# Hashemite Kingdom of Jordan

## Social Security Corporation (SSC): Toward Coverage Expansion and a More Adequate, Equitable and Sustainable Pension System

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## Executive summary

**This policy note presents an overview of the challenges and opportunities that Jordanian policymakers could consider when discussing a strategy to expand coverage of social security, with adequate, sustainable, and equitable financing mechanisms, which is also in line with long term fiscal sustainability.** The note focuses on the pensions program of SSC[1], and includes a preliminary analysis and projections under certain assumptions and provided data[2]. An overview, and recommendations based on good international best practices are presented. In addition to pensions macro-simulations included here, further micro-simulations and individual impact analysis could be provided in a later stage, including old-age, disability, and survivors.

**The note is divided in three sections.** In the first section a brief overview of the Jordanian pension and social insurance system is presented, including description of the programs, and recent reforms. The second section presents the challenges that the current system is facing: a) financial sustainability (including some preliminary financial projections of baseline scenarios); b) economic challenges (fairness, and incentives); and c) social challenges (adequacy, and coverage). The third section presents some policy options to address such challenges: a) addressing financial unsustainability (including financial projections of reform options); and b) addressing social, and economic challenges. International best practices are also presented in this section. In addition to the three sections, the note also includes five annexes.

**SSC has a rich history, and a considerable number of reform efforts have been taking place, particularly during the last few years. Jordan's first social security law was in 1978, and originally covered the programs of work injury benefits, as well as old-age, survivors, and disability benefits, all programs to be administered by the SSC (Social Security Corporation).** Until 1995, the SSC covered only private sector workers. Civil servants and the military continued to have their independent pension schemes. However, in 1995 and 2003, reform laws were passed, and civil servants and military schemes were closed to new entrants, respectively. Basically, all new hiring contracts in the government and the army became covered by the same scheme. It is estimated that by 2060-70, Jordan will have a unified social security system where both public and private sector workers will be solely covered by one agency, the SSC.

**The pensions program of SSC is designed as contributory, earnings-related, pay-as-you-go (PAYG), defined-benefit (DB)** [3]. This is still a common type of design worldwide. Such design uses a financing mechanism by which current contributors pay for current beneficiaries, and the pension is calculated according to a formula that relates retirement income benefits to individual earnings. Like most

[1] The Jordanian social security system currently provides benefits for old-age, disability and survivors, maternity, work injury, and unemployment insurance. This chapter, however, only focuses on the old-age, disability, and survivors program.

[2] Some figures, particularly those related with the impact of the last emergency measures, are still in the process of being discussed further in-depth with counterparts, and updated projections can be presented in a second phase.

[3] Contributory means that participating employees in the pension scheme are required to support the scheme with contributions (often through payroll taxes). Earnings related means that pensions are based on the beneficiary's earnings. Pay-as-you go (PAYG) in its strictest sense, is a method of financing whereby current pensions are paid out of current revenues from contributions. When revenues are higher than expenditures some reserves can be accumulated, hence PAYG can be fully or partially-funded. Defined benefit (DB) means the pensions are calculated based on a prescribed formula that usually considers several factors - mostly length of employment and salary history.

contributory pension schemes worldwide, the Jordan pension program in SSC is intended to be self-financed.

**Challenges that the programs in SSC are currently facing are not only financial, but also social, and economic. On the financial aspects, it is important to emphasize that the total spending on pensions in Jordan is already high (around 9 percent of GDP in 2019)[4] by international standards, particularly considering that Jordan is still a young country, and the current pensions program only covers around 53 percent of the total labor force[5].** Legal coverage of social security in Jordan is wide, especially since 2010, when the self-employed and workers in agriculture were included. However, effective coverage is only partial. By law those that are covered include all Jordanian and non-Jordanian private-sector employees, public-sector employees, self-employed persons, and citizens of Jordan working at diplomatic missions or for international organizations in Jordan. Voluntary coverage is also available.

**There is a general misleading perception that the SSC programs are financially sustainable**. In particular, regarding the pensions program, there is too often a mistaken conclusion that the program is financially healthy simply because, at the moment, it is generating cash surpluses (i.e., contributions to the scheme exceed benefits). However, a pension program is sustainable only when it has the capacity to pay current – and future – benefits over a long horizon under reasonable assumptions without shifting substantial burdens to future generations and without having to cut benefits, increase contributions, or change qualifying conditions. In 2019 there were 1.3 million people contributing to the pensions program, and only 242.0 thousand beneficiaries, and even with this favorable demographics, revenues from contributions could hardly cover pension benefits. In 2019, revenues from contributions represented around JD billion 1.5, while pension spending represented around JD billion 1.1. Accumulated amount of reserves, for all programs in SSC, represented around 36 percent of GDP (JD billion 10.9) by end March 2020, and already JD billion 11 by end June 2020.

**Financial projections of the pensions program of SSC show that it will already run deficit in around 10 years from now. When investments are considered in the projections, the deficit can be delayed for around 10 more years.** Basically, revenues from contributions will not be sufficient to cover benefit expenditures in only around 10 years, and all SSC reserves could be depleted sooner than expected[6], unless further reform measures are considered. Demographic changes (the number of beneficiaries eventually growing faster than the number of contributors) are not the sole cause of unsustainability, but given these changes, the intergenerational transfers will increasingly be less able to finance the gap. A main cause of unsustainability is the misalignment of the parameters of the current design[7].

[4] In 2019 the general budget paid around 5 percent of GDP (JD billion 1.4) for two old pension schemes (military and civil servants), while SSC paid around 4 percent of GDP (JD billion 1.3) for its pension benefits (regular and lump-sum payments).

[5] In 2019 the total number of active contributors was 1,345,118 to the pensions program of SSC, while labor force was 2,637,689. Today SSC is expecting to have around 1,495,000 active contributors (since many of those receiving emergency benefits are expected to become active). However, the figure has not yet been validated.

[6] Given the demographics of the pension program, reserves are projected to keep increasing for around 20 years, but after that they could also be quickly depleting.

[7] In order to make sure that a pension scheme is sustainable, the design parameters would need to be aligned. In other words, if the aim is to make the PAYG pension scheme sustainable and self-financed (and non-regressive), then the linkages between the various parameters of the pension system design would need to be respected. Basically, to make a PAYG DB financially sustainable, policy makers can choose only two of the three key parameters: (i) contribution rate, (ii) relative pension level, and (iii) retirement age. Once two parameters are set, the third is determined endogenously. At the end, demographic changes are not the sole cause of the pension scheme unsustainability, but the intergenerational transfers will increasingly be less able to finance the gap for the Jordan pension scheme since the parameters are inconsistent with long term balance.

**One important social challenge of SSC is the low rate of effective coverage. The reason is not only because many individuals never contribute, but also because many others contribute only part of the time that they are supposed to. Affiliates to the SSC only contribute on average about one third of their working life**. Densities of contribution in Jordan are even smaller than densities reported in other countries such as those in Latin America that are currently facing similar challenges. Informality is also interrelated with early retirement in Jordan, which is very high. In SSC (people with 25 years of service can retire as young as 45 years of age), around 60 percent of contributors retire early (before the legal retirement ages of 55/60 for men/women respectively)[8]. Pensions are relatively low for many early retirees, so many choose to work informally. Recognizing the challenge of early retirement, a recent amendment to law 2014 specifies that all contributors that started contributing on October 1st. 2019 will be subject to some new rules: men will be required to contribute at least for 252 months before retiring at age 55, and women will be required to contribute at least 228 months before retiring at age of 52. Basically, nobody will be allowed to retire before the ages of 55/52 for men/women respectively. Given the fact that this measure on early retirement will only affect the new entrants, no impact is expected for at least 20 years. The new amendment also specifies that the reduction factors for early retirement pensions will be higher than the previous ones, however they will not yet be actuarially fair. With the new rule of early retirement, people will not be able to retire any longer at 45 with 25 years of service, but there could still be many people retiring at ages as young as 55/52, while life expectancies keep increasing.

**Jordan has now an important window of opportunity to reform further its pension program, with the ultimate aim to expand the coverage of good quality pensions –where good quality is defined as pensions that create a balance between sustainability on the one hand and adequacy on the other, without creating inequities, or other distortions, and which are delivered in an efficient way in terms of costs, investment returns and labor market impact.** The needed pension reform should be considered not only in the context of all SSC programs, but in the context of the current overall trends and reforms regarding labor market, and labor market policies, as well as the social protection programs. Jordan could also be an example of pension reform for the rest of the MENA region if this window of opportunity is well taken. At the moment, compelling examples for reform come mostly from outside the region. Also, the bad experiences of Greece or Italy, for example, show the consequences of not reforming, basically a failure to get ahead of the demographic wave. Evidently this can lead to very tough decisions on pensions and a huge burden for the next generations.

**Policymakers in Jordan should also explore the advantages of a multi-pillar approach that combines basic pensions with some form of retirement savings, in addition to the current type of system design. Many of the policy measures could address at the same time the financial, economic, and social challenges**. For instance, the current voluntary pension program could be re-designed as DC (defined contribution) in order to make the program more sustainable, and with other features that would also make it more attractive. Alternatively, or additionally, a complementary pensions scheme could also be considered in SSC which would not only increase the adequacy of pensions, but also fairness, and sustainability. If the complementary scheme is well designed, this could also increase coverage.

**Also with respect to the expansion of coverage, before COVID-19 crisis, SSC had actually already been making a considerable effort to implement administrative and other measures to reduce job**

[8] Early retirees as a percentage from all retirees in the last 5 years were as follows: 2019: 58.25%, 2018: 62.71%, 2017: 60.65%, 2016:60.96%, 2015:61.11%

**informality in the country**. This included: (i) awareness campaigns targeting employers in sectors with high informality; (ii) improvements in labor inspections[9]; and (iii) better inter-operability between relevant government databases.

**Concrete components of a current SSC strategy for financial sustainability and formalization include the following:** i) ensuring the sustainability of all programs; ii) decreasing the level of the informality within a comprehensive social protection strategy in coordination with related line ministries and agencies; iii) putting in place some mechanisms that would reduce evasion, increase declaration of wages, and ultimately increase the effective coverage of employees, and firms that should be covered by law; iv) providing public and media awareness campaigns about the importance of social security coverage; v) providing capacity building programs for SSC human resources; vi) improving the services of the programs, including e-services programs; and vii) enhancing the corporation efforts on archiving systems. In addition to these efforts, and given the current crisis, various emergency programs and defense orders for SSC to provide unemployment compensations and other benefits have been implemented.

**Expected support from the World Bank to the formalization strategy includes:** A new World Bank study on job informality[10] that will inform policies to increase formal employment. The study will look at the profile of informal workers (e.g. low-skill young workers versus early retirees) and the firms that employ them (formal or informal) in order to help to determine what groups (of workers and firms) and policies should focus on and how to build on the current policy package to reduce informality. The study will also look at options to provide pension solutions to informal workers, particularly those in micro-enterprises and self-employed. The study will present alternative design options for the current voluntary pension system in SSC (currently covering only around 73,000 people, and design as DB-Defined Benefit) to make it more financially sustainable, and more attractive (providing adequate benefits), particularly for workers with irregular incomes. Potential alternative (usually innovative) mechanisms will be identified in order to cover specific income groups such as self-employed, and/or low income, and/or informal employees, which are usually groups that are not easy to be covered by the traditional contributory earnings-related pension scheme.

**Summary of recommendations includes the adoption of measures to improve the administration, and enforcement policies, and extend coverage while providing at the same time incentives to save for retirement on a voluntary basis, include**: i) gradually adjust further the parameters of the SSC pension program in order to achieve affordable, adequate, fair, transparent, and sustainable pensions; ii) design and implement mechanisms to expand coverage; iii) modernize the administration of SSC by improving the quality of records, harmonizing identification systems, integrating IT development programs and improving collection enforcement to reduce the financial gap; and iv) adopt a regulatory framework for private pensions and design supervision programs aligned with international standards.

**In short, ultimately the aim of the note is to help decision makers to look beyond short-term measures, and quick fixes, but to look instead into a long-term strategy to expand coverage through a more sustainable, equitable, and adequate pension system. The strategy should avoid transferring the financial burden of the system to the next generation.** The current COVID 19 crisis has put in evidence some of the weaknesses of the current social security system and the urgent need to increase

[9] Further improvement to inspection could take place using the national inspection system and increasing digital/bank payments of salaries.

[10] Led by a team of SPJ (Social Protection and Jobs).

effective coverage to the informal sector. Even with the new reforms, the social security system still faces a risk of financially unsustainable funds, given the current design (parameters, and qualifying conditions), the increased longevity of retirees, along with the decrease of the formal labor force participation. More efforts are needed to ensure long-term fiscal sustainability without increasing contribution rates. Simulations on Jordan's social security system presented here emphasize the importance of further raising the retirement age with slightly decreasing the accrual rates (less generous benefit formula) in order to address the current economic, and social issues as well as the system's long-term insolvency. Moreover, expanding social security coverage would require more diversification of pillars (including DC voluntary pension scheme).

## I. Description of the Social Security Programs in Jordan, and recent reforms

1. **Jordan's first social security law was in 1978 (Law no. 30), and originally covered the programs of work injury benefits, as well as old-age, survivors, and disability benefits, all programs to be administered by the SSC (Social Security Corporation).** Until 1995, the SSC covered only private sector workers. Civil servants and the military continued to have their independent schemes. However, in 1995 and 2003, reform laws were passed, and civil servants and military schemes were closed to new entrants, respectively. Basically, all new hiring contracts in the government and the army became covered by the same scheme.

2. **It is estimated that by 2060-70, Jordan will have a unified social security system where public sector and private sector workers will be solely covered by one agency, the SSC[11].** Meanwhile, the old pension schemes for military, and civil servants are slowly phasing out. In 2019 the total amount of these old pension schemes (for both civil and military beneficiaries) represented JD 1.4 billion. This amount is still expected to increase until around 2023 when it will start gradually decreasing. In addition to old-age beneficiaries, these old schemes are also expected to pay for their dependents, hence even though there have not been any new contributors, the payments will still be paid for a very long time.

