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TURNING INACTIVITY INTO REACTIVATION

A 10-YEAR LONGITUDINAL ANALYSIS OF EPF MEMBERS' CONTRIBUTION DYNAMICS

SOCIAL PROTECTION SERIES

TURNING INACTIVITY INTO REACTIVATION

A 10-YEAR LONGITUDINAL ANALYSIS OF EPF MEMBERS' CONTRIBUTION DYNAMICS

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This paper is a publication of the Social Policy Research Section EPF, authored by Hawati Abdul Hamid, Elena Zafrul, and Shahnaz Kamaruzaman.

Contents

Executive Summary 7

Section 1 Introduction 8

1.1. Background and Rationale 8
1.2. Study Objectives and Research Questions 9
1.3. Data and Analytical Approach 9
1.4. Key Definitions 10

Section 2 Labour Market Context and EPF Membership Trends 12

2.1. Labour Market Development 12
2.2. Trends in EPF Membership and Contribution Status 13
2.3. Membership Composition Dynamics 14
2.4. Longitudinal Patterns of Contribution Status 15
2.5. Demographic Patterns of Contribution Status 16
2.6. Contribution Density among Consistently Active Members 17

Section 3 Dynamics of Contribution Inactivity 20

3.1. Duration of Inactivity Spells 20
3.2. Frequency of Inactivity Episodes 21
3.3. Risk of Inactivity by Demographic Group 22

Section 4 Reactivation Pathways and the Role of Voluntary Mechanisms 23

4.1. Reactivation Patterns 23
4.2. Mechanisms and Frequency of Reactivation 24
4.3. Demographic Profile of Reactivated Members 26
4.4. Role of Voluntary Contributions 27
4.5. Incentive Thresholds and Contribution Behaviour 29
4.6. Savings Outcomes of Reactivated Members 30

Section 5 Discussion and Conclusion 32

5.1. Labour Market Participation and Retirement Saving 32
5.2. Policy Considerations 33
5.3. Conclusion 34

Appendix 35

Appendix A: Dataset Structure and Member Breakdown, 2016–2025 35
Appendix B: Demographic Distribution of the Longitudinal Panel 36
Appendix C: Exclusion of Cancelled and Dormant Account Members 37

References 38

Executive Summary

As EPF membership continued to grow alongside labour market expansion, aggregate trends show considerable churn, with many members moving in and out of active contribution status. This study looks beyond the aggregate numbers to examine how members' contribution patterns changed over time, focusing on contribution continuity, inactivity dynamics and pathways back to active contribution.

Drawing on a 10-year balanced administrative panel dataset that tracks the same EPF members from 2016 to 2025, this study provides a longitudinal view of how contribution behaviour changes among members aged below 60.

Key findings

1. **Contribution continuity remains a challenge for many EPF members**

   Within the study cohort, members who contributed consistently at least once a year account for 31.8%, while intermittently inactive members constitute the largest group at 43.5%, and a further 24.7% remained consistently inactive throughout the study period. However, nearly three-quarters (74.5%) of intermittently inactive members eventually reactivate and return to active contribution status. This suggests that while contribution interruptions are common, inactivity is not necessarily permanent, and many members remain connected to the EPF system over time.

2. **Prolonged inactivity increases the risk of non-reactivation**

   Most inactive members experience a single sustained spell of inactivity, with 66.1% remaining inactive for four to ten years. Although nearly 90% of members inactive for one year eventually reactivate, the likelihood falls to 49.1% after seven to nine years of inactivity. This indicates that prolonged inactivity becomes increasingly difficult to reverse once disengagement becomes entrenched.

3. **Voluntary contribution channels support reactivation but have limitations in sustaining participation**

   Voluntary channels facilitate reactivation and provide an alternative pathway for members outside mandatory arrangements, with participation appearing responsive to government incentives. However, sustained contribution participation and retirement savings outcomes are stronger under mandatory payroll-based contributions, which account for most reactivations (73.9%). This suggests that mandatory payroll-based contributions linked to formal employment remain a key mechanism for sustained EPF contribution participation.

4. **Policy should strengthen contribution continuity through early intervention, improved voluntary arrangements and broaden mandatory contribution coverage**

   Contribution gaps often reflect disruptions in employment and earnings rather than being solely driven by individual choice. Given the strong link between sustained participation and employment-related contributions, policy should focus on strengthening contribution continuity within the EPF system. This includes early engagement of inactive members to support timely reactivation, enhancing incentive-based voluntary contribution arrangements to support sustained participation, and expanding mandatory contribution coverage to all income earners regardless of employment arrangement to strengthen retirement saving outcomes.

Section 1

Introduction

This section establishes the background and rationale for examining EPF contribution activity from a longitudinal perspective. It discusses how increasingly fragmented labour market trajectories may affect members' continuity of contributions and participation in contributory retirement systems. It then sets out the study's objectives and research questions, describes the data and analytical approach, and defines the key concepts used throughout the analysis.

1.1. Background and Rationale

Labour markets in many economies have become increasingly fragmented, shaped by the expansion of informal and non-standard work arrangements, greater job mobility and heightened exposure to economic shocks associated with technological change, macroeconomic instability and global disruptions (ILO, 2016; OECD, 2019a). As a result, stable and continuous employment has become less common in many workers' labour market trajectories, as individuals move more frequently between different forms of economic activity. Non-standard forms of employment, including temporary, part-time, and own-account work have become a persistent feature of contemporary labour markets, reflecting a shift away from traditional employer-employee relationships towards more flexible and intermittent participation (ILO, 2016).

These developments present important challenges for contributory retirement systems, which were historically designed around stable relationships between employers and employees that enable regular payroll contributions and continuous savings accumulation. Under more volatile employment conditions, interruptions in employment, informal work, and irregular income streams can disrupt contribution activity and lead to uneven participation over time. Understanding how individuals move in and out of contributory participation is therefore critical for assessing the resilience of employment-based social protection systems.

In Malaysia, the Employees Provident Fund (EPF) operates as a mandatory defined contribution retirement savings scheme, predominantly covering private sector workers and a smaller segment of non-pensionable public sector employees, while also offering voluntary contribution options for individuals outside formal employment and those not currently employed. Participation in EPF retirement savings accumulation is therefore closely linked to labour market conditions.

Transitions between active and inactive status reflect changes in employment continuity including job loss, job mobility, movement between formal and informal work and intermittent labour market engagement associated with irregular earnings. In this context, contribution patterns provide a useful lens for examining labour market participation as movements into, out of, and back into the EPF scheme reveal how workers engage with contributory social protection over time.

At the same time, contribution inactivity does not necessarily represent permanent disengagement from the EPF scheme as members may subsequently re-engage and return to contributing actively through renewed employment or voluntary contributions. This suggests that inactivity may reflect constrained or unstable labour market participation rather than permanent disengagement.

Most existing analyses of EPF participation focus on aggregate participation rates and retirement savings accumulation. While these indicators provide useful system-level measures, they offer limited insight into how participation evolves over time at the individual level, particularly with respect to transitions into inactivity, the persistence of inactivity spells and pathways back into active contribution participation.

Against this backdrop, this study adopts a longitudinal perspective to examine labour market transitions through the contribution records of EPF members. Building on the premise that inactivity may not represent permanent disengagement, the analysis examines inactivity as a dynamic condition that may persist, resolve through return to active contribution or involve repeated transitions between active and

inactive states over time. Particular attention is given to reactivation pathways including voluntary contribution mechanisms that may support renewed participation among members in irregular or non-standard employment arrangements.

1.2. Study Objectives and Research Questions

The study examines EPF members' contribution activity and transitions from active into inactive status and subsequent reactivation across three interrelated areas. First, it analyses trends and the composition of EPF membership and contribution status over time, including variation across demographic groups. Second, it examines the nature of inactivity, characterised by the duration of inactivity spells and the frequency of inactivity episodes, to distinguish between temporary interruptions and more persistent disengagement. Third, it investigates reactivation pathways with particular attention to the role of voluntary contribution mechanisms in facilitating renewed participation among members with interrupted contribution activities.

Guided by these objectives, the analysis addresses three core research questions:

1. How do members' contribution statuses change over time, and what is the extent of churn between active and inactive contribution?
2. What are the dynamics of inactivity and reactivation, and how do they differ across member groups?
3. To what extent voluntary mechanisms support reactivation, contribution continuity and retirement saving outcomes?

This paper contributes to the literature on labour market transitions and contributory social security in three ways. First, it provides a longitudinal analysis of EPF contribution participation using administrative data that track more than ten million members over a ten-year period, moving beyond static measures of active and inactive membership.

Second, it examines the dynamics of contribution inactivity including transition into inactivity, the persistence of inactivity spells and the frequency of reactivation, highlighting the effects of employment volatility and fragmented labour market trajectories.

Third, by analysing reactivation pathways including voluntary mechanisms, the study provides policy insights on how contributory scheme support continued participation among workers outside formal employment.

1.3. Data and Analytical Approach

This study draws on ten-year EPF administrative data covering the period from 2016 to 2025. The analysis focuses on **members aged below 60 only** to avoid conflating labour market transitions with retirement-related exits. Two complementary datasets are used.

First, an **annual snapshot dataset** provides system-level information on contribution status, covering 12.5 million members in 2016 and increasing to 16.1 million in 2025 (representing 89.0% of total membership in 2025[1]). This dataset is used to describe aggregate trends in active and inactive membership, as well as the demographic composition of contribution status.

Second, a **balanced longitudinal panel** is constructed to track the same members consistently over the ten-year period. The balanced panel comprises 10.2 million members (81.6% of members aged below 60 as at end-2016[2]) with a valid active or inactive contribution status recorded in every year from 2016 to 2025[3].

Members who are not continuously observed across all years, or whose contribution status cannot be identified (for example, those whose accounts are cancelled[4] or become dormant[5] in one or more years), are excluded from the analysis.

[1] Remaining 11.0% are members aged 60 and above.

[2] Remaining 18.4% are members aged below 60 who were not continuously present across the ten-year period.

[3] Percentage shares are benchmarked against the 2016 EPF member population aged below 60, which serves as the base population for constructing the balanced longitudinal panel by tracking members continuously from 2016 to 2025.

[4] Cancelled accounts refer to member accounts that have been closed following full withdrawals due to death or leaving the country.

[5] Dormant accounts refer to member accounts with zero savings arising from various factors including lump-sum withdrawals at age 55 or 60, pension withdrawals, incapacitation withdrawals and other circumstances leading to full account depletion. Members may transition out of dormant status once contributions resume and a positive account balance is recorded.

Approximately 2.3 million members fall into this excluded category, of whom nearly 1 million had cancelled accounts as of 2025. Of the remaining members, around 442,000 had at least some record of active contribution during the study period.

As the primary focus of this paper is on members with complete and consistently observable contribution histories, these cases are not examined further. This longitudinal structure enables the analysis of transitions between active and inactive states over time, including the persistence of inactivity and pathways back into active contribution activity, which cannot be adequately observed using cross-sectional data alone.

Overall, these datasets provide broad coverage of EPF members and are sufficiently large to support robust and representative analysis of contribution patterns and status transitions. Further details on data structure and derivation are provided in Appendix A.

Meanwhile, the longitudinal panel remains broadly representative of the underlying member population, with some differences arising from the balanced panel design (Appendix B). The main difference relates to members aged 50–59 in 2016. As these members would reach age 60 during the observation window, they would not satisfy the balanced panel requirement of continuous observation throughout the full ten-year study period.

Similarly, members who first registered with EPF after 2016 are excluded because they were not observed for the entire study period. The extent of this difference is illustrated in Appendix B, where the composition of the longitudinal panel is compared with both the 2016 and 2025 member populations. Relative to the 2025 population, the longitudinal panel contains proportionately fewer members aged below 30 and aged 50–59, reflecting the exclusion of post-2016 entrants and members who reached age 60 during the observation period.

Appendix C provides a detailed breakdown of other categories of members excluded from the balanced panel, particularly those whose contribution histories could not be observed consistently throughout the study period.

1.4. Key Definitions

Key terms used in this paper are set out below:

Member status is classified based on contribution activity on an annual basis. Members are considered **active** if at least one EPF contribution is recorded in the preceding 12 months, and **inactive** if no contributions are recorded during that period, regardless of employment status. This definition reflects contribution activity rather than labour market status.

Reactivation refers to a transition from inactive back to active status. Reactivation pathways are distinguished by contribution mechanisms namely:

- **Mandatory** (payroll-based deductions)
- **Voluntary** (self-contributions made through i-Simpan, i-Saraan and i-Suri)[6]
- **Mixed** (a combination of both mandatory and voluntary contributions).

This distinction allows the analysis to isolate the role of each contribution mechanism in facilitating renewed participation among members with interrupted contribution continuity.

Employment arrangements in this study are inferred from contribution mechanisms and should be interpreted as indicative proxies rather than directly observed employment statuses.

Formal employment refers to employment arrangements proxied by mandatory payroll-based contributions. These contributions reflect employer-administered deductions and are indicative of regular, wage-based employment relationships with stronger institutional attachment.

Beyond Formal arrangements refer to employment outside the formal sector including self-employed, own account, part-time and

[6] The records of inactive members receiving contributions from spouse through i-Sayang are currently undergoing conversion from inactive to active status. As the update process is still ongoing, these records are retained as reflected in the source data without further adjustment in the present analysis. The number of affected records remains relatively small (around 188,000 members) and is not expected to materially affect the overall findings.

casual work where work relationships are less structured, as well as situations of non-employment or labour force absence such as caregiving or studying. These are proxied by voluntary contributions via i-Simpan, i-Saraan and i-Suri, reflecting EPF contributions outside formal payroll-based deductions rather than a single, directly observed employment status.

