number of years of reduction.
- Pensions are indexed to inflation.

Projections show that over time, when pension values are no longer influence by the rights accrued under the old system, average replacement rates converge to 45 percent (see Figure 15).
Figure 14. Projected Number of Old Age

Source: Authors’ calculations

Figure 15. Projected Replacement Rates for Stock of Old Age Pensioners (% of average wage)

Source: Authors’ calculations
4. DESCRIPTION OF THE OLD SYSTEM (CURRENT LAW)

**AFTER THE WAR LAW DOES NOT APPLY. FLAT PENSIONS ARE BEING PAID**

<table>
<thead>
<tr>
<th>ELIGIBILITY CONDITIONS</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Pension System (SEP)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>M=W = 60</td>
</tr>
<tr>
<td><strong>Vesting period</strong></td>
<td>15 years</td>
</tr>
<tr>
<td><strong>Rules for early retirement</strong></td>
<td>M=55 with 30 YOS</td>
</tr>
<tr>
<td></td>
<td>W=50 with 25 YOS</td>
</tr>
<tr>
<td><strong>Rules for delayed retirement</strong></td>
<td>Compulsory retirement at 63</td>
</tr>
<tr>
<td><strong>Rules for abandoning the system</strong></td>
<td>Individuals not meeting retirement conditions (age and minimum 15 years of service) receive a lump-sum payment equaling 1 month’s pension for each year of contributions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SECURITY CONTRIBUTION RATES</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) SOE : 3 - 30% (1-10% by EE matched 200% by ER)*</td>
</tr>
<tr>
<td></td>
<td>(2) Civil Servants: 1% to 10%</td>
</tr>
<tr>
<td></td>
<td>(3) Military: NA</td>
</tr>
<tr>
<td></td>
<td>E=12%; W=5% ** (exceptions: banks 10% on the annual salary fund, oil companies 25% on the annual salary fund)</td>
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</table>

<table>
<thead>
<tr>
<th>ACCRUAL RATE</th>
<th><strong>SCHEMES</strong></th>
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<tbody>
<tr>
<td></td>
<td>12/420=1/35=2.86%</td>
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<table>
<thead>
<tr>
<th>INCOME MEASURE</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Month Wage</td>
<td>AMW last 3 years</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>CEILING ON THE COVERED WAGE</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>NO</td>
</tr>
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<table>
<thead>
<tr>
<th>MAXIMUM REPLACEMENT RATE AND/OR MAXIMUM PENSION</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>75% reference wage plus 5% for each additional dependent up to a max. of 90%</td>
<td>NO</td>
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</tbody>
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<table>
<thead>
<tr>
<th>PENSION INDEXATION</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad-hoc</td>
<td>Ad-hoc</td>
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<table>
<thead>
<tr>
<th>MINIMUM PENSION</th>
<th><strong>SCHEMES</strong></th>
</tr>
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<tbody>
<tr>
<td>NA***</td>
<td>NA</td>
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<table>
<thead>
<tr>
<th>ECONOMY-WIDE MINIMUM WAGE</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>NA</td>
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<table>
<thead>
<tr>
<th>ECONOMY-WIDE AVERAGE WAGE</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>ID (thousands) 45.0</td>
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</table>

<table>
<thead>
<tr>
<th>MONTHLY AVERAGE WAGE</th>
<th><strong>SCHEMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ID (thousands) 243.4</td>
<td>ID (thousands) 45.0</td>
</tr>
</tbody>
</table>

Source: MOF and SSW.

Note: Categories of workers excluded from system include agricultural workers, temporary employees, domestic servants, and family laborers.

* The percentage of contribution differs with wage level and is matched 200% by the ER.

** Out of the 17% total contribution, only 14% covers pensions. The equivalent portions of the contribution for pensions are: EE: 4.1%; ER: 9.9%.

***The law stipulates a minimum pension of ID$ per month, but it is outdated, provided recent changes.
5. MEASURES TO IMPROVE ADMINISTRATION OF THE PENSION SYSTEM IN IRAQ

This section discusses key issues pertaining to improving the system of pension administration in Iraq. It outlines critical operation areas and recommends activities to be undertaken prior to implementing the reform measures. The overall focus of the preparatory activities should be on surveying the mechanisms of the old system and learning about existing institutions, assessing their technical capacity, and addressing the needs for capacity building. The tasks proposed below should be useful when defining terms of reference for technical assistance on pension administration practices. The attached questionnaire is designed to facilitate collection of the detailed information on pension administration practices.

