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Iceland: Financial Sector Assessment Program-Technical Note on Pension Fund Regulation and Supervision

INTERNATIONAL MONETARY FUND

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ICELAND

FINANCIAL SECTOR ASSESSMENT PROGRAM

July 2023

TECHNICAL NOTE ON PENSION FUND REGULATION AND SUPERVISION

This paper on Iceland was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on June 21, 2023.

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June 21, 2023

FINANCIAL SECTOR ASSESSMENT PROGRAM

TECHNICAL NOTE

PENSION FUND REGULATION AND SUPERVISION

Prepared By
Monetary and Capital Markets Department

This Technical Note was prepared in the context of the Financial Sector Assessment Program mission for Iceland, led by Etienne B. Yehoue. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at https://www.imf.org/en/Publications/fssa

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CBI	Central Bank of Iceland
DA	Defined Ambition
DB	Defined Benefit
DC	Defined Contribution
EEA	European Economic Area
EFTA	European Free Trade Association
EIOPA	European Insurance and Occupational Pensions Authority
ESG	Environmental, Social, Governance
EU	European Union
FSA	Financial Supervisory Authority
FSAP	Financial Sector Assessment Program
GDP	Gross Domestic Product
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principle
IOPS	International Organization of Pension Supervisors
IORP	Institutions for Occupational Retirement Provisions
ISK	Icelandic Króna
MoF	Ministry of Finance and Economic Affairs
NGFS	Network for Greening the Financial System
OECD	Organization for Economic Cooperation and Development
ORA	Own Risk Assessment
PFA	Pension Fund Act
SFDR	Sustainable Finance Disclosure Regulation

EXECUTIVE SUMMARY

Iceland's mandatory occupational pension fund sector is large, and risks are mostly borne by pension fund members and beneficiaries. The mandatory part of the second pillar is provided by 21 autonomous pension funds, and the large majority of schemes can be categorized as defined ambition, a regime aimed at fully-funded liabilities where risks are borne collectively by the members. Defined-benefit schemes which cover the public sector were closed for new members already in the late 1990s. While defined-ambition schemes do not guarantee any pre-determined pension payment, the system has a targeted minimum replacement rate of 72 percent—the effective replacement rate, however, is determined by the performance of pension funds. Total assets of the pension fund sector[1] amount to almost twice the GDP (176 percent at end-2022), making it one of the worldwide largest.

Pension funds in Iceland play a vital role in the domestic financial sector, acting as investors and lenders. Their exposure to Icelandic banks has more than doubled from 2017 to 2021, accounting for 10 percent of total pension fund assets. Pension funds are also active in the mortgage lending market with an outstanding volume amounting to 8 percent of their assets. Together with holdings in domestic sovereign bonds (21 percent of assets), the concentrated exposure towards the sovereign-banks-property nexus is significant. The share of foreign-denominated assets has been increasing in recent years, reaching 34 percent of assets as of September 2022.

Historically, Icelandic pension funds have a very solid track record of achieving real investment returns, but the year 2022 will end with a significantly negative real return of around -12 percent, resulting from a combination of negative returns both on the stock and the bond market, and a relatively high inflation rate. Funding ratios of several defined-ambition schemes have dropped below 100 percent, which might require some funds to adjust accrued and/or future benefits for their members.

As of January 1st, 2020, the Central Bank of Iceland took over the tasks of the Financial Supervisory Authority (FSA) with responsibility for almost the entire financial services sector in Iceland. Resources for pension fund supervision at the FSA are stretched, giving rise to key person risks. The Ministry of Finance and Economic Affairs continues to perform certain important supervisory tasks, authorizing new pension funds and approving changes to a fund's Articles of Association, thereby also approving mergers and acquisitions. This split of responsibilities has recently resulted in some delays and inefficiencies.

The governance and internal controls framework for pension funds is not aligned with the systemic role of the sector, and the underlying rules in the Pension Fund Act pre-date the corresponding provisions for other financial sectors. The Pension Fund Act is silent on board nomination processes, and only defines risk management and internal audit as control functions,

[1] Providing both mandatory Pillar II pensions and Pillar III personal pension savings

but not the actuarial function or the compliance function. Outsourcing of key functions, including internal control functions, is quite common in the Icelandic pension market, especially among smaller funds that in some cases outsource all operations to outside parties. In order to mitigate some of the shortcomings of the Pension Fund Act, the FSA issues non-binding guidelines and circular letters, but occasionally faces resistance from supervised entities, which argue that the FSA's measures are not founded by any requirements in the Act.

The FSA has adopted a risk-based and forward-looking supervisory model, however there is no minimum frequency set for on-site inspections. The FSA sets up an annual plan for both on-site and off-site work, based on the minimum engagement model, the results of the detailed risk analysis, and the focus areas of the supervisory strategy. Between 2018 and 2022, the FSA conducted between two and three on-site inspections in the pension fund sector per year. A main focus of these inspections recently was on risk management, actuarial examination, governance, and outsourcing arrangements.

Structural risks which need to be addressed relate to outsourcing, the scarcity of actuarial resources, and climate risk management. The FSA aims for a strict approach with regard to outsourcing and tries to specifically target pension funds which have outsourced their entire operations including the function of the managing director. The actuarial profession in Iceland relies on a very small number of pension fund experts which is generally seen as a risk by the pension funds and by authorities. Finally, the approach to climate risk management is still at an early stage, lagging behind other peers in Europe, and requiring decisive actions by both pension funds and the FSA.

Macroprudential supervision targets also the pension fund sector, but surveillance findings and current risk assessment are not reported frequently to the Financial Stability Committee. The FSA's Pensions and Insurance Department conducts horizontal analyses with a view to identify sector-wide risks also in a forward-looking manner. Being active in mortgage lending, pension funds are subject to a comprehensive data collection, and the macroprudential borrower-based policy measures, targeted at mortgage lending, apply equally to all lenders in the banking and non-banking sector.

The FSAP recommends a strengthening of the legislative framework, especially regarding governance, internal controls and outsourcing. All supervisory tasks and technical rule-making powers should be allocated to the FSA, and infringements and sanctions should be defined within the Pension Fund Act. With regard to supervisory practices, the FSA should conduct more frequent on-site inspections and re-establish the institutionalized dialogue with large pension funds. Furthermore, the FSA should issue guidance on how to adjust member benefits based on principles of inter-generational fairness, and engage more closely with pension funds on climate risk management. Finally, given the important role of pension funds in the domestic financial system, developments in the sector should be more frequently discussed in the Central Bank's Financial Stability Committee (Table 1).

Table 1. Iceland: Main Recommendations on Pension Fund Regulation and Supervision

#	Recommendations	Addressee	Timing*	Priority**
1	Allocate supervisory powers under the Pension Fund Act fully to the FSA (¶27)	MoF	ST	M
2	Ensure commensurate resources with expanding tasks (¶28)	MoF, FSA	C	M
3	Delegate rule-making powers on technical matters under the Pension Fund Act to the FSA (¶33)	MoF	ST	M
4	Define infringements and sanctions in the Pension Fund Act (¶34)	MoF	ST	H
5	Review investment rules and consider removing (most) quantitative limits (¶37)	MoF, FSA	MT	M
6	Develop a process for a regular review of the methodology to discount pension liabilities (¶41)	MoF, FSA	MT	M
7	Publish clear guidance and best practices with regard to changes in benefits and accruals (¶42)	FSA	MT	M
8	Align rules on governance, internal controls, risk management with IORP II or Solvency II (¶55)	MoF, FSA	ST	H
9	Enact more stringent rules for outsourcing, and ensure an appropriate level of corporate substance within each pension fund (¶56)	MoF, FSA	ST	H
10	Prescribe more detailed pension benefit statements, e.g., in line with IORP II (¶57)	MoF, FSA	ST	M
11	Communicate clearly on the supervisory strategy and upcoming focus areas of supervisory work (¶62)	FSA	C	M
12	Perform regular on-site inspections for large pension funds, and re-establish an institutionalized supervisory dialogue (¶68)	FSA	I	H
13	Explore ways to expand and strengthen the actuarial profession (¶79)	MoF, FSA	ST	M
14	Intensify engagement with pension funds on climate risk management, and provide guidance for the upcoming SFDR transposition (¶80)	FSA	I	M
15	Report more frequently on developments in the pension fund sector to the Financial Stability Committee (¶82)	FSA	C	M

* C = Continuous; I = Immediate (within one year); ST = Short Term (within 1-3 years); MT = Medium Term (within 3-5 years).

** H = High; M = Medium; L = Low.

INTRODUCTION[2]

1. This technical note analyzes the key aspects of the regulatory and supervisory regime for pension funds in Iceland. The analysis is part of the 2023 Financial Sector Assessment Program (FSAP) and based on the regulatory framework in place and the supervisory practices employed as of December 2022. This note is based on a review of regulations, market analyses, and meetings with the Icelandic authorities, in particular the Central Bank of Iceland (CBI) and the Ministry of Finance and Economic Affairs (MoF). The FSAP team also met with representatives from pension funds, industry associations, and other private sector bodies. The work benefitted greatly from their readiness to discuss critical issues and share information.

2. This FSAP reviews recent developments and the structure of the Icelandic pension fund sector. This technical note provides context on the Icelandic pension system, focusing in particular on the compulsory occupational scheme in Pillar II, the most important pillar of the system. The pension fund sector is large, well developed, and highly interconnected with the domestic financial system, mainly through exposures towards banks and domestic investment funds. A separate technical note summarizes the results of the risk analysis carried out for the pension fund sector and elaborates more on current market risk sensitivities.

3. The previous FSAP in 2008 did not review the pension fund sector in detail. Nevertheless, the Article IV consultation in 2022[3] noted "a need to further review the CBI's [...] microprudential powers and capacities, including to oversee pension funds' governance and risk management practices". It also highlighted the need to monitor pension funds' increasing foreign exchange exposures.

4. The note does not include a detailed assessment of observance of the global standards for pension fund oversight. The FSAP carries out a focused review of the legislative framework and supervisory practices, in particular for governance, internal controls, and risk management. As the Principles of the International Organization of Pension Supervisors (IOPS)[4] are not very detailed, further reference is made to selected Insurance Core Principles, set up by the International Association of Insurance Supervisors (IAIS)[5], and relevant legislation in the European Union, including the Institutions for Occupational Retirement Provisions (IORP) Directive II[6] and the Solvency II framework for insurers[7].

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[2] The main author of this note is Timo Broszeit, IMF external expert on insurance and pension fund regulation.

[3] Iceland: 2022 Article IV Consultation – Press Release and Staff Report, June 2022

[4] IOPS Principles of Private Pension Supervision, November 2010

[5] IAIS Insurance Core Principles, November 2019

[6] Directive (EU) 2016/2341 of the European Parliament and of the Council of 14 December 2016 on the activities and supervision of institutions for occupational retirement provision (IORPs)

[7] Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)

THE ICELANDIC PENSION SYSTEM

Three-Pillar Structure

5. **Iceland's pension system is characterized by a strong second pillar with mandatory contributions to occupational pension funds** (Table 2). The first pillar, an income-tested public pension, provides a basic pension and a pension supplement if payments from the second pillar would fall below a certain threshold. Voluntary personal pension savings in the third pillar and other savings in the fourth pillar complete the system. The mandatory part of the second pillar is provided by 21 autonomous pension funds, operating 25 schemes. The large majority of schemes can be categorized as defined ambition (DA) which targets but not guarantees a certain replacement rate; four defined-benefit (DB) schemes are now closed for new members. Pension funds paid out the majority of all old-age pensions in 2021 (ISK 144bn vs 92bn paid out by Pillar I), covering around 50,000 pensioners aged 67 and higher, and their share is expected to grow further.