Accordingly, distinctions between formal and beyond formal participation are based on contribution mechanisms and interpretations relating to labour market attachment should be understood within this proxy framework.

The remainder of the paper is structured as follows. Section 2 outlines the labour market context and key EPF membership trends. Sections 3 and 4 examine transitions into inactivity and subsequent reactivation pathways. Section 5 synthesises the findings through a labour market and institutional lens and draws out key implications for contributory social protection.

Section 2

Labour Market Context and EPF Membership Trends

This section provides an aggregated overview of active and inactive contribution status over time, establishing the broader participation patterns that underpin the longitudinal analysis in subsequent sections. It examines changes in the level and composition of active and inactive membership including year-on-year movements between contribution states and situates these trends within broader labour market developments. Together, these provide a descriptive, baseline for understanding participation patterns, as well as transition and reactivation dynamics examined in subsequent sections.

2.1. Labour Market Development

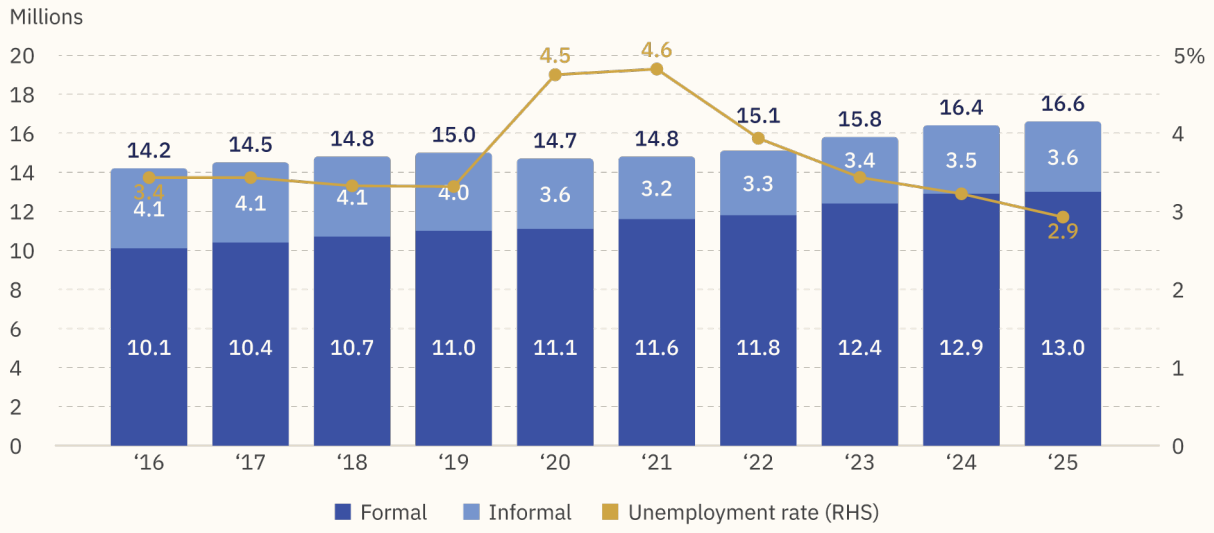
Labour market developments during the study period provide important context for understanding contribution patterns over time. As most contributions originate from formal employment, labour market conditions including employment continuity, economic shocks and changes in workforce composition are expected to shape both the size of contributor base and the continuity of members' contributions.

Over the study period, Malaysia's labour market exhibited a clear cyclical pattern with steady expansion prior to 2020, a sharp disruption in 2020–2021 during the COVID-19 pandemic and a gradual recovery thereafter.

As shown in Figure 2.1, the number of employed persons expanded consistently from 14.2 million in 2016 to 16.6 million in 2025. However, this upward trend was interrupted during the pandemic when the unemployment rate rose sharply from around 3.3–3.4% pre-pandemic to a peak of 4.6% in 2021, before declining to 2.9% by 2025 as labour market conditions improved.

These shifts provide important context for understanding EPF contribution behaviour. Periods of labour market disruption, particularly during the pandemic, are closely associated with heightened risks of employment interruption, income instability and transitions out of formal employment. While aggregate indicators point to recovery in recent years, the extent to which this recovery has translated into sustained contribution continuity remains uneven.

Figure 2.1: Employed persons by employment sector and unemployment rate, 2016–2025



Note: Formal and informal employment figures are based on data from the World Bank (2024) and Department of Statistics Malaysia (DOSM). Missing observations are linearly interpolated. Formal employment is calculated as total employment minus informal

Source: DOSM (2025)

2.2. Trends in EPF Membership and Contribution Status

Total EPF membership among members aged below 60 increased steadily between 2016 and 2025, rising from 12.5 million in 2016 to 16.1 million. This growth was driven primarily by an expansion in active contributors, which increased from 6.7 million to 10.1 million over the same period (Figure 2.2), consistent with broader labour market expansion.

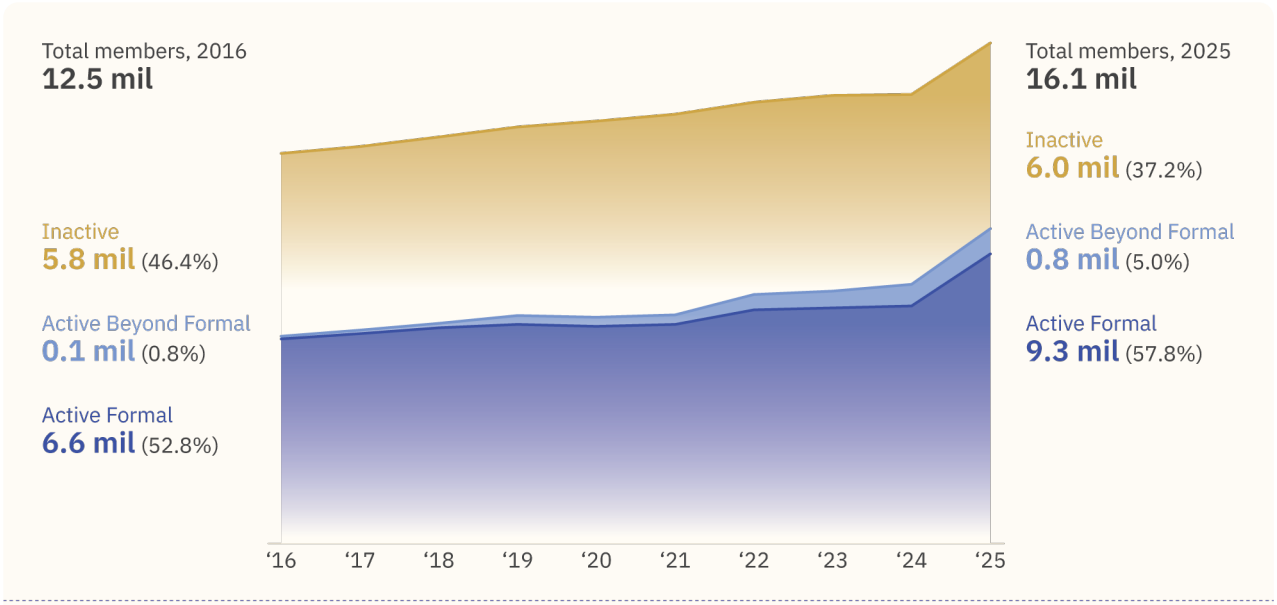
Active members are further classified into two categories: Active Formal referring to members contributing via mandatory payroll-based deductions; and Active Beyond Formal referring to those contributing through voluntary mechanisms.

Over time, and partly reflecting shifts in employment structures, the number of Active Beyond Formal members increased markedly, from 0.1 million in 2016 to 0.8 million in 2025 as shown in Figure 2.2. Additionally, this growth was also supported by sustained efforts by EPF and the Government to encourage voluntary participation through incentive schemes, with contribution incentives being periodically enhanced over time (see Box 4.1 for a summary of these initiatives).

In contrast, the number of inactive members remained relatively stable in absolute terms, hovering around 5.8 to 6.0 million. As active membership expanded, the share of inactive members within total membership gradually declined from 46.4% in 2016 to 37.3% in 2025. At the aggregate level, these trends suggest an overall strengthening of contribution participation particularly in the post-pandemic recovery phase. However, aggregate measures of contribution status mask substantial underlying movement between active and inactive states. As we shall see later, even as the active member base expanded, sizeable inflows into inactivity (defined as periods with no EPF contributions) continued to occur each year.

This divergence between improving aggregate indicators and persistent transition flows highlights an important structural feature: labour market recovery has not translated uniformly into sustained contribution continuity. From a social protection perspective, this implies that risks of contribution interruption remain significant, even in periods of macroeconomic improvement.

Figure 2.2: EPF members aged below 60, by contribution status, 2016–2025



Source: EPF (2025a)

2.3. Membership Composition Dynamics

Beyond overall participation levels, changes in the composition of active and inactive membership provide further insight into how contribution status evolved over time. While aggregate patterns provide a useful overview, they conceal important shifts in the composition and flow of members across contribution statuses. Decomposing membership status reveals that the overall shares of active and inactive members aged below 60 remained broadly stable over time, but with notable variation in transition dynamics within each category.

As shown in Figure 2.3, the proportion of active members increased gradually over the period, while the inactive share declined modestly. Within these broad categories, however, persistent inflows into inactivity continued even during periods of labour market recovery, indicating ongoing churn in contribution status.

Overall, these patterns highlight two key dynamics. First, stability in aggregate shares masks substantial underlying transitions between states. Second, recent growth in active membership has been driven in part by compositional changes, particularly the increased entry of non-Malaysian citizen employees, rather than solely by improved continuity among the existing member base. This highlights the importance of examining individual-level contribution trajectories rather than relying on net changes in membership composition alone.

More recently, 2025 saw a marked increase in new active members, driven largely by non-Malaysian citizen members. As illustrated in Figure 2.4, new active membership rose sharply from 1.1 million in 2024 to 2.7 million in 2025, with non-Malaysians accounting for 54% of new entrants. This represents a significant shift in the composition of inflows into active status. The change reflects a long-standing reliance on migrant labour that has become more visible with the enforcement of mandatory contributions for migrant workers, alongside shifts in labour demand conditions.

Figure 2.3: Composition of EPF membership status, 2016–2025

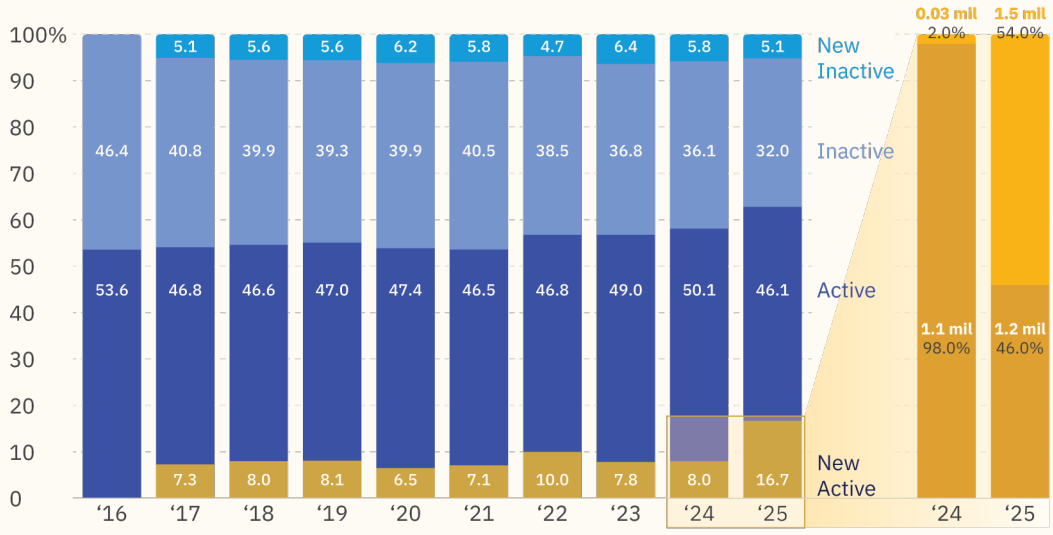
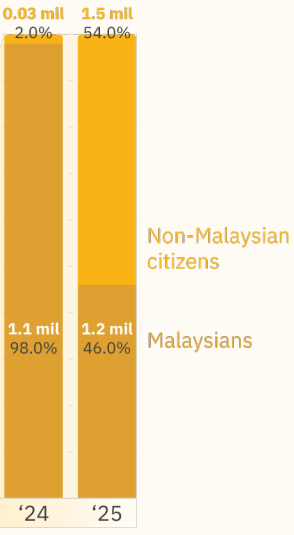


Figure 2.4: New active members, by citizenship, 2024 vs 2025



Note: New Active and New Inactive categories are not shown for 2016 since the study period begins in 2016 in which prior-year transitions are not observed. New Active refers to members who were previously not classified as Active (e.g. inactive members or new members) and became active in the reference year. Similarly, New Inactive refers to members who transitioned from active to inactive status during the reference year.

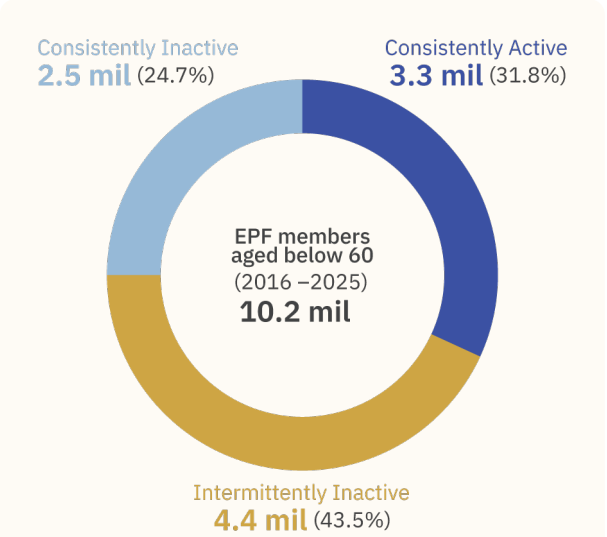
Source: EPF (2025a)

2.4. Longitudinal Patterns of Contribution Status

While the preceding sections focused on aggregate participation patterns, the analysis now shifts to an examination of individual contribution trajectories over time. Using a balanced longitudinal panel that tracks the contribution histories of the same 10.2 million members over the 2016–2025 period, the analysis examines patterns of persistent inactivity, repeated transitions between active and inactive status and reactivation over time.

