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Light entrepreneurs in Finland

A longitudinal study of careers, income and pension accrual

Susanna Sten-Gahmberg and Aart-Jan Riekhoff

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Foreword

Light entrepreneurship has received much public attention in recent years. Despite this interest, however, there is a scarcity of information about the careers of light entrepreneurs. This is the first study to take a longitudinal perspective on the careers of light entrepreneurs. It shows that not only are light entrepreneurs a highly heterogeneous group, but they also have widely diverging careers.

This study has benefited from the input of several colleagues at the Finnish Centre for Pensions. Teija Lääväri and Päivi Johansson at the Supervisory Department have made the list of invoicing service companies available for our research and provided valuable insights into light entrepreneurship. Sampo Lappo and Jukka Lampi provided the data we needed on pension accrual and patiently answered our questions. Susan Kuivalainen, Ilari Ilmakunnas, Teija Lääväri, Päivi Johansson and Sampo Lappo offered constructive comments on our work. We wish to thank all of them for their help, feedback, and insights. We also thank the internal research seminar participants at the Finnish Centre for Pensions for their comments.

Susanna Sten-Gahmberg and Aart-Jan Riekhoff

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Summary

This study examines the development over time of light entrepreneurs' careers, income and pension accrual using Statistics Finland and Finnish Centre for Pensions register data for 2012–2022. First, we aim to identify who become light entrepreneurs and study the extent of light entrepreneurship in terms of continuity, regularity and income, and explore any changes in these in 2017–2022. Second, we study the career trajectories of light entrepreneurs in terms of transitions between different labour market states in the years prior to and after becoming a light entrepreneur using sequence analysis. Our focus is on those who started as light entrepreneurs in 2017. Lastly, we study how income and pension accrual evolve in the years prior to and after becoming a light entrepreneur. In this analysis we compare light entrepreneurs who started in 2017 with their peers within the same sociodemographic groups who were not light entrepreneurs in 2012–2022. The analyses in this study are descriptive, and the results cannot be interpreted as causal relationships between light entrepreneurship, employment, income, and pension accrual.

Light entrepreneurship: between salaried employment and self-employment?

Light entrepreneurship can be described as a form of work where the entrepreneur is a client of an invoicing service company. Invoicing service companies offer a range of services that help with the financial management of entrepreneurial activities, especially by invoicing clients on behalf of the entrepreneur. Light entrepreneurs are not required to establish a business and often receive payments as salary or trade income (*työkorvaus* in Finnish) from the invoicing service company. Light entrepreneurship is not an official employment status in Finnish law. Light entrepreneurs are either salaried employees or self-employed and treated as such in the pension insurance system. In public debate, however, light entrepreneurship is often presented as a form of employment in-between salaried employment and (solo) self-employment. It can be used to facilitate platform or gig work, but it is not platform work in and of itself as invoicing service companies do not usually offer gigs.

Light entrepreneurs are typically young, male, and increasingly born outside Finland

Light entrepreneurs are a heterogenous group, but they are more likely to be men and to be in their twenties and thirties. Light entrepreneurship is predominantly an urban phenomenon. In 2017 light entrepreneurs were relatively highly educated compared to the overall population, but in recent years the share of lower educated entrepreneurs has increased. The share of foreign-born among light entrepreneurs has grown considerably between 2017 and 2022, from around one in ten to around one in four. Still, most light entrepreneurs are males born in Finland.

Many enter light entrepreneurship each year, but few continue

The population of light entrepreneurs almost tripled from around 23,000 in 2017 to close to 68,000 in 2022. In each year, new entrants to light entrepreneurship made up around 40 to 50 per cent of the light entrepreneur population, indicating that light entrepreneurship often lasts for a short duration. Only 50 to 60 per cent of light entrepreneurs continue after one year. Only 22 per cent of those who started in 2017 were still active light entrepreneurs in 2022. Light entrepreneurs close to retirement age and, increasingly, immigrants were more likely to continue in light entrepreneurship. Those who were already employed as employees in the year of entry were less likely to continue.

Light entrepreneurs had rather good employment prospects as the share of those employed (as employees or self-employed) continued to grow after entry into light entrepreneurship and after quitting light entrepreneurship. Employment prospects were somewhat better for those with higher education and who were born in Finland.

Most light entrepreneurship is occasional

In 2022, the average light entrepreneur received payments in 4.2 months. 35 per cent of light entrepreneurs only received one payment from invoicing companies during the year, and 13 per cent received payments in 10 to 12 months. In general, older and foreign-born individuals received payments more often than others. There were only small gender differences among light entrepreneurs born in Finland, but among foreign-born light entrepreneurs males engaged in light entrepreneurship more frequently

than females. In most sociodemographic groups, the average number of months with payments has increased since 2019, especially after 2020. The increase has been particularly strong among foreign-born males.

Income from light entrepreneurship is low for most but for many accounts for an important share of earned income

In 2022, mean annual income from light entrepreneurship was EUR 7,058. The median was EUR 1,703, indicating that the income of most light entrepreneurs was considerably below the mean. On average, income from light entrepreneurship accounted for 39 per cent of annual earned income, and 21 per cent of light entrepreneurs had no other earned income recorded in the Incomes Register. Males, foreign-born and older individuals had on average higher income from light entrepreneurship, and their income from light entrepreneurship made up a larger share of their annual earned income.

Among foreign-born light entrepreneurs, income from light entrepreneurship has increased in 2017–2022 despite a dip in 2020, especially among males. Especially after 2020, light entrepreneurship income as a proportion of total earned income has increased among foreign-born male light entrepreneurs. Among foreign-born female light entrepreneurs and among Finnish-born light entrepreneurs irrespective of gender, the share of light entrepreneurship income has decreased after 2020.

Light entrepreneurs' varying career trajectories

Using sequence analysis, we study the labour market statuses of light entrepreneurs five years before entering light entrepreneurship and five years after entry. We observe weak or weakening labour market attachment before entry into light entrepreneurship. Unemployment increased in all sociodemographic groups. Among the younger cohorts, many were in education, whereas among young immigrants many were still residing abroad a few years before becoming light entrepreneurs. In the year of entry into light entrepreneurship, around 70 per cent were employed, 13 per cent were unemployed and smaller shares were students, pensioners, or something else. Starting as a light entrepreneur often marked the person's first entry into employment (either as an employee or self-employed), and employment levels remained stable in the years following the start of light entrepreneurship, albeit at different levels in different demographic and

socioeconomic groups. Transitions into self-employment were particularly common among foreign-born men, those with only primary education, and those with above median income. Light entrepreneurs' careers were relatively unstable as they made about three transitions between labour market statuses during the 11-year follow-up. Instability was highest among women born outside Finland and those with low or no earned income in 2012.

Income catches up after entry into light entrepreneurship

Growth in income from 2012 to 2021 among light entrepreneurs who started in 2017 is studied by comparing them with peers with the same sociodemographic characteristics but not light entrepreneurs in 2012–2022. Income is measured as the sum of taxable earned income and entrepreneurial income. Light entrepreneurs often had a lower income than their peers who were not light entrepreneurs in the years before entering light entrepreneurship. Light entrepreneurs also experienced slower income growth compared to their peers in these years, which could partly be explained by increasing unemployment in the same period.

In the years after entry into light entrepreneurship, light entrepreneurs experienced faster income growth than their peers, but there were differences between demographic and socioeconomic groups. Among light entrepreneurs born outside Finland, with a low level of education and whose income was missing or below the median in 2012, the gap in average income relative to the comparison population closed within four years after entering light entrepreneurship.

No increase in pension accrual parallel with income

The yearly pension accrual of light entrepreneurs decreased relative to their peers in the years leading up to entry into light entrepreneurship, which is in line with their income development. Despite the significant increases in income relative to the comparison group in the years after entry, there were no or only modest increases in yearly pension accrual of light entrepreneurs in the years after entry. Overall, our findings suggest that the income from light entrepreneurship is not fully YEL-insured, which was expected given that most income from light entrepreneurship is below the YEL insurance threshold.

A form of work that serves diverse needs but also raises pension policy concerns

Light entrepreneurship is still a relatively limited phenomenon, but it has gained significant traction in recent years. Our research shows that in many ways, it is a highly complex phenomenon. It attracts individuals from very different backgrounds, and it can be used to conduct very different types of work. While for some light entrepreneurship is an occasional way to top up their income, for others it means full-time employment. Our analyses show that light entrepreneurship is associated with positive outcomes, such as higher employment rates and income. This, however, does not translate into higher pension accrual, which may potentially weaken the social security of light entrepreneurs relative to their peers.

Tiivistelmä

Tutkimuksessa tarkastellaan Tilastokeskuksen ja Eläketurvakeskuksen vuosien 2012–2022 rekisteritietojen perusteella, miten kevytyrittäjien työurat, tulot ja eläkekertymät kehittyvät. Ensin tarkoituksenamme on tunnistaa kevytyrittäjiksi ryhtyvät ja tarkastella kevytyrittäjyyden laajuutta jatkuvuuden, säännöllisyyden ja tulojen kautta sekä tutkia näissä tapahtuneita muutoksia vuosina 2017–2022. Toiseksi tarkastelemme sekvenssianalyysin avulla kevytyrittäjien työurien kehitystä, eli miten kevytyrittäjät ovat liikkuneet eri työmarkkina-asemien välillä ennen kevytyrittäjäksi ryhtymistä ja sen jälkeen. Keskitymme vuonna 2017 kevytyrittäjiksi ryhtyneisiin. Lopuksi tarkastelemme tulojen ja eläkekertymän kehitystä ennen kevytyrittäjäksi ryhtymistä ja sen jälkeen. Tässä analyysissä vertaamme vuonna 2017 aloittaneita kevytyrittäjiä samoihin sosiodemografisiin ryhmiin kuuluviin henkilöihin, jotka eivät olleet kevytyrittäjiä vuosina 2012–2022. Tämän tutkimuksen analyysit ovat kuvailevia eikä tuloksia voi tulkita kevytyrittäjyyden, työllisyyden, tulojen ja eläkekertymien välisiksi syy-yhteyksiksi.

Kevytyrittäjyys: palkkatyön ja yrittäjyyden välimuoto?

