Target-Date Funds Scheme for Chile

Main Takeaways

Economic and Financial Research

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Main Takeaways

- Migrating from Multifunds to Target-Date Funds (TDF) would mean mobilizing slightly more than USD50 bn (16% of GDP) given the relevant assets under management (AUM) and the high degree of sub-optimality (contributors are in sub-optimal funds from a life-cycle perspective). Adding to this transition effect is the additional long-term flow to more conservative TDF.
- TDF have been positively evaluated for managing pension funds and represent a change in the risk-return paradigm and in pension risk supervision.
- A move towards TDF within an eventual Pension Reform would require raising regulatory and normative mitigators within the powers of the Pension Supervisor and the central bank to minimize the impact on asset prices and financial stability.
- Taking the Mexican experience of 2019 and what is contemplated in the Pension Reform bill, we performed a static exercise where portfolios are maintained without lifting limits. We quantified that the transition to TDF would require an additional net purchase of USD31 bn of local fixed income (Treasury, corporate and bank bonds) and a net divestment of USD24 bn of foreign equities.

What are the Generational Funds about?

- Generational Funds (GF) or life-cycle funds are similar to Target-Date Funds (TDF) in the USA.
- The TDF/GF improve the risk-return ratio of pension investments and have been proposed within the Pension Reform, with a positive view by the Committee of Experts given the evidence of their positive impact on replacement rates. There would be technical and political consensus to migrate to this scheme.
- The TDF establish the risk exposure during the life of the managed fund. The selection of assets within the TDF is dynamic and gradually reduces the investment in equities according to a temporary and transversal distribution mix (glidepath) that accompanies the contributor’s horizon.
- TDF are designed for similar age groups and are usually grouped in five-year ranges. In principle, it is possible to think of about ten TDF, double the current multifunds managed by the AFPs.
- The TDF define their glidepath as well as their rebalancing. The supervisor monitors this glidepath and the maximum looseness. The risk parameters change from VaR to tracking error.

What does the Pension Reform bill say?

- Each Pension Investor must maintain at least 10 TDF, differentiated by risk level and expected return, where the mandatory contributions will be deposited.
- Formal secondary markets will not be used to transfer the resources of the current Pension Funds to the TDF. The transfer price will be based on the quota value of the corresponding Fund.
- The TDF will come into effect three years after the publication of the law.
- A term of two years from the publication of the law, at the latest, is established to dictate the investment regime of the TDF. This regime may authorize transitory limits for TDF investments during the two years following the entry into force of the TDF.
- The investment limits will be set by the central bank no later than six months before the TDF investment regime is enacted. That is, within one and a half years from the publication of the law at the latest.