Based on this panel, members were classified into three trajectory groups according to their active and inactive statuses observed from their contribution histories over the ten-year period (Figure 2.5). Approximately 3.3 million members (31.8%) remained consistently active throughout the observation period, with active status recorded in every year. At the other end of the spectrum, 2.5 million members (24.7%) were consistently inactive, recording no contributions across all ten years.

Figure 2.5: Breakdown of EPF members, by contribution status, 2016–2025



Source: EPF (2025b)

Together, these groups reflect stable but polarised participation patterns. The largest group, comprising 4.4 million members (43.5%), consisted of intermittently inactive members who were active in some years and inactive in others over the observation period.

Figure 2.6. Illustration of the measurement of contribution status, inactivity and reactivation episodes

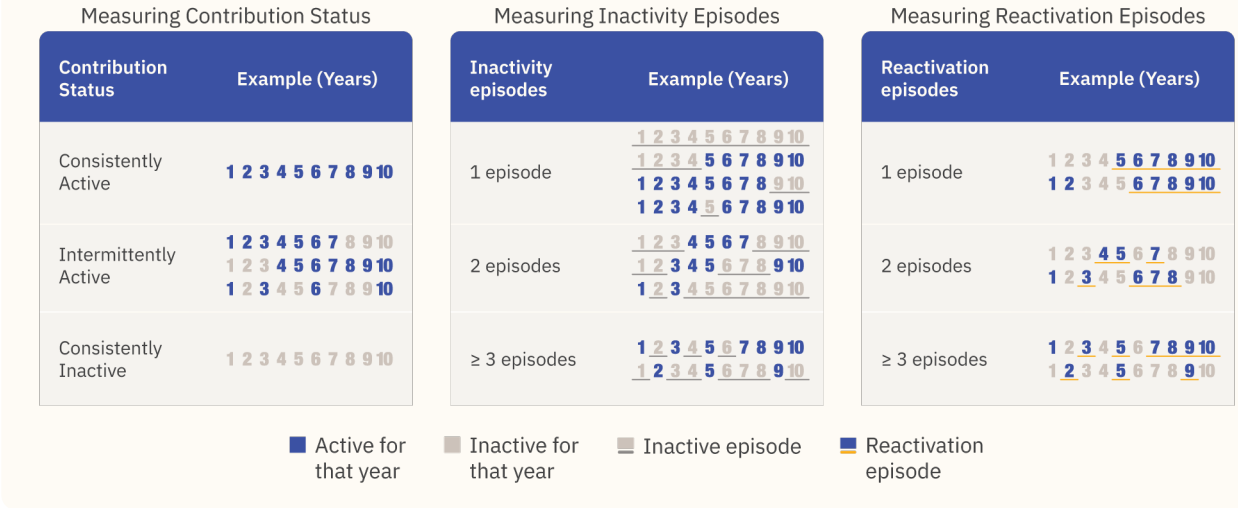


Figure 2.6 illustrates how contribution status is classified over time and how inactivity episodes are identified within individual contribution histories. It provides stylised examples to clarify the distinction between consistent and intermittent participation, as well as how duration and frequency of inactivity are measured.

The predominance of intermittent contribution patterns indicates that contribution instability, rather than sustained continuity, characterises the experience of a large share of members. From a policy perspective, this suggests that risks to retirement adequacy are not only from persistent exclusion, but also from repeated and cumulative interruptions in contribution histories.

This longitudinal classification provides the analytical foundation for the subsequent analyses. The following sections examine the timing, frequency and determinants of transitions into inactivity, as well as the pathways through which members return to active contribution.

2.5. Demographic Patterns of Contribution Status

Building on the longitudinal contribution trajectory groups identified earlier, the analysis now examines how contribution status varies across demographic groups. Differences in contribution trajectories provide insight into broader variation in labour market attachment and employment conditions across member groups.

Contribution trajectories exhibit systematic variation across groups, reflecting heterogeneity in labour market attachment and employment conditions (Figure 2.7). By gender, female members are less likely to be consistently active (29.6%) compared to males (33.9%) and exhibit higher shares of both intermittent activity (43.4%) and persistent inactivity (27.0%). This is consistent with more frequent labour market interruptions among women, including caregiving responsibilities and transitions in and out of employment (DOSM, 2024; KRI, 2020).

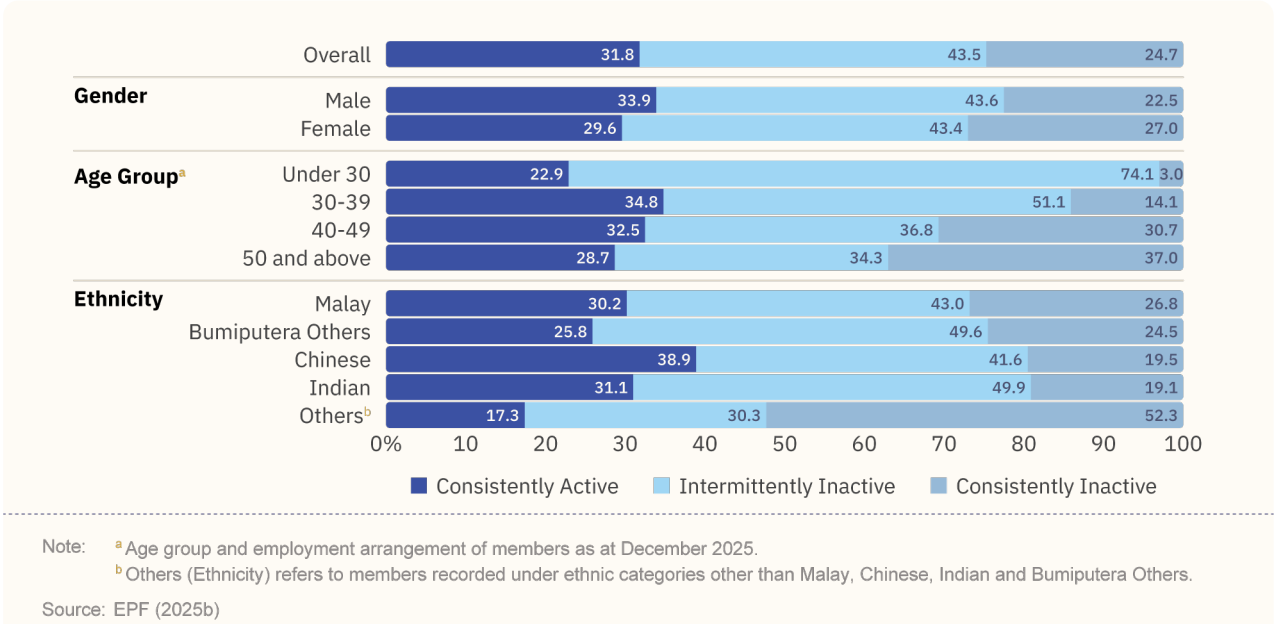
Age gradients are pronounced. Younger members (aged below 30) are predominantly intermittently inactive (74.1%), reflecting early career instability and transitions between education, job entry, and beyond formal work. Members aged 30–39 are more likely to be consistently active compared to other age groups, reflecting stronger and more sustained engagement with the labour market during this stage. Persistent inactivity rises sharply with age, reaching 37.0% among those aged 50 and above, suggesting gradual detachment from formal employment as workers approach retirement.

Differences across ethnic groups are also observed, though modest in scale. Chinese members exhibit the highest share of consistent contributors (38.9%), while Malays, Bumiputera Others and Indians show higher shares of intermittent inactivity (43.0%, 49.6% and 49.9%, respectively).

The "Others"[7] category records the highest level of consistent inactivity (52.3%), indicating weaker attachment to continuous contribution participation.

Overall, these patterns suggest that sustained contribution continuity is closely linked with stable labour market attachment and mandatory payroll-based contribution mechanism, rather than individual contribution behaviour alone.

Figure 2.7: Breakdown of demographic group, by contribution status, 2025



Note: [a] Age group and employment arrangement of members as at December 2025.
[b] Others (Ethnicity) refers to members recorded under ethnic categories other than Malay, Chinese, Indian and Bumiputera Others.

Source: EPF (2025b)

[7] Members recorded under ethnic categories other than Malay, Chinese, Indian and Bumiputera Others.

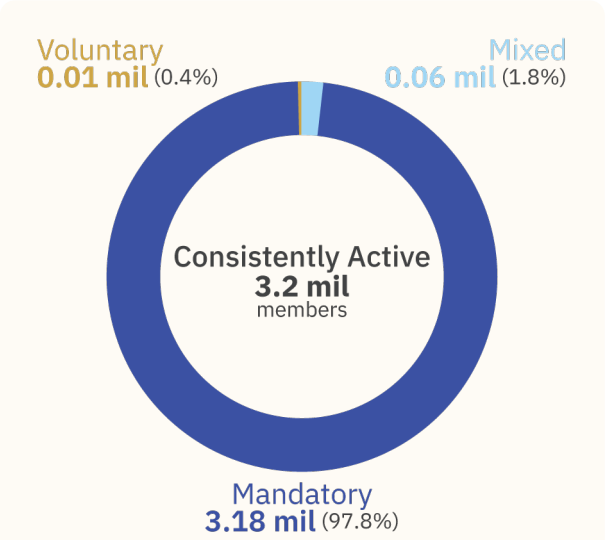
2.6. Contribution Density among Consistently Active Members

Building on the longitudinal classification, this section turns briefly to members who remained consistently active throughout the study period, focusing on variation in contribution density within this group. While these members maintained continuous attachment to the EPF scheme, their contribution behaviour may still vary in terms of contribution regularity within each year. Analysing contribution density therefore provides additional insight into the intensity and regularity of participation, beyond binary active–inactive classifications.

For clarity, members are categorised based on the contribution mechanism through which they are active:

- The **mandatory** category refers to members contributing through payroll-based contributions
- The **voluntary** category comprises members contributing solely through voluntary mechanisms, including i-Saraan, i-Simpan, and i-Suri (see Box 4.1).
- The **mixed** category captures members who contribute through both mandatory and voluntary mechanisms over time.

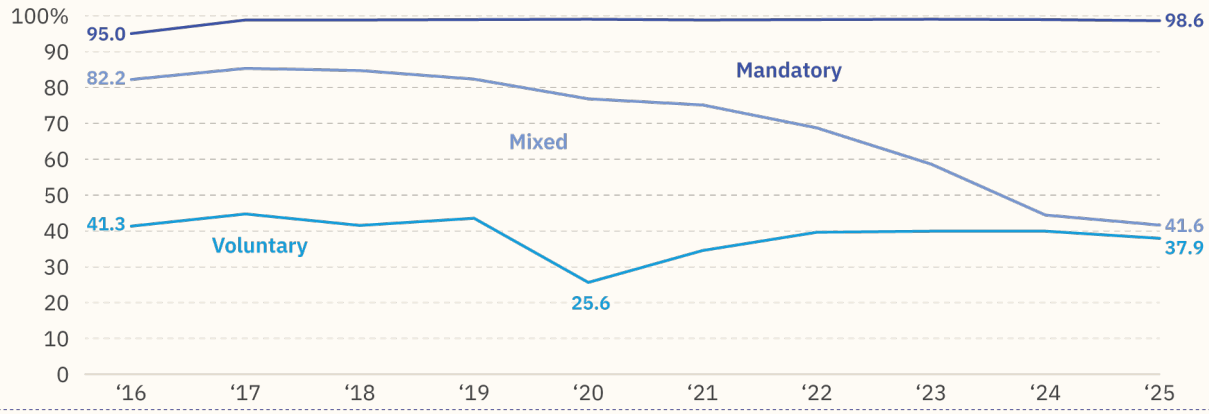
Figure 2.8: Breakdown of consistently active members, by contribution mechanism, across 2016–2025



Source: EPF (2025b)

The breakdown of these members is presented in Figure 2.8. The majority (3.18 million, 97.8%) of the consistently active members remain active through mandatory contributions. While only 0.01 million members (0.4%) remain consistently active through voluntary contributions. A small share of consistently active members remains active through both mandatory and voluntary contributions.