Kevytyrittäjyyttä voidaan kuvata sellaiseksi työn tekemisen muodoksi, jossa työnsuorittaja on laskutuspalveluyrityksen asiakas. Laskutuspalveluyritykset tarjoavat palveluja, jotka helpottavat taloushallintoa, erityisesti laskutusta. Työnsuorittajilta, ns. kevytyrittäjiltä, ei vaadita yrityksen perustamista, ja he saavat usein maksusuorituksia palkkana tai työkorvauksena laskutuspalveluyritykseltä. Kevytyrittäjyys ei Suomen lainsäädännön mukaan ole virallinen työmarkkina-asema. Kevytyrittäjät ovat joko työsuhteessa olevia työntekijöitä tai yrittäjiä, ja eläkejärjestelmässä heitä kohdellaan sen mukaan. Julkisessa keskustelussa kevytyrittäjyyttä sen sijaan kuvataan usein palkkatyön ja (yksin)yrittäjyyden välimuotona. Sitä voidaan käyttää alusta- tai keikkatyöhön, mutta se ei itsessään ole alustatyötä, koska laskutuspalveluyritykset eivät tavallisesti välitä keikkatyötä.

Kevytyrittäjät ovat tyypillisesti nuoria, miehiä ja enenevässä määrin muualla kuin Suomessa syntyneitä

Kevytyrittäjät ovat heterogeeninen ryhmä, mutta he ovat todennäköisemmin miehiä ja iältään 20–40-vuotiaita. Kevytyrittäjyys on ennen kaikkea urbaani ilmiö. Vuonna 2017 kevytyrittäjät olivat suhteellisen hyvin koulutettuja koko väestöön verrattuna, mutta viime vuosina matalammin koulutettujen osuus on kasvanut. Ulkomailla syntyneiden osuus kevytyrittäjistä on kasvanut huomattavasti vuosien 2017 ja 2022 välillä, noin joka kymmenennestä noin joka neljänteen. Siltikin useimmat kevytyrittäjät ovat Suomessa syntyneitä miehiä.

Vuosittain moni aloittaa kevytyrittäjänä, mutta harva jatkaa

Kevytyrittäjien määrä lähes kolminkertaistui vuosien 2017 ja 2022 välillä, 23 000 henkilöstä lähes 68 000 henkilöön. Kunakin vuonna uusien kevytyrittäjien osuus kaikista oli noin 40–50 prosenttia, mikä viittaa siihen, että kevytyrittäjyys usein on lyhytaikaista. Vain 50–60 prosenttia kevytyrittäjistä jatkaa vielä vuoden kuluttua aloittamisesta. Ainoastaan 22 prosenttia vuonna 2017 aloittaneista oli aktiivisia kevytyrittäjiä vielä vuonna 2022. Eläkeikää lähestyvät ja kasvavassa määrin maahanmuuttajat jatkoivat muita todennäköisemmin kevytyrittäjänä toimimista. Ne, jotka aloittamisvuonnaan olivat jo työsuhteessa, olivat epätodennäköisempiä jatkajia.

Kevytyrittäjillä oli melko hyvät työllistymisnäkymät, sillä työllisten (joko työsuhteessa tai yrittäjinä työskentelevien) osuus jatkoi kasvuaan kevytyrittäjänä aloittamisen ja kevytyrittäjyyden jättämisen jälkeen. Korkeammin koulutettujen ja Suomessa syntyneiden työllistymisnäkymät olivat jonkin verran muita paremmat.

Kevytyrittäjyys on useimmiten tilapäistä

Vuonna 2022 keskimääräinen kevytyrittäjä sai maksusuorituksia 4,2 kuukauden aikana. Kevytyrittäjistä 35 prosenttia sai vain yhden maksusuorituksen laskutuspalveluyrityksiltä vuoden aikana, ja 13 prosenttia sai maksusuorituksia 10–12 kuukautena. Yleisesti ottaen vanhemmat ja ulkomailla syntyneet kevytyrittäjät saivat maksusuorituksia muita useammin. Suomessa syntyneiden kevytyrittäjien joukossa sukupuolierot olivat pieniä, mutta ulkomailla syntyneistä kevytyrittäjistä miehet saivat maksusuorituksia useammin kuin naiset. Useimmissa sosiodemografisissa

ryhmissä keskimääräinen maksusuorituskuukausien määrä on noussut vuodesta 2019, erityisesti vuoden 2020 jälkeen. Kasvu on ollut erityisen voimakasta ulkomailla syntyneiden miesten joukossa.

Kevytyrittäjyydestä saatavat tulot ovat useimmilla pieniä, mutta monen ansiotuloista ne ovat tärkeä osa

Vuonna 2022 keskimääräinen vuositulo kevytyrittäjyydestä oli 7 058 euroa. Mediaani oli 1 703 euroa, mikä viittaa siihen, että useimpien kevytyrittäjien tulot olivat huomattavasti keskiarvoa alhaisemmat. Keskimäärin kevytyrittäjyydestä saadut ansiot muodostivat 39 prosenttia vuoden ansiotuloista, ja 21 prosentilla kevytyrittäjistä ei Tulorekisterin mukaan ollut muuta ansiotuloa. Miesten, ulkomailla syntyneiden ja iäkkäämpien henkilöiden kevytyrittäjyydestä saamat tulot olivat keskimäärin korkeammat ja muodostivat suuremman osuuden heidän vuosittaisesta ansiotulostaan.

Ulkomailla syntyneiden kevytyrittäjien, erityisesti miesten, kevytyrittäjyydestä saamat tulot kasvoivat vuosina 2017–2022, huolimatta vuonna 2020 tapahtuneesta pudotuksesta. Varsinkin vuoden 2020 jälkeen kevytyrittäjyydestä saatujen tulojen osuus kaikista ansiotuloista on kasvanut ulkomailla syntyneiden miespuolisten kevytyrittäjien keskuudessa. Ulkomailla syntyneillä naispuolisilla kevytyrittäjillä ja Suomessa syntyneillä kevytyrittäjillä – sekä miehillä että naisilla – kevytyrittäjyydestä saadut tulot ovat vähentyneet vuoden 2020 jälkeen.

Kevytyrittäjien vaihtelevat työurat

Tarkastelemme sekvenssianalyysin avulla kevytyrittäjien työmarkkina-asemia viisi vuotta ennen kevytyrittäjyyden alkua ja viisi vuotta sen jälkeen. Havaintojen mukaan ennen kevytyrittäjyyttä työmarkkinoille kiinnittyminen on ollut heikkoa tai heikentynyt. Työttömyys lisääntyi kaikissa sosiodemografisissa ryhmissä. Nuoremmissa ikäluokissa monet opiskelivat, kun taas monet nuoremmista maahanmuuttajista asuivat vielä ulkomailla muutamaa vuotta ennen kevytyrittäjyyden alkua. Kevytyrittäjyyden alkamisvuonna noin 70 prosenttia oli työllisiä, 13 prosenttia työttömiä ja näitä pienemmät osuudet olivat opiskelijoita, eläkeläisiä tai muita.

Kevytyrittäjyys oli usein henkilön ensimmäinen askel työmarkkinoilla, toisin sanoen ensimmäinen työ (työntekijänä tai yrittäjänä). Työllisyysasteet pysyivät vakaina kevytyrittäjyyden aloittamisvuotta seuraavina

vuosina, tosin eri tasoilla eri väestö- ja sosioekonomisissa ryhmissä. Siirtyminen yrittäjäksi oli erityisen yleistä ulkomailla syntyneiden miesten, perusasteen koulutuksen omaavien ja niiden joukossa, joiden tulot ylittivät mediaanin. Kevytyrittäjien työurat olivat suhteellisen epävakaita, sillä heidän työmarkkina-asemansa vaihtui noin kolme kertaa 11 vuoden seurannan aikana. Suurinta epävakaus oli ulkomailla syntyneillä naisilla sekä niillä, joilla vuonna 2012 oli alhaiset ansiotulot tai ei lainkaan ansiotuloja.

Tulot kasvavat kevytyrittäjäksi ryhtymisen jälkeen

Vuonna 2017 aloittaneiden kevytyrittäjien tulojen kasvua vuosien 2012 ja 2021 välillä tarkasteltiin vertaamalla heitä henkilöihin, joilla oli samat sosiodemografiset ominaisuudet, mutta jotka eivät olleet kevytyrittäjiä vuosina 2012–2022. Tuloja mitattiin verotettavan ansiotulon ja yrittäjätulon summana. Ennen kevytyrittäjyyden alkua kevytyrittäjillä oli usein pienemmät tulot kuin niillä, jotka eivät olleet kevytyrittäjiä. Kevytyrittäjien tulot myös kasvoivat näinä vuosina hitaammin kuin muilla, mikä saattaa osittain selittyä työttömyyden samanaikaisella kasvulla.

Kevytyrittäjyyden alkamista seuraavina vuosina kevytyrittäjien tulot kasvoivat nopeammin kuin vertailuryhmän, mutta väestöryhmien ja sosioekonomisten ryhmien välillä oli eroja. Suomen ulkopuolella syntyneiden, matalan koulutustason omaavien sekä niiden, joilla vuonna 2012 ei ollut tuloja tai tulot alittivat mediaanin, keskiansioiden ero vertailuryhmään hälveni neljän vuoden kuluessa kevytyrittäjyyden alkamisesta.

Eläkekertymä ei kasvanut tulojen mukaisesti

Kevytyrittäjien vuosittainen eläkekertymä pieneni suhteessa vertailuryhmään kevytyrittäjyyttä edeltävinä vuosina, mikä on luonnollista ottaen huomioon heidän tulokehityksensä. Siitä huolimatta, että kevytyrittäjien tulot kasvoivat merkittävästi suhteessa vertailuryhmään kevytyrittäjäksi ryhtymistä seuraavina vuosina, kevytyrittäjien eläkekertymä ei kasvanut tai kasvoi vain vaatimattomasti tuona aikana. Kaikkiaan tulokset viittaavat siihen, että kaikkia kevytyrittäjyydestä saatuja ansioita ei ole YEL-vakuutettu, mikä on odotettavissa, kun ottaa huomioon, että useimpien kevytyrittäjyydestä saamat tulot jäävät YEL-vakuutuksen alarajan alle.