Table 2. Iceland: Pension System Structure

	Pillar I	**Pillar II**	**Pillar III**	**Pillar IV**
Type	Tax-financed public pension	Occupational pension funds	Supplementary, voluntary individual pension savings	Other savings
Contributions	Funded through state budget Minimum 3 years of residence required between age 16 and 67	Mandatory contributions for employees (incl. self-employed) from age 16 to 70 Minimum 15.5 percent of wages (since 2023) o/w 11.5 percent are paid by the employer and 4 percent by the employee; 12 percent until 2022 o/w 8 by the employer and 4 percent by the employee Employees' contributions deductible from taxable income ~223,000 members (end-2021)	Voluntary contributions 4-6 percent of wages (o/w 2 percent paid by the employer) ~130,000 members (end-2021) Contributions up to 4 percent are deductible from taxable income	Various types

Table 2. Iceland: Pension System Structure (Concluded)				
	Pillar I	**Pillar II**	**Pillar III**	**Pillar IV**
Pension payments	For each year of residence 1/40th of the full entitlement Basic amount: ISK 359,046 per month (single person, 2022), income-tested Retirement age: 67 years (with optional early or late retirement) Pensions inflation-adjusted	DA: targeted 72 percent replacement rate (56 percent until 2022) DB: guaranteed 72 replacement rate Retirement age varies, but typically 67 years Pension benefits also for widowed spouses and children (until age 18) Disability benefits Pensions inflation-adjusted Benefits are treated as taxable income upon withdrawal	Typically paid out as limited lump-sum or programmed withdrawal Pension savings can be accessed pre-retirement, e.g., by first-time buyers of a house or apartment Pension savings fully inheritable	Various types
Providers	State	21 pension funds (o/w 4 with closed DB schemes)	13 pension funds, 5 banks, 2 foreign providers	Various providers (banks, life insurers, asset managers)
Assets (end-2021)	Not applicable (unfunded)	ISK 6,032bn (o/w 5,611bn DA, 421bn DB)	ISK 1,051bn (o/w 706bn in pension funds)	Not available

Source: IMF staff based on CBI, Icelandic Pension Fund Association, OECD.

6. **In international comparisons, the Icelandic pension system can be found in the top ranks, typically labeled as one of the best pension systems globally.** A study conducted by consulting firm Mercer and the CFA Institute ranks Iceland as number one in a comparison of 44 countries.[8] In each of the three sub-categories—"adequacy", "sustainability", and "integrity"—Iceland receives the top grade 'A'. Similarly, a study by Natixis[9] ranks Iceland on the third place among 44

[8] Mercer CFA Institute Global Pension Index 2022, October 2022

[9] 2022 Natixis Global Retirement Index, July 2022

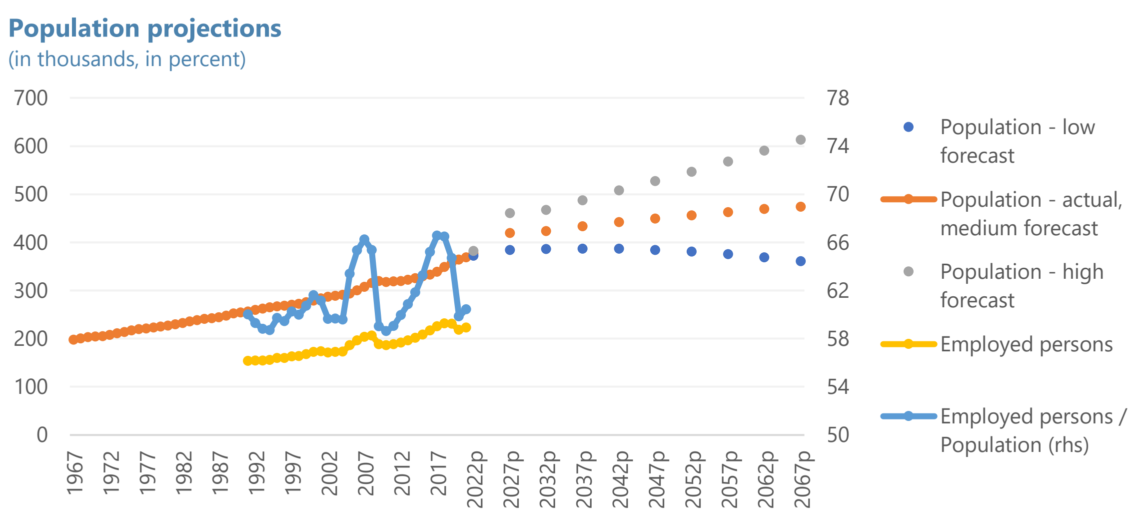
countries, behind Norway and Switzerland. In all four subcategories, the country is placed in the top-ten, being fifth in “material well-being”, sixth in “quality of life” and tenth in the two remaining subcategories “health” and “finances”.

Demographics

7. **Iceland’s population has increased significantly over the last decades and is expected to grow further at a relatively high rate** (Figure 1). By 2021, the population has reached around 370,000, up from 200,000 in the late 1960s. Especially over the last two decades, this trend has been further amplified through high net immigration. According to Statistics Iceland, the population will reach 474,000 by 2067 in a baseline scenario, and could even reach up to 600,000. In line with population growth, also employment has increased to 223,000 in 2021, corresponding to 60 percent of the population. However, the employment rate has been very cyclical over the last two decades, with substantial downturns during the financial crisis in 2008/09 and the Covid-19 pandemic in 2020/21.

Figure 1. Iceland: Population Growth and Employment

Iceland’s population stands at around 370,000. In a scenario with high growth assumptions, the population could even reach 600,000 by the mid-2060s. Employment has grown in line with population, but was highly cyclical during the financial crisis and the Covid-19 pandemic.



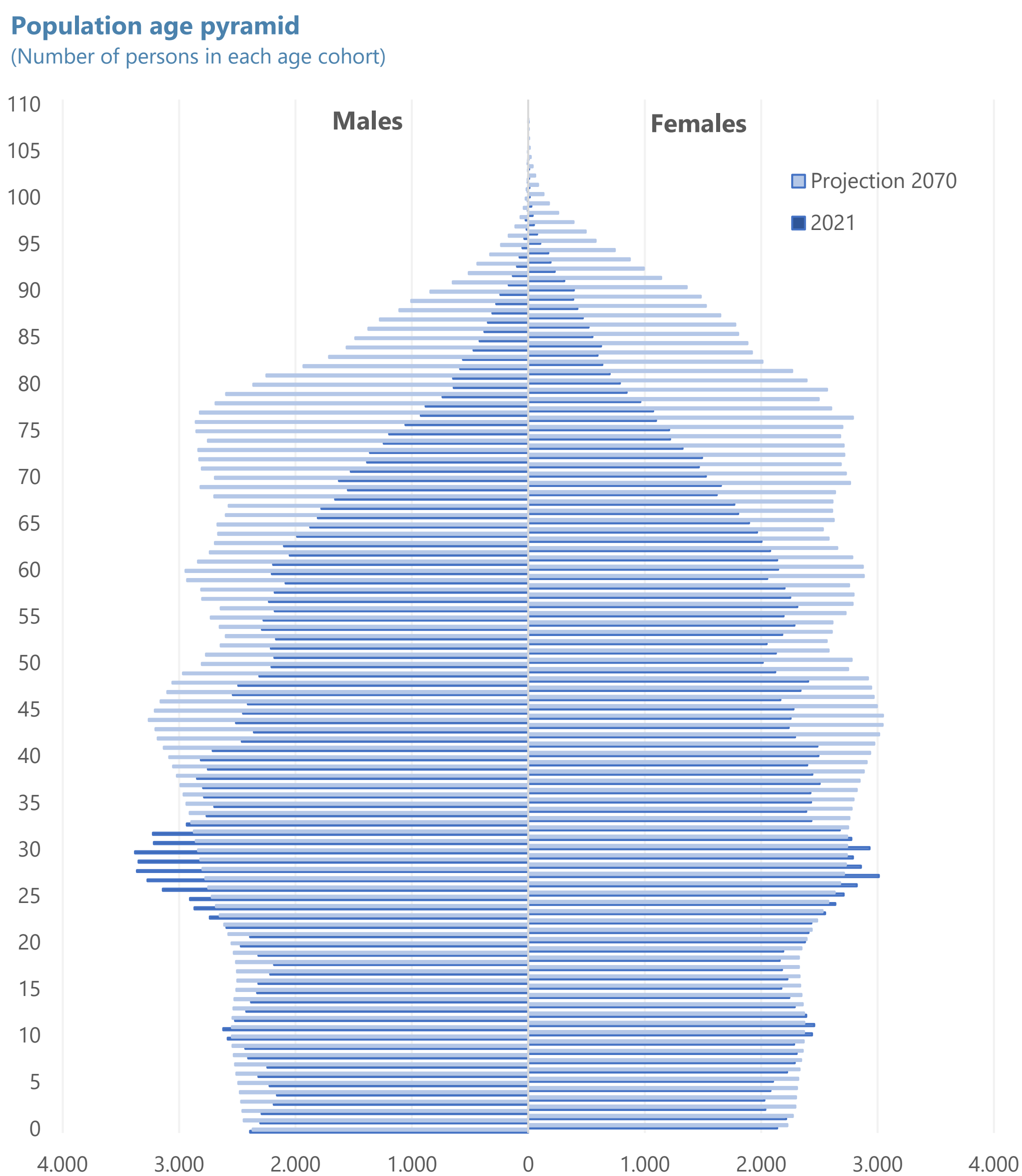
Source: Statistics Iceland.

8. **Iceland has a relatively young population, compared to peers, and a low old-age dependency ratio**. Almost 42 percent are 30 years or younger, and only 20 percent falls in the category of 60 years or older. The old-age dependency ratio—calculated by the OECD as the number of individuals aged 65 and over per 100 people of working age defined as those aged between 20 and 64—was 26.6 in 2021, considerably below the averages for OECD countries (30.4) and EU Member States (32.3). With larger number of employees reaching retirement age between

2050 and 2060, the old-age dependency ratio is expected to increase to almost 50 by 2070, however still below most other Western economies.

Figure 2. Iceland: Population Statistics

Iceland's population is comparably young, mainly due to significant net immigration over the last two decades. Nevertheless, projections hint at a large number of employees reaching retirement age between 2050 and 2060.



Source: Statistics Iceland.

Pillar II: Occupational Pension Funds

9. The DA system in Pillar II is fully funded, and all risks are borne collectively by the members. While it does not guarantee any pre-determined pension payment, the system has a targeted minimum replacement rate of 72 percent based on an average career income of 40 years reflected in age-based accrual tables.[10] However, a study conducted by the FSA and the Icelandic Pension Fund Association in 2014[11] projected the actual replacement to be closer to 54 percent. Pensions are by default paid out as a life annuity. DA schemes have adjustments mechanisms that allow funds to adjust accrued pension rights and future accruals if the actuarial funding ratio deviates by more than an allowed margin. Historically, in cases where breaches in the funding ratio were caused by investment returns being significantly below the benchmark rate, an equal reduction is applied uniformly for all members.[12] Vice versa, any excess of assets over liabilities can be distributed to members by scaling accrued pension rights up. The Pension Fund Act, however, does not prescribe an exact method on how to reduce or increase existing pension rights and benefits, hence the responsibility to make these adjustments rests with the pension fund according to is Articles of Association.