Figure 2.9: Share of consistently active members with full 12-month contribution annually, by contribution mechanism, 2016–2025

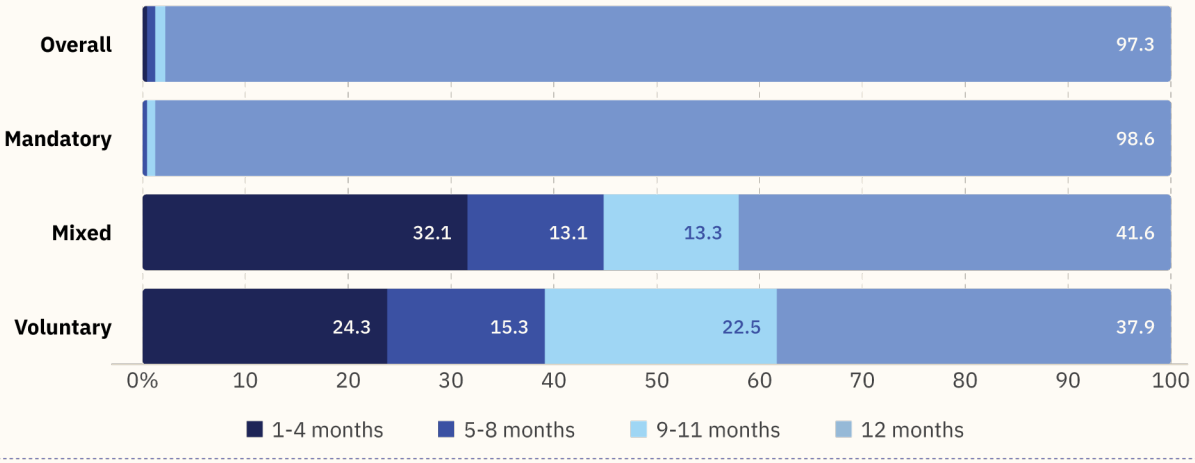


Source: EPF (2025b)

Figure 2.9 presents the share of consistently active members who contributed across all 12 months of a given year, disaggregated by contribution mechanism. Members contributing through the mandatory mechanism exhibit a high and stable rate of full-year contributions throughout the period, rising slightly from 95.0% in 2016 to 98.6% in 2025[8]. This reflects the structured and regular nature of payroll-based contributions associated with formal employment.

[8] The share of consistently active members recording full 12-month contributions is not 100%, as some members may continue to experience movements in and out of formal employment arrangements within a given year.

Figure 2.10: Breakdown of contribution density of consistently active members, by contribution mechanism and number of months, 2025



Source: EPF (2025b)

In contrast, contribution patterns among members in the mixed and voluntary mechanisms are more variable. The share of mixed contributors with full 12-month contributions declines over time, from 82.2% in 2016 to 41.6% in 2025, indicating a gradual shift towards less consistent contribution behaviour within this group.

A more pronounced disruption is observed among voluntary contributors, particularly during the COVID-19 period. The share of voluntary contributors with full 12-month contributions dropped sharply from around 41.3% in 2019 to 25.6% in 2020, reflecting the immediate impact of income shocks and labour market disruptions on individuals outside formal employment. Although this share partially recovered in subsequent years, it remained below pre-pandemic levels and stood at 37.9% in 2025. These trends suggest that while members in these mechanisms remain continuously active on an annual basis, their contributions are often intermittent within the year.

Figure 2.10 further illustrates the distribution of contribution density using 2025 as an example. Among consistently active members overall, the majority (97.3%) contributed in all 12 months of that year, reflecting the dominance of mandatory contributors within this group. However, disaggregation by mechanism reveals stark differences. Mandatory contributors are almost universally regular, with 98.6% contributing across all 12 months.

By contrast, contribution density among mixed and voluntary contributors is more dispersed. Among mixed contributors, only 41.6% contributed in all 12 months, while the remainder exhibited shorter contribution spans, including 32.1% contributing for 1–4 months, 13.1% for 5–8 months, and 13.3% for 9–11 months. A similar distribution is observed among voluntary contributors, where just 37.9% contributed consistently throughout the year, and a substantial share contributed for fewer months (24.3% for 1–4 months, 15.3% for 5–8 months, and 22.5% for 9–11 months).

Overall, these findings highlight that even among members classified as consistently active, the intensity of participation varies significantly by contribution mechanism. While mandatory contributors exhibit near-universal contribution regularity, members relying on voluntary or mixed mechanisms demonstrate more uneven contribution patterns. This suggests that continuity in active status does not necessarily imply stable or sufficient contribution accumulation, particularly for those outside formal employment arrangements.

From a policy perspective, these results underscore the importance of distinguishing between participation continuity and contribution adequacy. Members who remain continuously active but contribute irregularly may still face risks of inadequate retirement savings. This underscores the need for policies that not only encourage participation but also support more

consistent contribution behaviour among non-payroll mandatory contributors.

The differences in contribution patterns over time documented above reflect underlying structural features of the labour market rather than demographic characteristics alone. Members in formal employment benefit from institutional and regulatory mechanisms that sustain regular contributions including stable wages, employer-employee contracts, automatic payroll deductions and mandatory contribution requirements with established enforcement frameworks. These features reduce the likelihood of interruption and support consistent participation over time.

By contrast, workers in beyond formal and non-standard working arrangements face the opposite: income volatility, irregular schedules and weaker enforcement of contribution requirements, alongside more limited access to structured contribution mechanisms. This makes consistent saving structurally more difficult, independent of individual intent.

Regulatory design further reinforces these differences. Mandatory, payroll-based systems embed saving within employment relationships, effectively lowering behavioural and administrative barriers to participation. In contrast, voluntary contribution facilities require active decision-making and financial capacity, placing greater reliance on individual initiative and awareness.

These structural differences also shape how inactivity unfolds once it begins. Whether a spell is brief or prolonged determines how contribution gaps accumulate over a working life, and this in turn, provides the basis for the transition analysis that follows in the subsequent sections.

Section 3

Dynamics of Contribution Inactivity

Having established the broader patterns of contribution continuity and instability, the analysis now shifts focus to the dynamics of contribution inactivity. This section examines how inactivity unfolds over time by analysing members' contribution status across two key dimensions: (i) the duration of consecutive years of inactivity, and (ii) the frequency of distinct inactivity episodes. As shown earlier in Figure 2.6, contribution status and inactivity episodes are defined and measured based on members' contribution histories.

From a labour market perspective, entry into inactivity may reflect changes in employment continuity, earnings stability or movement outside formal employment arrangements, which interrupt regular contribution participation. As reflected in the aggregate patterns of intermittent contribution activity presented earlier, many members subsequently return to active contribution participation over time. Inactivity should therefore not be interpreted solely as a permanent exit from the EPF scheme. Rather, patterns of inactivity and reactivation provide insight into labour market attachment and contribution continuity over time.

Throughout this section, inactivity is analysed in terms of inactivity spells, defined as continuous periods of inactivity across consecutive years during which a member remains inactive. An inactivity episode begins in the year when contributions cease and ends in the year when contribution activity resumes, or when the observation period concludes (i.e. the end of the study period, 2025).

3.1. Duration of Inactivity Spells

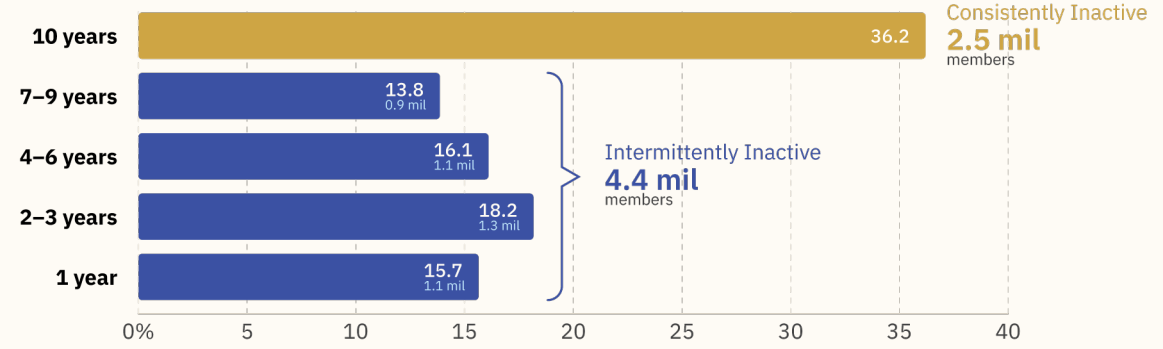
One important dimension of contribution inactivity is the length of time members remain inactive once contribution activity ceases. Inactivity varies considerably in duration, with shorter interruptions potentially reflecting temporary labour market transitions, while longer spells may indicate more sustained detachment from formal employment or contribution participation.

To examine these patterns, the analysis takes a deep dive into member-level data and classifies each individual member based on their longest observed inactivity spell over the study period. Duration is measured by the number of consecutive years a member remains inactive. This captures continuous episodes of disengagement, allowing assessment of the extent to which inactivity persists once it begins.

Figure 3.1 presents the distribution of inactivity duration among EPF members observed between 2016 and 2025. Shorter durations are relatively common. Approximately 1.1 million members (15.7%) experienced a single year of inactivity, while 1.3 million members (18.2%) remained inactive for two to three consecutive years.

At the same time, longer durations of inactivity are also widespread. Approximately 1.1 million members (16.1%) experienced four to six

Figure 3.1: Distribution of inactivity, by consecutive years of inactivity, across 2016–2025



Note: Duration of inactivity is calculated at the individual member level across 2016-2025 period. For members with multiple inactivity episodes, only the longest observed duration is reported.

Source: EPF (2025b)

consecutive years of inactivity, while 0.9 million (13.8%) remained inactive for seven to nine years. Notably, 2.5 million (36.2%) were inactive throughout the entire study period.

These patterns suggest that inactivity is often sustained once it occurs. While some members experience relatively brief interruptions, a substantial share remain inactive for extended periods, pointing to persistent disengagement from contribution activity.

3.2. Frequency of Inactivity Episodes

While duration captures how long inactivity persists once it occurs, frequency captures whether inactivity reflects a single sustained disengagement or repeated transitions between active and inactive states over time. Members who experience multiple employment transitions may have repeated episodes of inactivity. Examining frequency therefore provides additional insight into understanding contribution interruptions and the stability and continuity of labour market attachment beyond duration alone.

To capture this, inactivity frequency is analysed at the member level based on the number of distinct inactivity episodes experienced by each member over the study period.

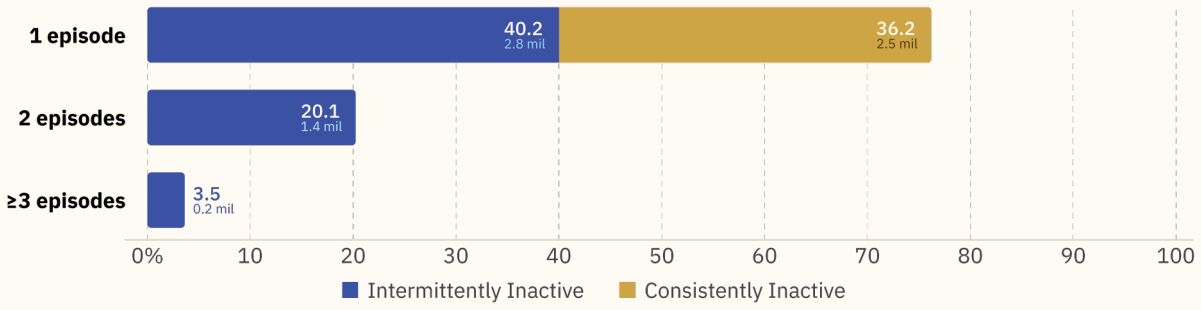
Given the persistence of inactivity observed in the previous section, inactivity is expected to be concentrated in a small number of episodes. As shown in Figure 3.2 inactivity is most commonly concentrated in a single episode. A large majority of members who experienced inactivity recorded only one episode during the ten-year observation period. This group comprises 76.2% of inactive members, or approximately 5.3 million individuals. Within this group, 2.5 million (36.2%) remained inactive throughout the entire period, while 2.8 million (40.2%) experienced one episode of inactivity but were active in other years.

Multiple episodes of inactivity are considerably less common. Around 1.4 million members (20.1%) experienced two episodes of inactivity, indicating at least two distinct transitions into inactivity during the study period. A much smaller group, approximately 0.2 million members (3.5%), experienced three or more episodes.

Cross-tabulation of duration and frequency reveal a further pattern. Longer periods of inactivity are overwhelmingly associated with a single episode. Members inactive for seven or more years are concentrated almost entirely in the single-episode category, indicating continuous disengagement once contribution activity ceases. Multiple episodes, by contrast, are more likely among members with shorter or moderate inactivity durations, though their overall prevalence remains limited.

Overall, contribution inactivity is more commonly characterised by a single sustained episode rather than repeated cycles of disengagement. Meanwhile, repeated transitions between active and inactive states remain comparatively limited. This suggests that inactivity often persists as a continuous spell once contribution activity ceases.

Figure 3.2: Distribution of inactivity, by episodes of inactivity, across 2016–2025



Note: Episodes of inactivity are calculated at the individual member level across 2016-2025 period.

Source: EPF (2025b)

3.3. Risk of Inactivity by Demographic Group

Analysis of inactivity incidence helps identify demographic groups that are more exposed to disruptions in contribution continuity. Differences in the likelihood of transitioning into inactivity provide insight into variation in labour market attachment and employment stability across member groups.

Figure 3.3 presents the incidence of transition from active to inactive status by age group. The results indicate a clear life-cycle pattern. Members aged below 30 face the highest likelihood of transitioning into inactivity, with 9.8% becoming inactive in the subsequent year. Incidence declines through the core working ages, falling to 6.7% among members aged 30–39 and 5.8% among those aged 40–49, before rising again to 6.7% among members aged 50 and above. This U-shaped pattern suggests greater instability at labour market entry and exit points, alongside stronger attachment during mid-career years.

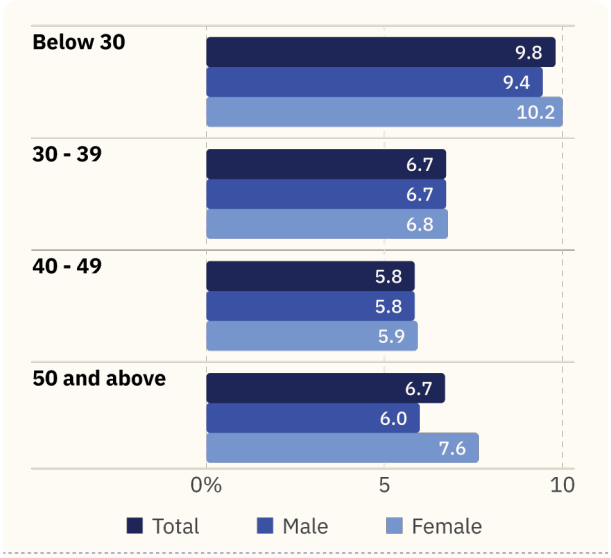
Across all age groups, female members exhibit higher incidence of inactivity than males. Differences are modest at younger ages but widen at older ages. Among members aged below 30, 10.2% of women transition into inactivity compared with 9.4% of men.