3. **The old military and civil pension schemes are not analyzed in this chapter, given the lack of data. The purpose of the note is to assess and analyze only the pensions program of SSC**. However, some relevant and general characteristics of the old pension schemes are known, and worth to mention. A pensions department at the Ministry of Finance is responsible for these old schemes, paid by the general budget. There are still around 5,160 contributors in these old schemes. The youngest among them are already 50 years of age. Around 3,160 civil servants will reach the age of 60 by next year. There is currently some discussion regarding the possibility for those 'young' old civil servants to buy some length of service and retire early. There is, however, some reluctancy from the individuals to do so, given the fact that only between 40 and 60 percent of all their remuneration is subject to contribution (and pension credited), hence when civil servants retires their total remuneration goes down considerably (losing the allowances that they receive during service). In the old pension scheme of civil servants there are currently 81,035 old-age beneficiaries, and 24,093 survivors. The numbers of the old military pension scheme are unknown and totally confidential. However, it is known that by 2023, the first military personnel that started contributing to SSC in 2003 (with 20 years of service) will start retiring in the new system of SSC.

4. **Today the Jordanian social security system provides benefits for old-age, disability and survivors, maternity, work injury, and unemployment insurance. As in most countries, old-age, disability and survivors insurance is the main and oldest sub-group of all programs**. The first law of 1978 was subject to several modifications, particularly in 2001, and 2010. The law was actually profoundly redesigned in 2010 and finally approved by the parliament with further slight changes in 2014. Maternity leave, unemployment insurance was initiated during these reform years. The SSC also provides voluntary private pensions.

[11] World Bank has not done any analysis of the old pension scheme, but the head and team of the pensions department at the Ministry of Finance in Jordan provided these estimated years.

5. **Legal coverage of social security in Jordan is wide, particularly since 2010, when the self-employed and workers in agriculture were included.** However, effective coverage is only partial (see next section on challenges). By law, those that are covered include all Jordanian and non-Jordanian private-sector employees, public-sector employees not covered by a special system, self-employed persons, and citizens of Jordan working at diplomatic missions or for international organizations in Jordan.

6. **The pension program of SSC is designed as contributory, earnings-related, pay-as-you-go (PAYG), defined-benefit (DB). The level of social security contributions in SSC (so-called payroll taxes), is currently 21.75 percent for all programs, and 17.5 percent is for pensions only.** The provided benefits include cash maternity benefits for all members. Private-sector employees and citizens of Jordan that are members of SSC can also receive unemployment benefits. However, public-sector employees, self-employed persons, and casual labor[12] are excluded from such benefits. Work injury benefits are provided to private-sector employees and apprentices, self-employed persons, and citizens of Jordan working at diplomatic missions or for international organizations. Casual workers are excluded. See table 1 for contribution rates of the various SSC programs, and Box 1 for details regarding the pensions program, which is the focus of this chapter.

**Table 1: contribution rates (% of wages) in SSC**

| Total Contribution Rates ( 21.75 %): | |
|---|---|
| **Old-age, disability and survivors:** | |
| | **Employees: 6.5%** |
| | **Employer: 11%** |
| | **Self-employed: 17.5%** |
| **Sickness and maternity:** | |
| | **Employer: 0.75%** |
| **Work injury:** | |
| | **Employer: 2%** |
| **Unemployement:** | |
| | **Employees: 1%** |
| | **Employer: 0.5%** |
| ***(note: effective contribution rate varies by year given that civil servants have different categories of contributions rates )*** | |

[12] Casual labor are usually not subscribed because their relationship with the employer is inconsistent (less than 16 days a month).

**Box 1. Key Design Features of Jordan's Pension System in SSC**

***CONTRIBUTION RATES***

*The contribution rates:* employee pays 6.5% of gross monthly covered earnings, and employer 11% (those in hazardous professions pay an addition 1%). Voluntarily insured and self-employed pay 17.5% of monthly earnings. The minimum monthly earnings used to calculate contributions are the national monthly minimum wage. The national monthly minimum wage is 220 dinars for citizens and 150 dinars for noncitizens. The maximum monthly earnings used to calculate contributions are 3,000 dinars. The Government finances any deficit, and only contributes as an employer.

***RETIREMENT AGE (and other QUALIFYING CONDITIONS)***

*The legal retirement age:* Age 60 (men) or age 55 (women) with at least 180 months of contributions (paid or purchased), including at least 84 months of paid contributions. Contributions may be retroactively purchased under certain conditions. An insured person with the minimum number of months of contributions at the normal retirement age may continue to contribute up to age 65 (men) or age 60 (women) to qualify for or increase the value of an old-age pension.

*Early retirement pension:* Currently age 50 with at least 252 months (men) or 228 months (women) of paid contributions; age 45 with at least 300 months of paid contributions; or age 45 with at least 216 months (men) or 180 months (women) of paid contributions and at least 60 months of paid contributions in the last 10 years in hazardous professions. Early pensions are also paid to certain other groups before age 50, depending on the insured's age on March 1, 2014, gender, and number of paid contributions. As earlier explained, for those who started contributing on October 1st. 2019 slightly stricter rules for early retirement will apply.

**BENEFIT LEVELS**

*The accrual rate, and reference monthly base earnings:* the monthly pension is the sum of 2.5% of the insured's average monthly earnings up to 1,500 dinars and 2% of average monthly earnings above 1,500 dinars, multiplied by the insured's months of contributions divided by 12. Average monthly earnings are based on the insured's earnings in the last 36 months. Dependent's supplement: 12% of the old-age pension is paid for the first dependent (at least 10 dinars and up to 100 dinars) plus 6% each for the second and third dependents (at least 10 dinars and up to 25 dinars for each person).

*Benefit reduction for early pension*: The pension is proportionally reduced according to a schedule in law and is based on the last 60 months of contributions and the insured's age at application.

*Pension indexation:* Pensions are adjusted in May every year based on changes in the consumer price index or the annual growth in the legally defined average covered wage, whichever is lower. According to a recent amendment, the increases of pension indexation are provided as an equal nominal amount to all individuals. An important peculiarity of the program is that early pensions are not adjusted until the pensioner reaches the normal retirement age.

*Old-age settlement:* A lump sum of 10% of the insured's average annual earnings is paid for each year of contributions with less than 10 years of contributions; 12% of average annual earnings with 10 to 18 years; or 15% of average annual earnings with more than 18 years of contributions.

7. **A voluntary pension program is also available in SSC, but only for Jordanians**. The rationale behind offering such program is to allow Jordanian citizens who are not covered on a mandatory basis to get use of social insurances in which JSSC offers, this includes housewives, self-employed, Jordanians who live & work abroad or any Jordanian who has any source of income and is wishes to get covered under SSC'S umbrella. Voluntary contributor who subscribe to SSC for the first time can choose his/her insured wage. This wage cannot be lower than the minimum wage of 220JD, or higher than a value that is calculated based on two factors (insured's age and the average wage based on SSC's database for the year of subscription). The individuals who have contributed before in SSC (on a mandatory basis or voluntary basis), can continue contributing to the voluntary program based on his/her last wage, or s/he can ask to raise that wage by 10 percent for each break year in service. However, the voluntary contribution stops once the contributor is part of an insured establishment.

8. **The voluntary program of SSC only covers old age, disability, and death.** Therefore, voluntary contributor pays only 17.5 percent of his/her insured wage (equivalent to what would represent 11 percent from an employer, plus 6.5 percent from the employee). The benefits from the voluntary program are calculated the same way as the ones from the compulsory program, as a defined-benefit design. The only difference is that, as earlier mentioned, those covered by the voluntary program are not entitled to the unemployment, maternity, and work injuries benefits.

## II. Challenges of the pensions program of SSC

9. **All the recent amendments (2016, 2019, 2020)[13] of the Social Security Law are not yet addressing many of the current challenges that SSC is facing.** Decision makers in Jordan are aware that the impact of such amendments will certainly be minor. However, given the historical background of reforms and various initiatives, the difficulties of discussing further reforms at this stage, the current focus is now on improving governance aspects that might increase coverage. While this could certainly be effective, careful consideration should be given to the fact that the current design is not yet in equilibrium, and parametric measures are recommended to be revisited in the near future, and in line with more clear objectives. This would improve the current economic, social, and financial challenges that the current pensions program in SSC is facing.

10. **Despite all the previous reform measures, the pensions program design of SSC has still some parametric inconsistencies. Like in most PAYG schemes worldwide, benefit promises are not in line with contribution rates and retirement ages[14].** Such inconsistency is bridged, at the moment, by the favorable demographics, by the surplus of the scheme resulting from a much higher number of contributors when comparing to beneficiaries (1,345,118 contributors vs

[13] See box in annex III.

[14] In order to make sure that a pension scheme is sustainable, the design parameters would need to be aligned. In other words, if the aim is to make the PAYG pension scheme sustainable and self-financed (and non-regressive), then the linkages between the various parameters of the pension system design would need to be respected. Basically, to make a PAYG DB financially sustainable, policy makers can choose only two of the three key parameters: (i) contribution rate, (ii) relative pension level, and (iii) retirement age. Once two parameters are set, the third is determined endogenously. At the end, demographic changes are not the sole cause of the pension scheme unsustainability, but the intergenerational transfers will increasingly be less able to finance the gap for the Jordan pension scheme since the parameters are inconsistent with long term balance.

242,000 beneficiaries). However, since the number of beneficiaries is increasing faster than the number of contributors, as the experience shows worldwide, the program eventually needs to rely on different sources of funding, particularly the general budget. The pensions program of SSC is projected to run deficit in around 10 years from now. With investments the deficit could be delayed but only for around 10 more years[15].

## Financial challenges: Long-term financial trends and unsustainability

11. **There is a general misleading perception that the SSC programs are financially sustainable**. In particular, regarding the pensions program, there is too often a mistaken conclusion that the program is financially healthy simply because, at the moment, it is generating cash surpluses (i.e., contributions to the scheme exceed benefits). However, a pension program is sustainable only when it has the capacity to pay current – and future – benefits over a long horizon under reasonable assumptions without shifting substantial burdens to future generations and without having to cut benefits, increase contributions, or change qualifying conditions. In 2019 there were 1.3 million people contributing to the pensions program, and only 242.0 thousand beneficiaries, and even with this favorable demographics, revenues from contributions could hardly cover pension benefits. In 2019, revenues from contributions represented around JD billion 1.5, while pension spending represented around JD billion 1.1. Accumulated amount of reserves, for all programs in SSC, represented around 36 percent of GDP (JD billion 10.9) by end March 2020, and already JD billion 11 by end June 2020.

12. **To understand how the future trends will govern the pension program financial balance in SSC, it is essential to understand which are the major elements that are driving expenditures and revenues**. Expenditures of the pension system are generally driven by two major factors: (i) the scale of retirement-income promises; and (ii) the system demographics, and maturity of pension schemes. With respect to the first factor, old-age retirement income is quite high in Jordan with an estimated replacement rate or benefit ratio (defined here as average pension divided by average wage) reaching 86 percent in 2019. The average annual pensionable wage in Jordan was around JD 6,408 in 2019, while the average retirement benefit[16] was JD 5,484 the same year. On the other hand, demographics are still favorable in the pensions program of SSC.

13. **Jordan's total public spending on pensions is one of the highest in MENA.** The country's pension expenditures totaled around 9 percent of GDP in 2019 (when included both SSC and old pension schemes). This spending as percentage of GDP is the highest in the MENA region (Figure 5). In 2019 the general budget paid around 5 percent of GDP (JD billion 1.4) for the old scheme pensions, while SSC paid around 4 percent of GDP (JD billion 1.1) for its pension benefits.

14. **Demographics are central to the analysis of a PAYG pension system. In 2019, the pensions program of SSC had 1,345,118 contributors and only 242,000 beneficiaries[17].** The support ratio shows that there are more than 5 contributors for each beneficiary. The reciprocal is the dependency ratio: the number of beneficiaries amounts to 18 percent of contributors. This is

[15] Due mostly to the system demographics, SSC reserves are projected to keep increasing for the next 15 or 20 years. However, they are also projected to deplete fast after that.
[16] Based on the latest data provided by SSC
[17] This figure refers to the number of pension payments. Effectively more than 300,000 people benefited from such payments.

still quite low by international comparisons with OECD countries[18]. Demographics are an important driver of the sustainability challenge, and in this respect Jordan seems to be in a good shape. However, demographics are not the only driver of such challenge, but the design characteristics are also key. This can result in unsustainable benefit ratios (average pension as percentage of average wage). In 2019 the benefit ratio of the pension program of SSC was as high as 85 percent, while in OECD countries the same ratio is only between 25 and 55 percent. High benefit ratios indicate generous pensions when comparing with wages.

**Table 2. Demographic characteristics of the pensions program in SSC, 2019[19]**

| DEMOGRAPHICS CHARACTERISTICS | 2019 | 2020 (as of end-June) |
|---|---|---|
| Number of contributors | 1,345,118 | 1,495,000 |
| Number of all beneficiaries: | 242,000 | 248,348 |
| old-age pensioners (including early retirment) | 190,778 | 196,266 |
| early retirement beneficiaries | 117,760 | 121,828 |
| old age retirees | 73,018 | 74,438 |
| other beneficiaries | | |
| disability pensioners | 24,263 | 24,497 |
| survivors | 18,933 | 19,279 |
| others | 8,026 | 8,306 |
| Number of new old-age pensioners (including early retirment) | 15,364 | 6,984 |
| | | |
| Average annual wage (in JD) | 6,408 | 6,840 |
| Average annual pension (in JD) | 5,484 | 5,549 |
| old-age pensioners (including early retirment) | | |
| early retirement | 6,264 | 6,328 |
| old age | 5,508 | 5,540 |

15. **Some key design characteristics of the pensions program of SSC are quite generous by international comparisons[20].** Despite all the reform efforts and considerable improvements that SSC has been experienced (particularly with laws 2010, 2014 and recent amendments), the programs, but in particular the pensions, one has still various design features that could be further improved. For instance, pensions in SSC are still calculated based on last wages only (3 years), not the entire career as it would make the program not only more sustainable, but fairer. Contribution rates for pensions program are slightly higher than the average in the region (17.5 percent), and an average accrual rate for the pension calculation of 2.3 percent is slightly lower than the average in the region, however is considerably higher than the average in Europe which is 1.5 percent. The practice of indexing pensions in SSC is quite peculiar, although pensions are increased with CPI, individuals have the same nominal increase. Legal retirement ages are 60/55 for men and women respectively. The minimum length of service is 15 years but with only 20 years members can retire at any age.