10. The legacy schemes offering defined-benefit (DB) systems for civil servants are underfunded, but fully guaranteed by the employer. The guaranteed replacement rate in the DB system is at least 72 percent based on flat rate accruals. Members of DB schemes that joined prior to 1998 can continue accruing pension rights if they have maintained their appointment since then. Otherwise, DB schemes have been closed to new members. All risks, including investment and longevity risks are borne by the employers or sponsors. Sponsors of DB schemes include the state and local government municipalities. Civil servants' "A-division schemes" were transformed from DB to DA in 2017, granting existing members a right to continued flat rate accruals.

11. Total pension savings amount to almost twice the GDP, more than in any other country (Figures 3a-b). As of end-2021, combined assets of Pillar II and III totaled ISK 7.08trn, equivalent to 219 percent of GDP. Only two countries, Denmark and the Netherlands, had comparably high numbers with 211 and 210 percent, respectively. As equity and bond prices declined during 2022, assets at end-December amounted only to ISK 6.90trn (183 percent of GDP, of which 176 percent managed by pension funds). Focusing solely on Pillar II, pension funds managed ISK 6.03trn at end-2021 and around 5.90trn twelve months later.

[10] Since 2023, minimum mandatory contributions to Pillar II funds have increased from at least 12 to 15.5 percent—in practice, however, collective wage agreements had introduced higher contribution rates already since 2016 for most pension schemes. This came along with a higher replacement rate which—after accruals over a full career—is targeted to reach a minimum of 72 percent (instead of 56 percent previously).

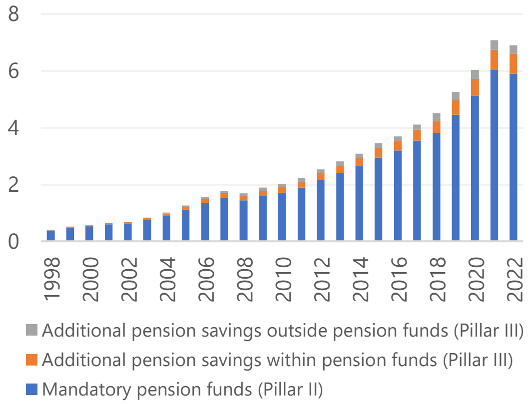
[11] Retirement Savings Adequacy: Measurement in Iceland, December 2014. The study projects the replacement ratio for the private sector pillar II schemes, i.e., the DA schemes, at 54 percent, with 55 percent of pensioners showing a replacement ratio below the 56 percent target. This is mainly due to gaps in contribution years and certain features of the accrual tables. Workers must contribute for up to 44 years to reach the 56 percent target.

[12] While lower investment returns have usually been the trigger for a breach of the funding ratio, structurally also regular adjustments of the mortality assumptions have contributed to a deterioration of the actuarial position.

Figure 3. Iceland: Size of the Pension Saving Sector and Cashflows

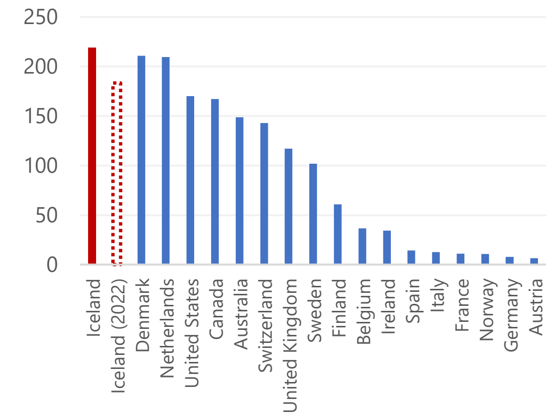
Pillar II pension funds managed assets of ISK 5.9trn at end-2022. A further 0.7trn of voluntary pension savings (Pillar III) is managed by pension funds, and another 0.3trn by other pension providers.

Composition of pension savings
(in ISK trillions)



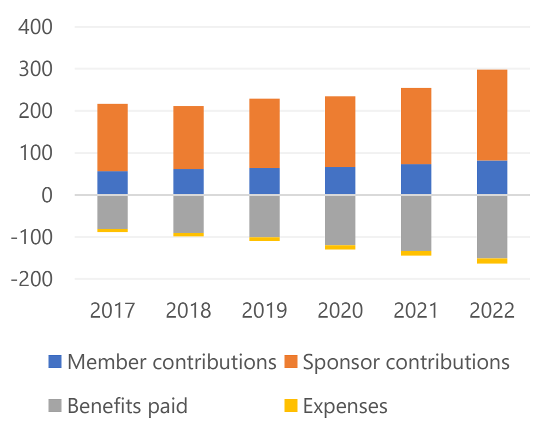
At end-2021, Iceland had the largest pension fund sector (Pillar II and III) in relation to its GDP, with almost 220 percent, with only Denmark and the Netherlands reaching similar amounts.

Size of the pension fund sector
(2021, in percent of GDP, Pillar II and III)



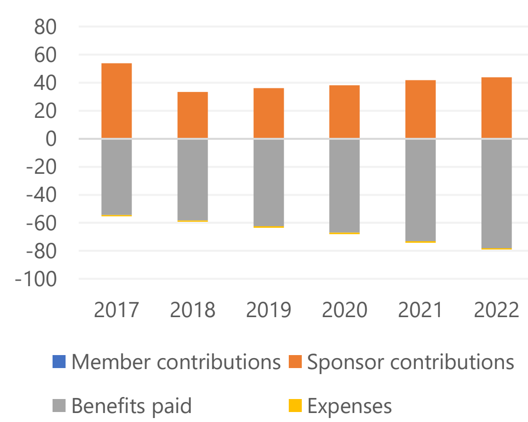
Most DA pension funds are still in an accumulation phase, with contributions exceeding benefits. The annual net inflow which was stagnating until 2021 has picked up again in 2022 (ISK 134bn).

Defined ambition: Cash flows
(in ISK billions)



DB schemes are all closed to new business, hence regular contributions decline every year due to the decreasing membership—at the same time, benefits are on the rise.

Defined benefit: Cash flows
(in ISK billions)



Notes: Defined-ambition cash flows also include Pillar III schemes offered by pension funds, which can be characterized as traditional defined-contribution schemes. Cash flows for defined-benefit schemes also include member contributions which cannot be shown in the graph due to their small size (ISK 0.35bn in 2022).

Source: IMF staff calculations based on CBI data.

12. Defined-ambition funds are mostly in an accumulation phase, with contributions exceeding benefits—opposite developments are observed for the remaining defined-benefit

schemes (Figures 3c-d). Annual contributions to DA schemes have increased from ISK 217bn in 2018 to 298bn in 2022; at the same time, annual benefit payments (incl. expenses) rose from ISK 89bn to 164bn. DB schemes, however, with their outflows (ISK 79bn in 2022) exceeding regular sponsor and member contributions also rely on special additional contributions from sponsors. In 2021, 78 percent of payouts from Pillar II related to old-age pension, 13 percent to disability pensions, 8 percent were survivor's pensions paid out to spouses, and less than 1 percent was paid out to children under the age of 18.

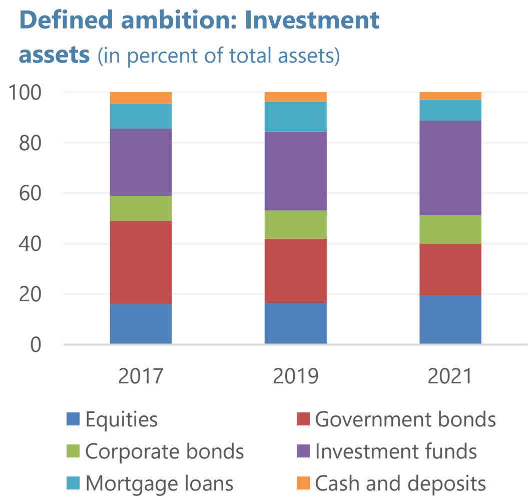
13. The pension fund sector has consolidated considerably over the last decades and is by now quite concentrated. In 1990, there were 87 active pension funds, this number came down to 62 in 2000, 33 in 2010, and 21 as of now. Pension fund membership is in most cases determined by participation in the workforce under a collective wage agreement. Most pension funds are open only to employees in a specific trade or profession. Only eight pension funds are open to the general public. While the largest pension fund manages more than ISK 1.3trn in assets (end-2021), some smaller funds manage less than 50bn; and the number of active members ranges from less than 100 to around 50,000. The three largest pension funds account for 51 percent of the total market (based on assets), and the five largest pension funds hold a cumulated share of 71 percent.

14. Pension funds have weathered the Covid-19 pandemic without major implications. While the investment performance during the first quarter of 2020 was negative, market valuation losses were caught up quickly. Specific Covid-19 measures introduced by the government enabled individuals to access their own savings in the voluntary personal pension of Pillar III. Total withdrawals in 2020 and 2021 amounted to ISK 23bn and 13bn, respectively. In the second pillar, the DA sector was slightly affected due to high unemployment in the tourism industry resulting in temporarily lower contributions. The DB schemes were even less affected: being the main pension provider for older civil servants, the pandemic did not affect their operations.

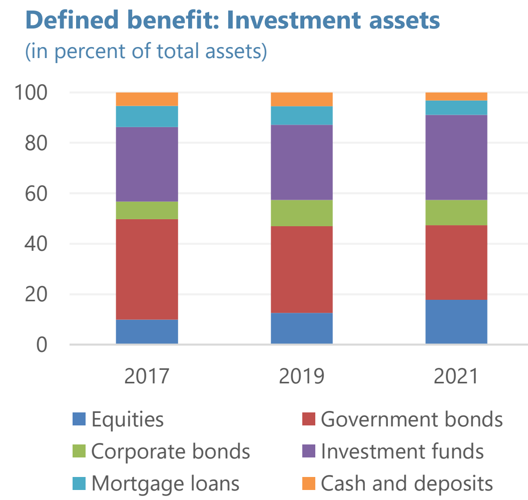
15. Investment assets of Icelandic pension funds are dominated by stocks and inflation-linked assets (Figures 4a-b). Large parts of the portfolio are managed by external asset managers, and, as of end-2021, investment funds account for 38 percent and 34 percent of the portfolio for DA and DB schemes, respectively—most of these funds are invested in stocks, and 11 percent of them are domiciled in Iceland (ISK 288bn, equivalent to 23 percent of outstanding investment fund shares). Directly held stocks account for another 19 percent of the assets of DA schemes and 18 percent for DB schemes. Inflation-linked bonds and loans amount to 36 percent of total pension fund assets, ranging from 27 to 77 percent for individual funds. Fixed-income assets are to a large extent unrated, specifically domestic corporate bonds and mortgage loans, highlighting the need for pension funds to comprehensively monitor their credit risks (Figures 4c-d). The average remaining maturity of fixed-income assets amounts to around 8.2 years.