The gap narrows in mid-career but remains present, before widening again among older members. Among those aged 50 and above, 7.6% of women become inactive compared with 6.0% of men. These patterns indicate that exposure to inactivity is shaped jointly by life stage and gender.

Incidence also varies across ethnic groups as shown in Figure 3.4, though the magnitude of variation is smaller than that observed by employment arrangement. Bumiputera Others members exhibit the highest incidence (11.5%), followed by Indian (10.2%), Malay (9.4%), and Chinese members (6.8%). Members classified under Other ethnic groups also record relatively high incidence (10.9%). These differences likely reflect variation in employment patterns and labour market attachment rather than ethnicity as a primary determinant of inactivity risk.

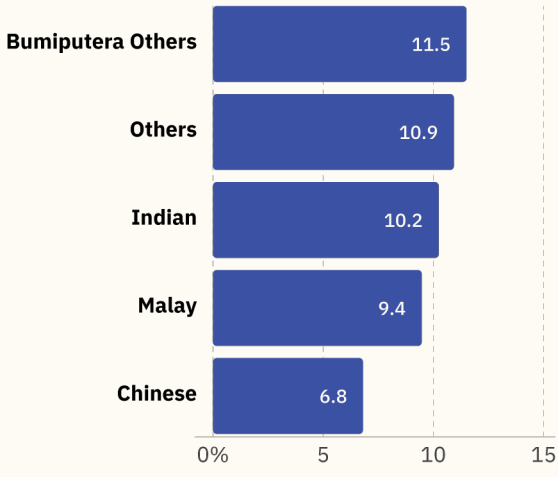
Overall, these findings are consistent with earlier patterns showing that exposure to inactivity is closely linked with labour market attachment and employment arrangements, particularly the stability associated with formal employment and payroll-based contribution mechanisms.

Figure 3.3: Incidence of transition into inactivity, by age group and gender, 2025



Source: EPF (2025b)

Figure 3.4 Incidence of inactivity, by ethnic group, 2025



Source: EPF (2025b)

Section 4

Reactivation Pathways and the Role of Voluntary Mechanisms

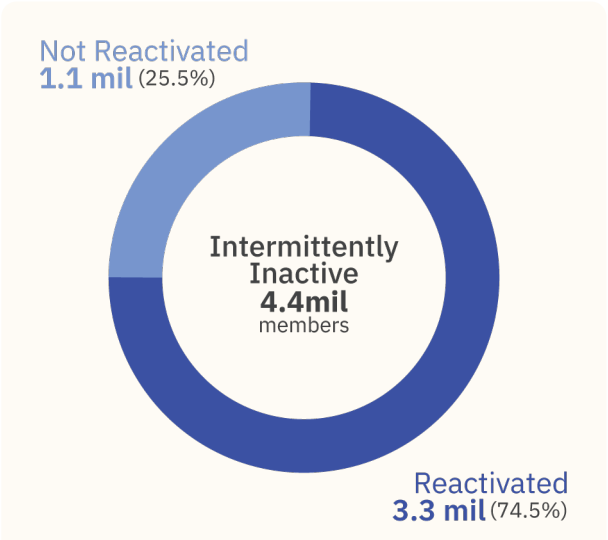
Building on the earlier analysis of transition dynamics, this section examines how members subsequently return to active contribution participation following periods of inactivity. While Section 3 showed that inactivity is often persistent once it occurs, the substantial share of the intermittent inactive group indicates that some members subsequently return to active contribution status. Examining these reactivation patterns provides insight into pathways through which members re-engage with contribution activity and the extent to which their returns translate into sustained participation.

This section examines reactivation among members who experience periods of inactivity across three interrelated areas. First, it analyses the likelihood and timing of reactivation and whether reactivation translates into sustained contribution activity. Second, it examines the mechanisms through which members return by distinguishing between mandatory and voluntary pathways, and how reactivation patterns vary across demographic groups. Third, it investigates the role of voluntary mechanisms, contribution behaviours and savings outcomes among reactivated members.

4.1. Reactivation Patterns

Reactivation is analysed at the member level based on whether individuals who experience inactivity return to active contribution at least once over the study period. This approach captures both the likelihood of returning to active status and whether participation is sustained following reactivation. Reactivation patterns are further examined according to the duration of members' inactivity spells to show how the likelihood of reactivation varies across different durations of inactivity. As shown earlier in Figure 2.6, contribution status and reactivation episodes are defined and measured based on members' contribution histories.

Figure 4.1: Reactivation among intermittently inactive members, across 2016–2025



Source: EPF (2025b)

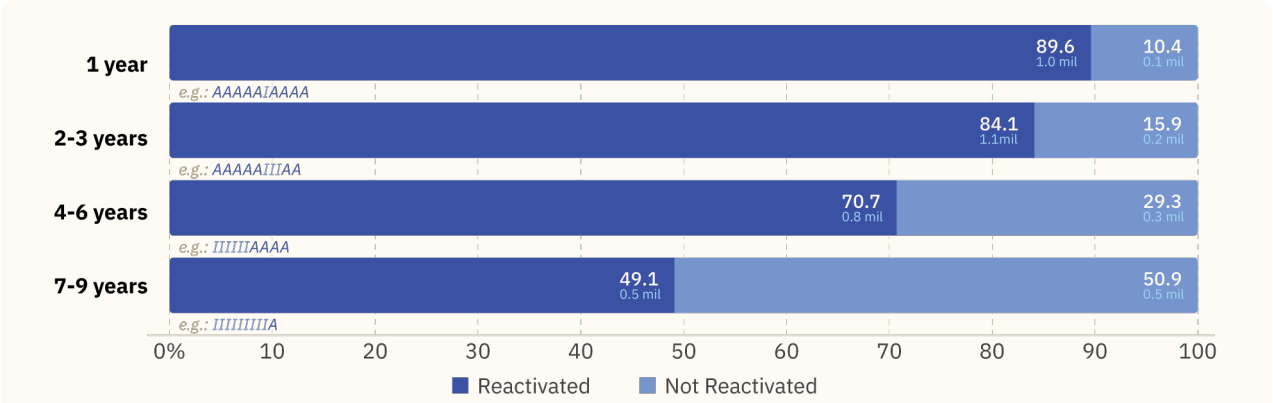
As shown in Figure 2.5, 4.4 million members experienced intermittent inactivity between 2016 and 2025. Of these, 3.3 million members (74.5%) reactivated at least once, while 1.1 million (25.5%) did not return to active contribution status by the end of the study period (Figure 4.1). Reactivation however does not necessarily translate into sustained participation. Of those who reactivated, 2.1 million (63.6%) remained active until the end of the study period, while 1.2 million (36.4%) subsequently became inactive again.

The likelihood of reactivation[9] declines as the duration of inactivity increases. Figure 4.2 grouped members based on the duration of inactivity spells to illustrate the likelihood of reactivation within each category of inactivity length. Among members inactive for one year, 89.6% eventually reactivate. Reactivation rates fall to 84.1% among those inactive for two to three years and 70.7% among those inactive for four to six years. The rate declines further to 49.1% among members inactive for seven to nine years.

Consistent with the findings in Section 3, reactivation becomes substantially less likely as inactivity persists longer, indicating that prolonged disengagement from contribution activity is increasingly difficult to reverse. This may reflect weakening attachment to employment or other stable income sources over time.

[9] Reactivation probability is calculated conditional on the duration of consecutive inactivity. For each inactivity duration, the probability reflects the share of members who eventually return to active contribution after experiencing that duration of inactivity.

Figure 4.2: Member-level reactivation, by consecutive duration of inactivity, across 2016–2025



Note: A = Active, I = Inactive

Source: EPF (2025b)

4.2. Mechanisms and Frequency of Reactivation

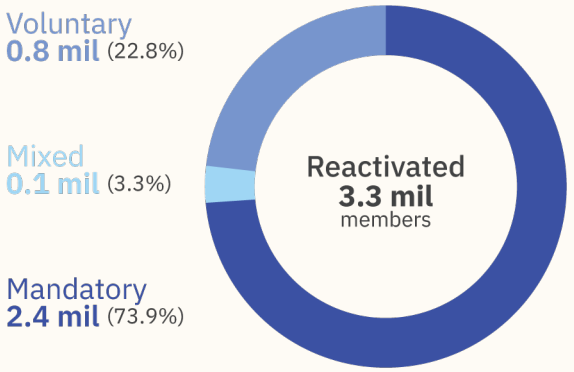
To better understand the pathways through which members return to active contribution status, this section focuses on the 3.3 million reactivated members who experienced at least one reactivation episode during the study period. Members are classified according to the primary contribution mechanism through which reactivation occurred.

Consistent with the classification introduced in Section 2.6, these reactivated members are grouped into three categories based on the contribution mechanism through which reactivation occurred. The mandatory category comprises members who reactivated through mandatory contributions, while the voluntary category includes those who reactivated via voluntary mechanisms (i-Saraan, i-Simpan, and i-Suri). The mixed category captures members who reactivated through both mechanisms across different episodes.

Overall, a majority of reactivated members, comprising 2.4 million members (73.9%), returned through mandatory contribution mechanism (Figure 4.3). This was followed by reactivation through voluntary mechanisms, involving 0.8 million members (22.8%), while the mixed category accounted for only 0.1 million members (3.3%).

A clearer pattern emerges when examining members with multiple reactivation episodes. The relative importance of the mandatory mechanism progressively weakens as the number

Figure 4.3: Breakdown of reactivated members, by contribution mechanism, across 2017–2025



Source: EPF (2025b)

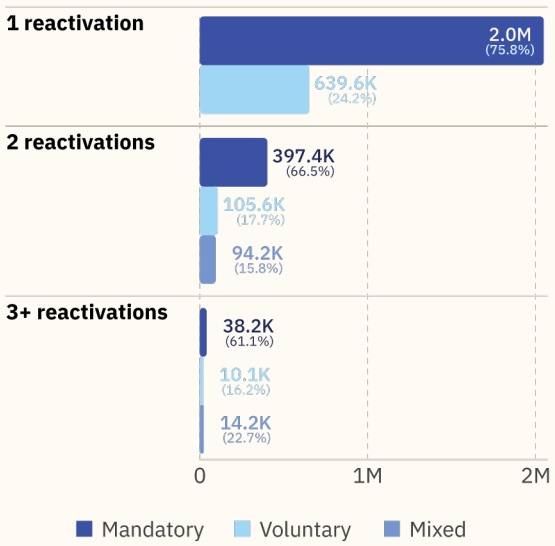
of reactivations increases, while the shares of voluntary and mixed mechanisms become more pronounced.

This pattern suggests that repeated reactivations may be associated with a less stable attachment relative to formal employment. As members move in and out of employment, they increasingly rely on voluntary contribution mechanisms to remain engaged with the EPF scheme. Over the study period, members experienced multiple reactivations, with the highest observed frequency reaching five reactivation events.

Figure 4.4 illustrates the distribution of reactivation frequency by mechanism. Among members with a single reactivation, the majority return through the mandatory mechanism (2.0 million), compared

to 639,600 through voluntary mechanisms. However, as the number of reactivations increase, the dominance of the mandatory mechanism diminishes. Among members with two reactivations, return through mandatory mechanism (397,400) remains higher than through voluntary (105,600) and mixed mechanisms (94,200), although the gap narrows substantially.

Figure 4.4: Episodes of reactivation, by contribution mechanism, across 2017–2025



Source: EPF (2025b)

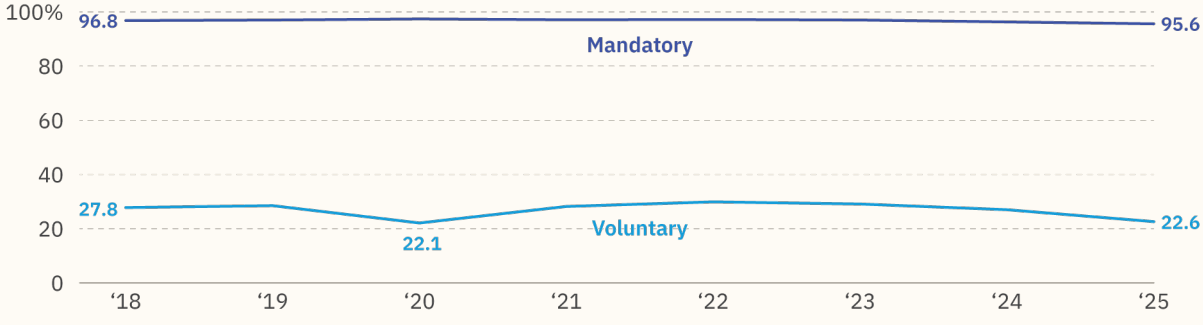
This convergence becomes more pronounced among members with three or more reactivations. For instance, among those with three or more reactivations, the number of members returning through the mandatory mechanism drops sharply to 38,200 (61.1%), while mixed mechanisms (14,200) account for a more meaningful share of reactivation pathways (22.7%). In contrast, the share of members reactivated through voluntary mechanisms remains relatively stable at 16.2%.