[18] System dependency ratios are higher than 50 percent in Italy, and even in countries with the lowest dependency ratios like in Ireland, the ratio is already higher than 25 percent.

[19] The total number of active contributors to the pensions program of SSC today is estimated to be today around 1,495,000. This number includes the active contributors as of 21-July, with those who were allowed to skip two months of pension contributions (per defense order 1) and those who are paying half of the pension contributions until the end of the year (defense order 14-Hemaya).

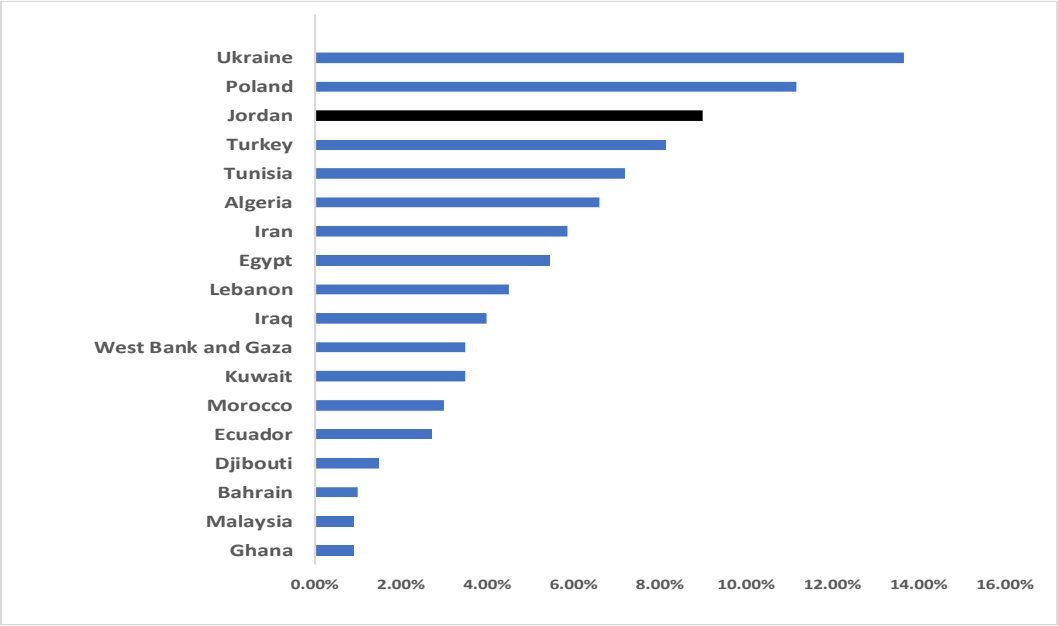
[20] See next section for challenges

16. **As a pure PAYG scheme, the pensions program of SSC has a small surplus.** The revenues from contributions in the pensions program in 2019 represented almost JD billion 1.5, while the pension payments represented already JD billion 1.1.

**Table 3. Performance characteristics of the pensions program in SSC, 2019[21]**

| FINANCIAL FLOWS AND RESERVES (JD) | 2019 | 2020 (as of end-June) |
|---|---|---|
| Revenues from contributions | 1,499,462,456 | 472,176,819 |
| other revenues (fnes/penalties and interests) | 31,810,893 | 10,400,164 |
| Regular Pension payments | 1,127,834,869 | 310,839,399 |
| Lump-sum payments | 63,722,572 | 23,274,124 |
| **Surplus/Deficit** | 339,715,908 | 148,463,459 |
| **Total Reserves in SSC** | 10,970,000,000 | 11,000,000,000 |

**Figure 1. Public Pension Spending in MENA and Select Countries**



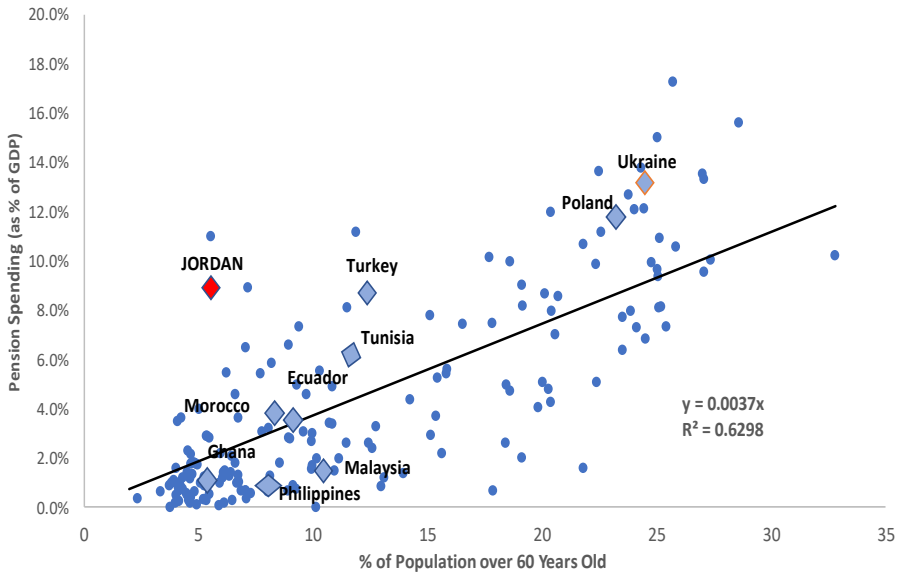

*Source*: World Bank pensions database.

17. **Jordan is also currently spending on pensions above what it would be expected based on international comparisons**. Figure 6 presents the relationship between demographics and pension spending. On the horizontal axis, the dependency ratio is defined as the percentage of the population over the age of 60 as percentage of total population. It ranges from less than 5 percent in demographically young countries like Ghana to nearly 23 percent in Japan—the country with the oldest population. Countries with similar demographics to that of Jordan, spend much less on pensions. The vertical axis shows public pension expenditures as a percentage of GDP. Countries close to the regression line spend what is normal (according to

[21] Reserves refer to end March 2020. Disclosed SSC reserves by end June 2020 represented already JD billion 11.

international experience) given their demographics. Jordan is significantly above the line, which means that its pension spending is associated with a dependency ratio that is more than its current ratio. Thus, countries with this level of pension expenditures usually have a significantly larger elderly population to cover. Basically, given the benefits generosity and the high incidence of early retirement, pension spending in Jordan is high by international comparisons.

**Figure 2. Pension Spending vs Demographics**




*Source: World Bank pensions database*

18. **Future revenues and expenditures of the pensions program of SSC are closely linked to changes in the size and age structure of the population of the country, employment levels, economic and wage growth, inflation, and rates of return on investments**. Therefore, for estimating future SSC finances, a projection of Jordan's total population and economic activity has been required. Demographic projections provided estimates of the size and composition of the labor force, while projections of the gross domestic product (GDP) and the growth of labor productivity were necessary to project the number of workers and their earnings. Demographic and macroeconomic variables were projected following an analysis of past trends and an estimate of plausible future experience.

19. **According to recent World Bank and IMF reports the Syrian refugee crisis has negatively impacted the Jordanian labor market. Unemployment grew the most in governorates that host most of the refugees. The unemployment rate has reached 16.3 percent 4 in 2015**. Hence, it is assumed that the total labor force participation rate will increase during the projection period. For male workers, age-specific participation rates are assumed to remain constant over time. The participation rate (15-64) of male workers thus fluctuates around 70 percent until 2063. For females, it is assumed that ages specific participation rates will increase to a level equivalent to 40 percent of male participation rates over the next 50 years. It is reasonable to expect that Jordan will experience, in the next decades, the same trend observed in most other countries regarding the participation rate of women. Under this scenario, the female

participation rate will increase from its present level of around 20 percent to almost 30 percent by 2065.

20. **Some of the data and assumptions for the preliminary projections presented here have not yet been discussed in depth with the SSC counterparts, hence they have to be taken with caution**. Also, the preliminary projections should not be quoted in absolute terms without proper reference to the underlying assumptions. The purpose of the sustainability benchmarks presented here is to provide a comparison of the relative magnitude of the effects of different pension policy measures under various scenarios. The type of simulations included here are explained in table 4.

21. **The results are presented for four simulations with different economic, demographic, and behavioral assumptions.** Baseline scenario 1 is based on the current program (including the recent amendments) and assuming some minor expansion of coverage. Very similar to baseline scenario 1, scenario 2 assumes no expansion of coverage, where nominal number of contributors increase only based on the increase of number of working age population (basically the coverage percentages of active contributors by age are constant during the entire simulation period). On the other hand, baseline scenario 4 a considerable expansion of coverage, all under the same PAYG program (in this scenario 4 the number of active contributors increase to 3.4 million by the end of the simulation period, while in scenarios 1, and 2 the number of assumed active contributors by the end of the simulation period is less than 3 million). Baseline scenario 3 is like baseline scenario 1 but assuming lower investment rates of return.

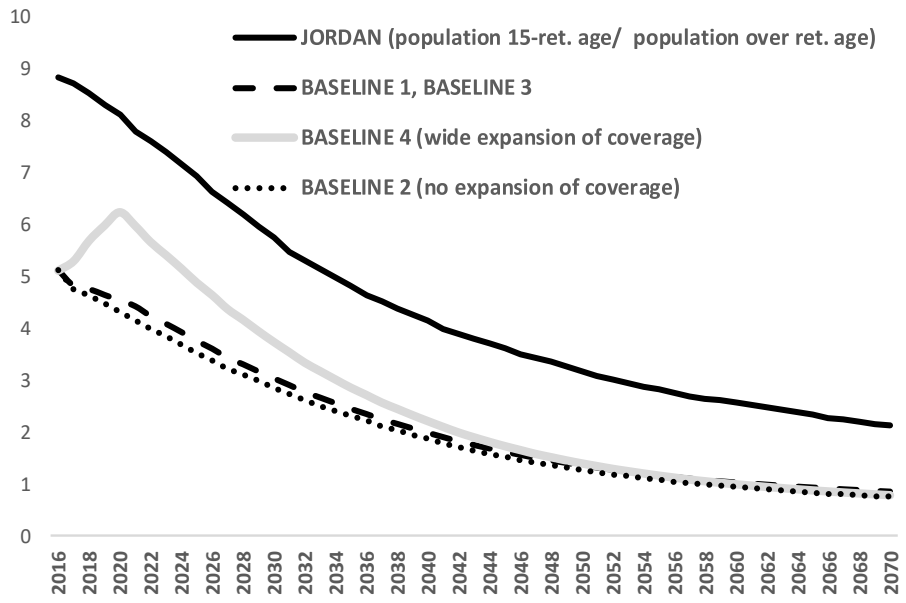
**Table 4. Pension Scenarios**

| | |
|---|---|
| **Baseline scenario 1** | Current system, some expansion of coverage, no reform |
| **Baseline scenario 2** | Current system, no expansion of coverage, no reform |
| **Baseline Scenario 3** | Current system, different assumptions of investment returns (estimated lower rates, from average 3% to 2%), no reform |
| **Baseline Scenario 4** | Current system, considerable expansion of coverage, no reform |

22. **Support ratios (active contributors over beneficiaries) are obviously decreasing in all scenarios.** Figure 7 illustrates the support ratios in all scenarios and compare them with the Jordanian population support ratio (population between ages 15-retirement ages over population older than retirement age). While there are today in Jordan more than 8 young people for 1 person above the legal retirement age, by the end of the simulation period there will only be around 2 young people for each person above retirement age (population ageing). The system support ratios are even lower. Short vesting periods and low retirement ages (plus

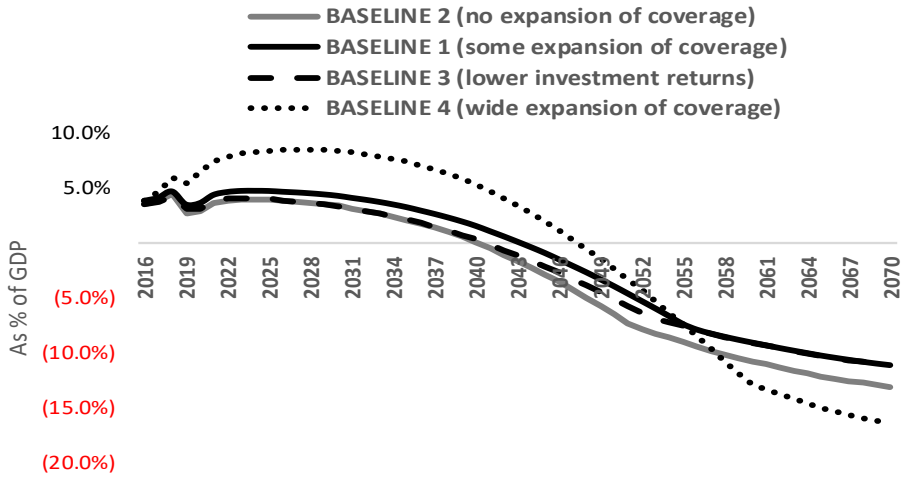
weak penalties on early retirement) also contribute to low support ratios. In 2019 there were only around 5 contributors for each beneficiary. In simulation baseline 1 there will be more beneficiaries than contributors by the end of the simulation period. Even in the simulation baseline 4 where a wide expansion of coverage is assumed, the support ratio will eventually be lower than 1 (if there are more contributors, there will also be more beneficiaries).