Figure 4. Iceland: Pension Fund Investments

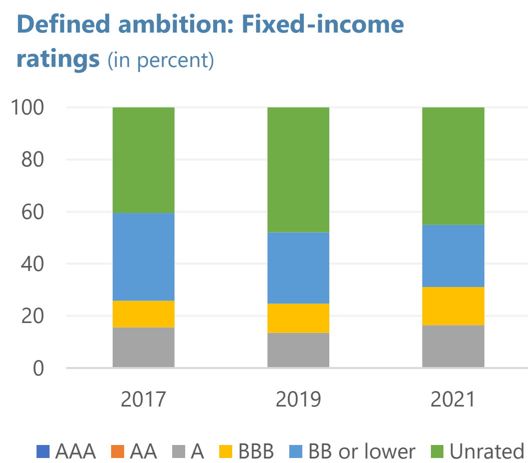
DA schemes have expanded their holdings in investment funds (mostly equity) over the recent years, accounting now for 38 percent of assets. At the same time, investments in government bonds declined to 20 percent.



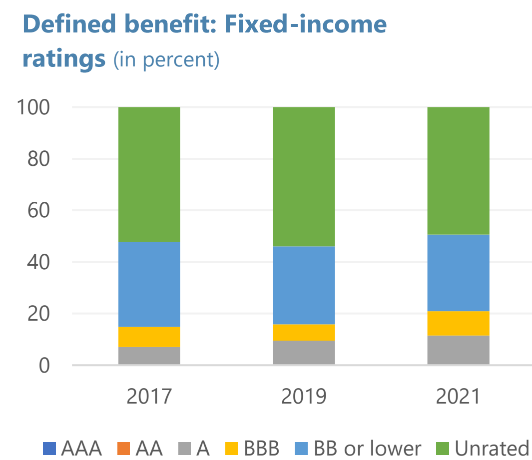
The asset allocation of DB schemes is slightly more conservative, with 29 percent in government bonds, but the share of investment funds and directly held equity has increased too (34 and 18 percent, respectively).



Fixed-income investments of DA schemes are targeted towards the lower investment-grade ratings and BB-rated assets. A large part of the portfolio (loans and domestic corporates) is unrated...



...which is similar for DB schemes, holding an even lower share of investment-grade assets. However, their share has increased from 26 to 31 percent over the last four years.

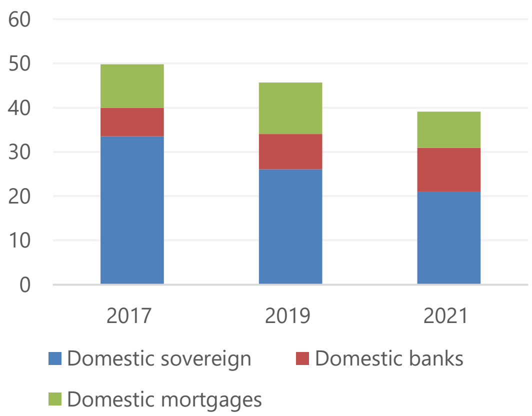


Source: IMF staff calculations based on CBI data.

Figure 4. Iceland: Pension Fund Investments (Concluded)

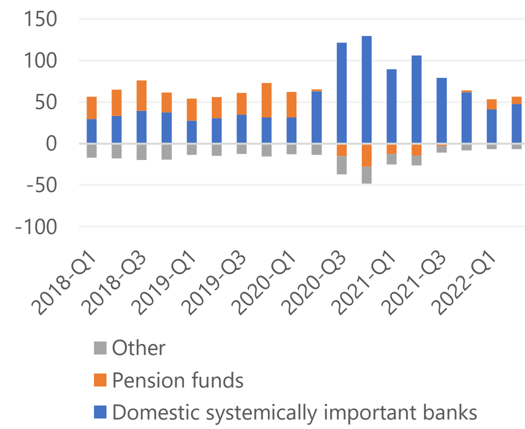
While the overall concentration towards domestic assets is declining, the exposure towards domestic banks has increased from 6 to 10 percent of total assets since 2017.

Domestic investments
(in percent of total assets, cumulated)



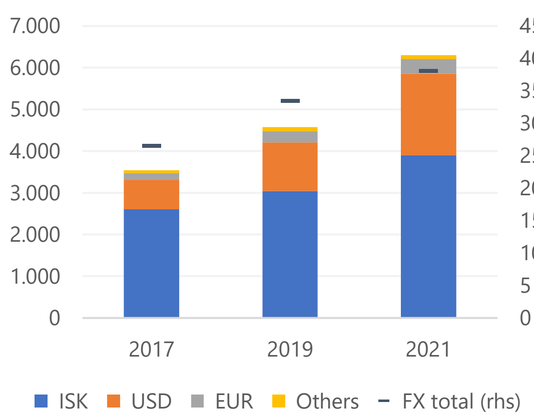
Net issuance of mortgage loans by pension funds was muted 2020/21 and has picked up again only in 2022.

Net new household mortgages
(in ISK billions)



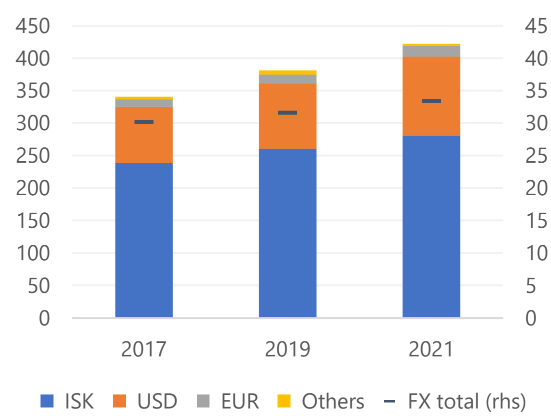
Reaching 38 percent at end-2021, the relative share of FX assets has increased substantially from 26 percent at end-2017. Most is invested in US dollars.

Defined ambition: FX assets
(in ISK billion; in percent of total assets)



The increase in FX assets has been less pronounced in the DB schemes: 33 percent at end-2021 as compared to 30 percent four years earlier.

Defined benefit: FX assets
(in ISK billion; in percent of total assets)



Source: IMF staff calculations based on CBI data.

16. Pension funds in Iceland provide substantial funding to domestic banks, through deposits, bonds and equity holdings (Figure 4e). The exposure to Icelandic banks has increased from ISK 250bn in 2017 to 670bn in 2021, or from 6 to 10 percent of pension fund assets—this corresponds to 14 percent of banks' financial liabilities. Partly, this increase was driven by the post-crisis privatization of Arion Banki and Íslandsbanki which had their initial public offerings in 2018 and 2021, respectively. Pension funds are also active in the mortgage lending market, although their market share has declined during 2020/21 (Figure 4f)—still, the outstanding lending amounts to ISK 526bn, or 8 percent of their total assets and 18 percent of the outstanding mortgage volume. Together with the holdings in domestic sovereign bonds (ISK 1,409bn, or 21 percent), the concentrated exposure towards the sovereign-banks-property nexus is significant.

17. The share of foreign-denominated assets has been increasing in recent years (Figures 4g-h). As of September 2022, 34 percent of assets are denominated in foreign exchange (up from 27 percent at end-2017), but shares among individual funds range from 11 to 40 percent. The US dollar is the most relevant currency with 81 percent of DA schemes' total FX exposures, followed by the Euro (15 percent). Among foreign-denominated investments, equity funds are the most relevant type. Currency risks are mostly borne by pension funds and hedging of that risk is rare. Pension funds typically regard foreign-denominated investments as favorable, offering a partial inflation hedge as historically the value of the Króna and inflation were correlated. Currency risks are therefore retained on pension funds' balance sheets especially for pension funds in an accumulation phase, i.e., where contributions still exceed benefit payments, with a longer investment horizon.

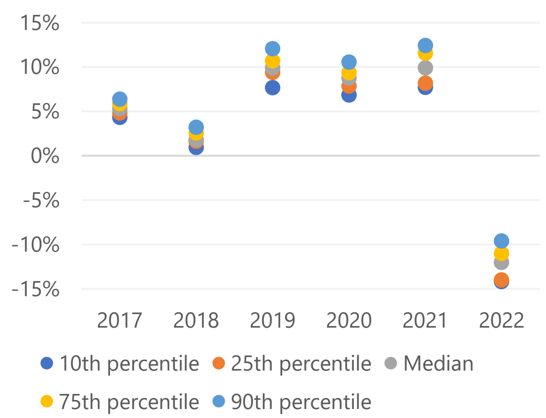
18. The use of foreign-exchange hedging has been very limited in recent years, and also the size of the market is not seen to be sufficient to absorb substantially more foreign-exchange exposure of the pension fund sector. In those few cases where a pension fund hedges some of its FX exposures, this is typically related to investment commitments in private equity funds. As the counterparts for pension funds are almost exclusively Icelandic banks, the overall hedging capacity is limited by applicable banking regulations: Commercial banks' forward foreign currency position versus each counterparty is limited to 10 percent of the capital base, and the gross total forward position cannot exceed 50 percent of the capital base.

19. Icelandic pension funds have a very solid track record of achieving real investment returns, but 2022 ended with high negative returns (Figure 5). From 1995 to 2021, pension funds yielded 4.9 percent on average in real terms. In about half of the years during this period, returns between 6 and 12 percent were achieved, but negative outliers like in 2008 (-22 percent) had a lasting impact. While the period from 2019 to 2021 was quite positive with returns between 8.7 and 9.9 percent for the median DA scheme, the year 2022 ended with a negative real return of around -12 percent, resulting from a combination of negative returns both on the stock and the bond market, and a relatively high inflation rate. DB schemes typically yield lower returns, given their larger exposure towards fixed-income and relatively lower investments in equities. From 2019 to 2021, this asset allocation still yielded between 7.0 and 7.5 percent in real terms for the median DB scheme.

Figure 5. Iceland: Pension Funds' Investment Returns

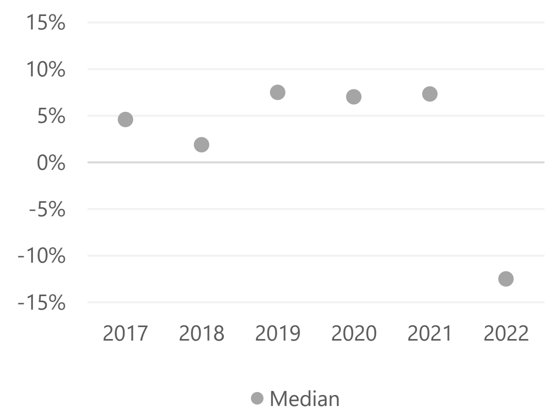
From 2017 to 2021, the real investment yields averaged 7.1 percent for the median DA scheme, followed by yield of -12.0 percent in 2022…

Defined ambition: Real investment yield (in percent, distribution)



…similar as for the median DB scheme, which yield -12.5 percent in 2022, preceded by 5-year average annual yield of 5.7 percent.

Defined benefit: Real investment yield (in percent, median)



Source: IMF staff calculations based on CBI data.

20. As funding ratios of DA schemes need to be maintained within narrow bands around 100 percent, there are typically no major fluctuations (Figure 6). Pension funds breaching the tolerance levels have to adjust members' pension benefits.[13] At the end of 2022, the median DA scheme had a funding ratio of 92.6 percent, and 80 percent of schemes were in a range between 86.7 and 100.0 percent. DB schemes are exempted from the requirement to maintain a funding ratio close to 100 percent. Instead, the sponsor—being the state or individual municipalities—pays in special contributions, typically on a regular basis, although the exact amount might also be determined to some degree on budgetary considerations.