The proposed overall reform measures stress the importance of improving services under the current system. Because the current system in large covers public sector employees, emphasis is also placed on expanding coverage to private sector employees and providing income security to all elderly citizens in Iraq. The focus of this analysis, thus, is broad. It seeks to reform or improve services provided to current contributors and the elderly covered under the system before the military campaign, and proposes services for those denied benefits under the old pension system and for working-age individuals who have not participated or are not participating in any formal pension scheme.

5.1. RECORDS OF THE OLD SYSTEM

Policy options for recognizing, accounting for, and paying off the pension liabilities accumulated under the old system would be constrained by the availability and quality of data on the respective members. Better and more reliable records could allow for greater differentiation in the levels of benefits. However, if a considerable number of records are poor, missing, or destroyed, a categorical approach to the benefit determination (flat benefits possibly with some limited differentiation based on group eligibility criteria) might be more appropriate.

With two broad categories of members who contributed to the old system – those who had not yet reached pension age and those who had retired prior to the conflict – the approaches toward assessing the quality of records will differ.

5.1.1. Working-age members of the old system

For records of the employees who have not yet retired, understanding the structure, completeness, and reliability of the existing records is very important. Practices of collection, verification, reconciliation, and storing of records of individual employment history and contributions generally depend on legal requirements, institutional setting, and capacity to enforce rules. Most systems would regularly collect and store reports from employers. Other, less-developed systems would only recognize records from employers made available at the time of employee application for benefits. The latter systems are less transparent and more prone to fraud in the process of eligibility and benefit determination. If such practices were applied in Iraq, their legacy would seriously incapacitate the ability of the newly reformed pension administration to establish a credible mechanism of determining eligibility given the context of the post-conflict situation.
Unfortunately, problems can arise even if required reporting forms used to be collected and stored by the pension fund:

- If any administrative changes were implemented in recent years without consistent effort and supervision, records for the same individuals across time may appear inconsistent or incomplete.

- If different employment groups used to be treated differently for contribution, reporting, and record-keeping purposes (e.g., employees versus self-employed; public versus private sector; etc.), difficulties may arise with fair and transparent identification of accrued rights across all employment categories. The scope and scale of the effect of the fragmentation of the pension system on the quality of records will need to be studied.

- Multiple reporting forms for different purposes (e.g., some to provide a record of employment history, others to report salary and contributions) with lack of consistency in providing such reports could make the task of assessing entitlement difficult.

- Weak institutions and lack of enforcement in collecting contribution reports would result in idiosyncratic gaps in data for some companies or some individuals.

5.1.2. Retired members of the old system

The records of retirees who are currently receiving emergency “flat” payments would be relatively easier to secure. However, if some or all are stored in the regional offices, consolidation of information on the outstanding liabilities could prove to be a challenge. And just as with the records of employment history, there is the same risk that some records of the previously retired members could be found damaged or destroyed in the conflict. This opens the possibility of having individuals who receive benefits while not eligible, and not providing benefits to individuals who would be eligible.

As a general note, political difficulty may arise with recognizing the rights of the former surviving beneficiaries and the disability recipients in separation from the needs of other deprived and conflict-affected groups in Iraq. An opposition to reform (or rather push for expansion of the “social” component of the system) may come from the groups who perceive payments to survivors and disabled, as identified based on records of the old system, inequitable in the context of the equally demanding needs of those wounded or who lost bread-winners in the conflict. Hence, the process of pension reform should proceed in parallel to establishing mechanisms of addressing the needs of those affected by the conflict.

Recommended tasks of technical analysis should include:

(a) Research rules of the old reporting and record-keeping system

(b) Identify all locations of data, detailing physical conditions and media it is stored in

(c) Categorize and assess the quality of the reports and data available

(d) Secure the records that survived in a safe location

(e) Define the options for (selective) digitizing critical data

(f) Elaborate recommendations on uses of the available information for the policy setting (e.g., degree of benefit differentiation, etc.).