**Figure 3. Support Ratios under various scenarios**




*Source*: PROST results

**Figure 4. Current balance under different baseline scenarios (SSC pensions program)**

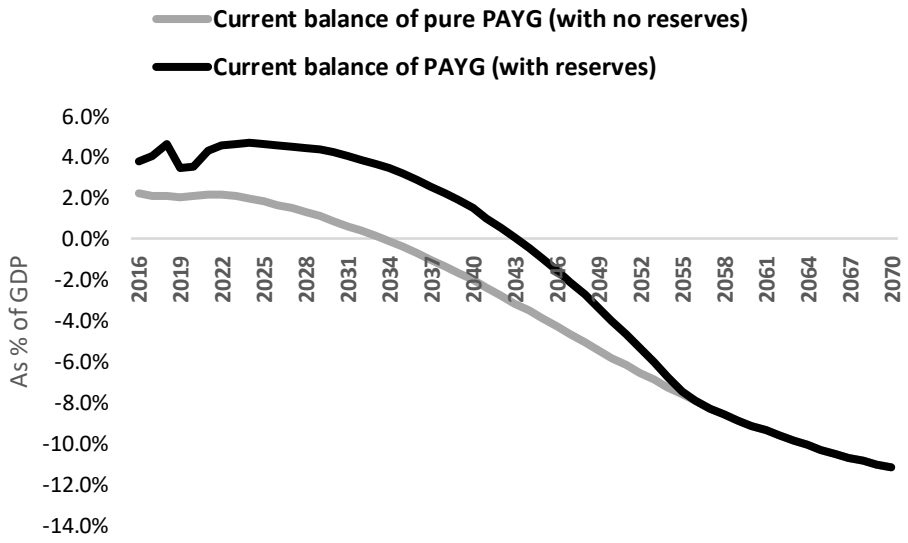



23. **Unless reforms are applied, even under the assumption of considerable expansion of coverage, the program is unsustainable**. Current balances under different no-reform scenarios

are illustrated in Figure 8. The deficit in baseline 1 is expected to be around year 2044. When no expansion of coverage or lower investment returns are assumed, deficit appears a few years earlier. On the other hand, when further expansion of coverage is assumed, the deficit does not appear until around year 2050. However, under this scenario 4, the deficit is eventually even deeper than in any other scenario. Having more contributors also means having many more beneficiaries as well, and consequently higher spending in an unsustainable type of design.

24. **Investment returns make a big difference in the financial situation of the pensions program of SSC. However, even when investment returns are considered, the program is unsustainable.** Looking only at the pure PAYG scheme (with no reserves), basically when considering only revenues from contributions and other revenues that are not investment returns (such as fines), versus the pension spending, the deficit is projected to appear by around year 2033. When investment returns are considered, the deficit does not appear until around year 2043. Figure 9 illustrates the difference of these projected current balances.

**Figure 5. Current balance under pure PAYG, and PAYG with reserves**




**<u>Economic challenges: inequities, and adverse labor market incentives</u>**

25. **The financial sustainability is indeed an important aspect in the design of the pension system, however, the economic aspects in terms of equity (fairness), efficiency, and good incentives is as important, and should be given a great consideration while discussing pension program designs.** There are some aspects of the current design of the SSC pension program that may be compromising equity and creating bad incentives.

26. **The pension program of SSC implicitly encourages early retirement.** The current program favors early retirement rather than working to the normal retirement age, as it is easy to qualify for early retirement, and pensions are not penalized fairly. As a result, around 60 percent[22] of

[22] Early retirees as a percentage from all retirees in the last 5 years were as follows: 2019: 58.25%, 2018: 62.71%, 2017: 60.65%, 2016:60.96%, 2015:61.11%

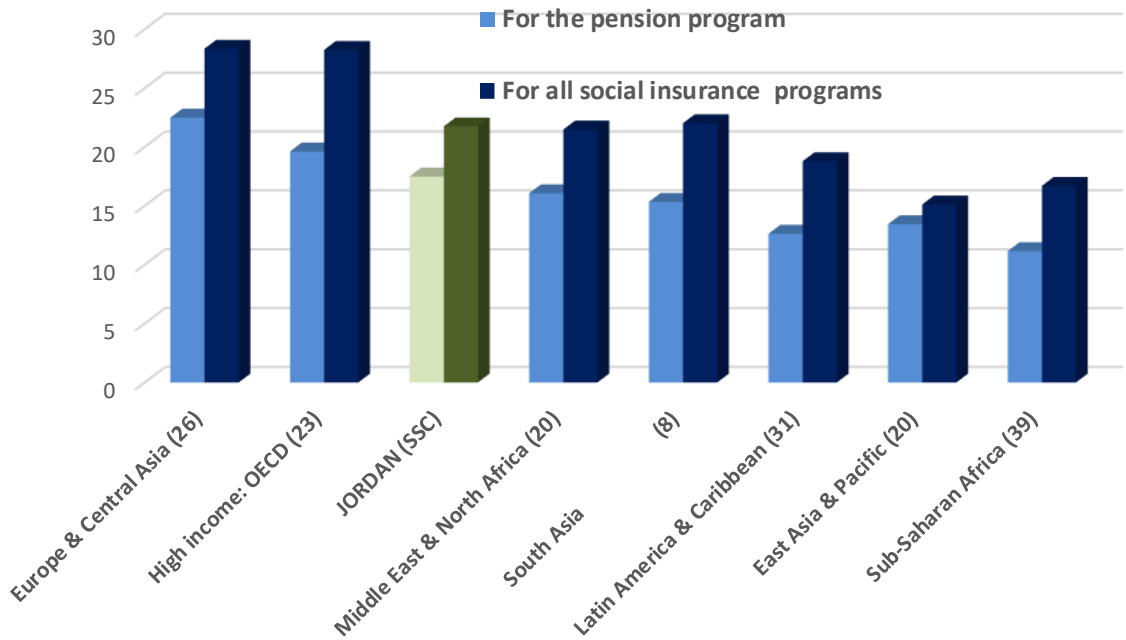
contributors to SSC take early retirement. It is a common policy in many countries to reduce pension benefits for early retirees—often called 'actuarial' deductions—to reflect the longer duration over which pension benefits will be paid. However, this is not the case in Jordan, and early retirement can be achieved at any age with at least 20 years of contributions. The recent amendment (2019) on early retirement will not have any impact for around 20 years (see section on scenarios) given the fact that only those who started contributing on October 1st. 2019 will be subject to the new rules. Nobody will be allowed to retire before the ages of 55/52 for men/women respectively. With the new rule of early retirement, people will not be able any longer to retire at 45 with 25 years of service (as it is still possible for those who started contributing before October 1st. 2019). The new amendments also include a higher reduction for early retirement pensions, but not yet actuarially fair. Although the new early retirement measures will certainly represent a certain improvement, they still produce inequities, and incentives to retire early (even with the increase of life expectancy).

27. **Pensions for early retirement are calculated now according to an actuarial reduction factor specified by law, which is not actuarially fair or neutral.** Early retirement could be sustainable if actuarially fair reduction factors were applied, which would result in lower pensions. Regardless, the objective of the pension system is to protect people of old age (dependents, and disabled), but not people that are still young and able to work. On the other hand, a peculiarity, but not a good practice, of SSC is the fact that pensions for those retiring early are not indexed until the individual reaches the legal retirement age. This also creates labor market distortions. People that retire early receive a pension that might not be indexed for years. This provides incentives for people to compensate this loss of purchasing power with informal sector work.

28. **Another parameter of the pensions program that could create economic challenges is the contribution rate. The difficult trade-offs of economic and financial (sustainability) challenges has to be carefully considered.** There have often been discussions in Jordan about reducing contribution rates to encourage employment, however the current contribution rate on pensions is not well aligned with the generous benefits that the program is providing[23]. Basically, most people are putting into the program much less than what they are taking out (which makes it difficult in the long-run to keep self-financed). On the other hand, and as illustrated in Figure 1, contribution rates in Jordan are not among the highest. This rate is a tax on employment, and might discourage employers from hiring workers if it is too high. This also encourages workers and employers to operate in the informal sector and evade social security contributions. Moreover, it pushes workers into schemes for self-employed and casual workers that lower contributions. High rates for social security contributions could also make Jordanian firms less competitive. In an increasingly global and competitive world economy, this could limit job creation and discourages investment, acting as a brake on economic growth and development. While all this is true careful consideration should be given to the attempts to decrease the contribution rate, unless the retirement age and/or the benefit levels are adjusted accordingly. On the other hand, increasing contribution rates is certainly not recommended.

[23] See footnote 11

**Figure 6. Social Security Contribution Rates: Jordan, and average by region (% of Wages)**




*Source*: World Bank Pension Database, OECD.

29. **The calculation of pension benefits in Jordan is contrary to international best practices.** Old-age pensions are estimated based on salaries during the latest three years of an individual's career, instead of a lifetime-average. Using revalued salaries of an employee's entire working life is currently near-universal international practice in advanced economies. Also, since retirement pensions are calculated based on an individual's last wages, it is also common practice to under-declare wages. Available data indicate that, on average, a worker's last wages are considerably higher than the rest of the wages during his or her career[24].

30. **Using the last salaries to estimate pensions can result in inequities, especially when large increases at the end of the career are allowed**. In fact, the earnings measure, or also called the base wage[25], is the most important determinant of pension entitlements. This measure is used in the benefit formula to calculate a beneficiary's pension. Basing pensions on a subset of earning years (like in the case of the pensions program of SSC), which was first used when salary histories were not easily accessible, tends to encourage beneficiaries to retire once earnings have peaked rather than move to lower-paid employment. It is also not actuarially fair to pay pensions based on last salary information while beneficiaries have usually been contributing to

[24] Same in Jordan (see annex)

[25] Earnings measure (revaluating earliest year's earnings) is closely linked to 'valorization'. This is the procedure for adjusting earlier years' earnings to take account of changes in the costs and standards of living between the time a pension entitlement is earned and the time of retirement. Because it relates to the working life, it is sometimes called pre-retirement indexation. (The 'pre-retirement' prefix is needed to distinguish this from the adjustment of pensions in payment during retirement.) Valorization becomes a policy issue as soon as pension benefits are based on anything more than the final year's salary.

the system for many more years. The fair practice would be instead to include all or nearly all past wages for the pensions calculation.

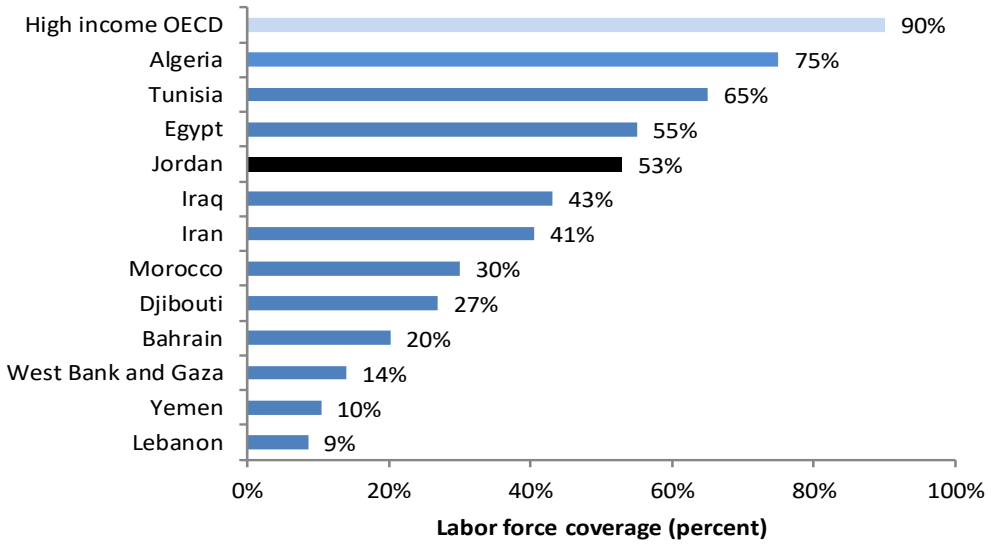
31. **In short, the pensions program in SSC provides strong incentives to contribute little and to retire as early as possible. The linkages between contributions and benefits are weak.** These incentives enshrined in the benefit formula are compounded by generous qualifying conditions.

### Social challenges: coverage experience in SSC, and adequacy of pensions

32. **Despite all the efforts to expand coverage, an important share of the Jordanian working population is still not covered by any social security scheme**[26]. The incidence of social security coverage substantially varies by employment status and the institutional sector of work. But all in all, today around 53 percent of the labor force in Jordan is actively contributing[27]. When comparing this coverage rate with those from other countries (Figure 4), coverage rate in Jordan has some space for improvement. However, and as indicated later in section III, expanding coverage would not necessarily be feasible through only traditional mechanisms, but through other innovative alternatives.

33. **Also, affiliates to the SSC contribute on average about only one third of their working life**. Basically, coverage is low not only because many individuals never contribute, but also because many others contribute only part of the time they are supposed to do so. In fact, the densities of contribution in Jordan are considerably smaller than densities reported in countries in Latin American countries, for instance.

**Figure 7. Pensions coverage of SSC (Jordan) vs other countries**




[26] See section III for more details on the coverage challenge

[27] By end 2019 there were 1,345,118 people actively contributing to SSC, but it is estimated that almost 1,500,000 will be actively contributing by the end of 2020.

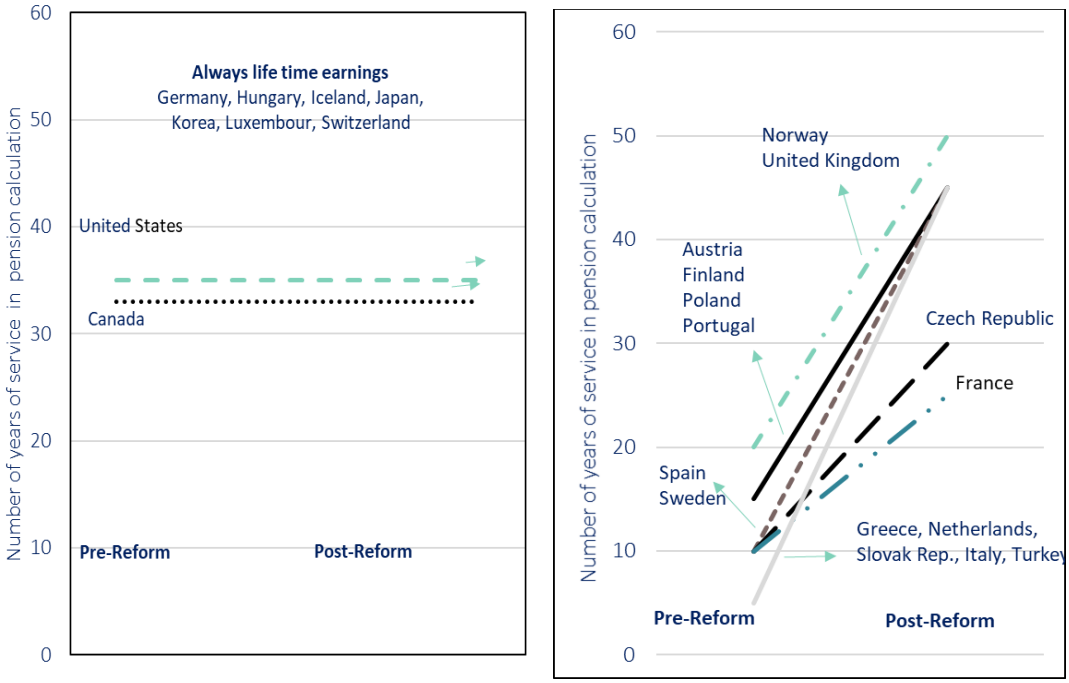
34. **The adequacy of pensions paid by SSC is also facing a few challenges**. Pensions for those retiring before the legal retirement age are not indexed at all, until the legal retirement age is reached. For normal old-age pensions, and according to a recent amendment to law 2014 (2019), the indexation is based on the CPI[28]. However, such increase is calculated as a whole and divided by the number of beneficiaries. Everybody is receiving the same nominal amount as an increase. This is an unusual mechanism that aims to equalize pension benefits. However, it is not a good practice and it is weakening even further the linkages between contributions and benefits. Based on international good practices, pensions should be indexed to inflation in order to maintain the purchasing power of the individual (see next section).