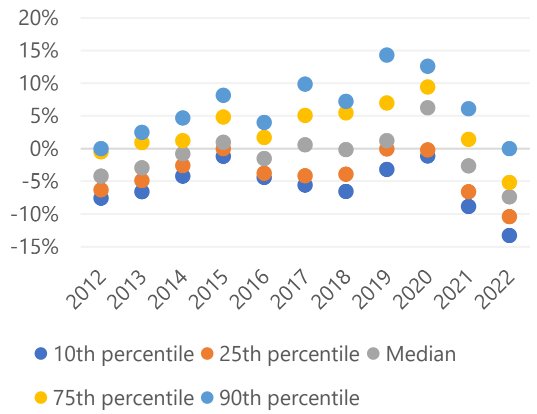
[13] For details, see the section on the valuation of liabilities and funding ratios.

Figure 6. Iceland: Pension Funds' Funding Ratios

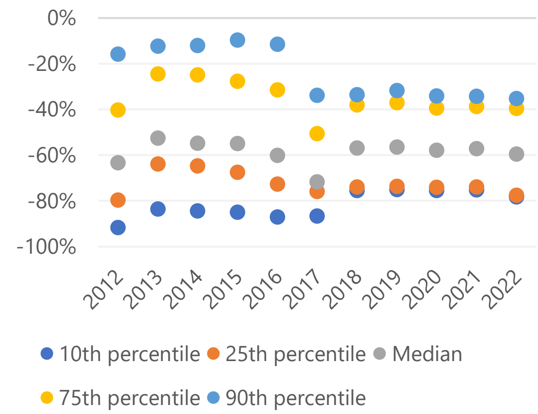
Over the last years, DA schemes maintained a funding ratio closely within the regulatory thresholds. The decline in 2021 resulted from the implementation of new mortality tables, hence higher liabilities, while in 2022 negative investment returns put pressure on the funding ratios

DB schemes have been maintaining funding deficits for many years. Funding is provided by the state and municipalities.

Defined ambition: Funding surplus/deficit (in percent, distribution)



Defined benefit: Funding surplus/deficit (in percent, distribution)



Source: IMF staff calculations based on CBI data.

Pillar III: Supplementary Individual Pensions

21. The voluntary third-pillar pension savings system complements the mandatory regime of the second pillar and is tax-incentivized. As part of the pension reform in 1997, legislation on tax incentives for voluntary personal pension savings was passed, making it possible for employees to deduct from their taxable income a contribution to authorized personal pension schemes. Such schemes are provided by 13 domestic pension funds, five domestic banks, and two foreign insurance undertakings. Pension funds are the largest providers, with about two-thirds of third-pillar savings (ISK 703bn out of 1,0bn in total as of end-2022). The voluntary third-pillar system is a pure defined-contribution (DC) system with individual accounts and without any guaranteed components, apart from the pension products offered by the two foreign providers. The pay-out phase is typically designed as a programmed withdrawal, and savings can be inherited.

22. Third-pillar pension providers are subject to higher liquidity risks, as pensioners have more options to withdraw some of their savings. This is reflected in a more conservative investment allocation which puts a higher emphasis on bonds (38 percent) and bank deposits (21 percent), with the remaining 41 percent being invested in stocks and investment funds.

INSTITUTIONAL AND REGULATORY STRUCTURE

23. The Financial Supervisory Authority (FSA) within the Central Bank of Iceland (CBI) is an integrated regulator with responsibility for almost the entire financial services sector in Iceland. As of January 1st, 2020, the CBI took over the tasks of the Financial Supervisory Authority which existed before as a separate entity.[14] At the time of the merger, four departments (Banking, Pensions and Insurance, Markets and Conduct, and Compliance and Inspections) were integrated into the CBI, and a Deputy Governor of Financial Supervision came into office. An organizational restructuring was announced in early 2023 which merged banking, pensions and insurance supervision (and also parts of the former markets and conduct supervision) into a new Department for Microprudential Supervision, and established a new Department for Conduct Supervision taking over the remaining responsibilities of the former markets and conduct supervision as well as compliance and inspections.

24. Major supervisory decisions are taken by the CBI's Financial Supervision Committee. Members of the Financial Supervision Committee are the Deputy Governor for Financial Supervision (as chair), the Deputy Governor for Financial Stability (as vice-chair), and three external experts appointed by the Minister of Finance for a term of five years. The committee can delegate non-major decisions to the Deputy Governor for Financial Supervision. The Governor of the CBI chairs the Committee when adopting rules of procedure, when entrusting the Deputy Governor for Financial Supervision to take non-major decisions, and when deciding on requirements regarding the capital, liquidity or funding of systemically important financial institutions. The Financial Supervision Committee meets normally ten times a year.

25. Resources for pension fund supervision at the FSA are stretched, giving rise to key person risks. The former Pensions and Insurance Department (now merged into the Microprudential Supervision Department) supervises pension funds and other providers of personal pension savings, insurance undertakings as well as insurance intermediaries. As of end-2021, the headcount in the department amounted to around 8 full-time equivalents, up from 6.5 in 2016. Half of the staff has supervisory experience of 10 years or more. Further staff in the Conduct Supervision Department (formerly Compliance and Inspections Department and Markets and Conduct Department) also support the work on pension fund supervision, with about one to two further full-time equivalents.

26. The Ministry of Finance and Economic Affairs (MoF) continues to perform certain important supervisory tasks, but the split of responsibilities results in some delays and inefficiencies. The MoF authorizes new pension funds and approves changes to a fund's Articles of Association, thereby also approving mergers and acquisitions. Prior to taking any such decision, the MoF asks the FSA for an expert opinion. The MoF also publishes the mortality tables, which are updated every few years by the Association of Icelandic Actuaries. The process of implementing the

[14] Any references to the FSA in this TN which relate to rules or guidelines issued prior to 2020 are to be read as references to the predecessor organization.

most recent version of the mortality tables in 2021/22 and changing the accrual tables and other relevant parameters in the Articles of Association was seen as rather lengthy by many pension funds. A more proactive and earlier engagement between both authorities would likely have reduced some of the uncertainties in the pension fund sector at the end of 2022.

Recommendations

27. Recommendation 1: Allocate supervisory powers under the Pension Fund Act fully to the FSA. Licensing of pension funds as well as any changes in pension funds' Articles of Association should be subject to approval by the FSA instead of the MoF. Mortality tables should also be published by the FSA, based on the calculations prepared by the Association of Icelandic Actuaries.

28. Recommendation 2: Ensure commensurate resources with expanding tasks. Going forward, resources and skills of the FSA's Pensions and Insurance Department should be regularly evaluated and additional tasks which might arise in the future (related to new supervisory tasks, policy work, or emerging risks and vulnerabilities being identified) should be reflected in the headcount.

PENSION FUND REGULATION

29. The Pension Fund Act No. 129/1997 entered into force in July 1998. The Act applies to all pension funds and custodians of pension savings. Since its entry-into-force it was amended several times, but most of the changes were only minor and formalistic changes. On July 1st, 2017, significant amendments came into force in Chapter VII of the Act regarding investment authorizations and risk management. The Act provides, in several articles, for either the MoF or the FSA to issue secondary legislation (regulations and rules, respectively), but the allocation to each authority is not always based purely on the level of technical details or expertise being required. As an example, the FSA can issue rules on financial statement and auditing, but not on risk management or actuarial valuation (Table 3). In order to mitigate some of the shortcomings of the Pension Fund Act, the FSA issues non-binding guidelines and circular letters, but occasionally faces resistance from supervised entities, which argue that the FSA's measures are not founded by any requirements in the Act.

30. The Pension Fund Act does not include a closed list of infringements or sanctions. It refers more generally to the Act on the Official Supervision of Financial Activities (Act No. 87/1998), which foresees fines between ISK 10,000 and 2,000,000 as well as periodic penalty payments between ISK 10,000 and 1,000,000—taking into account the nature of the negligence or violation, and the financial strength of the entity in question. However, in recent years, no sanctions were issued by the FSA based on this law. The only monetary fines pension funds were sanctioned with were related to infringements of securities markets laws.

Table 3. Iceland: Pension Fund Regulations

Act on Mandatory Pension Insurance and on the Activities of Pension Funds (Pension Fund Act, PFA)			**Act No. 129/1997**
Art. 6 (on pension contributions)	MoF	Regulation on compulsory pension insurance and on the activities of pension funds	Reg. 391/1998
Art. 10 (on further requirements for additional coverage or Pillar III savings)	MoF	*The MoF has not issued further regulations on this.*	
Art. 24 (on actuarial valuation)	MoF	Regulation on compulsory pension insurance and on the activities of pension funds	Reg. 391/1998
Art. 31 (on fit proper criteria)	FSA	Rules on the conduct of qualifications of pension fund managers and board members	Rules 180/2013
Art. 35 (on internal audit)	FSA	Rules on pension funds' audit departments and independent pension fund supervisors	Rules 577/2012
Art. 39a (on investment policy and risk management)	MoF	Regulation on investment policy and evaluation of returns of pension funds and private savings custodians	Reg. 916/2009
		Regulation on pension fund risk control systems	Reg. 590/2017
Art. 40 (on financial statements)	FSA	Rules on the annual financial statements of pension funds	Rules 335/2015
Art. 42 (on auditing)	FSA	Rules on the auditing of pension funds	Rules 685/2001
Art. 48 (on liquidation)	MoF	*The MoF has not issued further regulations on this.*	
Art. 56 (further provisions)	MoF	Regulation on the allocation of contributions to pension savings and supplementary cover	Reg. 698/1998
Act on Official Supervision of Financial Activities			**Act No. 87/1998**
Art. 11 (on fines and periodic penalty payments)	MoF	Regulation on the application of periodic penalty payments and periodic penalty payments in official supervision of financial activities	Reg. 397/2010
Act on the Pension Fund for the Accumulation of Pension Rights			**Act No. 155/1998**
Act on Occupational Retirement Funds (IORP transposition)			**Act No. 78/2007**

Source: IMF staff.

31. **European legislation on pension funds is being transposed into Icelandic law, but is not applicable to the specific type of Icelandic pension funds.** The EU Directives on Institutions for Occupational Retirement Provisions (IORP) provide a legislative framework for ensuring the

soundness of occupational pensions and better protection of pension scheme members. The IORP I Directive was transposed into Icelandic law in 2007 with the Act on Occupational Retirement Funds (Act No. 78/2007). However, as the Icelandic occupational pension system in Pillar II is compulsory for all employees, it falls under the perimeter of social security[15], and hence pension funds are not subsumed under the scope of the IORP framework. The IORP II Directive entered into force in January 2017 and EU Member States were required to transpose it into national law within two years. The Directive introduced enhanced governance requirements, new rules on IORPs' own risk assessment, new requirements to use a depositary, and enhanced powers for supervisors. It further enhanced information transparency to pension savers and clarifies the procedures for carrying out cross-border transfers and activities. As Iceland is not a member of the EU, but a member of the European Economic Area (EEA), it is not bound by the above-mentioned transposition deadline for EU Member States, but follows a separate timeline decided upon by the EEA-EFTA Member States and notified to the European Commission. According to this timeline, the IORP II Directive is planned to be transposed into Icelandic law during the first half of 2023. Still, the scope of the Directive did not change, and Icelandic pension funds will not be subject to the legislation.