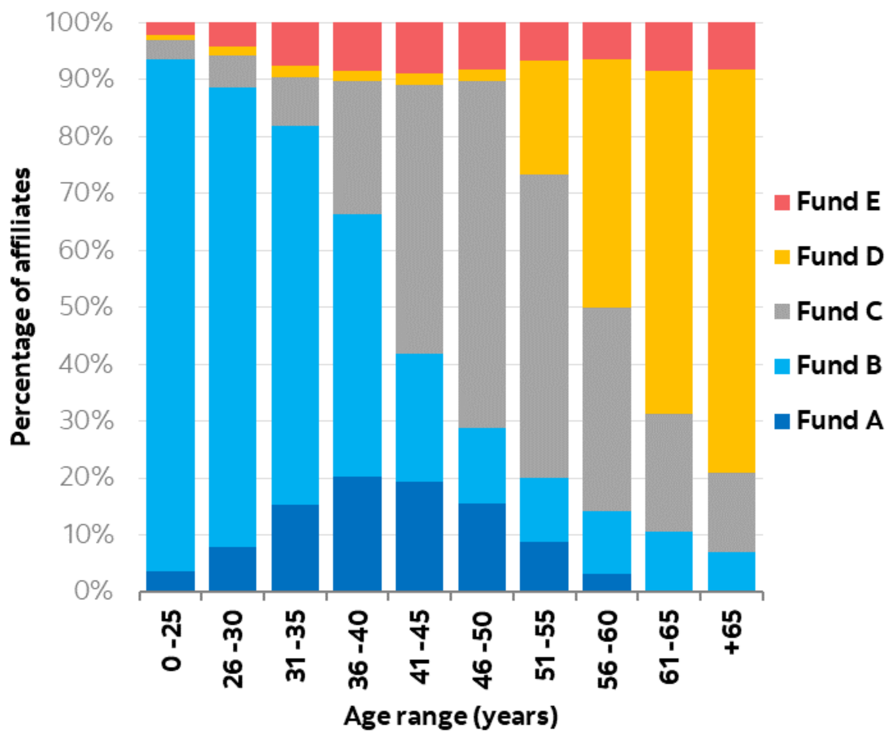
Mexican Experience

- The Afores (Retirement Fund Administrators), at the time of the transition to life-cycle funds, managed an equivalent to 16% of GDP (in Chile it reaches 55%).
- The distribution mix of the ten generational funds was defined with broad considerations for alternative assets and tracking error was introduced.
- At the beginning of the transition, the funds were predominantly fixed income and an increase towards equities was observed, which has not changed the supra-majority fixed income composition.
- Sub-optimality was quite limited. In other words, it was not observed that contributors were in funds that were particularly distant from their optimal funds. This could be explained by the lower assets under management and limited mobility of contributors.
- The Financial Stability Report for the first quarter of 2020, after the implementation of the new system in December of the previous year, indicated a re-composition of the AUM, in spite of the flexibilities provided for the transition. The above with flows in equity and government bonds observed at that time were influenced by the effects of the pandemic.

Administrative and Fundamental Considerations

- The Mexican experience is a benchmark for a successful transition but given the low sub-optimality of contributors and lower AUM, it underestimates the impacts on asset prices. Gradualness in the implementation of the funds (three years according to the law) is positive, but in an efficient market, the impacts usually materialize largely at the time of the announcement.
- For the transition period, transitional investment limits for generational funds, mechanisms that allow the transfer of ownership of financial instruments without selling them directly in the market, among others, are mitigators that would be used by the authorities.
- Valid questions arise from a migration to TDF:
  - At what price is ownership transferred if not determined by the market?
  - How is the risk premium affected in the short and long term?
  - What would be the magnitude of the adjustment in sovereign interest rates, exchange rate and local stock market?
  - How much would the home-bias be?
  - Does greater appetite for fixed income instruments (eminently sovereign) provide more room to redirect fiscal deficit financing to residents?

51% of affiliates are in a sub-optimal fund, according to the Pension Supervisor.

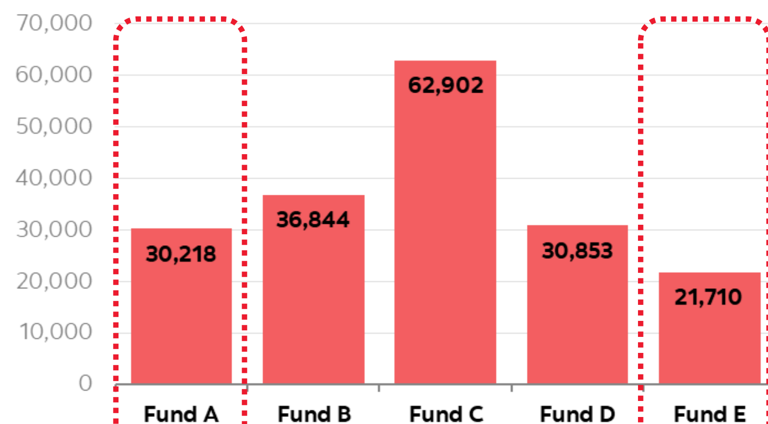


- The current regime based on multifunds allows people close to retirement age to maintain resources in risky funds.
- According to recent estimates by the Pension Supervisor (June 2024), 51% of affiliates are in a sub-optimal fund, i.e. one that does not correspond to their investment horizon (retirement date) and risk profile.
- According to the life-cycle investment strategy (TDF), members over 35 years of age should reduce their exposure to equity assets, safeguarding their assets with a greater participation in fixed-income instruments as retirement age approaches.