## III. Policy options and international best practices

### Addressing financial sustainability

35. **Countries are moving away from using final salaries for calculating pensions.** Nine countries in the OECD have always calculated pension payments based on full lifetime-average salaries (left-hand panel of **Error! Reference source not found.**2). The United States bases its pensions on the 35 years with the highest earnings, while Canada basis its system on 85.0 percent of the years with the highest earnings. A majority of OECD countries that did not start with full lifetime-average salaries for their pension systems have been changing their policies in favor of longer periods (right-hand panel of 1).

**Figure 8. Earnings measures for calculating pension benefits**




[28] Pensions until recently were adjusted in May every year based on changes in the consumer price index (by law they have been supposed to be indexed to inflation or the annual growth -average covered wage-, whichever was lower).

*Source*: authors' update from Whitehouse, E.R. (2010), 'Decomposing notional defined-contribution pensions: Experience of OECD countries' reforms', Social, Employment and Migration Working Paper no. 109, OECD, Paris; and Whitehouse, E.R. (2012), 'Parallel lines: NDC pensions and the direction of reform in developed countries', pp. 85-105 in R. Holzmann, E. Palmer and D. Robalino (eds), Non-financial Defined-Contribution Pension Schemes in a Changing Pensions World, vol. 1, World Bank, Washington, D.C.

36. **The results are also presented for three simulations with different reform measures.** Based on the previous status-quo baseline scenario 1, reform scenario 1 is assuming that actuarially fair reduction factors are applied for the calculation of all pensions for early retirees. In scenario reform 2, in addition to applying the actuarially fair factors, pensions are also indexed to inflation at any age (this scenario would be fairer and more adequate). Scenario reform 3 would be an option for most recommended reform measures. It is a reform package and it includes gradual reform measures. In addition to penalizing fairly the pensions for early retirement (and index them), retirement age is also increased with life expectancy, base wage for pension calculation is gradually increasing to include the entire career of the individual, and accrual rate is gradually decrease to 1/60.

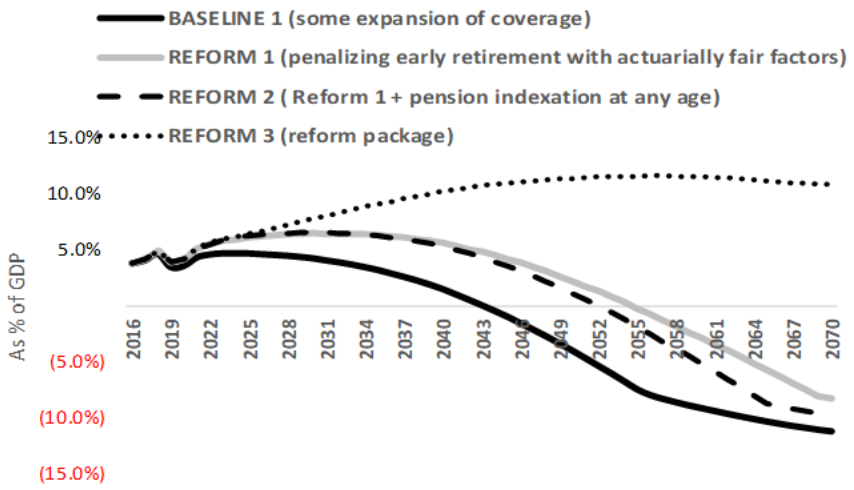
**Table 5. Pension Scenarios**

| | |
|---|---|
| **Reform Scenario 1** | Changing further rules for early retirement (penalizing with actuarially fair factors) |
| **Reform Scenario 2** | Penalizing early retirement with actuarially fair factors but indexing pensions to inflation (at any age) |
| **Reform Scenario 3** | annual accrual rate = 1/60<br>reference wage = lifetime average wage with wages valorized to wage growth<br>actuarially fair penalty for early retirement<br>gradual retirement age increase with life expectancy<br><br>*Note: new benefit formula is applied to post-reform contributory years, new penalties for early retirement applied to all contributory years.* |

37. **Only when a combination of measures (reform package) is considered, the pensions program of SSC can be sustainable.** Figure 10 illustrates the projected current balances under different reform scenarios. Scenario reform 1 is only presented to show the impact of what would happen if the only new measure is to apply actuarially fair factors for penalizing early retirement (without indexing pensions in payment until the legal retirement age is reached). Scenario reform 2 instead assumes that pensions are indexed at any age (and actuarially fair factors are also applied). Scenario reform 3 is assuming scenario reform 2 plus three very important measures: i) increasing the wage base for pension calculation; ii) decreasing accrual rate; and iii) increasing retirement age (all of them being applied gradually). As shown in figure 10, only

in this reform package scenario reform 3 the program can be sustainable. Of course, there are infinite ways of combination of measures and pace of reforms that can be considered. This is only an example.

**Figure 9. Current balance under different reform options (SSC pensions program)**




## Addressing social, and economic challenges

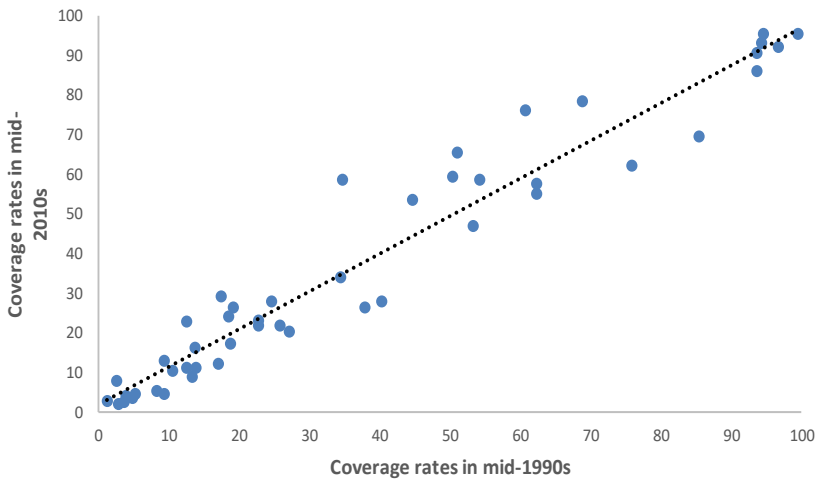
38. **Legal pensions (and social insurance) coverage is wide in Jordan, however actual coverage is quite limited**. Affiliates to SSC contribute on average about one third of their working life, and a large part of the population still remain apart from the system in practice. Basically, low coverage in Jordan is not just a problem associated with permanent exclusion from social security but partly due to the fact that many individuals affiliated to the SSC contribute only part of their working life.

39. **Efforts to expand social insurance coverage worldwide have proven to be quite unsuccessful so far, and coverage has mostly not been expanding[29].** Figure 11 shows the coverage rates for all countries worldwide with available data during the 1990s vs mid-2010s. Basically, coverage rates have hardly changed. A few countries have slightly increased coverage while others have even seen a reduction of it. One important reason about this fact is that traditional contributory pension schemes are not responding to the needs of the informal sector. As a result, a large share of people do not have any access to contributory pension schemes during their working

[29] Efforts to expand coverage to a larger group of workers is also increasingly important because the elderly are often cared for by their children, particularly women. Into the future, however, as the children move more often to different locations, or even abroad, and have their own struggles with their own jobs and families, the elderly may be left behind with fewer resources, or putting more pressure on their relatives that are adult working population, particularly women. More resources and financing mechanisms to help the elderly will not only help them, but also their families.

lives, or contribute only for a very short time or too irregularly. Both things mean that too many people will not be eligible for a pension.

**Figure 10. Coverage rates worldwide 1990s vs 2010s**

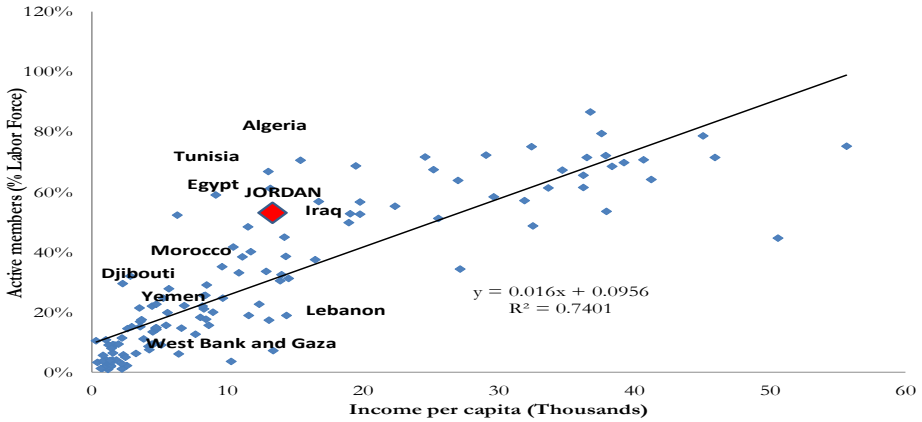



*Source: WB pensions database*

40. **There is a high correlation worldwide between income per capita and coverage of social insurance and pension systems**. Figure 12 illustrates such correlation. Most countries in the MENA region are above the correlation line, including Jordan. This is suggesting that there should be no expectation that coverage will expand substantially through future income growth over the medium term, particularly because most uncovered individuals are in the private sector (including self-employed, rural, etc.). So, a significant part of the labor force might not be at the moment accumulating the necessary savings for retirement and other contingencies. Hence, once again, innovative mechanisms to cover uncovered individuals is important. There is significant scope to learn from other parts of the world and a number of World Bank projects that focus on pension coverage for the informal sector. [30]

**Figure 11. Coverage rates vs Income per capita**

[30] This is the objective of a forthcoming note on informality in Jordan.




41. **An increasing number of governments worldwide are examining new initiatives to extend pension coverage to informal sector workers**[31]. Informality represents distinctive issues in the provision of retirement income that cannot be addressed merely by extending conventional pension systems to these workers. Different solutions are needed to tackle the unique characteristics of this heterogenous group. For instance, some workers may have the potential to save, but not sufficiently (or regularly) to participate in traditional contributory pension systems[32]. Basically, existing formal sector pension schemes do not respond to the distinct needs of the diverse informal sector. Formal sector pension schemes, such as the program in SSC, is designed based on formal employee-employer relationships, which are atypical in the informal sector[33]. Traditional pension designs also require regular monthly contributions, which are not suitable for informal sector workers who are usually characterized by irregular incomes. Also, participation in formal sector pension schemes may not even be affordable for many informal sector workers.

42. **There is no one-size-fits-all program design that can be implemented across the informal sector in all countries. However, there are several principles that policy makers and technicians in Jordan may consider, as follows**:

- Instead of the current voluntary defined benefit scheme, a voluntary defined contribution scheme involving a combination of short- and long-term savings accounts may be one possible product. The amounts and frequency of contributions, pension scheme rules, the payout requirements, and synergies with other services, such as health care, microfinance, training, and so on, should be carefully considered in the design of products and communicated to the public at the outset.
- The government could benefit from modern technology for improved outreach and reduced costs, such as the use of mobile money. There could be an opportunity to use these mechanisms to collect pension contributions from the informal sector which is scattered around the country

[31] Some successful examples include Ghana, Mexico, and Kenya. Others have not yet been that successful but can still offer some lessons learnt such as Chile, Rwanda, Argentina, and Brazil.

[32] Contrary to the common perception, not all informal sector workers are poor. Some are able to defer consumption to save for old age. Moreover, some are also already organized through associations.

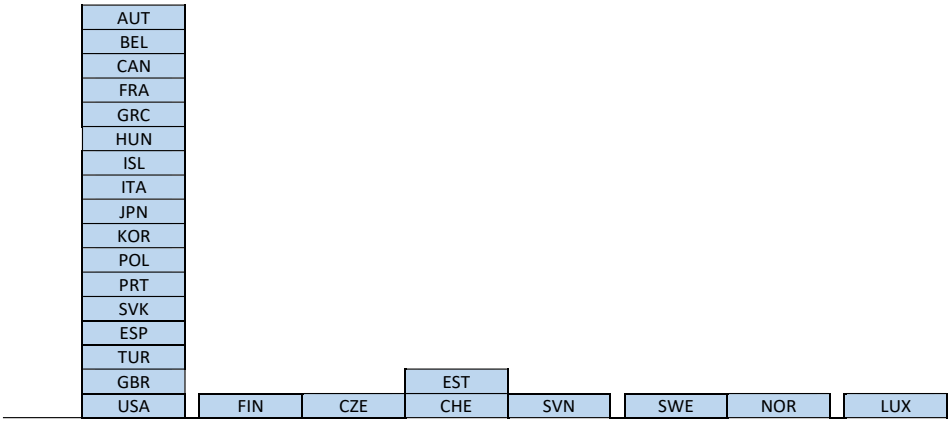
[33] The voluntary program in SSC was created precisely for this purpose, however it should be re-designed to make it more sustainable and adequate.