32. The Icelandic government plans a comprehensive review of the pension system in co-operation with the social partners and pension funds by end-2023. In the coalition agreement of November 2021, the government has announced a Green Paper which should focus on simplifying the system.[16] A particular focus is on the pension funds' ability to invest in a diverse, responsible and secure manner, taking into account their growing importance in the Icelandic economy. It is planned to examine how pension funds can increase their involvement in infrastructure investments in order to speed up public projects, and contribute to innovation and green solutions in response to climate change. Choices for (prospective) pension fund members with regard to their supplementary pension savings should be expanded by increasing the number of investment options. In collaboration with Digital Iceland, possibilities will be examined of promoting digitalization in the pension system by facilitating communication between institutions to ensure better and more coordinated services and users' access to information.

Recommendations

33. Recommendation 3: Delegate rule-making powers on technical matters under the Pension Fund Act to the FSA. Rule-making powers for the FSA should specifically be considered regarding the actuarial valuation, investment policy and risk management, and also—given the FSA's mandate on consumer and investor protection—with regard to information provided to pension fund members (including prospective members, members prior to retirement, and retired members).

[15] In the EU (and EEA) legislation, social security systems are governed by Regulation (EC) No 883/2004 on the Coordination of Social Security Systems and the related implementing Regulation (EC) No 987/2009

[16] Specifically, the coalition agreement mentions a "discussion of basic assumptions regarding the role, structure, sustainability and scope of the pension funds in the economy; the acquiring of entitlement and the interplay between different pillars of the pension system; the necessary increase in retirement age and flexibility in retirement, given increasing life expectancy; actuarial assumptions; investment authorizations; operating environment; and supervision."

34. Recommendation 4: Define infringements and sanctions in the Pension Fund Act. The act should clearly define infringements and ranges for administrative fines to be enforced by the FSA.

A. Investments

35. Quantitative investment limits have been traditionally used in the Pension Fund Act, and these were kept in place even when the prudent-person principle was introduced in 2017. Articles 36a-36d define various quantitative limits for exposures in certain asset classes and towards individual counterparties, including:

- 80 percent cap to the combined investment in corporate bonds (except certain covered bonds) and money-market instruments, stocks, investment funds, property, and derivatives.
- 60 percent cap to the combined investment in non-financial corporate bonds and money-market instruments, stocks, investment funds, property, and derivatives.
- 20 percent cap to assets not listed on a regulated market; in addition, a maximum of 5 percent of assets listed on EEA multilateral trading facilities.
- 10 percent cap to exposures towards an individual counterparty (except for certain instruments such as government bonds); 25 percent cap to combined exposures through deposits and financial instruments towards a commercial bank or savings bank.
- 20 percent cap to holdings in the shares of an individual company (this cap does not apply to companies that perform services for the pension fund).
- 25 percent cap to holdings in the units of a mutual fund.
- 50 percent cap to holdings in assets which do not match the currency of the liabilities.
- 75 percent cap to the loan-to-value ratio for residential mortgage loans, 50 percent for other real estate.

Having both such an extensive set of quantitative limits and the prudent-person principle at the same time is seen as rather unusual. With the implementation of Solvency II in the European Union, virtually all quantitative investment limits for insurance undertakings, which had previously existed in Member States, were removed[17].

36. For Pillar II pension funds, the share of foreign-denominated assets is capped at 50 percent (Art. 36d Pension Fund Act). Taking into account pension funds' request for a more liberal regime, a bill has been proposed which would gradually allow a higher allocation to foreign-

[17] Exposure-based capital requirements in Solvency II indirectly affect the asset allocation of an insurer, but do not serve as an outright cap to the investments in an asset class or to the exposure towards a counterpart.

denominated investments, up to 65 percent by 2036.[18] In June 2021, restrictions on derivatives trading involving the Icelandic Króna were lifted with the new Foreign Exchange Act No. 70/2021, whereas such trades previously required confirmation by the CBI. The new Rules on Derivatives Transactions No. 765/2021 greatly expanded the authorizations for derivatives trading involving the Icelandic Króna. Transactions are no longer subject to restrictions relating to their purpose, nor do they require confirmation from the CBI.

Recommendations

37. Recommendation 5: Review investment rules and consider removing (most) quantitative limits. Any remaining investment limits should be solidly justified and explicitly formulated as exceptions to the prudent-person principle. This could include limits to related party exposures, or limits to foreign-denominated assets—the latter also being explicitly allowed in the IORP II Directive (Art. 19(6)(b)). Also, the macroprudential borrower-based instruments related to mortgage lending, like limits to the loan-to-value ratio, can be argued to be a valid exception. An important prerequisite to any removal of quantitative limits is the fundamental strengthening of governance and internal controls within pension funds, to ensure that the prudent-person principle is fully embedded and enforceable by the FSA.

B. Accounting Principles and Valuation of Assets

38. In accounting terms, the fair-value principle is the general rule for asset valuation, but exemptions are made for loans to pension members and bonds held to maturity where the amortized cost method is allowed. Accounting is based on the Pension Fund Accounting Rules No. 335/2015, which determine in Chapter V the valuation principles for different asset classes:

- Stocks and residential real estate: Fair value.
- Loans: Amortized cost.
- Bonds held to maturity: Amortized cost.[19]
- Other bonds: Fair value.

For assets valued at amortized cost, potential credit losses need to be reflected both in the balance sheet and in the income statement based on established accounting principles.

[18] The bill proposes a gradual increase with annual steps of 1.5 percentage points until 2027, and further annual steps of 1 percentage point until 2036.

[19] The intent to hold a bond to maturity need to be documented at the date of purchase and shall be based on documented plans, policies and procedures established by the pension fund. Debt securities designated to be held to maturity are not permitted to be measured at fair value after the date of purchase. Furthermore, a bond may not be transferred from a fair-value valuation to a held-to-maturity valuation. The notes in the annual financial statements shall detail the debt securities held to maturity and indicate their fair value.

C. Valuation of Liabilities and Funding Ratios

39. Pension funds are required to value their liabilities on an annual basis. The solvency position of a pension fund is determined in an annual actuarial examination, carried out by an appointed actuary according to Article 24 of the Pension Fund Act. This actuarial examination comprises an evaluation of pension liabilities and available assets to fund pension liabilities taking into account both accrued liabilities and expected future liabilities conditional of continued premium payment for existing active scheme members. Future cashflows arising from projected pension benefit payments and projected future premiums are discounted with a fixed real interest rate of 3.5 percent. This rate is determined by Regulation No. 391/1998 and has not been changed since 1998. There is no established mechanism in place for potential future adjustments, as it exists for example for the ultimate forward-rate in Solvency II.

40. Assets which back pension liabilities must equal to the actuarial valuation of liabilities. The value might deviate by a maximum of 10 percent for single observation and 5 percent over time. It implies that pension funds have to permanently maintain a funding ratio between 90 and 110 percent and not outside 95 and 105 percent for five consecutive years.[20] In case the funding ratio exceeds these thresholds, the board is required to adopt the necessary changes in its Articles of Association. Possible measures for DA schemes include adjustments to accrued pension rights or lowering future pension accrual tables. However, no detailed methods are prescribed in the Pension Fund Act or any secondary legislation on how to make these adjustments and how to ensure a fair treatment of all pension fund members. DB schemes guaranteed by the plan sponsor (state or municipalities) are exempt from the requirement to maintain fully-funded liabilities.

Recommendations

41. Recommendation 6: Develop a process for a regular review of the methodology to discount pension liabilities, including the discount rate. As a minimum, such a review should incorporate the past experience of the real interest rate over the last 25 years since the 3.5 percent rate has been introduced. Furthermore, the methodology should include a smoothening mechanism which spreads out larger changes in the discount rate over several years in order to minimize any potentially disruptive effects in the change of pension liabilities and funding ratios.

42. Recommendation 7: Publish clear guidance and best practices with regard to changes in benefits and accruals. In particular, intergenerational transfers involving a different treatment of accrued benefits and future accruals should be laid out clearly.

[20] After the 2008 financial crisis, the allowed margins for the funding ratio were widened to +/-13 percent as a temporary measure. Despite this measure, most DA schemes applied equal reductions for all members as investment losses were realized on the balance sheet.

D. Governance, Internal Controls, and Risk Management

43. The governance and internal controls framework for pension funds is not aligned with the systemic role of the sector, and the underlying rules in the Pension Fund Act pre-date the corresponding provisions for other financial sectors. Chapter VI of the Pension Fund Act sets out governance requirements of pension funds in rather broad terms which are not as detailed and extensive as the requirements for banks or insurance undertakings. In recent years, the FSA has repeatedly emphasized the importance of harmonizing the legal framework regarding pension fund governance to correspond with the framework of other participants on the financial market.

Governance

44. Fit and proper assessments are in place for board members and managing directors of pension funds. Article 29 of the Pension Fund Act determines that the board of directors is responsible for the pension fund's compliance with all applicable laws and regulations. It also requires the board to oversee the fund's operations, accounting and disposal of assets. The board of directors typically comprises an equal number of representatives from the labor unions and the corresponding federation of employers (or representatives from the MoF in the case of the public state pension fund). Article 31 of the Pension Fund Act sets out the eligibility criteria for board members and the managing director, with further details set out in Rules No. 180/2013 on the Fit and Proper Assessment of Managing Directors and Directors of Pension Funds. Pension funds are required to notify the FSA of new appointments and subsequent changes in the board of directors and the managing director without delay. Contrary to the rules for Icelandic banks and insurers, pension funds are still excluded from having board members from non-EEA Member States.

45. The requirements for fitness and propriety are to be met on an ongoing basis. According to Article 19 of Rules No. 180/2013, managing directors and directors must, at all times, satisfy the eligibility requirements of the Pension Fund Act and provisions of Rules No. 180/2013. Should there be changes to information previously provided which could affect a person's eligibility, the FSA must be informed thereof without delay and no later than two weeks after the changes occur. The FSA may, at any time, make a special examination of the eligibility of managing directors and board members, for instance, if their conduct in their work for a pension fund gives cause for so doing or if there are major changes in the scope, work, operations or legal environment of pension funds.

Internal Controls

46. The Pension Fund Act only defines the functions of risk management and internal audit as control functions. Chapter VI of the Pension Fund Act sets out the main internal control requirements of pension funds, in particular Articles 29, 34, and 35. Internal control requirements are further detailed in Regulation No. 590/2017 on pensions funds risk management system and Rules No. 577/2012 on audit departments and independent internal auditors of pension funds. According to Article 29 of the Pension Fund Act, the board of directors is responsible for the structure of a pension funds internal control system and the documentation thereof. The board is furthermore responsible for setting a risk policy and developing a control system for the pension fund´s risk. As part of a pension funds risk assessment the FSA assesses the monitoring and reporting mechanisms within the internal control system and the subsequent procedure of the board.

47. A pension fund shall have in place an audit department or contract an independent internal auditor, which shall be part of the fund's structure and internal control system (Article 34 of the Pension Fund Act). Article 35 and Rules No. 577/2012 on audit departments and independent internal auditors of pension funds detail further the responsibility of the internal audit function. According to Article 3 of Rules No. 577/2012 internal auditors shall be professionally qualified and have sufficient knowledge and experience, be independent in their work, and take into account international standards for the implementation of internal audits. When the function is outsourced, it is required to be a certified auditor, as determined by Article 34 of the Pension Fund Act and Article 3 of Rules No. 577/2012.