Erilaisia tarpeita palveleva, mutta myös eläkepoliittista huolta aiheuttava työn muoto

Kevytyrittäjyys on edelleen melko rajallinen ilmiö, mutta se on yleistynyt merkittävästi viime vuosina. Tutkimuksemme osoittaa, että se on ilmiönä monella tapaa kompleksinen. Se houkuttelee hyvin erilaisista taustoista tulevia henkilöitä ja sitä voidaan käyttää hyvin monenlaisiin töihin. Joillekuille kevytyrittäjyys on satunnainen tapa saada lisäansioita, kun taas toisille se on kokopäivätyö. Analyysimme osoittavat, että kevytyrittäjyyteen liittyy myönteisiä piirteitä, kuten työllisyyden ja tulojen kasvu. Tämä ei kuitenkaan johda suurempiin eläkekertymiin, mikä mahdollisesti voi heikentää kevytyrittäjien sosiaaliturvaa muihin verrattuna.

Contents

Foreword 5

Summary 6

Tiivistelmä 11

1 Introduction 18

2 What is light entrepreneurship? 20

2.1 Invoicing service companies 20
2.2 Previous studies on light entrepreneurs 21
2.3 The nature of light entrepreneurship 22
2.3.1 Comparisons with solo self-employment and platform work 22
2.3.2 Topping-up, incubators, stepping stones, or traps 23
2.3.3 The need for longitudinal research 25
2.4 Pensions of light entrepreneurs 25

3 Data and methods 28

3.1 Data 28
3.1.1 Identification of light entrepreneurs 29
3.1.2 Income from light entrepreneurship 30
3.1.3 Total taxable income 31
3.1.4 Pension accrual 31
3.1.5 Labour market status and sociodemographic characteristics 32
3.2 Methods 33

4 Changes in characteristics, stocks, flows, and employment over time 35

4.1 Growth in light entrepreneurship 35
4.2 Sociodemographic characteristics of light entrepreneurs 36

4.3 Entry into light entrepreneurship 41
4.4 Survival in light entrepreneurship 43
4.5 Light entrepreneurship as a bridge to employment 46
4.6 After light entrepreneurship 50

5 Scope of light entrepreneurship 54

5.1 Regularity of light entrepreneurship 54
5.2 Income from light entrepreneurship 58

6 Career trajectories 65

6.1 Transitions between labour market statuses 65
6.2 Career trajectories by sociodemographic groups 70
6.2.1 Finnish-born light entrepreneurs 70
6.2.2 Foreign-born light entrepreneurs 73
6.3 Employment trends in the comparison groups 76
6.4 Differences by level of education and income 77

7 Income growth of light entrepreneurs 81

7.1 Income growth by age group 82
7.2 Income growth by birth country and gender 83
7.3 Income growth by socioeconomic characteristics 86

8 Pension accrual 91

8.1 Pension accrual by age group 92
8.2 Pension accrual by birth country and gender 93
8.3 Pension accrual by socioeconomic characteristics 96

9 Discussion and conclusion 99

9.1 Main results 99
9.2 Discussion 103
9.3 Limitations 106
9.4 Conclusion 108

References 109

Appendix 114

1 Introduction

Digitalization, shifts in the labour market, and changes in people's skills and preferences about how and when to work have all contributed to change the landscape of working life (Alasoini et al., 2022). New forms of work have emerged alongside wage employment and entrepreneurship. In Finland, this has mainly involved increased self-employment through invoicing service companies (in Finnish *laskutuspalveluyritys*), or what the invoicing service industry terms light entrepreneurship (in Finnish *kevytyrittäjyys*). This is a form of employment that allows individuals to work as entrepreneurs without having to set up their own business.

The number of light entrepreneurs has increased rapidly in recent years. In 2021 *Uusi työ ry*, an organization that represents the five largest invoicing service companies in Finland, had over 217,000 registered users (Uusi työ ry and Kantar TNS, 2021), up from 85 000 in 2017. Not all of these registered users are active, however. In 2021, around 55,000 individuals received earnings from 54 identified invoicing service companies (Hannula & Jylhämäki, 2022), compared to 5,000 individuals in 2012 (Kotiranta & Sannikka, 2020).

The empirical evidence to date (summarised in section 2.2) suggests that light entrepreneurs are a mixed crowd. On the one hand, light entrepreneurship provides an opportunity for professionals to make some extra income on the side of their day job, studies, retirement, or to test their wings as an entrepreneur. On the other hand, there are indications that a non-negligible share of light entrepreneurs has a weaker labour force attachment and may be more vulnerable in terms of employment protection and social security compared to wage earners and entrepreneurs. Examples of so-called forced or quasi entrepreneurship where (often immigrant) workers are offered no choice but to become light entrepreneurs, have been seen especially in the construction sector (Grey economy & economic crime, 2022; Hellsten, 2021). In such cases, light entrepreneurs may not always fully understand the consequences of being self-employed instead of a salaried employee. Another group that includes light entrepreneurs and the adequacy of whose social security has been questioned is that of food couriers (Perkiö, Mbare, Svynarenko, Kokkonen, & Koivusalo, 2023).

The existing research on light entrepreneurs is cross-sectional, focusing on data for one given year at a time. Therefore, we know little about what being a light entrepreneur means for the individual in the longer run, in terms of career and income development, social security and pension accrual.

In this study, we use national administrative register data to provide a more in-depth examination of the careers of light entrepreneurs. We identify light entrepreneurs in 2017–2022 but collect data from the period 2012–2022, which allows us to follow light entrepreneurs over time, even before their entry into light entrepreneurship. We also collect data for individuals who are not light entrepreneurs, allowing us to compare light entrepreneurs with relevant risk populations.

The study is structured as follows. In Chapter 2, we present the institutional setting of light entrepreneurship, define central concepts and summarise previous research on light entrepreneurs. In Chapter 3, we describe the data and methods used in this study. The results are presented in five chapters. In Chapter 4, we shortly describe the background of light entrepreneurs, survey their stocks and flows in terms of entry, survival and exit, and analyse their employment prospects. In Chapter 5, we use monthly data on income from invoicing services to analyse the scope and regularity of light entrepreneurship. Additionally, we describe how income from light entrepreneurship is distributed. In Chapter 6, we use sequence analysis to study the career trajectories of light entrepreneurs in the years before and after they become light entrepreneurs. In Chapter 7, we compare the development of light entrepreneurs' income with that of other groups who are not light entrepreneurs. Chapter 8 uses the same framework to study the pension accrual of light entrepreneurs. Chapter 9 summarises and discusses the results of the study.

2 What is light entrepreneurship?

In this chapter we describe what and who light entrepreneurs are and what is known about them from previous research. Since light entrepreneurship is a relatively new phenomenon and the term appears to be exclusive to Finland, we compare it with similar forms of nonstandard employment that have been emerging in recent years to gain a better understanding of their similarities and particularities. Finally, since light entrepreneurship is largely concentrated among younger cohorts and it will not be possible to study its impact on retirement and pensions for decades to come, we will use existing literature on the retirement planning and savings of the self-employed to formulate some expectations about the pension accrual of light entrepreneurs.

2.1 Invoicing service companies

We define and identify light entrepreneurs as clients of invoicing service companies. These invoicing service companies, sometimes called light entrepreneurship services, offer a range of services that help with the financial management of entrepreneurial activities, especially by invoicing clients on behalf of the light entrepreneur. If they use an invoicing service company, light entrepreneurs do not need a business ID (in Finnish: *Y-tunnus*), especially if the work they do is on a part-time, occasional, or freelance basis. In such cases, invoicing service companies often pay a salary to light entrepreneurs, deducting a fee for its services.

Light entrepreneurs can also work with a business ID. Some invoicing service companies offer them assistance in obtaining one. Light entrepreneurs with a business ID usually have more extensive entrepreneurial activities that involve a heavier administrative burden, different tax regulations and possibly the obligation to take out pension insurance for self-employed persons (in Finnish: *yrittäjän eläkelaki, YEL)*.[1] Instead of being paid a salary by the invoicing service company, the light

1 Regardless of whether they have a business ID, light entrepreneurs are obliged to take out YEL pension insurance if their entrepreneurial income exceeds a certain limit (EUR 9,010 in 2024) and if their entrepreneurial activities last more than four months.

entrepreneur with a business ID earns an entrepreneurial income based on invoicing their clients through the invoicing service company. In these cases the invoicing service company will typically charge a certain fee on the invoiced amounts.

2.2 Previous studies on light entrepreneurs

The characteristics of light entrepreneurs are described in several recent reports. Based on these studies we know that most light entrepreneurs are in their twenties or thirties. The majority are men, although the share of females has been rising until 2018 (Pukkinen, Stenholm, Heinonen, Naumanen, & Vainikainen, 2023; Kotiranta & Sannikka, 2020). Almost half of them resided in the capital region, and they were more likely to be foreign nationals (10 per cent) compared to the workforce as a whole (4 per cent) in 2018 (Kotiranta & Sannikka, 2020). The group of foreign-born light entrepreneurs in particular has grown strongly in recent years (Pukkinen et al., 2023).

Younger light entrepreneurs more often have only primary or secondary education, while tertiary degrees are relatively more common among older light entrepreneurs (Salonen, 2020). The group of lower-educated light entrepreneurs has been growing (Pukkinen et al., 2023). Light entrepreneurs often have a background in technical or general education or have completed an education in arts and humanities. Their occupational background is varied. Practical jobs such as sellers, cleaners, drivers and carpenters are common, but many also work in creative occupations as advertising experts, graphic designers, teachers and software designers (Pukkinen et al., 2023; Salonen, 2020).

Most light entrepreneurs earn relatively small amounts through invoicing services. In 2018 almost 80 per cent of light entrepreneurs earned less than EUR 5,000 through invoicing services, but average yearly earnings have increased from EUR 3,000 in 2012 to EUR 5,000 in 2018. Almost 80 per cent had other wage earnings in 2018. 30 per cent received unemployment benefits and about 30 per cent received other benefits such as sickness or study benefits, or childcare allowance (Kotiranta & Sannikka, 2020). Pukkinen et al. (2023) found large differences in income from invoicing services by gender, age, immigrant status, and educational level and field.

Light entrepreneurship often lasts for relatively short periods. Pukkinen et al. (2023) found that only around half of those who were light entrepreneurs in one year continued in light entrepreneurship the next year. Only around one-third of those who were light entrepreneurs in 2019 were still observed as light entrepreneurs three years later.

2.3 The nature of light entrepreneurship

2.3.1 Comparisons with solo self-employment and platform work

Given our limited knowledge about light entrepreneurship, it can be useful to compare it with similar forms of nonstandard work that have increased in recent years, particularly solo self-employment and platform or gig work.