- The efforts on communication strategies from SSC should continue but focusing more on informal sector to build trust among the public in relation to the benefits of the new DC scheme. An ongoing financial literacy training program during the implementation of the strategy could help informal sector workers understand key messages and take informed decisions.
- The platform in SSC for the voluntary pension scheme should be able to maintain records on contributions, withdrawals, and account balances, while minimizing administrative costs.
- To improve the success of the scheme, the contributions should be separately invested by SSIF to maximize returns and minimize asset management costs. Proper regulations must also be identified, developed, and implemented for the scheme.
- Given the relatively low amounts of the contributions and assets involved, an analysis of the viable size of a defined contribution scheme would need to be carried out. To be successful, the scheme must reach scale, while minimizing the costs of asset management and operations. SSC would have more chance of reaching scale if incentives and subsidies are provided. These would also help inspire a savings culture in Jordan.
- Finally, measuring coverage should not only be based on registration of members. Important measures should include: i) number of members who are active contributors, their amount of contribution, and frequency; ii) administrative costs (as part of SSC); and iii) investment returns.

43. **Pension indexation is a very important measure. The living standards of retirees are not eroded by inflation when pension payments are regularly adjusted.** Pension payments for an individual can last 20 years or more (e.g., with survivor benefits). Even in countries with a low inflation rate of 2.0 percent, the real value of an unadjusted pension falls by a third over a 20-year period. Moreover, an inflation rate of 3.5 percent can wipe out half of the pension's purchasing power over the same period.

44. **Price indexation can make pension systems more equitable and also more adequate protecting benefits from losing real value.** Indexing pensions to inflation rates guarantees the purchasing power of benefits during retirement. Price-indexation of pensions in payment is the most common policy internationally, and many OECD countries have different policies for uprating pensions through price and wage indexation schemes (**Error! Reference source not found.**3). However, there is often a significant gap between policy and practice. Around 40 percent of OECD countries have either frozen benefits or put a cap on benefit increases since 2010. Therefore, it is important to create clear and fair regulations for pension indexation.

**Figure 12. Indexation of pensions in payment: international experience**




| | USA | FIN | CZE | CHE | SVN | SWE | NOR | LUX |
|---|---|---|---|---|---|---|---|---|
| Prices | 100% | 80% | 67% | 50% | 40% | | | |
| Earnings | | 20% | 33% | 50% | 60% | -1.6% | -0.75% | 100% |

Source: OECD (2015), Pensions at a Glance, OECD, Paris; see Whitehouse, E.R. (2009), 'Pensions, Purchasing-Power Risk, Inflation and Indexation', Social, Employment and Migration Working Paper no. 77, OECD, Paris.

## Policy recommendations

45. **When analyzing and assessing the pensions program of SSC, it is recommended to look beyond a financial and/or actuarial study. The social, and economic aspects of the program are also very important to consider.** The design of the current pensions program in SSC is not only unsustainable, but it has also some features (such as not penalizing early retirement fairly, not calculating the pension based on the entire career, or not indexing pensions below the legal retirement ages) that may create inequities, and adverse incentives to work, and save. These features make that some individuals take out from the system much more than what they contribute when comparing with others. For instance, not penalizing early retirement pensions fairly is favoring those retiring early versus those retiring later, and calculating the pension based only on last salaries is discriminating those with flat career wages. This last measure also tends to create adverse incentives to increase wages only when people are closer to retirement age. Easy qualifying conditions for early retirement is also creating adverse incentives to (formally) work, and save. These features could be very gradually reformed, towards a more transparent, and fairer program. Policies on phased-out retirement or encouraging people to go back to work could also be considered.

46. **Given the fact that each SSC program has different objectives, appropriate transparent financing strategies for each branch separately is usually a good practice.** In particular, for the pensions program it is important to isolate the operations of this program from the others (which provide short-term benefits). Cross-subsidization between schemes is hardly recommended. Given favorable system demographics at the moment (high support ratio), contribution rates can create an illusion of an excess reserve.

47. **Beyond short-term measures, a long-term strategy[34] is needed to address the pension system's financial obligations that extend over half a century.** Pensions is a long-term issue. It is often politically and technically difficult to cut benefits of existing retirees and older workers nearing retirement, because of unaffordable past promises. Too many countries are facing such challenges. This makes it difficult for short-term reforms to improve the financial sustainability of the system in the long run. The pensions program of SSC has now a very good window of opportunity to consider such long-term strategy before it is too late. International experience has shown that the longer reforms are postponed, the higher the cost for the population.

48. **Expanding coverage to the informal sector is very important, but based on international experiences, there is no one-size-fits-all program design that can be implemented across all the informal sector in all countries.** Jordan's pension coverage rates, albeit relatively modest, need to be revisited since they are limited, with workers in the informal sector largely unprotected. Many participants, particularly women, in the informal economy operate beyond the reach of legislative reforms. Moreover, contribution density is low among workers who are covered in the private sector. Some workers will not receive pension benefits because they have not participated in the system the required number of years, while others will receive low benefits because of the limited number of years they have contributed.

49. **The GOJ and SSC should explore the advantages of a multi-pillar approach that combines PAYG-DB with some form of retirement savings (DC-defined contribution)**. Particularly to increase the adequacy of pensions and also for covering employees from certain sectors with irregular income. This would be needed to create a scheme that really works with the current labor market characteristics. The World Bank is planning to present country experiences in a forthcoming note on informality in Jordan[35].

[34] Reform packages need to be well-assessed in terms of their impact on different generations, the labor market, and the macroeconomic and fiscal environment

[35] SSC counterparts are currently working on a bylaw for an amendment to the law, on expansion of coverage with the aim to effectively expand coverage to current informal employees in the sectors of agriculture, construction, transportation, tourism, general services, maintenance, etc. The discussion of the forthcoming bylaw is in the very early stages (zero draft). The first idea would be to keep a DB type of design with different type of contribution rates, however international experiences show that DC type of schemes are more appropriate to cover employees with irregular income.

## Annex I. Pension Reform Options Simulation Toolkit (PROST)

PROST models pension contributions, entitlements, system revenues, and system expenditures. The model is designed to promote informed policymaking, bridging the gap between quantitative and qualitative analysis of pension regimes. It is a flexible, computer-based toolkit, easily adapted to wide range of countries' circumstances. The program is designed to simulate the behavior of pension systems and can assess their financial sustainability under different sets of assumptions over a long-time frame. It allows modeling different pension reform options – from "parametric" reforms of pay-as-you-go defined-benefit schemes to systemic reforms, such as the introduction of fully funded defined-contribution and/or notional defined-contribution schemes. The program can be adapted to a wide range of country circumstances and can handle simulations up to 100 years and more.

As with any simulation model, the outcome from PROST depends largely on the nature and quality of data as well as on the set of assumptions being used for the simulations. Since PROST has been used in more than 90 countries to provide quantitative input for pension policy discussions, its methodology has proven to be sufficiently robust and its flexibility has permitted easy adaptation to specific country circumstances for sensitivity testing and comparisons under a wide range of economic and policy scenarios.

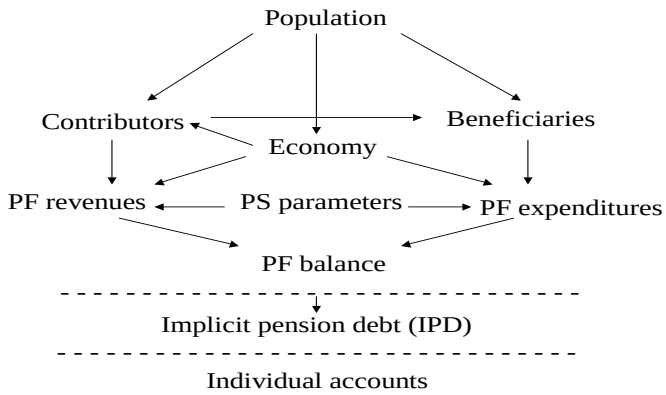
***Input Modules***

The model consists of an input workbook and five output modules. On the input side, the user provides country specific data on demographic, economic and pension system related parameters and assumptions about their behavior in the future. This information is entered in the input file with eight embedded worksheets:

| | |
|---|---|
| *General* | Economic variables (GDP and wage growth, inflation, interest rate), nonage-specific pension system parameters (pension fund balance and benefit expenditures in the base year, retirement age, contribution rate, pension indexation rules, etc.) and some demographic variables; |
| *Population* | Base year population by age and gender along with age-specific fertility and mortality rates and immigration information. |
| *Labor* | Age and gender specific labor force participation and unemployment rates as well as distribution of wages and old age pensions across age and gender cohorts. |
| *Pension* | Age and gender specific information about pension system contributors, beneficiaries, coverage and retirement rates, average years of service at retirement and replacement rates for new beneficiaries. |
| *Profiles* | Information on representative individuals, such as gender, career path, individual wages, life expectancy, etc. |
| *Reform General* | General (not-age-specific) parameters for systemic reform |
| *Reform Pension* | Age-specific parameters for systemic reform |
| *Factors* | Actuarial tables |

In the most simplified way the general calculation scheme can be summarized as follows:

*Figure A.1.1 General Calculation Scheme*




PROST follows single age/gender cohorts over time and generates population projections, which, combined with labor market assumptions, are used to forecast future numbers of contributors and beneficiaries. These in turn generate flows of revenues and expenditures. The model then projects fiscal balances and calculates the implicit pension debt. The required contribution rates and affordable replacement rates for zero pension fund balance in each year of the simulation period are also calculated. Finally, PROST produces outputs related to individuals – what an individual would contribute to the system and what he/she would get out of it under PAYG DB and multi-pillar schemes. This allows both intra- and intergenerational analysis.

Depending on the characteristics of the pension system and data availability, the user can choose the method for calculation of some of the variables. In particular, the number of contributors and beneficiaries can be computed in either "Stock" or "Flow" method. With the "Stock" method, for each year the stocks of contributors/beneficiaries are calculated first and then inflows (new contributors/beneficiaries) are derived as the changes of the stocks:

$$Inflow(a,t,g) = stock(a,t,g) - stock(a-1,t-1,g) + outflow(a,t,g)$$

With the "Flow" method, inflows are calculated first and then stocks are derived as previous year's stocks in each age/gender cohort adjusted for the net inflow (inflow-outflow):

$$Stock(a,t,g) = stock(a-1,t-1,g) - outflow(a,t,g) + inflow(a,t,g)$$

where a = age, t = year, g = gender

As` PROST keeps track of contribution years of service accrued by each cohort, the calculated number of new retirees – whatever method is used – is then adjusted so that the total length of service accrued

by the cohort is equal to the total length of service claimed by the cohort at the time of retirement. After the number of new retirees is adjusted, the stock is recalculated using the "Flow" method.

The user can also choose how the benefit of new beneficiaries is specified - via benefit formula or via age and gender specific replacement rates.

***Output Modules***

As mentioned above, output produced by PROST is organized in five output modules. Each of the modules contains a number of Excel worksheets and a graphical summary on key output indicators:

*Population Projection* Population projections and pyramids, life tables, life expectancy changes, population dependency rates, etc.

*Demographic Structure* Labor force and employment projections, projections of contributors and beneficiaries, demographic structure of the pension system, and system dependency rates.

*Finances of Monopillar* Macroeconomic trends, wage projections, pension benefit *PAYG* projections for the existing and new pensioners, revenue and expenditures of the pension system, required adjustments to contribution rates and replacement rates for zero current balance, and the implicit pension debt.

*Finances of Multipillar* Pension benefit projections for new and existing pensioners *System*under each of the three pillars (conventional PAYG, notional PAYG, and funded DC), revenues and expenditures of both PAYG and funded pillars, implicit pension debt of the PAYG system after the reform, and results of the reform (compares benefit projections and financial standing under the monopillar PAYG and multipillar scenarios).

*Individual accounts* Lifetime contributions and benefits and individual related summary statistics for up to six different individuals specified in the "Profiles" input sheet under PAYG system (statutory, with adjusted contribution rates and with adjusted benefits) and multipillar system (for those who switched to the multipillar system and those who remained in the PAYG system).

***Key Indicators Estimation***

The following charts show a schematic view on the calculation and sources of revenues and expenditures. Contribution revenues were calculated based on the prescribed contribution rate, the average earnings of each age cohort, and the number of contributors in each cohort. Expenditures are calculated based on the pension of the previous year, indexation rules, and entry benefits for new retirees.

*Figure A.2.1 Revenues estimation*

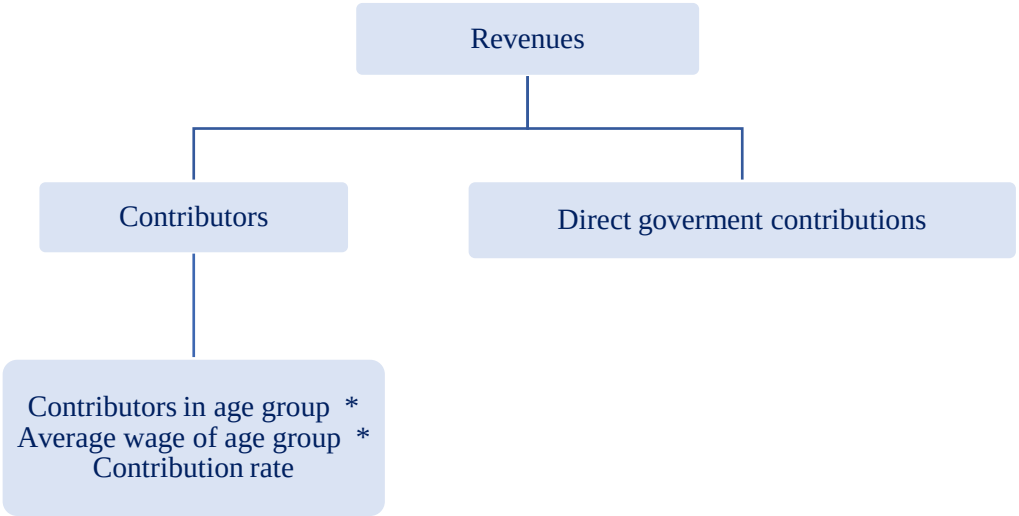
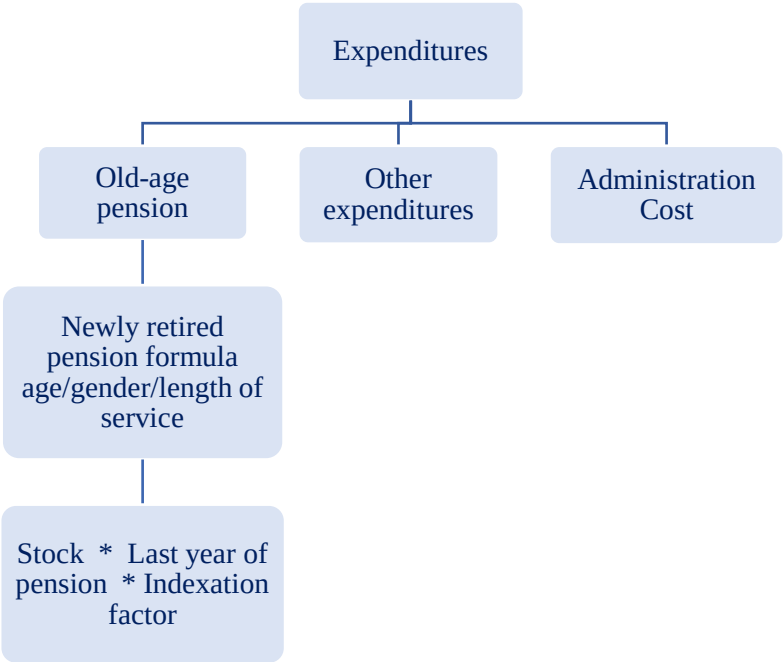



*Figure A.2.2 Expenditure estimation*



## Annex II. Data and Assumptions

Population projections for Jordan 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 10.3 million to 17.9 million by the end of the simulation period with life expectancy increasing from today's 73.3 to 80.6 years for men, and from today's 76.8 to 83.2 years for women.