48. Pension funds shall appoint an employee of the fund to be responsible for analysis, measurement and reporting on risk, according to Article 35a of the Pension Fund Act. The pension fund's risk management shall be independent of the other units of the fund. The pension fund shall ensure that risk management has sufficient funding and authorizations with regard to, among other things, obtaining the data and information necessary for risk management activities. It shall be ensured that the person responsible for risk management has direct access to the board of directors of a pension fund. Regulation No. 590/2017 further details the risk managing function requirements: According to Article 8 the risk management of a pension fund shall have personnel with clearly defined roles and have the appropriate experience and skills to perform their duties adequately.

49. The board of a pension fund shall conduct an annual actuarial examination of the actuarial position of a fund (Article 39 of the Pension Fund Act). The actuarial examination shall be conducted by an actuary or an expert with comparable knowledge, who has been approved by the FSA. However, the actuary is not defined as an internal control function as in the IORP II Directive or in Solvency II. Hence, the actuary is not directly subject to the overall governance requirements and, more specifically, not required to contribute to an effective implementation of the risk management system.

50. Outsourcing of key functions, including internal control functions, is quite common in the Icelandic pension market, especially among smaller funds that in some cases outsource all operations to outside parties. Outsourcing contracts must be in accordance with Guidelines No. 6/2014 on outsourcing. In cases where internal control functions are outsourced, the FSA must be informed in advance. The IORP II Directive suggests a limit to outsourcing by requiring that a pension fund should be effectively run by at least two persons—this requirement can be reduced to only one person on the basis of a reasoned assessment conducted by the competent authorities.

Risk Management

51. Requirements for risk management are laid out in the Pension Fund Act and further detailed in regulation issued by the MoF. Article 36(e) of the Pension Fund Act sets out the main risk management requirements of pension funds which are further set out in Regulation No. 590/2017 on pensions funds risk management systems. Article 3(2) of this Regulation states that the board is responsible for implementing the risk management policy of a pension fund. The Article further states that the risk management policy shall include a risk appetite statement as well as quantifying the risk tolerance. Article 5 of Regulation No. 590/2017 states that a pension fund shall have in place a risk management policy which shall describe the methods used to identifying and quantifying all material risk factors.

52. The Prudent Person Principle sets out requirements for the investment process and the management of investment risks. Article 36 of the Pension Fund Act sets out, together with Regulation No. 916/2009, specific requirements regarding the content of a pension fund investment policy. According to this, pension funds should base their investment decisions on an appropriate analysis of security, quality, liquidity, and profitability of the portfolio as whole, and ensure that assets are sufficiently diversified. In addition, ethical standards should be established for investments. Furthermore, the investment policy shall include a coverage regarding the age composition of the fund members and other actuarial factors that affect liabilities.

53. A pension fund has to perform at least annually an Own Risk Assessment (ORA). The FSA has issued guidelines on the performance of ORA assessment that supplement Rules No. 590/2017 and outlines supervisory expectations to the performance of the ORA. The board of a pension fund is responsible for ensuring that its ORA is carried out at least annually and whenever there is a material change in the fund’s risk profile. The ORA shall take into account all relevant risk factors, be forward-looking and consistent with the management and policies of the pension fund. Results of ORA shall be considered in the fund’s decision-making, risk policy, and investment policy. At least the main risks of the fund's operations and their dependencies shall be considered, assessing the likelihood of the risk materializing and the impact on the assets and liabilities—to do so, stress tests and sensitivity analyses shall be conducted as appropriate. Furthermore, actuarial assumptions and factors affecting changes in the actuarial position shall be included. The pension fund's ORA, its implementation and procedures shall be adequately documented, and the board shall review the process, assumptions, and the conclusions—this review shall also be documented as part of the ORA. No later than 30 June each year, the pension fund sends the FSA a copy of its ORA.

54. The FSA does not set any minimum requirements for pension funds’ own stress testing, however the methods applied should be commensurate with the nature and complexity of the pension fund. The methods applied by pension funds range from simple top-down shocks to scenario-based shocks. The primary focus of stress tests is on the assets and the implications that negative scenarios have on the actuarial position. Actuarial assumptions are usually not subject to stress testing, apart from assumptions on the future inflation rate. Prior to 2019, pension funds were required to submit results of standardized stress tests. This practice has since then been replaced by the requirement to perform own stress tests as a part of the ORA.

Recommendations

55. Recommendation 8: Align rules on governance, internal controls, risk management with IORP II or Solvency II. While taking proportionality into account, the governance framework should be strengthened, by putting in place rules which are commensurate with the systemic role of the Icelandic pension fund sector. More specifically:

- The board nomination process should be set out in more detail, ensuring that board members act solely in the interest of pension fund members; and staggered renewals of board members' terms should be established as best practice.

- The requirement to recruit board members only from EEA Member States should be removed as it unnecessarily diminishes the pool of knowledgeable experts.

- In addition to risk management and internal audit, also the actuarial function and the compliance function[21] should be defined as internal control functions, in line with the Solvency II.

- Key function holders should meet fit and proper requirements.

- Key function holders should be required to inform the FSA about any instances of material non-compliance with applicable laws and regulations which they had reported to their board, but which have not been addressed by the board through appropriate and timely action.

56. Recommendation 9: Enact more stringent rules for outsourcing, and ensure an appropriate level of corporate substance within each pension fund. While it is acknowledged that smaller pension funds, and in particular those in run-off, outsource more functions than larger funds, a minimum level of operations should be retained in-house.[22] This relates in particular to the position of the managing director, and—for medium-sized and larger pension funds—the risk management function. Generally, it needs to be ensured that outsourcing does not compromise the overall system of governance and internal controls through, e.g., conflicts of interest or higher operational risks.

[21] Art 46(2) Solvency II Directive defines the compliance function as follows: "The compliance function shall include advising the administrative, management or supervisory body on compliance with the laws, regulations and administrative provisions adopted pursuant to this Directive. It shall also include an assessment of the possible impact of any changes in the legal environment on the operations of the undertaking concerned and the identification and assessment of compliance risk."

[22] According to Art. 31(3) IORP II Directive, "Outsourcing of key functions or any other activities shall not be undertaken in such a way as to lead to any of the following:

(a) impairing the quality of the system of governance […];

(b) unduly increasing the operational risk;

(c) impairing the ability of the competent authorities to monitor the compliance of the IORP with its obligations;

(d) undermining continuous and satisfactory service to members and beneficiaries."

E. Transparency

57. Pension members are informed annually about their accrued benefits and expected future pensions, but the statement lacks details on different scenario outcomes. The expected future pension payment assumes a constant 3.5 percent real investment yield. In addition to the annual statement, active members also receive a half-yearly statement on the contributions paid by their employer. Best practice like in the IORP II Directive suggests that the pension benefit statement should not only include a best estimate scenario, but also an unfavorable scenario.

58. Pension fund disclosures on climate risks are still to be implemented. The relevant EU rules, namely Directive 2019/2088 on Sustainable Finance Disclosure (SFDR) and Directive 2020/852 on the Sustainable Finance Taxonomy will be transposed into Icelandic law and enter into force in 2023. Pension funds are under the scope of the proposed bill with regard to any disclosure they make to (prospective) members.

Recommendations

59. Recommendation 10: Prescribe more detailed pension benefit statements, e.g., in line with the IORP II Directive. Such a statement for active pension fund members should include information on future pension payments based on different scenarios for future investment returns, and also a breakdown of costs (both investment and operating costs).[23] In this context, also the information disclosed to prospective members and retired members should be reviewed in line with the requirements of the IORP II Directive, including the need to disclose information on ESG and climate risks.

PENSION FUND SUPERVISION

60. The FSA has adopted a risk-based and forward-looking supervisory model. Regular supervision of pension funds and third-pillar pension savings custodians entails monitoring their compliance with regulatory provisions as well as an annual assessment of the risks in pension fund operations. The FSA publishes an annual report on its supervisory activities.[24]

61. In its Supervisory Strategy 2022-24[25], the FSA has published its focus areas for the supervision of pension funds. Maintaining sound governance practices, comprehensive risk management, and effective internal controls are considered as a priority. Concretely, the FSA plans to put a strong emphasis on the independence of the boards of directors and on board oversight for outsourced functions, especially for those funds that have outsourced a majority of their operations, such as asset management and risk management. Furthermore, the FSA intends to scrutinize the execution of and framework for actuarial assessments. Lastly, the FSA plans to

[23] In 2020, EIOPA has published two model pension benefit statements which could be considered as a benchmark.

[24] See e.g. Financial Supervision 2022, April 2022

[25] Supervisory Strategy 2022-24, August 2022

contribute to the review of the pension system framework by disseminating information on the status and evolution of the system. While pension funds appreciate the FSA's objectives, some representatives have noted that they learned about the Supervisory Strategy only by chance and that they would have preferred a more active communication.

Recommendations

62. Recommendation 11: Communicate clearly on the supervisory strategy and upcoming focus areas of supervisory work. Possible communication channels for the FSA could include industry roundtables, regular "Dear CEO" letters, or the institutionalized supervisory dialogue with management and key function holders of pension funds.

A. Risk-Based Supervision

63. The FSA receives detailed supervisory reporting from pension funds which is used for risk-based supervision. Pension funds' prudential reporting includes the following templates:

- Annual accounts;
- Report on actuarial examination (annual);
- Report on mortgage lending to households (monthly for the nine largest pension funds);
- List of assets (quarterly);
- Investment policy (annual);
- Report on returns of asset classes (annual).

In addition, pension funds report on a monthly basis their balance sheet composition with a sectoral breakdown of assets.

64. The risk assessment for pension funds follows the supervisory model of the FSA and the Supervisory Handbook. The Handbook sets out how risk assessment is to be carried out for each risk category. This includes both regular monitoring and a more detailed evaluation, where the frequency is based on the classification of the undertaking. As part of the regular monitoring, the FSA monitors several key risk indicators, comprising, e.g., funding levels, return on investments, concentration of assets, which are accessible for the analyst in a risk dashboard. The Handbook also specifies qualitative aspects that need to be monitored.

65. The FSA's minimum engagement model foresees different frequencies for reviews and interactions with a pension fund's management depending on the impact category. Financial institutions are classified on an impact scale ranging from 1 (low impact) to 4 (high impact). Three pension funds (around half of the sector based on total pension assets) are classified as medium-high, and the remaining 18 entities are classified as medium-low and low. The minimum engagement model determines the frequencies for general reviews of annual and quarterly returns as well as other reports submitted by entities—this is done regularly with almost no differentiation across impact classes. Differences exist, though, with regard to meetings with the chairpersons of the board and the managing director (every 1-2 years for medium-high funds, every 1-3 years for medium-low and low funds) and for meetings with other key function holders and the external auditor (mostly every 2 years for medium-high funds, and on an "as needed" basis for other pension funds)—during the Covid-19 pandemic, such meetings took place less frequent than anticipated by the engagement model. Furthermore, more detailed reviews of individual risks are foreseen every 2 years for medium-high pension funds, and every 3 years for other funds.

B. On-Site Inspections

66. The FSA's Compliance and Inspections Department conducts on-site inspections with support from relevant experts of the Pensions and Insurance Department. A report with the main findings and shortcomings is sent to the supervised entity. The report does not set out requirements for corrective actions the entity is required to undertake. Any such action to address shortcomings is defined separately by the supervisors of the Pensions and Insurance Department. Often, the FSA requires that a pension fund's internal auditor reviews the actions taken and confirms to the FSA that they are appropriate. Any follow-up to on-site inspections is typically performed off-site.