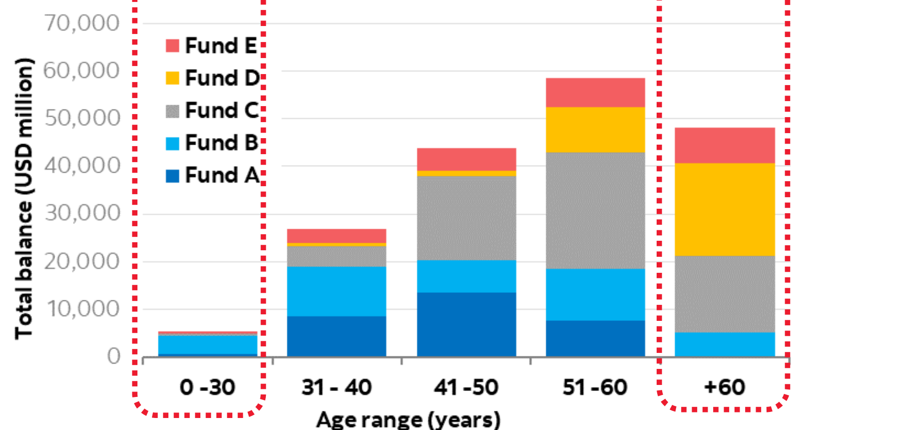
Source: Pension Supervisor (Ficha Estadística Previsional, Julio 2024), Scotiabank Economics.
Note: Effective figures by Pension Supervisor up to March 2024.

Only 30% of the resources are invested in conservative funds (D and E). However, about 60% of the AUM belong to people over 50 years old.

AUM by Multifund (mill. USD)



Balances of affiliates by Multifund and age (mill. USD)

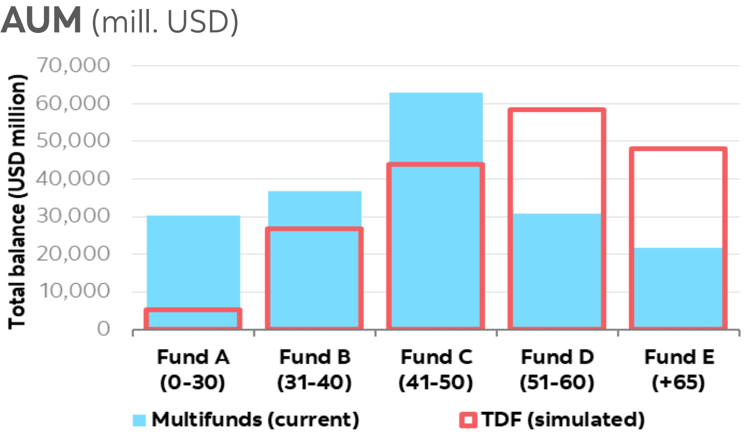


- The figure above shows the distribution of assets under management (AUM) by multifunds, where in aggregate terms there is a **higher concentration in the riskier funds (A and B).**
- The TDF scheme proposes a distribution of assets according to the age of the contributors. Based on current data, this distribution would be as shown in the figure below.
- **According to Scotia's estimates and the age ranges considered, about 42% of contributors are in a sub-optimal fund based on their age.** In terms of resources, about 30% of the assets would have to be reallocated when moving to a TDF scheme.
- In other words, the current portfolio of the multifunds is excessively invested in risky assets, which do not correctly reflect the investment horizon (retirement date) or the contributor's risk profile.