While light entrepreneurship often resembles solo self-employment, that is, being self-employed without personnel, there are some notable differences. As discussed earlier, we identify light entrepreneurs as those who use invoicing service companies to bill their customers. They may be persons who qualify as self-employed, but they can also be in salaried employment or have no other income from work (see Chapters 4 and 5). At the same time, many self-employed persons without personnel and with only limited income from self-employment do not use invoicing service companies.

Light entrepreneurship is not recognized as an official employment status in labour market surveys or administrative data, whereas (solo) self-employment usually is. Statistics Finland register data identifies self-employed persons based on their YEL pension insurance and the share of income from wages and/or entrepreneurship. YEL pension insurance is mandatory only if self-employment lasts for at least four months and annual income from self-employment exceeds EUR 9,010 (in 2024). Therefore, since income from light entrepreneurship often remains below this threshold and does not require YEL insurance, many light entrepreneurs are not identified in the data as self-employed (see Chapters 5 and 7).

Light entrepreneurship is sometimes used synonymously with platform and gig work. While there are similarities and there is overlap, there are some key differences. Platform work, as diverse as it is, is usually conducted through some digital infrastructure (labour platform) that plays a role

in assigning projects or "gigs" to workers. Invoicing service companies do not usually offer or assign work but provide services in invoicing and administration. However, the operations of labour platforms and customer invoicing companies can be strongly interlinked, as most labour platforms do not employ their workers but require them to be self-employed. For example, some food delivery platforms have recommended that their workers invoice their work through invoicing service companies.

2.3.2 Topping-up, incubators, stepping stones, or traps

Comparisons with solo self-employment and gig work can also provide insight into the reasons for becoming a light entrepreneur. Similar to solo self-employment and gig work, light entrepreneurship is often a means to top up existing income, occasionally or more permanently (Boeri, Giupponi, Krueger, & Machin, 2020; Ilsøe, Larsen, & Bach, 2021). In this regard, these forms of work are part of a growing trend towards multiple job holdings in the labour market. People might use these more flexible forms of employment out of necessity, i.e., when their income from a single job is not enough to make ends meet, or as a way to pursue additional income from activities they enjoy doing besides a regular job (Kauhanen, 2021).

A common perspective on these forms of employment is that, because of their inherent flexibility and attractiveness to people with certain skills and preferences for greater risk, they can serve as "incubators for entrepreneurialism" (Boeri et al., 2020; Vallas & Schor, 2020). It is thought that removing the costs of employment protection, social security obligations, bureaucratic firm structures and, in the case of platforms, lowering transaction costs and promoting sharing can foster new and more innovative ways of working. Moreover, light entrepreneurship is sometimes promoted as a way of "testing one's wings as an entrepreneur", suggesting that it might lead to more permanent entrepreneurship (Uusi työ ry, 2024). The increasing share of higher educated among the solo self-employed may reflect growing preferences for flexibility and entrepreneurship among skilled workers (van Stel & van der Zwan, 2020).

Another perspective is that light entrepreneurship, like other forms of nonstandard employment, can serve as a bridge or stepping stone towards regular employment (Mattijssen, Pavlopoulos, & Smits, 2020). From this perspective, light entrepreneurship may be less preferred than regular employment but be a better option than unemployment, and in

a sense represent a form of employment in-between (Boeri et al., 2020; Kautonen et al., 2010). It may be an attractive option for those who have difficulties finding a regular job or who are not suited to a regular job (Cieślik & van Stel, 2023; Uusi työ ry, 2024). At the same time, being a light entrepreneur rather than unemployed may bring new skills and experience, thereby improving an individual's human capital. Additionally, light entrepreneurship could improve the person's social capital by helping them build new networks and meet potential future employers. Light entrepreneurship may also serve as a positive signal to potential employers about a job candidate's skills and attitudes towards work (Spence, 1973).

These rather optimistic perspectives on new forms of work can be contrasted with more critical views. Like solo self-employment and gig work, light entrepreneurship may be a "trap" for individuals and part of a trend towards greater precarity and segmentation in the labour market (Cieślik & Dvouletý, 2019; Hipp, Bernhardt, & Allmendinger, 2015; Ilsøe et al., 2021). In some countries, pushing employees into solo self-employment has become a way for employers to evade employment legislation and high social security contributions (Boeri et al., 2020; Kautonen et al., 2010). Forms of "quasi" self-employment have little in common with entrepreneurialism if most of the revenue comes from one client or if self-employment is involuntary (Kösters & Smits, 2022). These forms of self-employment are unlikely to lead to standard employment or a permanent job (Muehlberger & Pasqua, 2009), nor does solo self-employment often lead to becoming an employer (Cowling & Wooden, 2021). Moreover, in the case of platform work, if the platform imposes strict conditions on how the work should be performed, there is little room for entrepreneurial freedom (Vallas & Schor, 2020).

From this standpoint, nonstandard employment is not a voluntary choice but a necessity in the absence of (standard) employment (Zwysen & Piasna, 2023). Studies have found that solo self-employment in particular is associated with lower incomes, greater financial insecurity and poorer working conditions than standard salaried employment (Cieślik & van Stel, 2023; Tammelin, 2019). The precarity perspective is supported by research findings that many who are in these types of nonstandard employment are part of vulnerable groups in the labour market, such as low educated and immigrant workers, and that many of them would actually prefer standard employment (Boeri et al., 2020; Brynin, Karim, & Zwysen, 2019; Ilsøe et al., 2021).

2.3.3 The need for longitudinal research

To better understand the nature of light entrepreneurship, it is important to study the careers and income of light entrepreneurs over a longer follow-up period. After all, if light entrepreneurship is a form of work in-between an employee and self-employment (Uusi työ ry, 2024) or in-between employment and unemployment (Boeri et al., 2020), then transitions between various labour market statuses and changes in sources of income may yield useful insights. Moreover, if light entrepreneurship is a stepping stone towards full entrepreneurship or standard employment, this may only become apparent after a few years in light entrepreneurship. Such longitudinal studies do not exist yet. Pukkinen et al. (2023) described the share of light entrepreneurs who also registered a trade name (in Finnish: *toiminimi*). This share was highest, around 20 per cent, among young male light entrepreneurs. The figure was lower in older age groups. Among those over 55, for example, only 5 per cent registered a trade name. The same report also showed that entrepreneurs working under a trade name had higher incomes than those who did not have a trade name. Registering a trade name, however, does not in itself guarantee success in entrepreneurship.

2.4 Pensions of light entrepreneurs

Light entrepreneurs in Finland do not need to take out pension insurance (i.e., YEL insurance) if their entrepreneurship lasts less than four months and if their annual income from entrepreneurial activities remains below EUR 9,010 (in 2024).[2] Above this threshold, YEL insurance is mandatory. Light entrepreneurs need to take out the insurance themselves, although some invoicing companies do offer assistance with this. Pension contributions are set at 24.1 per cent of confirmed income from entrepreneurship (25.6 per cent between ages 53 and 62). A 22 per cent discount is applicable on pension contributions in the first four years of self-employment (Finnish Centre for Pensions, 2024b). Entrepreneurs are themselves responsible for reporting the amount of entrepreneurial income that is subject to pension contributions.

2 Prior to 2017, light entrepreneurs were considered employees of invoicing service companies and the latter were required to take out pension insurance for them under the Employees Pension Act.

In many countries there is growing concern about the social security coverage of the self-employed (Eurofound, 2024; OECD, 2019). While the numbers of (solo) self-employed are increasing, they are often not covered by pension insurance or only take out insurance on a voluntary basis. This leads to substantial underinsurance and lower pensions compared to traditional wage earners. Alternatively, the self-employed are expected to plan and save for retirement on their own, but studies have shown that they are not financially better prepared for retirement than employees (Rostamkalaei, Nitani, & Riding, 2022) and that those who feel they have been "forced" into self-employment are less likely to save for retirement than those who voluntarily became self-employed (Hershey, van Dalen, Conen, & Henkens, 2017). Due to low pension accrual and savings, many self-employed persons have to continue to work beyond retirement age or face low income in old age (Fachinger & Frankus, 2017; Höppner, 2021; Polvinen, Riekhoff, Nivalainen, & Kuivalainen, 2024).

In this regard, light entrepreneurs and the self-employed are relatively well covered in the Finnish pension system. Yet some risks remain. First, as light entrepreneurs can earn up to EUR 9,010 per year without having to take out pension insurance, this means that, with the current pension accrual rate of 1.5 per cent of yearly income, they are deprived of up to EUR 135 per year of pension income in retirement. Although EUR 9,010 may appear a small amount for some, for those on a low income it can be a substantial part of their yearly earnings and thereby of their yearly potential pension accrual. For the Finnish pension system as a whole, this may be considered a double burden. It forfeits contributions to earnings-related pensions, while at the same time the risk increases that especially low-earning light entrepreneurs end up on a minimum guarantee pension, which is paid out of taxes rather than contributions.

Second, not all light entrepreneurs are fully aware of their status (Johansson, 2022). If they have an employment relationship with an employer, the employer is required to take out pension insurance under the Employees Pension Act (TyEL), to which both the employee and employer contribute. If they do not have an employment contract and if they meet the minimum criteria of EUR 9,010 and four months of entrepreneurial activity, light entrepreneurs have to take out YEL insurance. Adding to this confusion are the sometimes conflicting decisions by courts and various authorities (e.g. Labour Inspection and the Finnish Centre for Pensions) as to whether all or some light entrepreneurs, e.g., food couriers, should be

treated as employees or entrepreneurs (Niinivuo & Raeste, 2024; Regional State Administrative Agency, 2021; Finnish Centre for Pensions, 2021, 2023). Therefore, it is possible that light entrepreneurs do not always know whether they should take out pension insurance or save for retirement in some other way. Finally, entrepreneurs with YEL insurance are required to keep their pension insurance company up-to-date about changes in income. However, reported income has been often lower than actual income, and underinsurance among the self-employed has been common in Finland (Nivalainen & Tenhunen, 2020).[3]

3 YEL insurance was recently reformed with the aim of reducing underinsurance: https://www.etk.fi/ajankohtaista/ennakkotieto-yrittajien-yel-tyotulojen-tarkistuksessa-mediaanikorotus-4-000-euroa/

3 Data and methods

The main aim of this study is to examine how the careers and income of light entrepreneurs develop over time. Using detailed register data from Statistics Finland and the Finnish Centre for Pensions, we analyse who become light entrepreneurs and the extent of light entrepreneurship in terms of continuity, regularity and income. Further, we follow the career trajectories of light entrepreneurs in terms of transitions between different labour market states in the years prior to and after becoming a light entrepreneur. Lastly, we study how income and pension accrual evolve in the years prior to and after becoming a light entrepreneur.