Overall, these findings suggest that while most members initially return through mandatory contribution mechanism, repeated reactivations are increasingly associated with reliance on voluntary and mixed mechanisms. This may reflect weaker attachment to formal employment arrangements and increasing movement into beyond formal or non-standard employment, contributing to more fragmented contribution patterns.

Beyond reactivation patterns, the consistency of contributions among reactivated members provides further insight into the quality of labour market attachment. Out of the 3.3 million reactivated members, this analysis focuses on those who experienced a single reactivation episode and subsequently remained active throughout the study period. This restriction is applied to ensure a more stable and representative assessment of contribution behaviour across members. Individuals who move in and out of contribution activity may introduce volatility into the distribution, particularly where prolonged periods of inactivity are present, thereby obscuring underlying patterns.

Figure 4.5 presents the share of reactivated members who contribute in all 12 months of a given year, disaggregated by contribution mechanism. Similar to the patterns observed among consistently active members in Section 2.6, members reactivated through the mandatory mechanism exhibit a sustained high rate of full-year contributions, with the vast majority contributing every month throughout the period. This reflects the structured and regular nature of payroll-based contributions.

Figure 4.5: Share of reactivated members with full 12-month contributions annually, by contribution mechanism, 2018–2025



Note: Only members active in the preceding year are included, to reflect full-year contribution density.

Source: EPF (2025b)

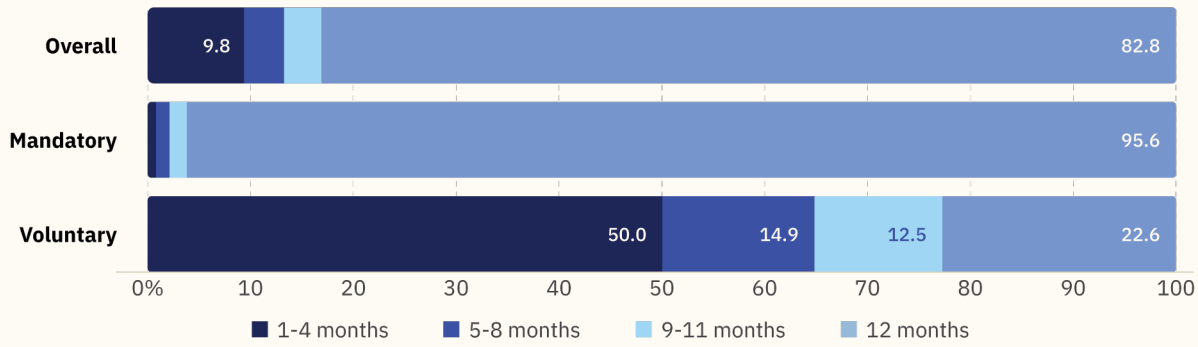
In contrast, members contributing through voluntary mechanisms display substantially lower and more variable rates of full-year contributions. The share declined sharply to 22.1% in 2020, perhaps reflecting reduced capacity to contribute due to income disruptions during COVID-19, and has since recovered only marginally to 22.6% in 2025. While this broadly mirrors the pattern observed among consistently active voluntary contributors in Section 2.6 earlier, the overall share remains comparatively lower among reactivated members. This pattern highlights the more irregular nature of voluntary contributions, which are likely influenced by income variability and individual financial capacity.

Further granularity is provided in Figure 4.6 which breaks down contribution density among reactivated members by the number of contributing months in 2025. Among members contributing through the mandatory mechanism, the vast majority (95.6%) contribute consistently across all 12 months, with only a small proportion contributing intermittently[10].

In contrast, voluntary contributors exhibit a markedly different distribution. A large share contributes for only 1–4 months (50.0%), while relatively fewer maintain contributions throughout the year (22.6%). This suggests that voluntary contributions are often episodic in nature, likely reflecting irregular income flows or discretionary saving behaviour.

Overall, these findings reinforce earlier evidence that while voluntary mechanisms play an important role in facilitating reactivation into the EPF scheme, members reactivated through these mechanisms tend to exhibit less consistent contribution patterns.

Figure 4.6: Breakdown of contribution frequency of reactivated members, by contribution mechanism and number of months, 2025



Source: EPF (2025b)

4.3. Demographic Profile of Reactivated Members

Examining reactivation pathways across demographic group provides insight into differences in labour market attachment, employment arrangements and reliance on contribution mechanisms following periods of inactivity. Figure 4.7 shows that while the majority of members are reactivated through the mandatory mechanism, disaggregation by demographic profile reveals notable variations.

By gender, both males and females are predominantly reactivated via the mandatory mechanism although the proportion is higher among males. In contrast, females exhibit a greater reliance on voluntary mechanisms compared to males. This difference is consistent with broader labour market patterns where women are more likely to engage in non-standard or flexible forms of employment. This may be due to caregiving

[10] The small share of mandatory contributors without 12 months of contributions reflects members who became active during the year and therefore had a shorter contribution window within the year.

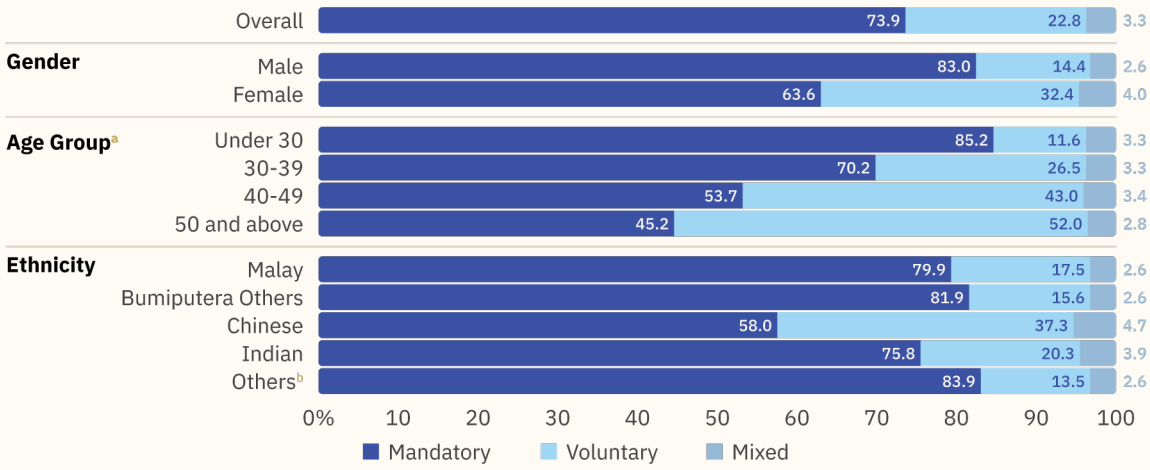
responsibilities and constraints associated with formal employment arrangements (World Bank, 2019).

A similar pattern is observed across age groups. The proportion of members reactivated through the mandatory mechanism declines with age, while reliance on voluntary mechanisms correspondingly increases. This suggests that younger members are more likely to return to formal employment following periods of inactivity, reflecting stronger labour market attachment and lower barriers to re-employment.

Conversely, older members appear to depend more on voluntary contribution pathways, which may indicate comparatively weaker or less stable attachment to formal employment arrangements. This is consistent with broader literature highlighting that older workers may face labour-market barriers such as lower re-employment prospects, skills mismatches, health constraints, or age-related employer preferences, which can affect continued participation in formal employment (OECD, 2019b; World Bank, 2020).

Across ethnic groups, the majority of members are still reactivated through the mandatory mechanism. However, Chinese members have the lowest proportion of reactivation through the mandatory mechanism (58.0%) relative to other ethnic groups (around 80.0%). Correspondingly, their reliance on voluntary and mixed mechanisms is higher (37.3%) and mixed (4.7%). This may reflect greater participation in self-employment, business ownership or non-standard work arrangements.

Figure 4.7: Breakdown of reactivated members, by contribution mechanism, 2025



Note: [a] Age group and employment arrangement of members as at December 2025.
[b] Others (Ethnicity) refers to members recorded under ethnic categories other than Malay, Chinese, Indian and Bumiputera Others.

Source: EPF (2025b)

4.4. Role of Voluntary Contributions

Reactivation via voluntary contributions typically occurs after a sustained period of inactivity rather than immediately following exit from active contribution status.

This timing is consistent with the possibility that voluntary contributions may serve as a form of financial recovery or stabilisation once income conditions become more favourable, rather than as a seamless substitute for employment-based contributions.

Reactivation through voluntary contributions also appears to vary alongside broader labour market conditions and policy emphasis (see Box 4.1). Taken together, these patterns highlight the importance of voluntary mechanisms as a complementary pathway for maintaining coverage, particularly for members whose return to contributory participation does not occur through formal employment.

Box 4.1: Voluntary Contributions under EPF

Under EPF's various products, members may make voluntary contributions through several facilities, namely i-Simpan, i-Saraan, and i-Suri. i-Simpan (previously known as Self-Contribution) is a voluntary retirement savings option for members who wish to independently grow their retirement savings. Similarly, i-Saraan, introduced in 2018 (previously Skim Simpanan Persaraan 1Malaysia launched in 2010), aims to extend contributory coverage to individuals outside standard formal employment, including the self-employed and workers with irregular or non-fixed incomes.

This reflects an institutional response to labour market changes that weaken the link between stable employment and continuous participation in contributory social protection. In contrast, i-Suri is specifically targeted at housewives who are registered under the National Poverty Data Bank (eKasih). The programme is intended to improve the well-being of housewives and to recognise their contributions to their families and to the nation's development.

Across all three facilities, individuals may make voluntary contributions to EPF scheme at flexible amounts and frequencies as part of their retirement savings. However, voluntary contributions across all facilities (i-Simpan, i-Saraan, and i-Suri) are subject to a combined maximum accumulated limit of RM100,000 per year. Unlike i-Simpan, both i-Saraan and i-Suri are supported by government matching incentives, credited directly to members' EPF accounts and subject to annual and lifetime limits.

Since their introduction, the incentive structures have been enhanced in stages, with higher matching rates and expanded caps introduced over time to strengthen participation (Table 1). Most recently, the facilities provide matching contributions of up to 20 per cent under i-Saraan and 50 per cent under i-Suri of annual contributions, within specified limits. Contributors are also entitled to EPF dividends and standard member protections.

Within the EPF framework, i-Simpan, i-Saraan, and i-Suri operates alongside employment-based contributions, expanding participation pathways across diverse employment arrangements. By allowing flexible contribution amounts and frequencies, the facilities support partial continuity of retirement savings accumulation under conditions of employment volatility, informality, and unpaid work. In doing so, they illustrate how institutional design can adapt contributory social protection systems to evolving labour market realities while preserving their core and savings accumulation functions.

Table 1. Enhancements to i-Saraan and i-Suri incentives over time

Facility	Year	Incentive and Condition	
		Matching Contribution Rate (%)	Annual Cap (RM)
i-Saraan	2017	10	120
	2018–2022	15	250
	2023	15	300
	2024	15	500
	2025	20	500
i-Suri	2018–2023	RM40 for each min contribution of RM5	480
	2024–2025	50	300

4.5. Incentive Thresholds and Contribution Behaviour

As highlighted earlier in Figure 4.3, 0.8 million members were reactivated through voluntary mechanisms. This subsection focuses on a subset of these members, specifically those who experienced a single reactivation incidence and subsequently remained continuously active throughout the study period. This restriction is applied to ensure a more stable and representative assessment of contribution behaviour. Members who move in and out of contribution activity may introduce volatility into the distribution. This is particularly the case where prolonged periods of inactivity are present, which may obscure underlying patterns. Around 45,000 members meet these criteria and form the analytical sample for this subsection.

Figure 4.8 presents the distribution of annual contribution amounts among members reactivated via i-Saraan. The distributions are disaggregated by year, reflecting potential variations in contribution behaviour associated with changes in policy design and incentive structures over time.

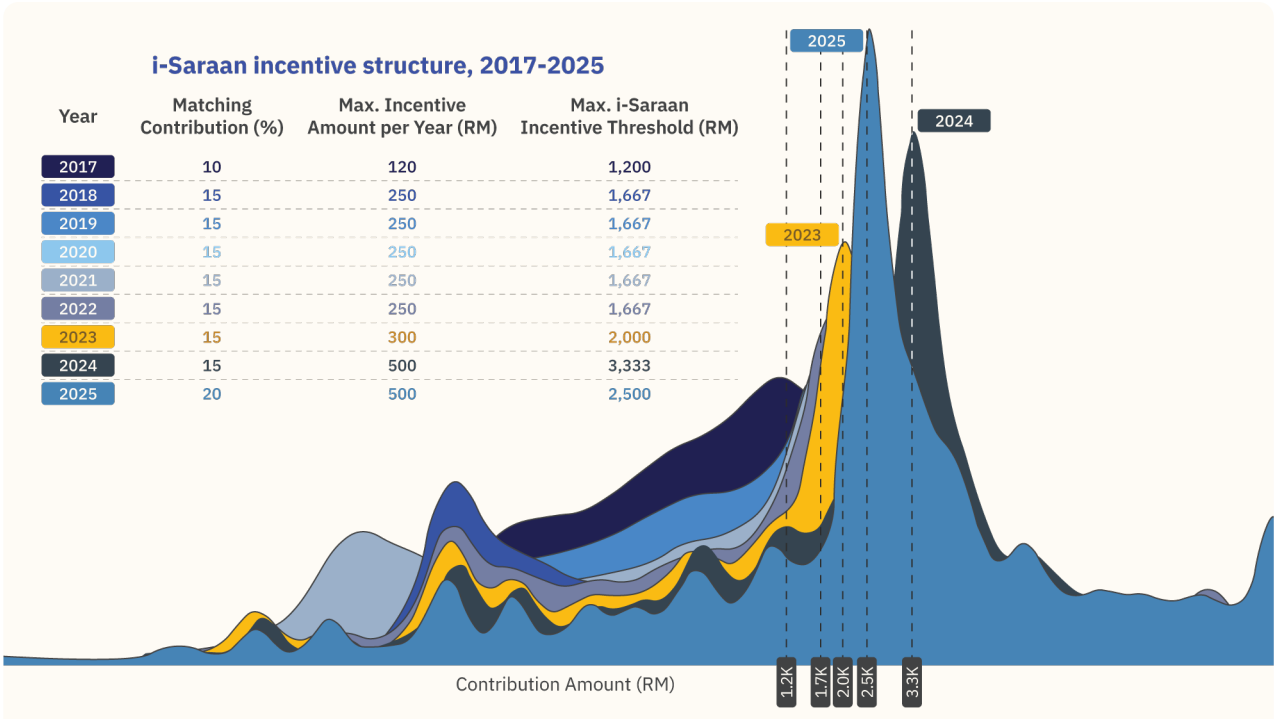
Clear clustering is observed around the maximum incentive thresholds under the i-Saraan facility. For instance, in 2023, where the annual contribution required to fully maximise the matching incentive was RM2,000 (see Box 4.1), the distribution shows a pronounced concentration at this level. Similar patterns are evident in other years with comparable incentive thresholds, as reflected by the shaded groupings in the figure. This may imply that members are responsive to the facility's parameters, adjusting their contributions to maximise eligibility for incentives.