(g) Audit and update records of current beneficiaries.
5.2. EMPLOYEE REGISTRATION SYSTEM

A robust and transparent individual registration system is a must for a modern pension administration. The administration of any pension scheme relies heavily on universal registration mechanisms that make identification of the insured individuals easy and unique. As a best practice model, the same universal ID system should be used for all fiscal and insurance purposes. Furthermore, it is well advised for national ID number to have some internal validation mechanism that facilitates immediate validation of records.

All existing individual registration systems in Iraq (e.g., tax, social insurance, civil/election systems) would need to be studied and contrasted with the best practices. Experience of employee registration and records management under the old system should provide useful insight into the problems. If the recommendation is to introduce a new registration system for the reformed pension agency, it would be ideal to ensure the consistency and continuity of all individual records across time (e.g., for those who contributed under the old rules and will continue contributing to the new system) and across various population groups (e.g., retired under the old rules – who are receiving the emergency “flat” payments, and future retirees under the new system).

The system of civil registration that was used in the recent Iraqi elections and developed under the supervision of international technical experts must be surveyed carefully. Efficient implementation would render the system propitious for the new universal registration mechanism for all fiscal purposes. However, such systems – without changes – are normally not able to accommodate foreign nationals (e.g., those with continuous residency and employment in Iraq) or maybe even Iraqis who lost all valid proofs of identity during the conflict. Therefore, it may need to be supplemented with an extension system for the otherwise excluded groups who still need to be covered by the fiscal and social insurance systems.

Correspondingly, the proposed tasks and activities include:

(a) Define clear criteria for a nation-wide employee registration system representing best international practices and corresponding to the needs of Iraq

(b) Prepare a study of the various individual registration systems in Iraq that were in use prior to the conflict and those introduced recently

(c) Review options for universal insurance registration mechanisms in Iraq and recommend a registration policy and administration solution, detailing modifications in the existing system(s) if necessary.

(d) Audit current records of contributors.

5.3. CONTRIBUTION COLLECTION SYSTEM

Quality of services provided by the reformed pension administration will depend heavily on the capacity and infrastructure to collect contributions, reconcile payments, and monitor compliance. The financial sector normally would mediate payments of the contributions. In an environment where the infrastructure has been weakened by military conflict and where there are dispersed geographic locations of economic activities, the efficiency and capacity of the banking sector to mediate payments at present is not clear.

According to the records of the pension system, the private sector reflected only a small proportion of covered labor (less than 100,000 employees). The majority of contributors worked in the civil service and public companies. Under such settings, it would not be unusual to find the overall capacity of the financial sector to mediate and the fiscal sector to process the contribution payments quite weak and underdeveloped. Experience and so technical capacity of reconciliation
mechanisms is normally (but only in part) a function of the number and diversity of payers. At the same time, contribution payments from the civil sector would likely not require the involved reconciliation procedures given a closed system of easily identifiable clients. Identifying the contribution transactions of public companies, if few, similarly should not have posed challenges. Hence, any expansion of coverage for the private sector would likely require a significant and systematic effort aimed at improving the capacity of the financial sector to collect and report on payments as well as of the collection agency to process and reconcile all reports.

The role of Tax Administration in the old system needs to be studied. If the collection of taxes was separated from the collection of pension contributions, an assessment of options for the unified collection, given international experiences, would be well advised. In a unified collection system, only one agency is in charge of collection, reconciliation, and enforcement of both taxes and pensions contributions. A study of the prevailing collection practices of the tax administration in Iraq should provide knowledge about the overall infrastructure and efficiency of the collection system. The effort of capacity building in the area of collection and reconciliation would need to be significantly extended if/when the scheme with individual pension accounts is introduced. In such a system, requirements for clarity of processes and quality of individual records are particularly high.

Finally, effective enforcement assumes an efficient system for registering businesses. Similar to the above-discussed system of employee registration, the quality of data in the business register must provide sufficient confidence in positive identification of participating employers.

The activities in this area should include:

(a) Survey collection practices in Iraq (for both pension contributions and taxes) under the existing system. Identify deficiencies and outline good practices.