We answer four research questions:

1. What characterises light entrepreneurs in terms of personal characteristics and employment status, and how do they differ from the general population?
2. What is the extent of light entrepreneurship, and how is it combined with other kinds of work?
3. How do the careers of light entrepreneurs develop over time?
4. How do the income and pension accrual of light entrepreneurs develop over time?

The analysis is purely descriptive, and the results cannot be taken to reflect the causal impact of light entrepreneurship on careers, income, or pension accrual.

3.1 Data

We use individual-level register data covering the period from 2012 to 2022. Our data covers all individuals who resided in Finland at least during one year in this period, but we restrict the analyses to individuals aged 17 to 68. All the data are administered by Statistics Finland, apart from data about invoicing service companies and pension accrual, which are provided by the Finnish Centre for Pensions. The data are described in detail below.

3.1.1 Identification of light entrepreneurs

In the absence of an official register of light entrepreneurs, we identify light entrepreneurs based on information about payments from invoicing service companies. To identify invoicing service companies, we rely on information from the Supervisory Department at the Finnish Centre for Pensions. The Supervisory Department monitors employers and entrepreneurs in order to uncover underinsurance in pensions. One of the groups under regular supervision consists of customers of invoicing service companies. From the Finnish Centre of Pensions, we obtained a list of business ID numbers of invoicing companies that were monitored in 2017–2022. This list of 71 unique business IDs was compiled manually at the Supervisory Department in the first place for monitoring and supervising purposes, not for research. It is therefore possible that there are invoicing service companies that do not appear on the list. Still, the list should cover most companies that provide invoicing services to light entrepreneurs.

We define light entrepreneurs as individuals who have received at least one payment from an invoicing service company. Information about payments, including information about payer, recipient and amount, are obtained from tax returns in 2012–2018 and from the Incomes Register in 2019–2022.[4] Note, however, that we cannot distinguish between customers and employees of invoicing service companies, and therefore the number of light entrepreneurs is slightly overestimated.

The Supervisory Department did not monitor clients of invoicing service companies before 2017, and therefore we do not know with certainty who were light entrepreneurs before that date. However, we assume that if an invoicing service company existed prior to 2017, it would have provided services to light entrepreneurs. Thus, we assume that individuals who received payments from invoicing service companies prior to 2017 were light entrepreneurs in those years. There are, however, some potential sources of error. First, we cannot observe light entrepreneurs who used invoicing service companies that seized to exist before 2017. Second, it is possible that companies changed their services and that individuals who received payments from invoicing service companies prior to 2017 were in fact not light entrepreneurs. The first issue implies that we may

4 Note that no information is available about the customers of light entrepreneurs and therefore we have no way to identify the industries in which light entrepreneurs work.

underestimate the number of light entrepreneurs, while the second implies that we may overestimate the number of light entrepreneurs in 2012–2016.

For these reasons we do not analyse light entrepreneurs in 2012–2016. We do, however, take this period into account when determining the first year in which an individual was observed as a light entrepreneur. For example, in Chapters 6 to 8, we focus on individuals who started as light entrepreneurs in 2017. Individuals who obtained payments from invoicing service companies in 2012–2016 are excluded from these analyses.

3.1.2 Income from light entrepreneurship

To obtain a measure of income from light entrepreneurship, we use detailed information from tax returns in 2017 and 2018 and from the Incomes Register in 2019–2022. The registered unit in the Incomes Register is a payment slip. Each payment slip contains information about the payer, the receiver and the payment itself. The tax returns contain the same type of information aggregated to annual level. To identify income from light entrepreneurship, we identify all payments made by identified invoicing service companies using their business ID. Our measure of income from light entrepreneurship includes wages, fringe benefits, allowances, and reimbursements for costs.[5] The data from the Incomes Register are more detailed than those obtained from the tax returns, and therefore the measure of income from light entrepreneurship is not fully consistent over time. However, there are no large breaks in the data between 2018 and 2019, and we do not expect this issue to have a major effect on the results of the study.

The Incomes Register is divided into monthly files according to payment date. The period when the work was done may differ from the month of payment. The period from which the payment stems does not necessarily

5 Most of the income from light entrepreneurship is paid in the form of wages (88%). On average, 7 per cent of income from light entrepreneurship is paid in non-taxable kilometre allowances (in Finnish: kilometrikorvaus), 1.8 per cent in trade income (in Finnish: työkorvaus), 1.6 per cent in per diem allowances (in Finnish: päiväraha), 0.7 per cent in taxable expense reimbursements (in Finnish: verollinen kustannusten korvaus) and 0.6 per cent in meal allowances (in Finnish: ateriakorvaus). When the analysis is restricted to light entrepreneurs receiving the benefit in question, their share of total payments is larger. For example, 21 per cent of light entrepreneurs who received payments in December 2022 were paid kilometre allowances, and these accounted on average for 34 per cent of payments from invoicing companies.

correspond to a calendar month – it can be longer or shorter. Because no data are available on the number of hours or days worked, it is not possible to calculate exact monthly or hourly earnings. Since the work of light entrepreneurs is often occasional or gig-based, we do not use the information about the start and end date of the payment period. Monthly income thus simply refers to the month of the payment. To analyse the regularity of light entrepreneurship, we simply calculate the number of calendar months with payments from invoicing companies.

Because of the uncertainties related to monthly income in 2019–2022, and because tax data for years prior to 2019 are only available on the yearly level, we aggregate income in 2019–2022 to yearly data. Income is adjusted to 2022 prices using the consumer price index.

3.1.3 Total taxable income

In addition to income from light entrepreneurship, our examination covers the total taxable income of light entrepreneurs. Our measure of total taxable income is the sum of taxable earned income and entrepreneurial income. These measures are obtained from the FOLK Basic module and are available for the years 2012–2021.

3.1.4 Pension accrual

Estimates of pension accrual were obtained from the Finnish Centre for Pensions. Pension insurers calculate pension accrual for all employees and the self-employed using information about earned income, entrepreneurial income and social benefits that accrue pension. Information on income and benefits is collected and made available to pension insurers through a common earnings register.

Accrued pension is reported as the amount of gross monthly pension that an individual has accrued by the end of each calendar year.[6] In this study, we do not have access to actual pension accrual as calculated by pension insurance companies, but we use an estimate calculated by the Finnish

6 Starting pensions are adjusted using a life expectancy coefficient. The purpose of the coefficient is to take into account the impact of increasing life expectancy on pension costs and to encourage people to work longer. The effects of the life expectancy coefficient are not accounted for in the estimates of pension accrual or in the analyses in this study.

Centre for Pensions. Estimated pension accrual is calculated using the same income data and rules for accrual used by the pension insurers and should therefore be very close to actual pension accrual.

We calculate the yearly increase in accumulated pension accrual so that we can relate it to income in the same year. The calculated pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

3.1.5 Labour market status and sociodemographic characteristics

Using Statistic Finland's FOLK Basic module, we have access to information on the labour market statuses and sociodemographic characteristics of light entrepreneurs and the general population. As light entrepreneurship is not an official status category in Statistics Finland data and can be combined with other forms of labour market activity, the yearly labour market status indicates the main form of labour market activity measured at the end of each year. The FOLK data allows us to distinguish between salaried employment and self-employment, based on whether the individual had a valid employment contract, YEL pension insurance, and the shares of income from employment and entrepreneurial activities at the end of the year. Additionally, the data distinguishes between being a student or conscript, a pensioner, an unemployed person, and other. In parts of Chapter 4 we analyse whether someone was employed or not, meaning that they were either employed as an employee or self-employed. One limitation of using a measure for end-of-year labour market status is that it does not provide information on possible changes in statuses during the course of the year. Moreover, since identifying someone as a light entrepreneur in a given year is based on receiving at least one payment from an invoicing service company at any point during that year, we cannot be entirely sure whether the light entrepreneurship occurred at the same time as the observed labour market status.

Our main sociodemographic background variables are gender, age group, and whether someone was born in Finland or not. In some parts of the analysis we use additional background variables. Level of education indicates the highest level of educational attainment in each year: primary (including those for whom information on education is missing), secondary, and tertiary (bachelor's or master's degrees). We also categorise individuals into three groups based on their taxable income in

2012. These groups are no income, income below the median, and income above the median. These relative income positions are measured within each birth cohort. Marital status is defined as unmarried, married or in a registered partnership, divorced or separated, and widowed. In some analyses we control for whether there were children in the household or not. Furthermore, we identify whether individuals lived in urban, semi-urban or rural municipalities.

3.2 Methods

In Chapter 4 we use descriptive methods to analyse the size and composition of the population of light entrepreneurs, the continuity of their light entrepreneurship, and the extent of their employment after entry into and exit from light entrepreneurship. Additionally, we estimate a series of linear probability models to investigate which background factors contribute to entry, survival, and employment of light entrepreneurs, and whether these contributions have changed between 2017 and 2022.

In Chapter 5 we analyse the extent of light entrepreneurship in 2017–2022 and zoom in on light entrepreneurs in 2022. We use cross-tabulation and distributional plots to study the number of months with payments from invoicing companies and yearly income from light entrepreneurship in different sociodemographic groups based on gender, whether they were born in Finland or not, and age group (17–29, 30–49 and 50–68).

In Chapter 6 we study the longer-term career trajectories of light entrepreneurs. We select all individuals between ages 22 and 63 who entered light entrepreneurship for the first time in 2017 and follow them for the five preceding years and the five following years, i.e., from 2012 to 2022. For each year we determine whether they were light entrepreneurs or not, as well as their labour market status, distinguishing between being self-employed, employed, student, pensioner, unemployed, and other. This yields a total of 12 combinations of statuses, so-called states. Missingness from the data is added as a thirteenth state for those who in a given year are neither observed as light entrepreneurs nor appear in the FOLK data. We categorise individuals into groups by gender, whether they were born in Finland or not, and by age in 2017 (22–34, 35–49 and 50–63), yielding a total of 12 sociodemographic groups. We also separate the analysis by level of education as observed in 2022 and by whether income was above

or below the median in the population, or whether someone had no earned income in 2012.