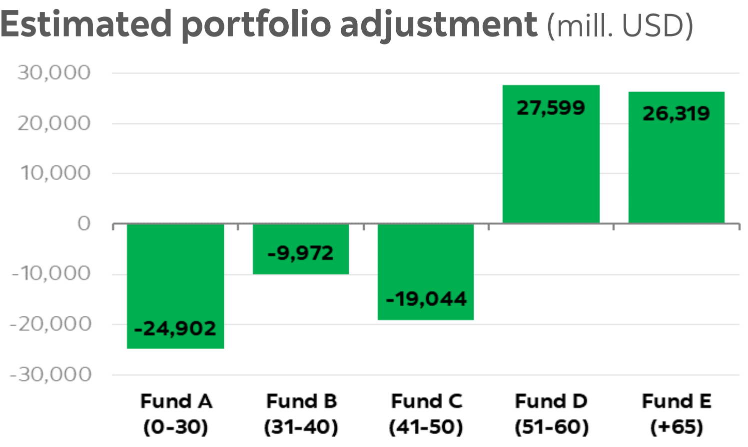
Source: Pension Supervisor, Scotiabank Economics.
Note: Charts use aggregate portfolio information of the Pension Funds as of June 2024. For the estimation of the total balance managed by the pension system, the balance for members and pensioners through Programmed Withdrawal (PW) is considered. The total balances of the system by age range are obtained with information from the Pension Supervisor regarding the number of affiliates and their average balance by age. To this, pensioners by PW are added, estimated based on a random sample of 5% of the total published by the Pension Supervisor. For the distribution of balances by age and by Multifund, the 5% (random) sample published by the Pension Supervisor is used with information on the member's balance by type of multifund.

Moving to a TDF scheme would imply a reallocation of about USD54 bn from the current risky funds to conservative TDF.

AUM (mill. USD)



Estimated portfolio adjustment (mill. USD)



- In a simplified manner, and for a direct comparison with the current multifunds, **we estimate a reallocation of the system's resources according to five age ranges of the member (or pensioner).** This implies that there is currently an excess of resources in the riskiest funds with respect to the age profile of the affiliates, and a deficit in the low-risk funds.
- With respect to the current investment portfolio of the multifunds, **the TDF would imply a transfer of resources of around USD54 bn from the current risky funds (A, B and C) to the conservative TDF, similar to the current D and E funds.** In other words, under a TDF scheme, about 30% of assets would have to be reallocated with respect to the current situation.

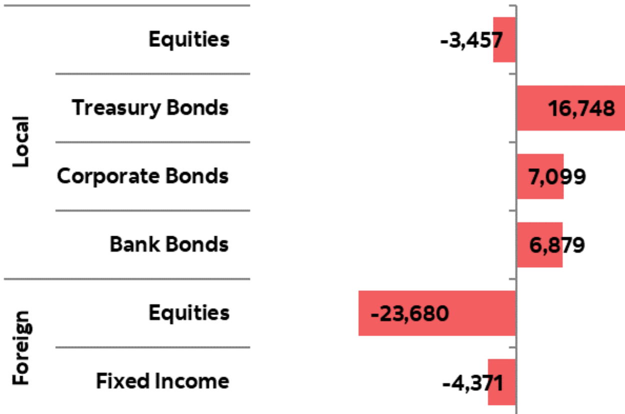
Source: Pension Supervisor, Scotiabank Economics.

Note: The AUM by multifunds consider information effective as of June 2024, while the balances by age range (TDF) correspond to our estimate of the total balance by age of the system's contributors and programmed withdrawal pensioners. For simplicity, we assume the existence of only five TDF, which would have the same investment criteria and limits as the current multifunds. In this simplified exercise, the following is assumed: those under 30 years of age should belong to a fund similar to the current Fund A; those between 31-40 years of age would belong to Fund B; those between 41-50 years of age to Fund C; those between 51-60 years of age to Fund D; and those over 65 years of age to Fund E.

With the current portfolio, converting to a TDF scheme would generate an additional net demand for (local) fixed income assets, to the detriment of (foreign) equities.

Net portfolio adjustment in main assets (mill. USD)

Estimated portfolio adjustments	
Assets	**USD mill.**
Local	**27,753**
Equities	-3,457
Shares	-3,151
Fixed Income	31,002
Treasury Bonds	16,748
Corporate Bonds	7,099
Bank Bonds	6,879
Foreign	**-27,753**
Equities	-23,680
Fixed Income	-4,371