### ECONOMIC DATA AND ASSUMPTIONS

*Evolution of GDP*.

GDP in 2016 is set at JD 28,448.4 million, and more than JD 30,000 in 2019.

Assumptions regarding real GDP growth rates and inflation are based on historical data from International Monetary Fund (IMF), and projections from Jordan Economic Monitor, June, 2020:

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2070 |
|---|---|---|---|---|---|---|---|---|
| **Real GDP, %** | 2.9 | 2.1 | 1.9 | 2.0 | -3.5 | 2.0 | 2.2 | 2.0 |
| **Inflation, %** | 2.4 | 3.3 | 4.5 | 0.8 | 0.5 | 2.0 | 2.3 | 2.5 |

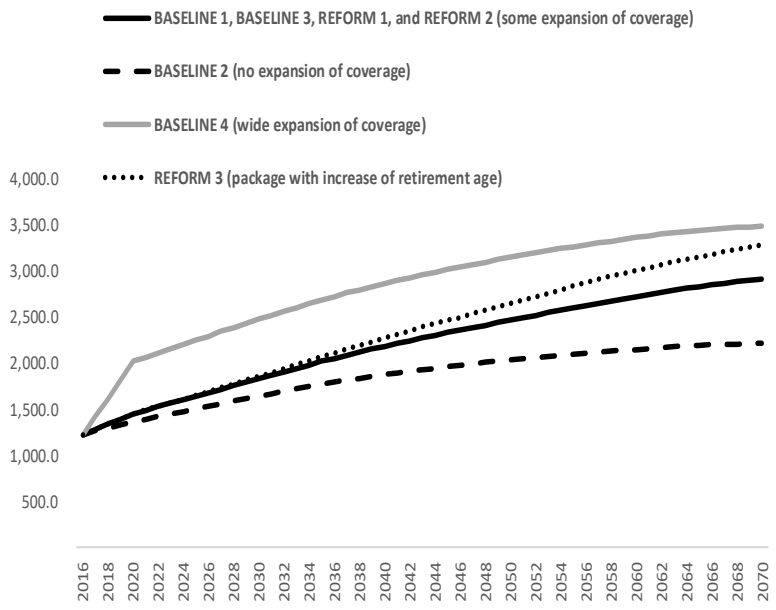
*Real discount rate for present values calculations* is set at 3.5 percent per year, and investment returns at 3 percent. Baseline scenario 3 is assuming lower investment returns (an average of 2 percent).

### SYSTEM DEMOGRAPHICS OF THE PENSIONS PROGRAM OF SOCIAL SECURITY CORPORATION

***Contributors***

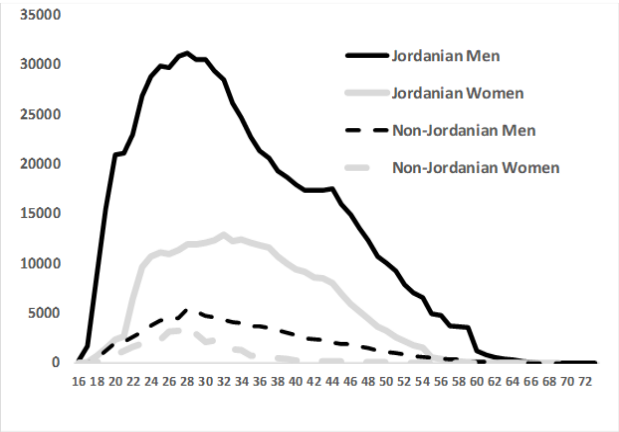
Three baseline scenarios with different projected number of contributors have been modelled. A baseline scenario (2) is assuming that there is no expansion of coverage, where the percentage of people the percentages of people contribution by age and gender do not change throughout the simulation period. As illustrated in figure II 1 below the total number of active contributors is expected to increase from the current 1,367,700 people to 2,018,000 by the end of the simulation period. The main baseline scenario is assuming that there is a certain increase of coverage, assuming that the total current number of contributors will increase to 2,213,200. Baseline scenario 4 is assuming that this figure will be 3,481,000.

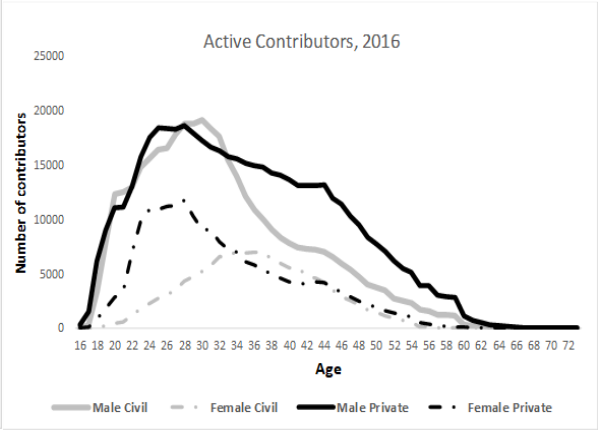
**Figure II 1. Projected number of Contributors**

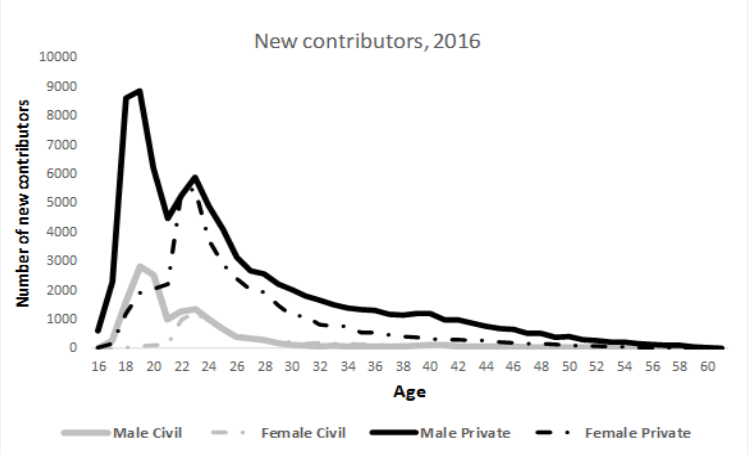



The distribution by age of the current active contributors in SSC is very peculiar when comparing with other countries. As indicated in figure II 2 coverage rates after the middle ages considerably decrease. The low coverages rates of ages 45-60 can be explained by the common and very general tendency to retire earlier. However, there is not yet a clear explanation of the low coverage rates between the ages of 40 and 45. It is assumed that this retirement pattern will continue for the next 20 years, until the effect of the new amendment that has increased the minimum early retirement age (see annex III).

**Figure II 2a, b, and c. Age distribution of the stock of contributors, and new contributors in SSC**



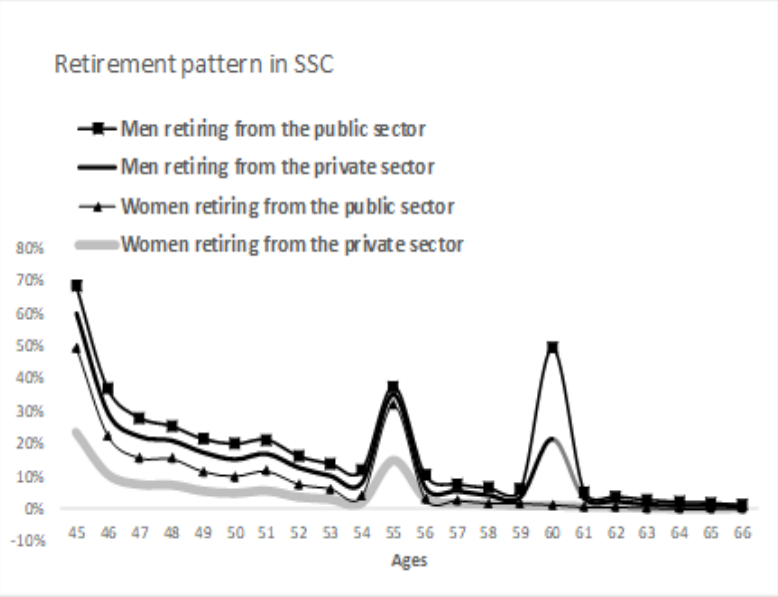




***Beneficiaries***

As indicated in Figure II 3, most of SSC members (more than 60 percent) retire before the legal retirement age of 60 for men, and 55 for women.

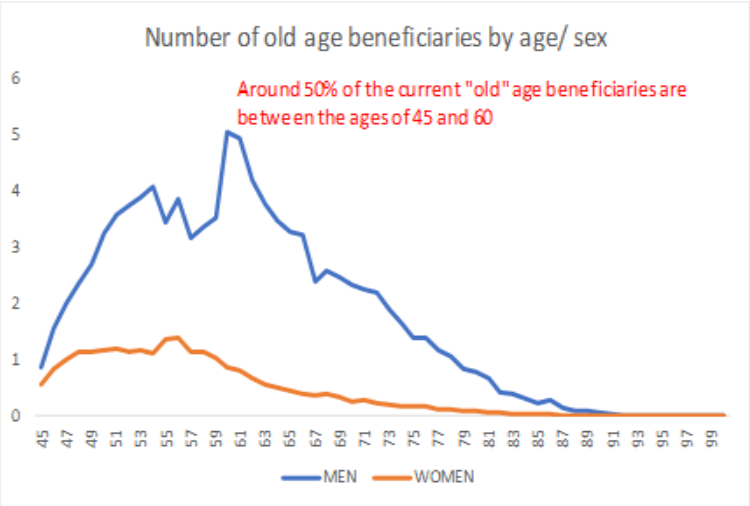
**Figure II 3. Retirement pattern in SSC**




Source: SSC

As illustrated in Figure II 4, a high percentage of the old age beneficiaries of SSC today are between the ages of 45 and 60. It is estimated that a lot of these beneficiaries are working in the informal sector.

**Figure II 4. Old age beneficiaries by age/ gender in SSC**



## Annex III: Some historical and background information, and recent amendments

In early 1940s, the government of Jordan initiated the first public mandatory retirement scheme but only targeting two groups of workers, civil servants and military forces. In 1955, the government enacted a law to compensate private sector workers for employment injuries, followed by the first labor law in 1960, which principally required private employers to provide their employees with a severance payment upon their end of work. This law encouraged large companies and banks to initiate saving and compensation funds. A few labor unions and syndicates (e.g. Jordan Engineers Association) began to provide old-age retirement and saving funds starting from early 1960s.

Jordan's first social security law was in 1978 (Law no. 30), and covered the programs of employment injury benefits, as well as old-age, survivors, and disability benefits, all programs to be administered by the SSC (Social Security Corporation). Until 1995, the SSC covered only private sector workers; civil servants and the military continued to have their independent schemes. However, in 1995 and 2003, reform laws were passed, and civil servants and military schemes were closed to new entrants, respectively. Basically, all new hiring contracts in the government and the army became covered by the same scheme.

The Social Security Investment Fund (SSIF) (formerly the Investment Unit in SSC) was established in 2001 to manage investment of SSC funds with the objective of realizing meaningful and sustainable returns on SSC investments while maintaining the real value of the assets and providing the liquidity needed to meet the SSC's future obligations. The Fund started its operations in the beginning of 2003 after adoption of the investment strategies that govern its work. The Fund is subject to the provisions of the Social Security Law No. 1 of 2014, and its work is regulated in financial, technical and regulatory matters by bylaws and legislation, which are adopted by the Investment Board and the Board of Directors of the Social Security Corporation. SSIF reviews its investment policy periodically in order to keep up-to-date with economic developments, seize investment opportunities, and maintain international best practices in the management of pension funds.

Due to financial sustainability, and other challenges, Jordan introduced important reform measures to its social security schemes in 2010, followed by a second round of corrective measures in 2014. The measures aimed at primarily ensuring the financial sustainability of the social security fund over time, improve equity, and expand coverage. The reform in social security introduced fundamental changes in the early retirement regulations, and contribution rates.