For all individuals in this sample, we construct sequences of their yearly states. We display these by our sociodemographic groups in a series of plots (Gabadinho, Ritschard, Studer, & Müller, 2009). Based on these plots and summary indicators of the sequences, we analyse the share of light entrepreneurs in different states at different times, the average time spent in each state, and the number of transitions made between states during the follow-up period.

Chapter 7 explores the income growth of light entrepreneurs in 2012–2021. We use the same sample of light entrepreneurs as in Chapter 6, i.e., light entrepreneurs aged 22 to 63 who entered light entrepreneurship in 2017. We calculate average yearly taxable income, measured as the sum of earned income and entrepreneurial income, for light entrepreneurs in three different age groups in 2017 (22–34, 35–49 and 50–63) and compare their income to that of a comparison group. The comparison group is a 10 per cent random sample of the population of the same age who were not light entrepreneurs in 2012–2022. The composition of this group in terms of gender, birth year and birth country is the same as in the total population who were not light entrepreneurs. Average income for light entrepreneurs and their peers is presented in graphs for comparison. In addition, we calculate 95 per cent confidence intervals that are presented in a data appendix, which is available upon request. The confidence intervals are used to determine whether income differences between different groups are statistically significant. We repeat the analysis for different demographic and socioeconomic groups, splitting the sample by birth country (Finland/other), gender, highest level of education in 2022 (primary or missing, secondary, and tertiary education), and level of income in 2012 (no income, below the median, above the median). In Chapter 8, we use the same methods as in Chapter 7 to study the development of pension accrual in 2012–2022.

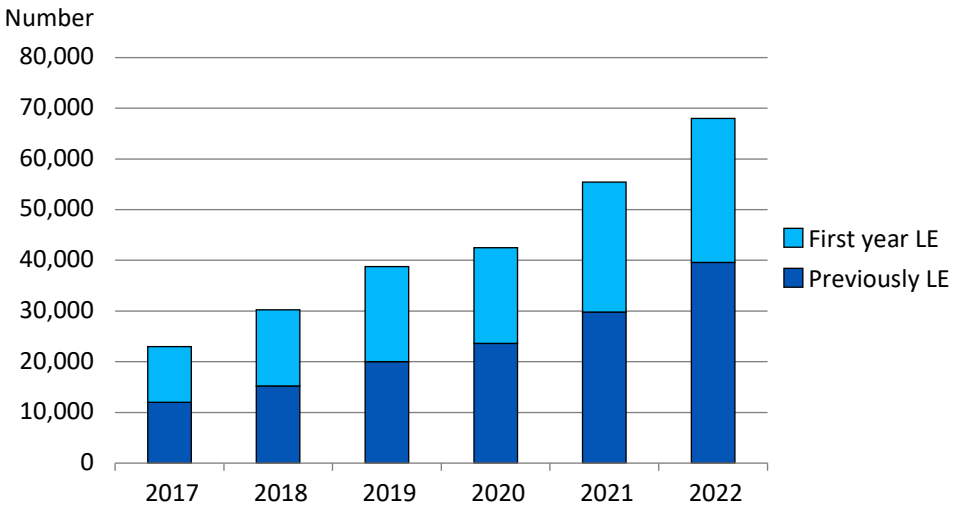
4 Changes in characteristics, stocks, flows, and employment over time

In this chapter we focus on the questions of who light entrepreneurs are, who become light entrepreneurs, who remain light entrepreneurs, and to what extent light entrepreneurs are employed after entry into and exit from light entrepreneurship. We also analyse how the composition of those who become, remain and cease to be light entrepreneurs has changed across the years.

4.1 Growth in light entrepreneurship

Figure 4.1 shows the number of light entrepreneurs in each year, distinguishing between those who have been observed in the data as light entrepreneurs in previous years and those who are observed as light entrepreneurs for the first time in that year. The figure shows a steady growth from a little more than 23,000 in 2017 to almost 68,000 in 2022, although that growth stalled somewhat in the Covid year 2020. The relatively low rate of continuity and high share of new entrants each year is remarkable. We will return to this in section 4.4.

Figure 4.1
Total number of light entrepreneurs, both previous and new entrants, in 2017–2022.



4.2 Sociodemographic characteristics of light entrepreneurs

While our intention is not to repeat previous studies that investigate the backgrounds of light entrepreneurs, we do present a short overview of their main sociodemographic characteristics and changes therein across years. Our sample of light entrepreneurs confirms the picture drawn by earlier studies in that light entrepreneurs are more often men, relatively young, and often immigrants (Table 4.1). The shares of men and older light entrepreneurs remained relatively stable between 2017 and 2022, while the proportion of those aged 17–29 increased. The relative shares of all other age groups declined. In 2017 the share of foreign-born light entrepreneurs was still relatively low (about 11%) but grew to more than one-quarter of all light entrepreneurs by 2022.

In 2017, around one-third of light entrepreneurs had a bachelor's or master's degree, a higher proportion than in the overall population (around 24%). This share, however, has decreased over time and in 2022 stood at only 28 per cent. The largest increase was recorded for those with primary education at most: from 16 per cent in 2017 to 26 per cent in 2022. This trend could partly be due to the growing share of foreign-born among light entrepreneurs as information on their level of education is not always available in register data and they are therefore classified among the lowest educated. This is also reflected in the increasing lack of information on light entrepreneurs' field of studies. Otherwise, persons with a general education and a degree in arts and humanities are overrepresented among light entrepreneurs compared to the general population, while those with degrees in engineering, manufacturing and construction and those with degrees in health and welfare are underrepresented.

In 2017, just under 10 per cent of those who undertook light entrepreneurial activities during that year qualified as self-employed at the end of the year. This share edged up to 12 per cent in 2022. Almost 61 per cent of light entrepreneurs were in an employment relationship at the end of 2017. This share declined over the years and dropped sharply to 52 per cent in the Covid year 2020, recovering to around 57 per cent in 2022. The effects of the Covid year are also seen in the share of the unemployed: in 2020, 15 per cent of light entrepreneurs were unemployed, higher than the unemployment rate in the general population (see also section 6.3).

Table 4.1
Sociodemographic characteristics of light entrepreneurs in 2017–2022, %.

Explanatory variable	2017	2018	2019	2020	2021	2022
Gender						
Men	61.9	58.8	59.0	59.5	60.5	62.0
Women	38.1	41.2	41.0	40.5	39.5	38.0
Age group						
17–29	34.6	35.6	36.0	35.7	37.5	38.6
30–39	31.1	31.0	30.1	30.6	30.5	29.5
40–49	18.0	17.5	18.0	18.5	18.0	18.0
50–59	11.7	11.3	11.0	10.4	9.6	9.3
60–68	4.6	4.7	4.9	4.8	4.5	4.6
Country of birth						
Finland	89.4	87.7	85.9	81.3	75.6	74.4
Other	10.6	12.3	14.1	18.7	24.4	25.6
Level of education						
Primary	16.4	16.6	17.7	19.5	23.5	25.6
Secondary	50.8	50.7	50.7	48.8	46.7	46.4
Tertiary	32.8	32.7	31.7	31.7	29.8	27.9
Field of studies						
General	13.4	13.2	12.8	12.1	11.7	12.3
Education	2.8	2.8	3.0	2.9	2.7	2.8
Arts and humanities	19.9	19.4	18.0	16.5	14.4	13.3
Social sciences, journalism and information	2.1	2.1	2.1	1.9	1.8	1.7
Business, administration and law	9.6	10.0	10.2	10.7	10.5	10.1
Natural sciences, mathematics and statistics	1.3	1.4	1.3	1.3	1.2	1.2
ICT	3.9	3.6	3.5	3.5	3.3	3.1

Explanatory variable	2017	2018	2019	2020	2021	2022
Engineering, manufacturing and construction	16.3	15.3	15.1	15.1	14.2	13.7
Agriculture, forestry, fishery and veterinary	1.9	2.2	2.1	2.1	1.8	1.7
Health and welfare	5.1	5.5	5.9	6.2	6.4	6.0
Services	7.2	7.7	8.0	8.0	8.3	8.2
Unknown	16.6	16.8	17.9	19.8	23.8	25.9
Labour market status						
Self-employed	9.7	11.7	11.9	11.7	11.4	12.0
Employee	60.9	58.2	57.5	52.0	55.6	57.0
Student	8.9	9.3	10.6	12.0	12.8	12.6
Pensioner	2.8	3.0	3.1	3.0	2.6	2.6
Unemployed	12.1	12.0	11.2	14.9	11.3	10.4
Other/Unknown	5.6	5.9	5.8	6.4	6.3	5.3
Marital status						
Unmarried	57.6	58.4	59.2	59.0	59.7	60.9
Married / registered partnership	30.9	29.8	29.1	29.3	28.9	28.2
Divorced / separated	11.2	11.5	11.4	11.4	11.1	10.5
Widowed	0.3	0.3	0.3	0.3	0.3	0.3
Children						
No	69.9	70.4	71.2	70.5	71.3	72.8
Yes	30.1	29.6	28.8	29.5	28.7	27.2
Municipality						
Urban	85.6	85.7	85.8	85.6	86.2	86.6
Semi-urban	8.3	8.5	8.6	8.7	8.4	8.1
Rural	6.1	5.8	5.6	5.7	5.5	5.3
N	22,449	29,505	37,340	40,607	52,534	63,390

By 2022 the share of the unemployed among light entrepreneurs had dropped back to about 10 per cent. The popularity of light entrepreneurship among students has increased over the years. The share of students among light entrepreneurs grew from nine per cent at the end of 2017 to 13 per cent at the end of 2022. Pensioners remained a relatively small group among light entrepreneurs throughout.

Light entrepreneurship is a distinctly urban phenomenon: more than 85 per cent of light entrepreneurs live in large cities. Light entrepreneurs are often unmarried and childless, which at least partly reflects the fact that young people are overrepresented in the light entrepreneur population.

To compare light entrepreneurs with the general population on a set of these characteristics, we estimated linear probability models for each year with being a light entrepreneur as the outcome variable (Table 4.2). One should note that as we are comparing the relatively small group of light entrepreneurs with the overall Finnish working-age population, the probability of being a light entrepreneur is inevitably quite small. In 2017 this unadjusted probability was 0.9 per cent, rising to 3.1 per cent in 2022. Even though often statistically significant, effect sizes were also relatively small. Confirming what was observed in Table 4.1, women were less likely to be light entrepreneurs in all years. The age composition of light entrepreneurs compared to the general population changed over time as the youngest age group became more dominant. The size of the coefficient for being foreign-born increased, indicating that while there was almost no difference with native Finns in 2017, immigrants were 2.2 percentage points more likely to be light entrepreneurs in 2022. Having a higher than primary level education meant having a higher probability to be a light entrepreneur. While it seems that the urban-rural gap in light entrepreneurship widened somewhat over the years, the differences between light entrepreneurs and the general population in marital status remained relatively stable. The negative association with having children and being a light entrepreneur increased somewhat across the years.