(b) Analyze the present capacity of the financial sector to mediate the collection system. Survey transaction accounting and reporting practices of the commercial banks. Define needs of technical assistance by the financial sector institutions.

(c) Map regional availability of services provided by the commercial banks to understand potential infrastructure constraints on expansion of coverage.

(d) Research accounting and reconciliation practices of the national collection agency and the state pension administration. Define needs for technical assistance by the public collection agency. Review staffing needs and scope professional training needs.

(e) Analyze relative merits of unified versus specialized collection arrangements in the local context.

(f) Provide analysis of the national business registration system.

(g) Develop recommendations regarding the structure and implementation time line for the fully functioning collection system with nation-wide coverage.

As part of the reform of collection and record-keeping systems, in the shorter term it is recommended to prepare and launch a pilot project that would include several major enterprises in the public and/or private sectors. Participation may be restricted to the employers meeting the criteria of a certain size and/or geographic location. At the very initial stage, involving only employers with good capacity for accounting and record keeping could be even more beneficial. The number of participating entities should be sufficiently small to ensure that the collection agency can accommodate frequent direct contacts with the companies during the pilot.
To alleviate pressure on the new, fragile collection system, draft legislation could assume gradual expansion of coverage. Initially, the mandate of participation would be only on the state agencies, public enterprise, and possibly only large private companies. Subsequently (after one to two years) access to the system could be provided to all private businesses; eventually self-employed individuals should also join the system.

International experience shows that simplified alternative mechanisms of contribution payments can effectively facilitate expansion of coverage to small private businesses and the self-employed. Such may include: lower frequency of contribution payments; presumptive fixed contribution amounts (possibly with several categories for various economic activities); and combined lump-sum tax and pension contribution (e.g., licensing fees). However, such mechanisms should be designed with caution as they may also be easily abused if parameters of the system that link benefits with contributions pervert incentives to contribute.

5.4. ADMINISTRATIVE INTEGRATION

The fragmentation of pension provisions in Iraq, like in many other countries, is associated with numerous inefficiencies. These include higher costs of administration, restricted labor mobility, and potential constraints on effective consumption-smoothing for individuals who choose to temporarily or permanently change sectors of their employment activity – since change can create important fluctuation in the level of future pensions. The integration of pension administration under a single agency with a unified set of rules and regulations would help to eliminate such inefficiencies and bring cost savings.

Integration means new tasks, new processes, new information systems, and trained personnel, which may require substantial expenditures in the short term but will pay off in the longer perspective. A strategy for integration needs to be defined. First, it will be important to assess which of the two currently operating pension institutions better-suits the task. SPS has been dealing with a greater number of participants but possibly with less-involved procedures of collection and reconciliation. At the same time, SSS has been exposed to the experience of collecting contributions from the private sector but the scheme covered only a small number of the contributors. It is not unlikely that both institutions would have to remain functional until their old plans with the current participants have been completely phased out.

The tasks of technical analysis in this area should include:

(a) Assess overall institutional, strategic, managerial, and operational capacity of both SSS and SPS.
(b) Present and discuss the merits of various strategies of integration of pension provisions under a single administration.
(c) If the new pension system is introduced, analyze and define services to be provided by both institutions in the interim period until the old schemes have been completely phased out.
(d) Assess the needs of information systems that should support a full-scale operation of the national pension administration both to handle the transition and to provide quality services under the newly reformed system.

5.5 ADMINISTRATION OF THE BASIC PENSION PROGRAM

The reform proposal includes the introduction of the universal basic pension for elderly Iraqis. As part of the implementation strategy, analysis of the options for delivery of cash benefits and of the associated costs and risks need to be performed. The infrastructure of benefit delivery that was in
place prior to the conflict as well as mechanisms employed recently by various cash assistance programs need to be carefully studied.

The banking system normally would be a preferred method of benefit delivery. The banking sector usually provides the opportunity for fast, reliable, and automated transfer of data and funds. This gives opportunity to the pension agency to have a reliable record of fund and data flows, thereby enabling more accurate reconciliation, security of service, and capacity for problem solving. Using the banking system also minimizes security problems associated with cash-in-transit: the banking system enables local cash deposits to be used as payments, thereby minimizing the need for cash deliveries to payment outlets. Using banks may provide the side benefit of additional liquidity in the financial system. However, initially banks may experience significant administrative pressure of picking up all new claimants and opening new accounts – the process of phasing in the payment system to full capacity may take several months.