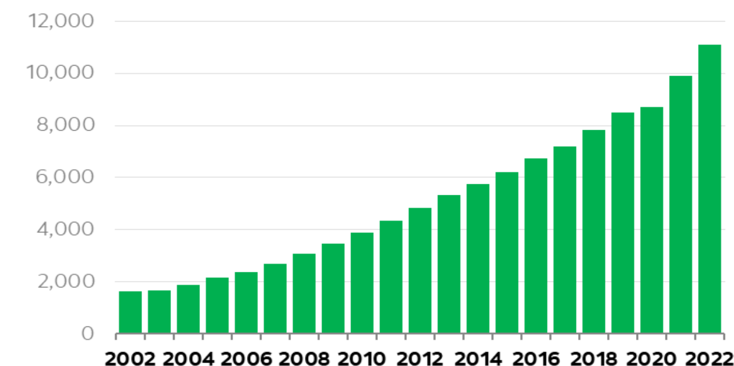


- Considering the portfolio as of June 2024, without flexibilizations, and only reallocating the amount managed by each multifund, converting to a TDF scheme would imply an increase in the demand for local fixed income assets of about USD 31 bn with respect to the current demand under the multifund scheme.
- The current portfolio based on multifunds holds a stock of USD37.5 bn in Treasury bonds, which under a TDF scheme would increase to USD 54 bn, i.e. about USD17 bn of higher demand for local sovereign debt.
- On the other hand, a divestment of USD27 bn in equities (local and foreign) would be observed.
- Under this exercise, we would observe a USD28 bn disinvestment from foreign assets to local assets.

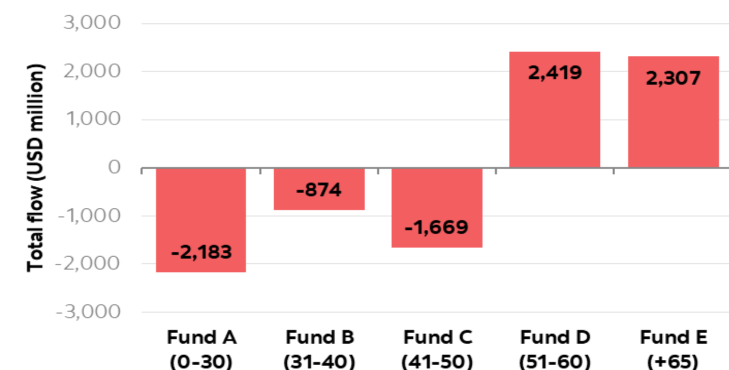
Source: Pension Supervisor, Scotiabank Economics.
Nota: The amounts reflect the change in demand by asset type with respect to the current multifund situation, as of June 2024. For the estimation of the portfolio adjustment by asset type, it is assumed that the fund managers invest the reallocated resources according to the portfolio as of June 2024. Adjustments to investment limits and changes in portfolio composition are not considered.

In the long term, the flows entering the pension system would imply an additional demand for fixed income instruments and a reduction in equities.

Annual flow of the system for payment of contributions (mill. USD)



Estimated portfolio reallocation of the entering flow (mill. USD)



- Together with the change in the investment stock, the flow of resources entering the system must also be considered, i.e., annual contribution payments (around USD10 bn) and an increase in contributions proposed in the Pension Reform (+6 ppts of contribution; USD6 bn).
- Under a TDF scheme, considering the portfolio as of June 2024 and without flexibilities, the reallocation of annual flows would imply an additional inflow of resources to the conservative TDF (similar to the D and E funds) of around USD5 bn.
- This reallocation would also imply an additional demand for fixed income assets (local) and less for equities (foreign) given the risk profile of the conservative funds.
- This effect of reallocation of resources due to the higher flow of contributions is added to the USD54 bn estimated for the reallocation of the system's stock of assets.

Source: Pension Supervisor, Scotiabank Economics.
Note: For simplicity, it is assumed that the 6 ppts increase in the mandatory contribution is invested according to Generational Funds criteria (by age range). The estimated adjustment for the portfolio flow corresponds to the difference between the annual flow of the system by payment of contributions invested under the current Multifunds model and the annual flow invested under a Generational Funds scheme, both including the full 6 ppts increase in mandatory contributions. In other words, the investment portfolios of both schemes are simulated with an inflow of resources of USD16 bn (estimated annual flow considering the +6 ppts increase in contributions).

ECONOMICS & FINANCIAL RESEARCH

Jorge Selaive | Head Economist
jorge.selaive@scotiabank.cl

Waldo Riveras
waldo.riveras@scotiabank.cl

Aníbal Alarcón
anibal.alarcon@scotiabank.cl

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