A first important aspect of these reform measures is that such changes were supposed to slowdown early retirement, however, this is still a current challenge in SSC (see next section on challenges). Some of the new measures that supposedly would reduce early retirement included the following:

i) *increase of the reference period for pension calculation* from the last 24 months (two years) of monthly average wage, to the last 60 months (five years) prior to early retirement;

ii) *increase of the minimum length of service to be eligible for early retirement* (the law of 2010, followed by its 2014 amendments implemented such measure), from 216 to 252 months (i.e. 21 years of monthly contributions) for men and from 180 to 228 (i.e. 19 years of monthly contributions) for women. This would apply for those retiring at age 50 or more. In case of claiming retirement between ages 45 and 49, the required number of contributions would be higher, and should reach at least 300 or more (practically 25 years of work); and

iii) *pension reductions based on retirement age*, while calculating the pension for those retiring early is the same, such pensions are subject to further reductions based on retirement age. For example, in the previous law, if a worker retired at the age of 50 rather than at 60, his or her entitlement was to be discounted by 9 percent. Such reduction rates were increased by 1 to 2 percentage point in the new law of 2014. Pensions of men retiring at the age of 50 are now reduced by 11 percent. Moreover, under the current law, early retirement monthly benefits are not adjusted to inflation or nominal wage growth until reaching the mandatory age of retirement. Then, they become indexed with inflation after reaching this age[36].

A second important aspect of these reforms was the increase of contribution rates. Monthly contributions paid by employers and employees according to the legislation. The basic contribution rate for the pensions program represented 14.5 percent of gross wage (9 percent from the employer and 5.5 percent from the employee) in 2010. With the current law of 2014 such rates were gradually increased to reach a total of 17.5 percent in 2017.

A third important aspect of the new social security laws enacted in 2010 and 2014 was the goal of expanding social security coverage. This was supposed to be done by enrolling informal workers, through covering firms composed of one employee or more, the self-employed and the employers. The laws also intended to encourage voluntary participation among out of labor force housewives, by extending maternity leaves, as well as Jordanians living or working abroad. However, the overall incidence of social insurance coverage appeared to only slightly increase in 2016, for private sector wage workers, irregular wage workers, and non-wage workers (employers and self-employed). Workers starting in the public sector were the most likely to acquire social insurance coverage at the start of their jobs, followed by the private wage workers inside establishments.

Further and more recent amendments in SSC are briefly explained in Box III 1.

[36] It is important to mention that all covered workers aged 45 or above when the new regulations became effective, i.e. in 2014, had the right to retire under the previous abolished law of 2001. Also, softer conditions apply for workers who were aged between 42 and 44 when the laws became effective. For instance, a male worker aged 44 years old in 2014 still had the option to retire early under the previous law of 2001 but at age 46 and conditional on having at least 228 contributions

**Box III 1. General recent amendments (2016, 2019-2020) to the social security law of 2014**

- *maternity* (details -bylaws- are still under discussion but benefits will be provided to working mother to provide incentives for female labor force participation).
- *unemployment:* an amendment was signed in November 2019 that allows Jordanians members of SSC to withdraw from their (virtual) unemployment individual accounts around 60-70% of their accumulated amounts (with a ceiling of 75% for education purposes, and 60% for health purposes). A total amount of JD millions 160 was withdrawn by 220,000 SSC members during the months of November/December 2019. Members are only allowed to withdraw every 3 years (36 months), and the minimum amount is JD 300.
- *loans* for SSC members: this was a 2016 amendment. It has been in place for the last 3 years. SSC members can request a loan from SCIF. The maximum amount for individual loans is 10 times his/her salary (and up to a maximum of JD 10,000). There are 4 modalities of loans, and non-Jordanians who are Palestinians can now benefit from such service.
- Reduction of contributions for new young members*:* this amendment, signed in February 2020, only affects new small employers (that started contributing in October 1st. 2019) with 25 employees or less in the sectors of IT and agriculture. According to this amendment, in such new small companies, employees that are 28 years of age or younger will not need to contribute to SSC (neither will be credited) for the pensions program. These young employees will only be covered by the SSC programs other than pensions. It is still under discussion the expansion of sectors beyond IT, and agriculture, however the law clearly specifies that this should only apply to new companies.
- *Early retirement:* an amendment about early retirement specifies that all contributors that started contributing on October 1st. 2019 will be subject to new rules: Men will be required to contribute at least for 252 months before retiring at age 55, and women will be required to contribute at least 228 months before retiring at age of 52. Basically, nobody will be allowed to retire before the ages of 55/52 for men/women respectively. Given the fact that this measure on early retirement will only affect the new entrants, no impact is expected for at least 20 years (see section on scenarios). With the new rule of early retirement, people will not be able to retire at 45 with 25 years of service.
- *Other amendments:*
    - a new pension indexation mechanism which equalizes (through a nominal amount) the provided annual increase, based on inflation;
    - changes in various of the current rules of the military program;
    - increase the possibility of voluntary pension contributions; and
    - provision of regular pensions instead of lump-sum payments to survivors of contributors who die of natural causes.

During the current crisis because of COVID-19 pandemic, the Government of Jordan, based on several defense orders, has also been implementing various emergency short-time type of measures that are impacting in different ways some of the SSC programs. These programs include: (1) program 1: for registered firms affected by the current crisis, employees can obtain 50 percent of their salaries as a temporary unemployment allowance; (2) program 2: for firms that are not currently registered with SSC

and were affected by the current crisis, the firm can apply to include its workers with unemployment insurance, paying an amount of JOD 140 for each worker only once; and (3) program 3: covers those who were previously contributing to SSC or are currently contributing to the voluntary scheme who have 12 or more contributions with SSC and wage does not exceed 500 JOD. The impacts of such measures are still mostly unknown.

**Box III 2. Some defence orders**

A particular Defense Order (DO) (9) was recently passed: Musaned (3). Another particular Defense Order (DO) (14) was also recently passed with the objective to protect the private sector in the Jordanian economy, and to share some of the economic burden with sectors negatively affected by COVID-19 crisis, in addition, to help these sectors moving to the recovery stage. The GoJ announced DO 14 in June 2020 and included the following protection programs/ measures:

**First: Protection Program/Measure (Himaya)**, designed for the private sector firms working in Tourism & Transportation sectors covered under SSC umbrella. Firms fully owned by the GoJ, Government Agencies, and municipalities are excluded. The eligibility period for firms to apply is June-December 2020. The SSC committed to pay 50 percent of the eligible insured wage, with a minimum of 220 JODs and a maximum of 400 JODs during the covered months. The firm then disburses 20 percent of the insured wage with a celling of 200 JODs, before SSC transfers the full amount to the insured person bank account. The resources for this purposed will be taken from the surplus of the Unemployment Insurance (UI) Fund of SSC, and the firms are obliged to repay these amounts by end of June 2023. Also, GoJ will bear a 3 percent of annual interest for the amounts that SSC disburses for this purpose. Firms will bear the interest amounts after June 2023. Firms must sign debt agreements with SSC before January 31st, 2021.

**Second: Economic Empowerment (1) – Tamkeen Ektisadi (1).** This program has been designed for the private sector firms. Those owned by GoJ, governmental agencies, municipalities, Banks, Insurance, Utilities, ITC, and Education are excluded. The eligible firms are allowed to provide partial contributions for their employees to cover them (partially) under the old-age insurance program, but with full commitment to cover them under the other programs. During this period employees can then be fully eligible for all benefits provided by SSC, except for old age and early retirement pensions which only half of the period covered would be credited, hence only 50 percent of the covered wage during this period would be credited for the purpose of calculating pensions. The length of this program is June-December, 2020, and any firm that would like to benefit from it, should apply before December 31st, 2020.

**Third: Economic Empowerment (2) – Tamkeen Ektisadi (2).** This program is also designed for private sector firms. Those owned by GoJ, governmental agencies, municipalities, Banks, Insurance, Utilities, ITC, and Education are excluded. The covered wages should not exceed 700 JODs in the latest registration. The benefits designed similar to Musaned (3) program under DO (9). The benefits are calculated as 5 percent of total wages, and delivered as Lump sum compensation with a celling of 200 JODs. But this amount can only be allocated, disbursed and delivered only once. SSC has the right to stop any program mentioned in the DO (14), totally or partially.

The benefits that these short-term emergency programs provide are mostly covered by the unemployment savings accounts, if such accounts have enough resources for the targeted beneficiaries. Available surplus of SSIF can be used to cover the extra costs. Although the Unemployment Insurance (UI) program was designed as a savings accounts system, the Emergency/Defence Law allows the Prime

Minister to change Laws temporarily to deal with COVID-19 crisis. The UI surplus/investments/assets is managed independently from other SSC investments & assets (by SSIF).

## Annex IV: Formalization, and parametric reforms

**Box IV 1. Social Security Corporation (SSC)'s strategy to formalize workers**

*Current challenges*: given a high incidence of job informality in Jordan, active contributors to SSC programs (old-age/invalidity/survivors, maternity, work injury, and unemployment) only represent about 53 percent of the workforce (around 1,270,800 people). Regular wage workers in large private sector firms are, in general, substantially more likely to be covered than those in smaller firms. Informality is also interrelated with early retirement, which is very high in SSC (starting at the age of 45), more than 60 percent of contributors retire early. Pensions are low for early retirees, so many choose to work informally. The medium-term financial sustainability of SSC pensions program is compromised by the low level of formal employment, low contribution densities, and the generosity (by design) of the pension system parameters. By the end-December 2019 the total number of active contributors to SSC from the private sector (including NGOs, and a voluntary pension scheme) were 775,058. However, the current COVID-19 crisis has *temporarily* left out of work around 400,000 people, who were until recently contributing to SSC.

*Efforts from SSC to formalize workers*: Before COVID-19 crisis, SSC has already been making a considerable effort to implement administrative and other measures to reduce job informality in the country. This includes: (i) awareness campaigns targeting employers in sectors with high informality; (ii) improvements in labor inspections; and (iii) better inter-operability between relevant government databases. SSC is also planning to make contributions for all part-time workers. The concrete components of a current strategy for financial sustainability and formalization are to: (i) ensure the sustainability of all programs; (ii) decrease the level of the informality within a comprehensive social protection strategy in coordination with related line ministries and agencies; (iii) put in place some mechanisms that would reduce evasion, increase declaration of wages, and ultimately increase the effective coverage of employees, and firms that should be covered by law; (iv) provide public and media awareness campaigns about the importance of social security coverage; (v) provide capacity building programs for SSC human resources; (vi) improve the services of the programs, including e-services programs; and (vii) enhance the corporation efforts on archiving systems.

In addition to these efforts, and given the current crisis, three emergency programs for SSC to provide unemployment compensations to workers in temporarily suspended businesses were implemented: (1) program 1: for registered firms affected by the current crisis, employees can obtain 50 percent of their salaries as a temporary unemployment allowance; (2) program 2: for firms that are not currently registered with SSC and were affected by the current crisis, the firm can apply to include its workers with unemployment insurance, paying an amount of JOD 140 for each worker only once; and (3) program 3: covers those who were previously contributing to SSC or are currently contributing to the voluntary scheme who have 12 or more contributions with SSC and wage does not exceed 500 JOD. The impacts of such measures are still unknown.

*Expected support from the World Bank to the formalization strategy:* A new World Bank study on job informality will inform policies to increase formal employment. The study will look at the profile of informal workers (e.g. low-skill young workers versus early retirees) and the firms that employ them (are they formal or informal?) in order to help to determine what groups (of workers and firms) policies should focus on and how, building on the current policy package to reduce informality. The study will also look at options to providing pension solutions to informal workers, particularly those in micro-enterprises and self-employed. The study will present alternative design options for the current voluntary pension system in SSC (currently covering only around 73,000 people, and design as Defined Benefit) to make it more financially sustainable, and more attractive (providing adequate benefits), particularly for workers with irregular incomes.

**Table IV 1. Pension design measures: Jordan vs international experiences**

| | Objective/Policy Principle | JORDAN SSC | OECD Experience | Proposed Transition |
|---|---|---|---|---|
| **Retirement Age** | The retirement age should increase in line with growth in life expectancy at age 60 | Legal retirement age is set at age 55/60 (men/women). However, there are easy provisions for early retirement for beneficiaries who have contributed for 20 years | Long-term policies: 15 OECD countries have age 65 as the pension age; 14 countries have 67; and 5 countries have 68 or 69 | A gradual and slow transition, starting in 2021, with the goal of extending the retirement age in line with growth with life expectancy at age 60 |
| **Early Retirement Age** | Actuarially neutral adjustment: equalizes present value of accrued benefits between normal and early retirement | The current system (even with new amendment) only penalizes early retirement with a non-neutral actuarial factor | 21 countries penalize early retirement by reducing the pension benefit. Some countries do not even allow early retirement | Penalizing early retirement with actuarially neutral adjustments |
| **Pension Indexation** | Price Indexation | Price Indexation. However, a nominal increase is equally apply which means that not everybody will maintain his/her purchasing power | Price indexation is the norm in 20 out of 28 countries | 100 percent price indexation starting in 2021 (perhaps with a ceiling) |
| **Base Wage** | Average earnings of an insured's entire career | The reference monthly base earnings are the insured's average monthly base earnings in the last three years | 26 out of 28 countries after reform (except France – best 25 years – and Czech Republic – best 30 years) | Gradual transition from using the average earnings of the last three years by 2021 to the average of an insured's total career, with valorization (thirty years, on average) by 2028. |

## Annex V: International experiences to cover self-employed and other informal employees

An increasing number of countries worldwide are looking at ways to extend pension coverage to informal sector workers. While the informal sector is diverse, and many individuals in this sector have irregular incomes, a significant segment of these workers can also save, contrary to the common believe.

Different institutions and regulators have taken different approaches in an effort to extend pension coverage. These are some examples of different efforts to include these workers through different contributory policies, and mechanisms.

International experiences worth to mention include:

i) Mexico: voluntary savings in convenience stores;
ii) Keya: MBAO, by Retirement Benefit Authority;
iii) Rwanda: long term savings scheme;
iv) Ghana: Tier 3 voluntary pension schemes;
v) Benin: ARCH program;
vi) Chile: self-employed coverage as part of a bigger social protection reform;
vii) Argentina: self-employed coverage.

Voluntary vs mandatory contributions: if incentives are strong enough to enroll and make contributions, voluntary contributions is a good mechanism to increase coverage.

Matching contributions: seems to work very well in some settings, however if it is a DB design is a double edge sword because some people would just contribute the bare minimum.

Managing expectations is very important. Communication strategy has to be designed well so people receive the correct information in terms of what kind of benefits they will be receiving. Pension schemes usually calculate benefits on a monthly basis or even less frequently. Some people check their benefits every day and when they see that they don't change day after day, they might lose trust, they don't see an incentive to be in the system.