At the same time, given poor financial infrastructure, in some remote or rural areas, standard delivery services may need to be combined with alternative delivery methods. In any event, the solution must be cost effective and provide for quality services.

Another important aspect is client identity. A key component of determining eligibility is the extent to which individuals and their age can be positively identified. This exercise may be quite complex in such a situation as prevails in Iraq where supposedly personal documents of many may be missing and official records may be of poor quality, incomplete, or destroyed. The mix of qualified evidential material (passport, birth certificate, election registration card, documents issued by third countries, etc.) would need to be identified.

Similarly, the systems of financial controls with proper disclosure incentives would need to be put in place in parallel to the introduction of the new system. International evidence suggests that the lack of death registration mechanisms poses a risk to the financial health of the public pension system. Some effective means may include a lump-sum incentive benefit or funeral benefit to families of the deceased beneficiaries of basic pension.

A critical component of the policy design and implementation effort is interaction between various public insurance and assistance programs. For instance, the basic pension benefit may or may not be taken into account as part of the family income when determining eligibility for some of the social assistance programs that target poor families. Whatever the policy decisions, as noted above, it is important to ensure universal individual registration mechanisms to facilitate efficient cross-program checks.

The proposed tasks in this area include:

(a) Survey various benefit payment mechanisms in place
(b) Map geographic coverage of the banking system
(c) Research and propose alternative methods of benefit delivery, and assess costs associated with various delivery methods
(d) Survey rules and prevailing practices of birth and death registration
(e) Propose a mix of qualified documents to be used for validation and registration of entitlement for basic pension
(f) Follow up on other retirement and social assistance policy initiatives and recommend measures to ensure efficient interaction between various public programs.
GENERIC QUESTIONNAIRE TO SURVEY PENSION ADMINISTRATION PRACTICES

EMPLOYEE REGISTRATION

- Which institution issues personal IDs used as individual social insurance numbers?
- Are insurance ID numbers unique?
- Does the insurance ID have structural verification mechanisms (e.g., control digit)?
- Is the individual insurance ID different from the individual tax ID?
- Do all employees/self-employed who pay taxes and pension contributions have IDs?

REGISTRATION OF BUSINESSES AND FIXED COST OF PARTICIPATION

- Which institution issues business registration numbers (BRN)?
- Do all entities that pay taxes and pension contributions have unique BRNs?
- Does the BRN have structural verification mechanisms (e.g., control digit)?
- Is any other information explicitly or implicitly included in the BRN structure (e.g., type of employer, region, time of issue)?
- How long does it take to process the application for a BRN?
- Are self-employed individuals required to obtain a BRN to pay contributions?
- Are self-employed individuals required to open bank accounts to pay taxes and pension contributions?

WITHHOLDING AND MINIMUM CONTRIBUTION REQUIREMENTS

- Is there a legal requirement of withholding from payroll by employers?
- For withholding purposes, what is the legal definition of “employee” (does it include: short-term employees, part-time employees, seasonal workers, implicit contracts, etc.)?
- What is the legal definition of wages for withholding purposes (does it include: bonuses, irregular payments, in-kind payments, payments below the minimum wage, etc.)?
- Is there a minimum wage/minimum contribution policy for the purpose of pension contributions?
- Is the minimum wage/contribution policy inclusive (all wages below the minimum wage are subject to a flat minimum contribution requirement) or exemptive (contributions on wages below the minimum wage are not required/accepted)?
- If applied, what is the minimum wage for pension contribution purposes as a share of the average economy-wide wage?
- If applied, what percentage of the contributors pay the minimum-level contribution?

STANDARD CONTRIBUTION PAYMENT PROCEDURES

- What is the number of administrative collection/enforcement branches (including in rural areas)?
- What is the regular mandated frequency of payments by employers?
- Is there a mechanism of compliance monitoring? What compliance indicators are used?
- What is the estimated collection ratio (collected contributions over contributions due)?
• What percentage of employers does not make payments on time in each given month?
• Are there fines for the delayed payments?
• To which agency do all the fines and penalties go?