67. There is no minimum frequency set for on-site inspections. The FSA sets up an annual plan for both on-site and off-site work, based on the minimum engagement model, the results of the detailed risk analysis, and the focus areas of the supervisory strategy. Between 2018 and 2022, the CBI conducted 13 on-site inspections, i.e. between two and three per year, at nine different pension funds covering about half of the market in terms of assets. The main focus of these inspections was on risk management, actuarial inspection, governance, and outsourcing arrangements.

Recommendations

68. Recommendation 12: Perform regular on-site inspections for large pension funds, and re-establish an institutionalized supervisory dialogue. For the largest pension funds, a minimum frequency should be defined for the inspection cycle, taking into account available resources. Regular meetings with managing directors, board chairpersons and key function holders should be held according to a framework aligned with the FSA's minimum engagement model.

C. Governance, Internal Controls and Risk Management

69. Despite the gaps in the legislative framework, the FSA has recently strengthened its focus on matters related to governance, internal controls and risk management. The FSA's supervisory approach regarding corporate governance consists of regular monitoring based on data reported, interviews with key employees and board members, risk assessment, assessment of the

ORA and the periodic submission of dedicated questionnaires for low impact pension funds. In addition, the FSA conducts thematic reviews focusing on governance as well as conducting targeted off-site and on-site inspections to enhance the annual risk assessment or to address the possible weaknesses that have been identified through other supervisory actions.

70. Fit and proper assessments are a key tool for the FSA to enforce its approach regarding governance. The FSAs assessment of eligibility involves, first, a review of the written documentation and, second, an oral assessment of eligibility, if appropriate. All managing directors of pension funds as well as board members of the largest pension funds are subject to an oral assessment of eligibility. Board members of smaller pension funds are subject to an oral assessment in cases where there is a doubt the board member in question meets the eligibility criteria, in particular when it comes to having sufficient knowledge and experience. Between 2019 and 2022, five individuals have not passed the assessment due to inadequate expertise or failure to appear for the interview. In 2022, the FSA conducted 36 assessments of pension fund board members and managing directors.

71. The FSA assesses the effectiveness of the board of directors by reviewing whether the board complies with their rules of procedure, reviewing minutes of board meetings and interviews with board members. It is assessed whether the issues discussed at board meetings are in accordance with the role and responsibility of the bord as well as whether the information provided to the board, in particular from subcommittees and key functions, is sufficient and enables the board of directors adequate and effective oversight. Recently, the FSA placed strong emphasis on pension funds' governance practices, including examining the board's role in monitoring the fund's operations, communications within the board as well as with the risk officer and internal auditor, and the boards' self-assessments.

72. While there is no requirement in the Pension Fund Act regarding the collective competence of the board of directors of pension funds, the FSA's effectiveness reviews implicitly also includes this aspect. Since 2018/19, the FSA periodically requires the board of directors of pension funds to perform a self-assessment which aims at evaluating the collective competence of the board. Additionally, although the fit and proper assessment of board members of pension funds is performed on an individual basis, the FSA assesses the collective competence of the board in relation to the governance risk assessment. The goal of reviewing the board composition is not to change the board or remove board members, but rather serves the purpose of identifying weaknesses and make recommendations on where the board could improve in terms of skills and knowledge.

73. Still, the traditional process of board nominations gives rise to concerns about potential conflicts of interest. In several pension funds the employee representatives in the board are nominated by trade unions; similarly, staff of the Ministry of Finance and Economic Affairs is represented in the board of the public sector pension fund. In all these cases, political interests might interfere with pension fund members interests when the board takes decisions.

74. Internal control functions are assessed via the FSA's risk assessment and targeted off-site work and on-site inspections. The FSA conducts interviews with the holders of the internal audit and the risk management function periodically, typically every two or three years, on the basis of the impact class of each pension fund as well as ad hoc interviews when warranted. Actions are taken if deficiencies are noted. The FSA identifies the function of actuary as an internal control function. In accordance with the supervision model the FSA conducts interviews with the holder of the actuary function periodically on the basis of the impact class of each pension fund as well as ad hoc interviews when warranted. However, the legal framework is lacking when it comes to supervisory powers regarding performing the duties of the appointed actuary.

75. The actuarial profession in Iceland relies on a very small number of pension fund experts which is generally seen as a risk by the pension funds and by authorities. The Association of Icelandic Actuaries has eleven active and seven associated members, and only two qualified actuaries serve the entire pension fund sector. The University of Iceland does not offer courses in actuarial sciences, and actuaries typically receive their education in the United Kingdom or other Nordic countries.

76. The FSA performed numerous on-site inspections in 2018/19 to assess the risk management systems of pension funds. These followed the implementation of Regulation No. 590/2017 on pensions funds risk management systems. Shortcomings were identified regarding how pension funds quantify their risk appetite and set out their risk tolerance. The FSA is currently working on assessing whether further guidance regarding risk appetite and tolerance is needed.

77. The FSA aims for a strict approach with regard to outsourcing and tries to specifically target pension funds which have outsourced their entire operations including the function of the managing director. Outsourcing contracts are reviewed by the FSA with consideration to the outsourcing policy and the procedures of the person responsible for the outsourced function within the pension fund. Recently, there have been concerns regarding pension funds that outsource both the function of general manager and the risk management function with regards to the oversight role of the board.

78. The approach to climate risk management is still at an early stage (Box 1). Representatives of pension funds acknowledged that in Iceland the methods and practices for identifying and managing climate risks—and more general, environmental, social and corporate governance (ESG) risks—are lagging behind other peers in Europe. Preparations for the upcoming implementation of the SFDR have started, but gathering the required input data was mentioned to be a challenge.

Box 1. Iceland: Supervisory Approach to Climate Risks

As pension funds are major investors in the domestic financial market, the FSA recognizes the crucial role pension funds could have in greening the financial market. A workshop jointly organized with the Icelandic Pension Fund Association in March 2022 was aimed at raising more awareness on sustainability and ESG issues, and also the FSA's Supervisory Strategy 2022-24 includes sustainable finance as one of four priorities.

The CBI became a member of the Network for Greening the Financial System (NGFS) in 2021, but has not finalized a strategy for climate-related supervisory activities. There is a process of developing a strategy and assessing the resource requirements for climate and environment-related activities. The implementation of the strategy is planned to align with the spirit of the recommendations made by the NGFS. In particular, the FSA aims at putting more emphasis on sustainable finance and ESG criteria in order to promote sustainable development while simultaneously increasing information disclosure requirements and boosting transparency so as to prevent greenwashing.1/ The FSA has sent propositions to the MoF to replace the current requirement in Article 36(5) of the Pension Fund Act that "pension funds shall set ethical standards in investments" with the demand to integrate ESG considerations and related risk assessment in their investment process. Further changes were proposed to reflect the increased focus on environmental, social and governance issues in risk management and investment policy.

The FSA has not yet undertaken an assessment of climate-related exposures and potential losses yet for pension funds. A sector-wide assessment of the exposure to climate related risk is under preparation for the commercial bank sector. This assessment is meant to be a learning exercise before being rolled out also to the pension fund sector.

1/ According to the IORP II Directive, Member States should require IORPs to explicitly disclose where environmental, social and governance factors, as referred to in the United Nations-supported Principles for Responsible Investment, are considered in investment decisions and how they form part of their risk management system.

Recommendations

79. Recommendation 13: Explore ways to expand and strengthen the actuarial profession. This could potentially involve the sponsoring of scholarships, academic projects, and a closer collaboration with actuarial societies in other jurisdictions, especially in the Nordic region. If relevant, any direct or indirect hindrances for actuaries from other EEA countries to work in Iceland should be removed.

80. Recommendation 14: Intensify engagement with pension funds on climate risk management, and provide guidance for the upcoming SFDR transposition. As some guidance is already available from EIOPA, it will be particularly important to adjust these guidelines to the specificities of the Icelandic market.

D. Macroprudential Supervision

81. Macroprudential supervision targets also the pension fund sector, but surveillance findings and current risk assessment are not reported frequently to the Financial Stability Committee. The Pensions and Insurance Department conducts horizontal analyses with a view to identify sector-wide risks also in a forward-looking manner. However, reporting to the CBI's Financial Stability Committee is not frequent and has generally occurred only once per year.

82. The CBI's Financial Stability Department focusses on issues related to the role of pension funds as lenders and participants in the domestic financial market. Being active in mortgage lending, pension funds are subject to a comprehensive data collection, and the macroprudential borrower-based policy measures, targeted at mortgage lending, apply equally to all lenders in the banking and non-banking sector. As pension funds are also major players in the domestic bond market, they are included in the CBI's analyses on corporate debt. In addition, also the role of pension funds in the foreign-exchange market is analyzed, based on monthly segregated data submissions covering their investments in all asset classes as well as transactions (buying/selling of securities).

Recommendations

83. Recommendation 15: Report more frequently on developments in the pension fund sector to the Financial Stability Committee. The Pensions and Insurance Department should, together with the Financial Stability Department, submit regular briefings with updated risk assessments to the Financial Stability Committee.

Appendix I. Iceland: Financial Soundness Indicators of the Pension Fund Sector *(In percent)*

Table 1. Iceland: Financial Soundness Indicators of the Pension Fund Sector *(In percent)*

	2017	2018	2019	2020	2021	2022
Funding level						
Assets / Liabilities, median – DA	100.6	99.8	101.2	106.2	97.3	92.6
Assets / Liabilities, median – DB	28.3	43.1	43.5	42.1	42.8	40.4
Share of assets of PF outside +/-5 percent range – DA	19.3	20.8	18.8	17.5	13.6	83.1
Share of assets of PF outside +/-10 percent range – DA	0.0	0.0	0.0	17.5	0.9	16.8
Contributions and benefits						
Change in contributions – DA 1/	…	-2.6	8.1	2.4	8.8	16.9
Change in contributions – DB	…	-38.2	8.2	5.8	9.5	5.2
Change in paid benefits – DA 1/	…	10.6	12.1	18.6	10.9	13.8
Change in paid benefits - DB	…	7.2	7.3	7.2	9.3	6.6
Asset quality and investment performance						
Equity investments – DA+DB / Total investments 2/ 3/	40.4	41.1	46.2	50.9	56.0	53.2
Bond investments – DA+DB / Total assets 3/	54.9	55.7	50.6	45.9	41.4	44.9
Non-investment grade – DA+DB / Total fixed-income assets	33.6	…	27.6	…	24.2	…
Foreign-denominated assets – DA+DB / Total assets 3/	24.5	26.3	30.7	34.2	36.4	34.0
Real investment return, median – DA	5.3	1.8	9.9	8.7	9.9	-12.0
Real investment return, median - DB	4.6	1.9	7.5	7.0	7.4	-12.5
Liquidity						
Liquid assets / total assets – DA+DB 4/	64.1	61.3	57.5	55.2	54.2	54.4
Contributions / benefits – DA	99.4	57.3	57.7	57.0	57.1	56.3
Contributions / benefits – DB	266.2	234.5	226.2	195.3	191.5	196.7

1/ Includes pension funds' defined-contribution schemes in Pillar III

2/ Equity includes investment fund shares.

3/ Data as of 2022-Q3.

4/ Liquid assets includes cash and deposits, marketable bonds and bills, equity (excluding investment fund shares).

Source: IMF staff calculations based on CBI data.