Overall, these findings suggest that contribution behaviour among voluntarily reactivated members is more strongly influenced by immediate and salient incentive structures, such as matching contributions under i-Saraan. The clustering observed at low contribution levels and around incentive thresholds may reflect the influence of financial constraints and behavioural anchoring in shaping saving decisions. Taken together, these patterns highlight the importance of designing incentive mechanisms that are both accessible and behaviourally salient, particularly for members with irregular income streams, to encourage more sustained and adequate retirement savings.

Figure 4.8: Distribution of contribution among members reactivated via i-Saraan, by year, 2017–2025

i-Saraan incentive structure, 2017-2025

Year	Matching Contribution (%)	Max. Incentive Amount per Year (RM)	Max. i-Saraan Incentive Threshold (RM)
2017	10	120	1,200
2018	15	250	1,667
2019	15	250	1,667
2020	15	250	1,667
2021	15	250	1,667
2022	15	250	1,667
2023	15	300	2,000
2024	15	500	3,333
2025	20	500	2,500



Note: The x-axis is shown on a logarithmic scale to better illustrate variation across values.

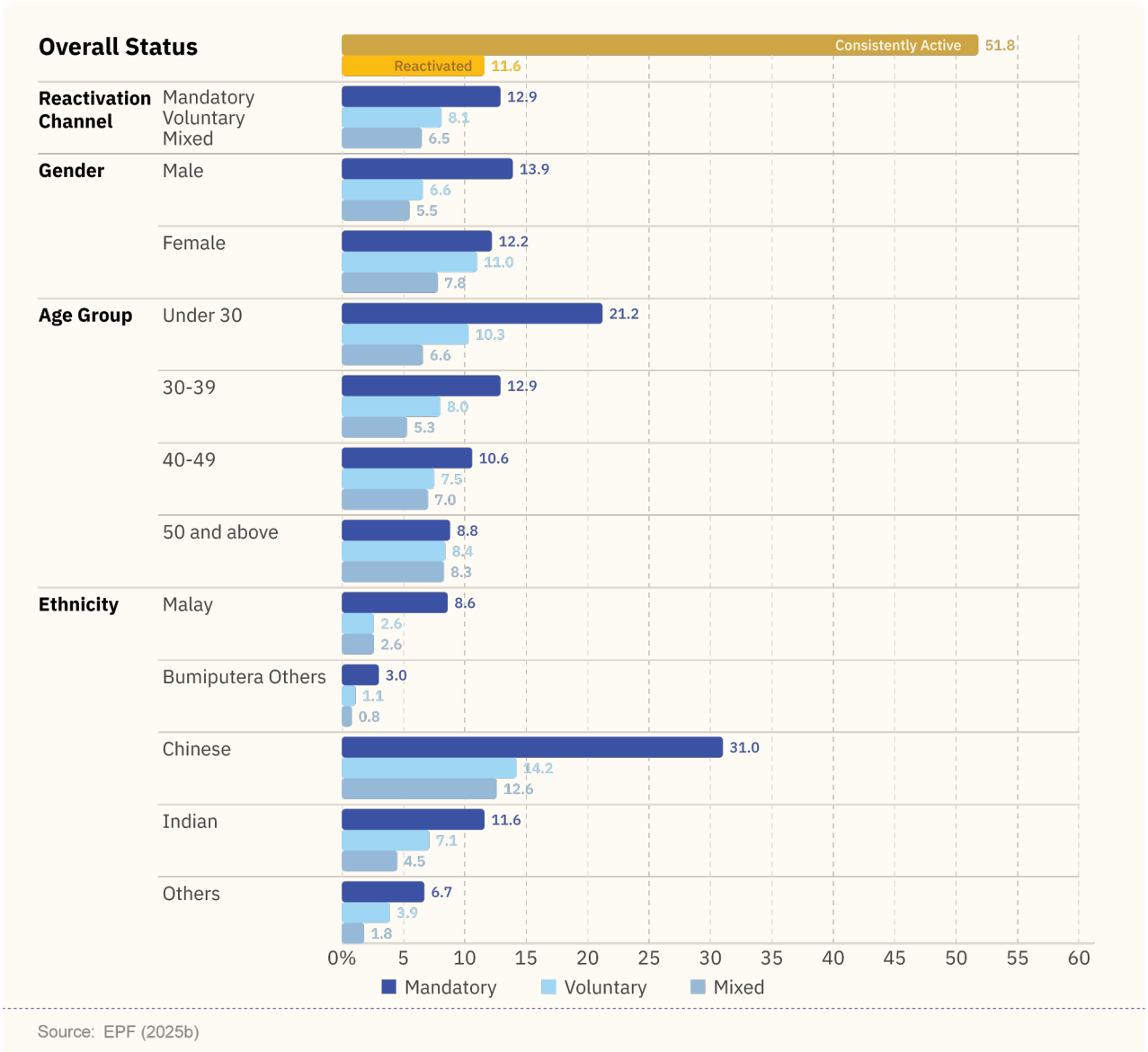
Source: EPF (2025b)

4.6. Savings Outcomes of Reactivated Members

Reactivation into contribution activity does not necessarily translate into adequate retirement savings. This subsection examines the extent to which reactivated members are able to meet the Basic Savings threshold[11], with outcomes disaggregated by reactivation mechanism and demographic characteristics. The Basic Savings threshold provides a benchmark for assessing whether members have accumulated a minimum level of retirement savings under the RIA framework[12].

Figure 4.9 shows that, as of December 2025, half of members who had remained consistently active met the Basic Savings threshold. Among reactivated members, those reactivated through the mandatory mechanism achieve higher rates of meeting Basic Savings compared to those reactivated through voluntary or mixed pathways. Overall, 12.9% of members reactivated via the mandatory mechanism meet the Basic Savings threshold, compared to 8.1% for voluntary and 6.5% for mixed mechanisms. This gap reflects differences in contribution regularity and income stability, with formal employment arrangements providing a more consistent basis for savings accumulation.

Figure 4.9: Reactivated members meeting basic savings, by contribution mechanism, 2025



Source: EPF (2025b)

[11] Among consistently inactive members, only 0.8% members meet Basic Savings threshold of RM390,000.
[12] EPF (2024)

Significant variation is also observed across demographic groups. By ethnicity, Chinese members exhibit the highest rates of meeting Basic Savings, particularly through the mandatory mechanism (31.0%), compared to Malays (8.6%), Indians (11.6%), Bumiputera Others (3.0%), and Others (6.7%).

This finding is noteworthy given that, as discussed in Section 4.3. Chinese members have the lowest proportion of reactivation through the mandatory mechanism relative to other ethnic groups, alongside a higher reliance on voluntary mechanisms. Despite this, Chinese members record the highest share of individuals achieving Basic Savings through the mandatory mechanism.

This apparent contrast suggests that while fewer Chinese members reactivated through the mandatory mechanism, those who do may exhibit stronger contribution capacity or consistency, enabling them to accumulate sufficient savings to meet the Basic Savings threshold. More broadly, these patterns point to underlying differences in employment quality, income levels, and contribution intensity across ethnic groups, beyond the initial pathway of reactivation. Across all ethnic groups, outcomes remain consistently lower for those reactivated through voluntary and mixed mechanisms, indicating that the mode of reactivation plays a critical role in shaping savings adequacy.

Gender differences are evident but less pronounced. Although women are more likely than men to reactivate through the voluntary mechanism, as established in Section 4.3, this does not translate into higher Basic Savings attainment under voluntary pathways. Men are more likely than women to meet Basic Savings under voluntary reactivation (11.0% compared with 6.6%) and mixed reactivation (7.8% compared with 5.5%). Under the mandatory mechanism, however, women record a slightly higher attainment rate than men (13.9% compared with 12.2%).

Age gradients are particularly strong. Younger members (aged below 30) show the highest likelihood of meeting Basic Savings when reactivated through the mandatory mechanism (21.2%), reflecting longer accumulation horizons and potentially stronger labour market reengagement. However, this advantage diminishes with age with rates declining to 10.6% among those aged 40–49 and 8.8% among those aged 50 and above. Across all age groups, members reactivated through voluntary and mixed mechanisms exhibit consistently lower attainment, underscoring the challenges of accumulating sufficient savings outside formal employment structures.

Taken together, these findings highlight that the quality of reactivation, proxied by the mechanism through which members return to active status, plays a critical role in shaping long-term savings outcomes. While voluntary pathways play an important role in supporting savings accumulation following reactivation, particularly among members outside formal employment, savings outcomes remain weaker relative to mandatory contributions.

From a policy perspective, this suggests that facilitating reactivation alone may be insufficient to ensure retirement adequacy. Strengthening contribution intensity and consistency among reactivated members, particularly those relying on voluntary mechanisms, remains critical to improving long-term savings outcomes.

Section 5

Discussion and Conclusion

The findings of this study suggest that patterns of contribution activity within the EPF scheme are closely linked to labour market conditions. Transitions into inactivity, the persistence of inactivity and subsequent reactivation are shaped by employment continuity, income stability and access to contribution mechanisms. These patterns are therefore better understood as reflecting differences in labour market attachment and contribution arrangements, rather than simply disengagement from labour market or retirement saving.

Viewed through contribution behaviour, inactivity emerges as a heterogeneous state ranging from temporary interruptions to prolonged or persistent inactivity. A substantial number of members move in and out of contribution activity over time, reflecting variation in labour market attachment, employment continuity and access to contribution mechanism. These patterns suggest that contribution continuity is shaped not only by individual decisions, but also structural constraints and the design of the contributory system.

This section discusses the implications of these findings, focusing on how labour market dynamics and institutional features jointly shape contribution participation and continuity over time.

5.1. Labour Market Participation and Retirement Saving

The findings of this study highlight the close relationship between labour market participation and engagement with contributory retirement scheme. Contribution activity within the EPF is closely tied to employment continuity, with participation shaped by transitions into and out of different employment arrangements.

First, contribution inconsistency is widespread and reflects the fragmented nature of many workers' labour market trajectories. A substantial share of members experience interruptions in contribution activity, particularly those at the margins of stable employment. These patterns indicate that contribution gaps are not isolated events but a common feature of participation under conditions of employment volatility.

Second, inactivity often becomes persistent once disengagement occurs. Many members remain inactive for extended periods and the likelihood of reactivation declines as inactivity persists. This suggests that early interruptions in contribution activity can lead to prolonged disengagement, highlighting the importance of engaging with those members before inactivity becomes entrenched.

Third, voluntary contribution mechanisms provide an important complementary pathway for participation among workers outside standard formal employment arrangements. Reactivation patterns indicate that members do re-engage with the EPF scheme following periods of inactivity, including through non-mandatory mechanisms. This reflects continued engagement with retirement saving despite irregular or absent employment and income.

However, the scale of voluntary participation remains modest relative to the dominant role of mandatory contributions associated with formal employment. While voluntary mechanisms support partial continuity, they do not fully offset the effects of employment instability on contribution participation. As a result, sustained engagement with the retirement savings scheme continues to depend on stable attachment to formal employment.

5.2. Policy Considerations

The findings carry several important implications for the design of contributory retirement scheme in increasingly fragmented labour markets.

First, inactivity should be reframed as a coverage risk rather than a compliance failure. Contribution gaps often arise from labour market disruptions, including job loss, beyond formal employment and income volatility, and are not solely driven by individual choices. Policy responses should therefore focus on supporting continued participation during periods of transitions, rather than expecting uninterrupted contributions.

Second, early intervention is critical. The strong relationship between inactivity duration and the likelihood of reactivation suggests that preventing prolonged disengagement should be an important priority. Supporting members at the point of initial exit, particularly during early and mid-career stages, may help strengthen long-term participation continuity and retirement savings outcomes.

Third, policy design should support both regular and occasional contributions. Evidence from voluntary contribution mechanisms suggests that saving behaviour is shaped by financial circumstances and incentive structures. The observed clustering of contributions around incentive thresholds indicates that contribution behaviour may be responsive to facility design and policy incentives. Rather than assuming continuous contribution capacity, product design should recognise that contribution patterns may be irregular, particularly among members with volatile or non-standard income arrangements. In this context, the flexibility of contribution mechanisms and incentive structures remain important in supporting continued engagement with retirement saving schemes among members with irregular or fluctuating income patterns.