Table 4.2
Linear probability models for being a light entrepreneur in each year.

Explanatory variable	2017	2018	2019	2020	2021	2022
Gender (ref. Male)						
Female	-0.003***	-0.003***	-0.003***	-0.004***	-0.005***	-0.007***
Age group (ref. 17–29)						
30–39	0.001***	0.001***	0.001**	0.000	-0.002***	-0.004***
40–49	-0.002***	-0.003***	-0.004***	-0.005***	-0.009***	-0.011***
50–59	-0.005***	-0.007***	-0.009***	-0.010***	-0.015***	-0.019***
60–68	-0.007***	-0.009***	-0.012***	-0.013***	-0.018***	-0.023***
Country of birth (ref. Finland)						
Other	0.000**	0.001***	0.003***	0.009***	0.018***	0.022***
Education (ref. Primary)						
Secondary	0.002***	0.002***	0.002***	0.002***	0.002***	0.001***
Tertiary	0.004***	0.004***	0.004***	0.004***	0.003***	0.002***
Marital status (ref. Unmarried)						
Married or in a registered partnership	-0.001***	-0.008***	-0.001***	-0.001***	-0.000	-0.000
Divorced or separated	0.001***	0.002***	0.002***	0.002***	0.003***	0.004***
Widowed	-0.000	-0.000*	-0.001***	-0.001*	-0.000	0.000
Children (ref. None)						
Yes	-0.002***	-0.003***	-0.003***	-0.003***	-0.004***	-0.005***
Municipality of residence (ref. Urban)						
Semi-urban	-0.003***	-0.003***	-0.004***	-0.004***	-0.005***	-0.006***
Rural	-0.003***	-0.004***	-0.005***	-0.005***	-0.006***	-0.008***
Intercept	0.010***	0.012***	0.016***	0.017***	0.024***	0.031***
R^2	0.003	0.003	0.004	0.005	0.008	0.010
N	3,564,213	3,545,619	3,534,130	3,529,714	3,526,296	3,533,204

Note: * p ‹ 0.05, ** p ‹ 0.01, *** p ‹ 0.001.

4.3 Entry into light entrepreneurship

The previous section focused on the stocks of light entrepreneurs in each year. In this section we move on to look at new entrants into light entrepreneurship since we observed in Figure 4.1 that in some years, almost half of the light entrepreneurs were new entrants. An examination of these new entrants may provide a clearer picture of potential ongoing changes in the composition of the light entrepreneur population. Furthermore, we are especially interested in the labour market transitions of light entrepreneurs: what was their labour market status prior to becoming a light entrepreneur?

Table 4.3 shows the results for a set of linear probability models predicting entry into light entrepreneurship in each year. The unadjusted probability of someone becoming a light entrepreneur increased from 0.5 per cent in 2017 to 1.5 per cent in 2022. The effect sizes of the various explanatory variables were again generally small, ranging from a few tenths to one percentage point, due to the large size of the overall study population. Compared with those who were employees one year prior to entry, the self-employed and pensioners were less likely to become light entrepreneurs. Students and the unemployed were more likely to become light entrepreneurs in all years. Again, it is visible that the youngest age group until age 30 was increasingly represented among the new entrants, as the coefficients for all other age groups became more negative. The likelihood of entering light entrepreneurship increased among the foreign-born population, as evidenced by the increasing positive coefficient. The direction of the coefficients for education took a turn between 2020 and 2022, making those with only primary education the most likely to enter light entrepreneurship, while they were the least likely to enter in 2017. However, effect sizes remained relatively small.

Table 4.3
Linear probability model for entering light entrepreneurship in each year.

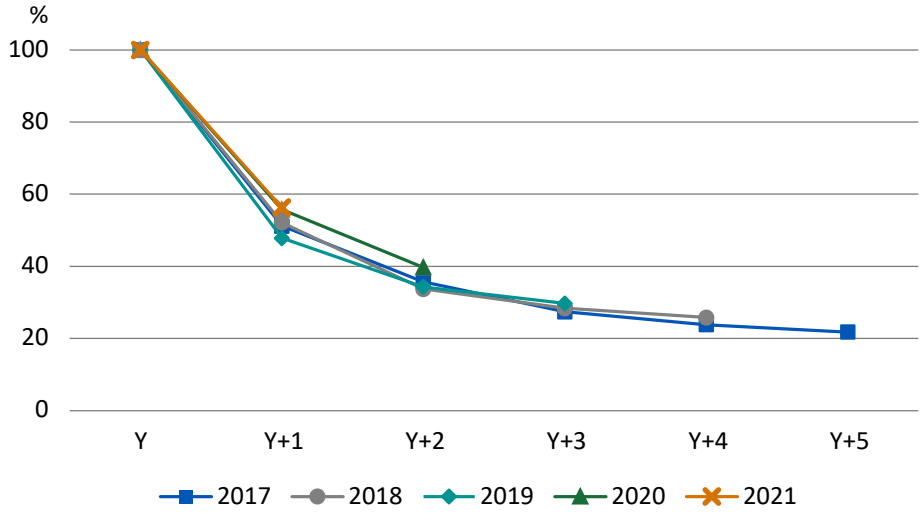
Explanatory variable	2017	2018	2019	2020	2021	2022
Labour market status at y-1 (ref. Employee)						
Self-employed	-0.000***	-0.001***	-0.001***	-0.001***	-0.002***	-0.002***
Student	0.000	0.001***	0.001***	0.001***	0.004***	0.004***
Pensioner	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
Unemployed	0.002***	0.004***	0.003***	0.002***	0.004***	0.003***
Other/unknown/missing	0.000	0.000	-0.000	-0.001***	-0.000	-0.000
Gender (ref. Male)						
Female	-0.001***	-0.001***	-0.001***	-0.002***	-0.002***	-0.002***
Age group (ref. 17–29)						
30–39	-0.001***	-0.001***	-0.002***	-0.002***	-0.003***	-0.005***
40–49	-0.003***	-0.003***	-0.004***	-0.005***	-0.007***	-0.008***
50–59	-0.004***	-0.005***	-0.006***	-0.007***	-0.009***	-0.010***
60–68	-0.004***	-0.006***	-0.007***	-0.007***	-0.010***	-0.011***
Country of birth (ref. Finland)						
Other	0.001***	0.001***	0.003***	0.007***	0.012***	0.010***
Education (ref. Primary)						
Secondary	0.001***	0.001***	0.001***	0.001***	-0.000	-0.001***
Tertiary	0.002***	0.002***	0.002***	0.002***	-0.000	-0.001***
Intercept	0.005***	0.006***	0.008***	0.008***	0.012***	0.015***
R^2	0.002	0.002	0.002	0.003	0.006	0.006
N	3,535,793	3,514,221	3,496,713	3,489,324	3,476,257	3,463,453

Notes: Controls for marital status, children and municipality included in the models but not reported. * p ‹ 0.05, ** p ‹ 0.01, *** p ‹ 0.001.

4.4 Survival in light entrepreneurship

Survival or continuity in light entrepreneurship is rather low, as suggested earlier by Figure 4.1. In this section we shed light on the extent of survival in light entrepreneurship and on the light entrepreneurs who continued after their first year of observation. Figure 4.2 shows the percentage of light entrepreneurs starting in each year Y and observed in the data as light entrepreneurs one to five years after entry. We find that after one year, only between 50 and 60 per cent were still observed in the data as light entrepreneurs. After five years, for those who started in 2017, this share was only 22 per cent. However, continuity in light entrepreneurship has shown a slight upward trend, although the Covid year 2020 brought a temporary decrease in continuity, especially among light entrepreneurs who started in 2019.

Figure 4.2
Survival in light entrepreneurship by year of entry Y, 2017–2021



In Table 4.4 and Table 4.5 we analyse which light entrepreneurs were still observed as light entrepreneurs one and two years after entry, respectively. The results show that those who worked as employees were less likely to continue in light entrepreneurship than all other labour market groups one (Table 4.4) and two years (Table 4.5) after entry, although after two years most of the differences are no longer significant. Students and pensioners in particular were more likely to continue as light entrepreneurs at least after one year. For example, students who started in 2021 were eight percentage points and pensioners 13 percentage points more likely to continue after one year than employees. The likelihood of continuing after one year decreased

between 2017 and 2021 for the self-employed and unemployed and turned negative after two years. We added a variable for (log-transformed) income from light entrepreneurship, which indicates that the higher this income, the greater the likelihood of continuing as a light entrepreneur.

Table 4.4
Linear probability model for being in light entrepreneurship one year after entering, by year of entry.

Explanatory variable	2017	2018	2019	2020	2021
Labour market status (ref. Employee)					
Self-employed	0.053**	0.007	0.068***	0.022	0.014
Student	0.061***	0.043**	0.054***	0.083***	0.081***
Pensioner	0.104**	-0.001	0.076**	0.040	0.134***
Unemployed	0.067***	0.042***	0.017	0.032**	0.006
Other/unknown	0.111***	0.056**	0.089***	0.078***	0.047***
Log income from LE in Y	0.089***	0.083***	0.084***	0.066***	0.065***
Gender (ref. Male)					
Female	0.064***	0.023**	0.077***	0.020*	0.019**
Age group (ref. 17–29)					
30–39	0.039**	0.032**	0.017	-0.021*	0.014
40–49	0.025	0.037**	0.036**	-0.034**	-0.001
50–59	0.015	0.008	-0.001	-0.014	-0.007
60–68	0.028	0.071**	0.034	-0.031	-0.008
Country of birth (ref. Finland)					
Other	-0.025	-0.001	-0.005	0.150***	0.067***
Education (ref. Primary)					
Secondary	-0.000	0.009	0.021*	-0.002	-0.011
Tertiary	-0.054***	-0.029*	-0.016	-0.021	-0.049***
Intercept	-0.139***	-0.082***	-0.187***	0.035	0.063***
R^2	0.092	0.074	0.083	0.075	0.065
N	10,340	14,044	17,136	17,127	23,012

Notes: Controls for marital status, children and municipality included in the models but not reported. * p ‹ 0.05, ** p ‹ 0.01, *** p ‹ 0.001.