**Simplified Tax and Contribution Payment Procedures**

• What is the number of contributing, self-employed individuals and small businesses (including in rural areas)?
• Do alternative tax payment procedures exist (e.g., different frequencies, rates, tax base) for different groups of contributors?
• Can income/profit taxes be paid on a presumptive basis (e.g., flat regular payments or a license fee)?
• What is the share of paying entities that follow simplified tax payment procedures?
• Do alternative pension contribution payment procedures exist (e.g., different frequencies, rates, base wage)?
• Which entities may/must follow alternative pension contribution payment procedures (e.g., all, agriculture workers, self-employed, voluntary contributors)?
• Can contributions be paid on a presumptive basis (e.g., flat regular amounts or license fee)?
• What is the share of businesses that use simplified contribution payment procedures?
• What are the presumptive methods used, if any?
• If applied, what is the alternative frequency of contribution payments?
• Is the contribution rate under simplified procedures different from the rate under standard procedures?

**Collection Infrastructure**

• What role in the process of collection of pension contributions do the following agencies play?
  - Tax Administration / Pension Agency / Central Bank / Commercial Banks / Ministry of Finance / Treasury.
  - *Menu of answers:* pre-payment check / payment declarations collection / individual contribution reports collection / reconciliation of payments / reconciliation of individual reports / follow up on errors and discrepancies / assessment and enforcement / collection account maintenance / investment of funds / contribution payments for civil servants / contributions for military / contributions for unemployed or poor).
• What is the number of commercial bank branches (including in rural areas)?
• Are records of employees verified prior to or at the time of contribution payment? What information is verified: IDs/names and amounts (percentages and sums). Which institution performs the verification (e.g., banks or pension offices)?
• Do banks charge for transferring contribution payments? How much?
• Are there requirements for banks to transfer collected payments within a specified period of time?
• What share of contributions is not transferred in a timely manner by banks or not transferred at all?
• What fee can be imposed on banks for non-compliance?
• How often do banks report on transactions of collected and transferred contributions to the collection agency?
• Do banks report electronically or on paper?
• Do banks perform any real-time client data verification (e.g., BRN check) prior to money transfer?

**COLLECTION ACCOUNT AND RECONCILIATION OF PAYMENTS**

• Is there one collection account or multiple collection accounts where all regular gross payments flow?
• Which institution maintains the collection account(s)?
• How often are transactions on the collection account(s) reported to the pension agency?
• Which institution is responsible for reconciling deposits and receivables in the collection account with payables of the commercial banks?
• How many staff are involved in reconciling information from the collection account with the commercial banks?
• At the end of a collection cycle, what share of the total contributions remains unidentified by source?

**REPORTING AND RECONCILIATION OF INDIVIDUAL CONTRIBUTIONS**

• What is the frequency of reporting on individual pension contributions?
• To which agency must the reports on individual contributions be submitted?
• Are all reports entered into an electronic database? Which agency processes the reports and performs the data entry?
• What action is taken if reports have errors?
• Can reports be submitted electronically? Are reports required to be submitted electronically (e.g., for large enterprises)?
• Which institution reconciles the reports with the payments?
• In any given year, what share of collected payments cannot be matched to reports (reports are missing or amounts do not match)?
• What actions are taken if amounts reported and paid do not match or when reports are missing?

**RECORD-KEEPING PROCEDURES**

• Are records of lump-sum and individual contributions kept electronically or on paper?
• Are paper records on contributions stored in local administrative branches or in a centralized location/database?
• What information about the participant is available with the pension agency? How often is the general information updated?
• Is any use made of the records of employment that employers generate when employees apply for benefits?
**Benefit Payment Procedures**

- What documents are used for identity verification at the time of application for benefit?
- What is the average waiting period from the application submission to the first benefit payment?
- What methods of benefit delivery are used (e.g., Banks, post office branches, pension offices, home delivery of cash)?
- What are the predominant delivery methods in rural areas?
- Do banks charge fees for benefit delivery? Who pays the fees?
- How often are payments made?
- To determine whether the beneficiary is still alive, what checks are carried out? Are there policies that provide incentives for families to report the death of their retired relative?