Fourth, voluntary contribution mechanisms should be strengthened but not treated as stand-alone solutions. While mechanisms such as i-Saraan play an important role in facilitating reactivation, particularly among workers outside formal employment, their effectivenes would remain closely shaped by income stability and labour market conditions. Strengthening their long-term effectiveness therefore requires integrating them within a broader coverage strategy that addresses structural employment constraints and support continued participation across different forms of work. This may be complemented by behavioural nudges and targeted financial education initiatives to encourage more consistent participation.

Fifth, regulatory approaches to expanding coverage warrant greater consideration. The strong association between mandatory contribution mechanisms and sustained participation suggests that extending elements of compulsory or default-based contributions beyond formal employment arrangements may help reduce coverage gaps. This is particularly relevant for workers in beyond formal or other non-standard employment arrangements, where reliance on voluntary participation alone has proven to be insufficient to sustain contribution continuity. Policy options could include simplified contribution mechanisms, platform-based integration, or hybrid models that combine flexibility with default participation, while taking into account income variability and enforcement feasibility.

Finally, policy should be grounded in a transition-based understanding of participation. Rather than viewing inactivity as a static condition, participation should be understood as dynamic, shaped by movements into and out of economic activity over time. Longitudinal data on contribution activity provide valuable insights into entry, persistence, and reactivation patterns. Leveraging such data may support more targeted and timely interventions, shifting from reactive management of inactive members to proactive strategies that prioritise continuity and resilience. In parallel, active labour market policies such as job search and matching services, skills and development programmes and employment incentives can facilitate labour market reintegration, which in turn support contribution continuity.

5.3. Conclusion

This study provides a longitudinal perspective on contribution participation within the EPF scheme, demonstrating that labour market transitions play a central role in shaping retirement saving outcomes. By moving beyond static measures of participation, the analysis highlights the importance of understanding how individuals participate in, temporarily disengage from and later return to contributory systems over time.

The findings show that contribution inconsistency is common and often persistent. Reactivation is possible but it declines with prolonged disengagement. Contribution patterns also vary significantly depending on employment conditions and reactivation pathways. While voluntary mechanisms have expanded opportunities for re-engagement, they are associated with more irregular contribution patterns and weaker savings outcomes compared to mandatory contributions.

Overall, the findings indicate that many members experience intermittent periods of inactivity, which may contribute to weaker retirement savings outcomes over time. Ensuring adequate retirement savings will therefore require policies that not only expand access and facilitate reactivation, but also strengthen the consistency and sustainability of contributions, particularly among workers in informal and non-standard employment arrangements.

Appendix

Appendix A: Dataset Structure and Member Breakdown, 2016–2025

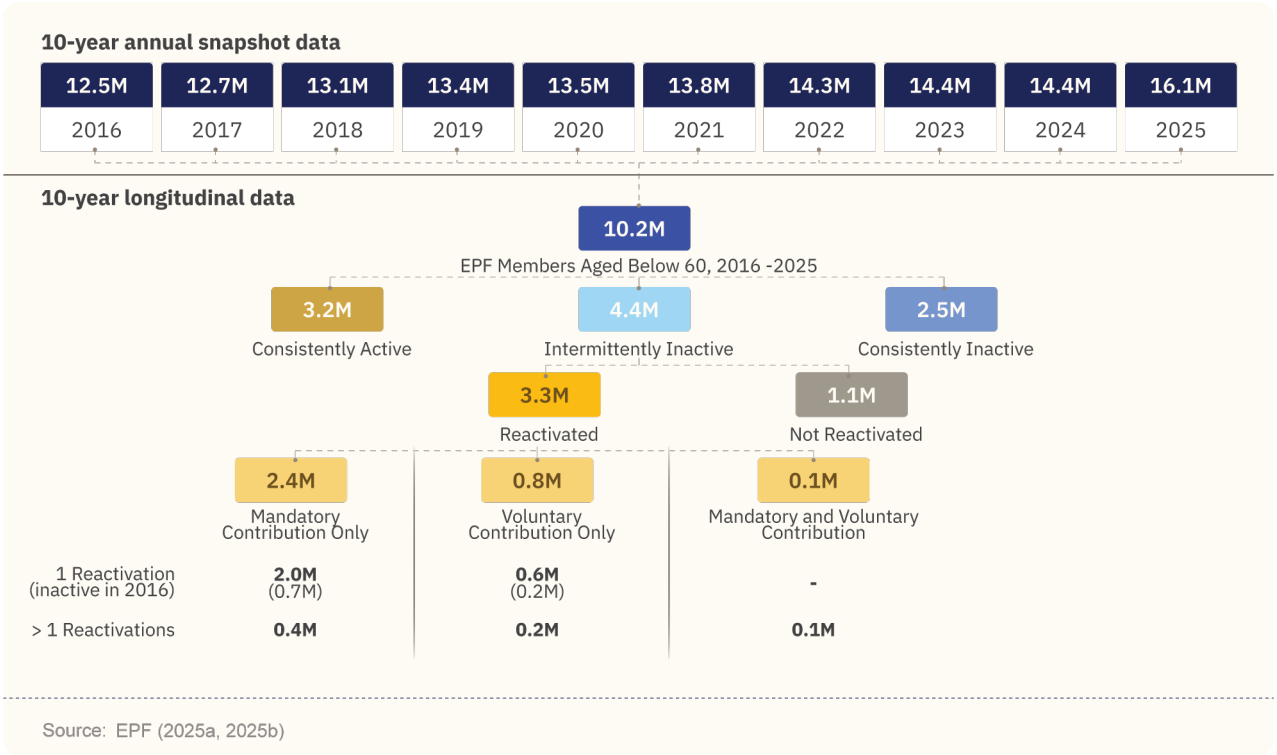
Figure A.1 summarises the analytical sample and key classifications underpinning the study. Over the 2016–2025 period, the annual snapshot dataset shows a steady expansion in EPF membership aged below 60, increasing from 12.5 million in 2016 to 16.1 million in 2025. Within this, the longitudinal panel focuses on 10.2 million members with a complete sequence of annual active/inactive status records over the ten-year period.

These members are categorised based on their contribution patterns over time. Approximately 3.3 million members (31.8%) remain consistently active throughout the period, while 2.5 million (24.7%) are consistently inactive. The largest group, comprising 4.4 million members (43.5%), exhibits intermittent participation, transitioning between active and inactive states at least once over the study horizon. This highlights the importance of adopting a longitudinal perspective, as a substantial share of members do not follow a stable contribution trajectory.

Among those with intermittent activity, 3.3 million members experience at least one reactivation episode, while 1.1 million remain inactive after their initial exit. Reactivation occurs predominantly through mandatory contribution mechanisms (2.4 million), followed by voluntary mechanisms (0.8 million), with a small proportion utilising a combination of both (0.1 million). Further disaggregation shows that the majority of reactivated members experience a single reactivation episode, although a non-negligible share moves in and out of activity multiple times.

Overall, the figure underscores both the scale of membership growth and the heterogeneity of contribution behaviour, reinforcing the need to distinguish between persistent inactivity and more fluid patterns of labour market attachment.

Figure A.1: Dataset structure and member breakdown, 2016–2025



Source: EPF (2025a, 2025b)

Appendix B: Demographic Distribution of the Longitudinal Panel

Table B.1 compares the demographic composition of the longitudinal panel with that of EPF members aged below 60 in both 2016 and 2025. The comparison with the 2016 population assesses how closely the longitudinal panel reflects the baseline population from which the panel was constructed, while the comparison with the 2025 population illustrates the compositional differences that emerge over the ten-year study period.

Overall, the longitudinal panel broadly reflects the base population, although some over- and underrepresentation is observed across demographic subgroups. These differences arise primarily from the balanced panel design, which includes only members whose active or inactive status could be consistently observed throughout the full 2016–2025 period.

In particular, members aged 50–59 are underrepresented in the longitudinal panel. This reflects the study design, whereby only members who remained below 60 throughout the study period and were observed across all years were retained in the longitudinal sample. As the panel extends to 2025, the oldest members included are aged 59 in the final year, implying that only members aged below 51 in 2016 could be observed across the full study period.

Similarly, members who first registered with the EPF after 2016 are excluded because they were not observed from the beginning of the study period. As these new entrants are disproportionately concentrated in younger age groups, the comparison with the 2025 population shows a modest underrepresentation of younger cohorts relative to the overall EPF membership.

Overall, the differences observed between the longitudinal panel and the 2025 population are expected consequences of the balanced panel design rather than indications of systematic sampling bias. Despite these compositional differences, the longitudinal panel remains broadly representative of the underlying member population for analysing transitions in contribution activities over time.

Table B.1: Comparison of the demographic composition of the longitudinal panel with EPF members aged below 60 in 2016 and 2025

		Longitudinal Panel [A] (%)	EPF Members Below 60 Population 2016 [B] (%)	Point difference [A] - [B]	EPF Members Below 60 Population 2025 [C] (%)	Point difference [A] - [C]
Gender	Male	52.4	53.1	-0.7	55.1	-2.7
	Female	47.6	46.9	0.7	44.9	2.7
Age	Below 20	3.5	2.9	0.6	2.0	1.5
	20-29	34.5	29.6	4.9	27.1	7.4
	30-39	34.3	29.3	5.0	30.0	4.3
	40-49	25.7	23.7	2.0	24.1	1.5
	50-59	2.0	14.5	-12.5	16.8	-14.7
Ethnicity	Malay	52.5	50.8	1.7	48.9	3.6
	Chinese	26.6	27.1	-0.5	22.6	4.0
	Indian	8.1	8.3	-0.2	7.2	0.9
	Bumiputera Others	10.2	9.8	0.4	10.0	0.2
	Others	2.6	4.0	-1.4	11.2	-8.7
Status	Active	52.7	53.6	-0.9	62.9	-10.2
	Inactive	47.3	46.4	0.9	37.1	10.2

Source: EPF (2025a, 2025b)

Appendix C: Exclusion of Cancelled and Dormant Account Members

The balanced longitudinal panel described in Appendix A was constructed to follow the same members consistently over the 2016–2025 period. The final panel comprises 10.2 million members. However, not all members could be continuously `observed throughout the study period or have their contribution trajectories consistently classified.

As discussed in Section 1, this mainly concerns members whose accounts were cancelled or became dormant at one or more points during the study period. Cancelled accounts refer to accounts closed following full withdrawals, typically due to death or leaving the country. Dormant accounts refer to accounts with zero balances arising from various circumstances, including full withdrawals at age 55 or 60, pension withdrawals, incapacitation withdrawals, and other forms of complete account depletion. Dormant members may subsequently re-enter the system if contributions resume and positive balances are restored.

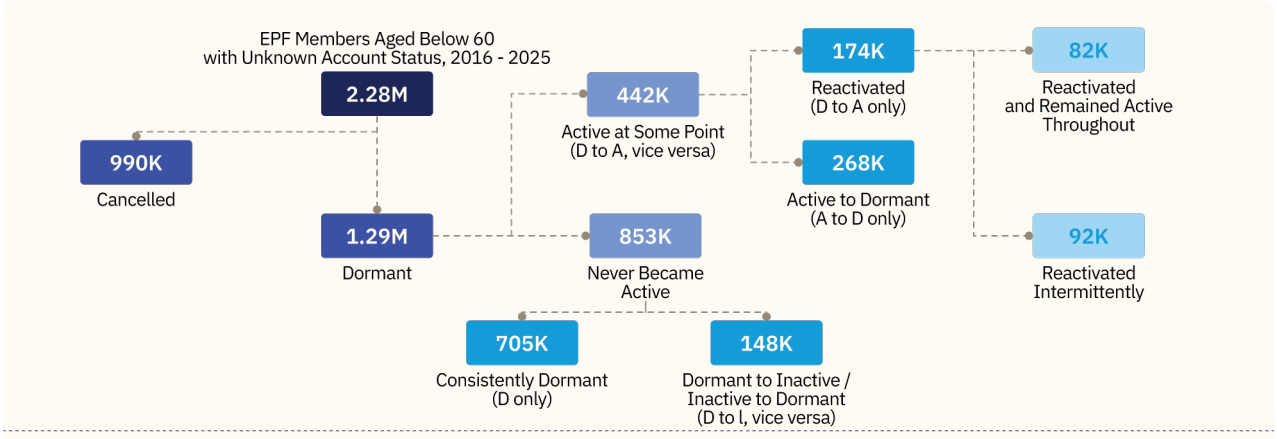
Figure C.1 shows that approximately 2.28 million members aged below 60 fell outside the final panel. Of these, nearly one million had cancelled accounts as of 2025. Given the permanent nature of account cancellation and the very low likelihood of future contribution activity, these members were excluded from the balanced panel.

Among the remaining 1.29 million members with dormant accounts, around 853,000 never recorded any active contribution status during the ten-year period. These members remained consistently dormant or transitioned only between dormant and inactive states without ever becoming active contributors. As the study examines contribution continuity and reactivation among participating members, individuals with no history of active contribution were excluded from the balanced panel.

The remaining 442,000 members recorded active contribution status at some point during the observation period. Of these, around 268,000 transitioned from active status to dormancy without subsequently re-entering the system, while approximately 174,000 experienced at least one reactivation episode. Among the latter, around 92,000 displayed intermittent movements between dormant and active statuses, whereas approximately 82,000 were reactivated and remained active thereafter.

Although these members exhibited meaningful contribution dynamics, their contribution histories were not fully observable across the entire 2016–2025 period. Including them would introduce unequal observation windows and bias measures of inactivity duration, episode, and reactivation patterns. They were therefore excluded from the balanced panel to preserve a longitudinal dataset comprising members with complete and continuously observable contribution histories throughout the study period.

Figure C.1: Composition of members excluded from the balanced longitudinal panel, 2016–2025



Source: EPF (2025a, 2025b)

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