Women were more likely to continue as light entrepreneurs after one year, although the difference with men narrowed over time. The results for gender after two years are mixed: women who started in 2017 and 2019

were more likely than men to remain light entrepreneurs after two years, while women who started in 2020 were less likely than men to still be light entrepreneurs in 2022. The results for age groups are also mixed and differ by year, but mostly the differences are not statistically significant. For level of education, we notice that those with a tertiary degree were less likely to be light entrepreneurs one (4.9 percentage points less likely for those who started in 2021) and two years (2.6 percentage points less likely for those who started in 2020) after entry than those with only lower secondary education.

Table 4.5
Linear probability model for being in light entrepreneurship two years after entering, by year of entry.

Explanatory variable	2017	2018	2019	2020
Labour market status (ref. Employee)				
Self-employed	0.046*	0.019	0.036*	-0.005
Student	0.031*	0.008	0.008	0.039***
Pensioner	0.045	0.059*	0.076**	0.027
Unemployed	0.052***	0.024	-0.001	-0.013
Other/unknown	0.023	0.023	0.001	0.034
Log income from LE in Y	0.054***	0.051***	0.044***	0.034***
Gender (ref. Male)				
Female	0.027**	-0.003	0.035***	-0.021**
Age group (ref. 17–29)				
30–39	0.015	0.024*	0.021*	0.007
40–49	0.006	0.036*	0.047***	0.018
50–59	0.028	0.013	0.023	0.035*
60–68	0.0351	0.0225	0.0267	0.0104
Country of birth (ref. Finland)				
Other	-0.051***	-0.006	0.008	0.121***
Education (ref. Primary)				
Secondary	0.004	0.050***	0.029**	-0.015
Tertiary	-0.037*	0.015	0.003	-0.026*
Intercept	-0.029	-0.060**	-0.023	0.127***
R^2	0.040	0.035	0.028	0.034
N	10,340	14,044	17,136	17,127

Notes: Controls for marital status, children and municipality included in the models but not reported. * p ‹ 0.05, ** p ‹ 0.01, *** p ‹ 0.001.

4.5 Light entrepreneurship as a bridge to employment

As explained in section 3.1.5, being a light entrepreneur does not necessarily mean being employed (either as a salaried employee or self-employed). This is because being a light entrepreneur and being employed are measured in different ways. Light entrepreneurs with no valid employment contract or YEL insurance at the end of a year are not considered employed in our data. Moreover, light entrepreneurship may be combined with being a student or pensioner, or with receiving unemployment benefits. As shown in Table 4.1, around 30 per cent of light entrepreneurs were either students, pensioners, unemployed or something else. In this section we analyse how the employment rates of light entrepreneurs change after entry into light entrepreneurship and whether, and for whom, light entrepreneurship might serve as a bridge to further employment.

Figure 4.3
Percentage of light entrepreneurs in employment by year of entry Y, 2017–2022.

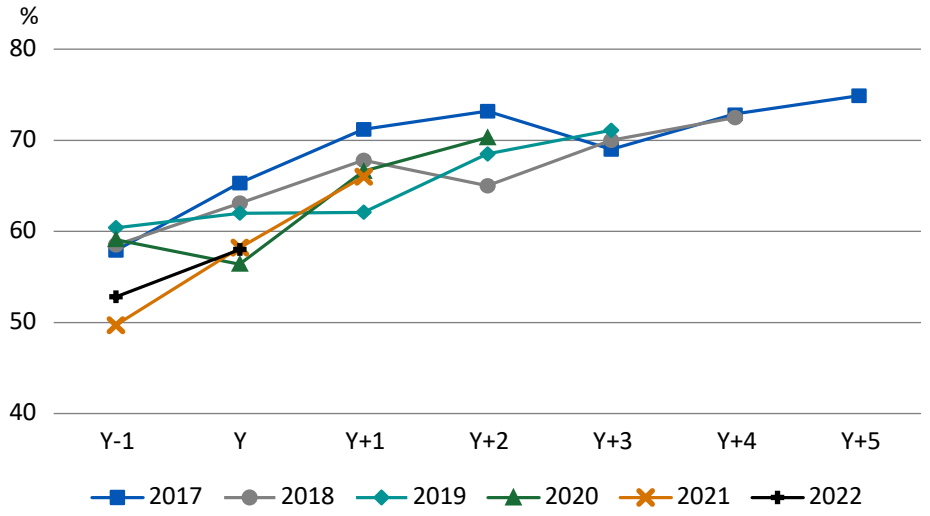


Figure 4.3 shows the shares of light entrepreneurs who were employed at the end of the year from one year before entry to up to five years (in the case of 2017 entrants) after becoming a light entrepreneur. Most light entrepreneurs came from a position of lower employment in the year before entry, between 50 per cent of those starting in 2021 and 60 per cent of those starting in 2019. In the year of entering light entrepreneurship,

employment rates increased by 1.6 percentage points for those starting in 2019 and by up to 8.5 percentage points for those starting in 2021. Those who started in 2020 experienced a decrease in employment compared to the preceding year. Employment increased in all consecutive years, except during the Covid year 2020.

Again, we used linear probability models to estimate the likelihood of being employed one and two years after entry into light entrepreneurship (Table 4.6 and Table 4.7). Unsurprisingly, one of the main determinants of being employed one or two years after entry was whether the individual was employed in the year of entry. Students, pensioners and unemployed persons were substantially less likely to be employed than employees and the self-employed. Additionally, higher income from light entrepreneurship emerged as a relevant predictor for chances of being employed.

Chances of employment did not differ considerably between male and female light entrepreneurs. Compared to the youngest age group, those between 30 and 49 were more likely to be employed after one year, while after two years the differences disappeared. Those over age 50 were less likely to be employed, especially after two years. In the age group 60–68 this is most likely due to transitions into full retirement. Foreign-born persons who entered in 2018 and 2019 were 4.4 percentage points and 3.5 percentage points respectively, less likely to be employed than Finnish-born entrepreneurs after two years. The chances of employment increased with level of education in all years. Two years after entry into light entrepreneurship, those with a tertiary degree were between 11 and 15 percentage points more likely to be employed than those with primary education.

Table 4.6
Linear probability model for being employed one year after entering light entrepreneurship, by year of entry.

Explanatory variable	2017	2018	2019	2020	2021
Labour market status (ref. Employee)					
Self-employed	0.018	0.021	0.041***	0.006	0.006
Student	-0.340***	-0.354***	-0.364***	-0.368***	-0.343***
Pensioner	-0.617***	-0.583***	-0.611***	-0.626***	-0.631***
Unemployed	-0.403***	-0.418***	-0.436***	-0.353***	-0.378***
Other/unknown	-0.383***	-0.406***	-0.438***	-0.440***	-0.427***
Log income from LE in Y	0.010***	0.010***	0.008***	0.014***	0.009***
Gender (ref. Male)					
Female	0.005	-0.001	-0.006	-0.007	-0.000
Age group (ref. 17–29)					
30–39	0.023*	0.013	0.016	0.025**	0.019*
40–49	0.022	0.037**	0.009	0.035***	0.023*
50–59	-0.006	-0.019	-0.000	0.001	0.017
60–68	-0.224***	-0.195***	-0.134***	-0.168***	-0.105***
Country of birth (ref. Finland)					
Other	-0.015	-0.006	-0.025*	-0.005	-0.010
Education (ref. Primary)					
Secondary	0.051***	0.019	0.053***	0.035***	0.029***
Tertiary	0.093***	0.093***	0.140***	0.100***	0.083***
Intercept	0.723***	0.714***	0.643***	0.694***	0.727***
R^2	0.237	0.235	0.236	0.232	0.208
N	10,334	14,014	17,114	17,103	22,979

Notes: Controls for marital status, children and municipality included in the models but not reported. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 4.7
Linear probability model for being employed two years after entering light entrepreneurship, by year of entry.

Explanatory variable	2017	2018	2019	2020
Labour market status (ref. Employee)				
Self-employed	0.028*	0.022	0.028*	-0.005
Student	-0.199***	-0.222***	-0.242***	-0.250***
Pensioner	-0.584***	-0.507***	-0.544***	-0.578***
Unemployed	-0.286***	-0.343***	-0.323***	-0.247***
Other/unknown	-0.318***	-0.345***	-0.374***	-0.366***
Log income from LE in Y	0.005*	0.012***	0.009***	0.011***
Gender (ref. Male)				
Female	-0.010	-0.001	-0.011	-0.014*
Age group (ref. 17–29)				
30–39	-0.009	0.020	0.006	0.003
40–49	0.011	0.016	0.008	-0.011
50–59	-0.044**	-0.034*	-0.019	-0.029*
60–68	-0.306***	-0.254***	-0.234***	-0.233***
Country of birth (ref. Finland)				
Other	-0.028*	-0.043***	-0.035***	-0.008
Education (ref. Primary)				
Secondary	0.057***	0.063***	0.071***	0.036***
Tertiary	0.117***	0.148***	0.148***	0.107***
Intercept	0.737***	0.595***	0.665***	0.719***
R^2	0.173	0.174	0.188	0.166
N	10,283	13,947	17,044	17,041

Notes: Controls for marital status, children and municipality included in the models but not reported. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

4.6 After light entrepreneurship

Many light entrepreneurs quit after just a few years, which raises the question whether this is because they have found other employment, become “full” entrepreneurs, or find themselves without employment. Figure 4.4 shows the employment percentages (as employees or self-employed) for each year, by the year in which they were observed as light entrepreneurs for the last time. Employment rates increased after exiting light entrepreneurship, again with the exception of 2020. After the worst Covid year, employment seemed to quickly recover and continued to grow. It is likely that this growth was largely due to the overall rise in employment rates in Finland during this period. In 2022, however, employment rates were higher for those who exited light entrepreneurship five years earlier (75% for those who quit after 2017) than for those who left one year earlier (70% for those who left after 2021). There might be different explanations for this. One is that labour market attachment continues to increase in the years after leaving light entrepreneurship. A second is that the composition of the group leaving light entrepreneurship has changed between 2017 and 2021 and that the group who left in 2021 had poorer chances of employment than those who left earlier.

Figure 4.4
Percentage in employment with Y as the last year observed in light entrepreneurship, 2017–2022.

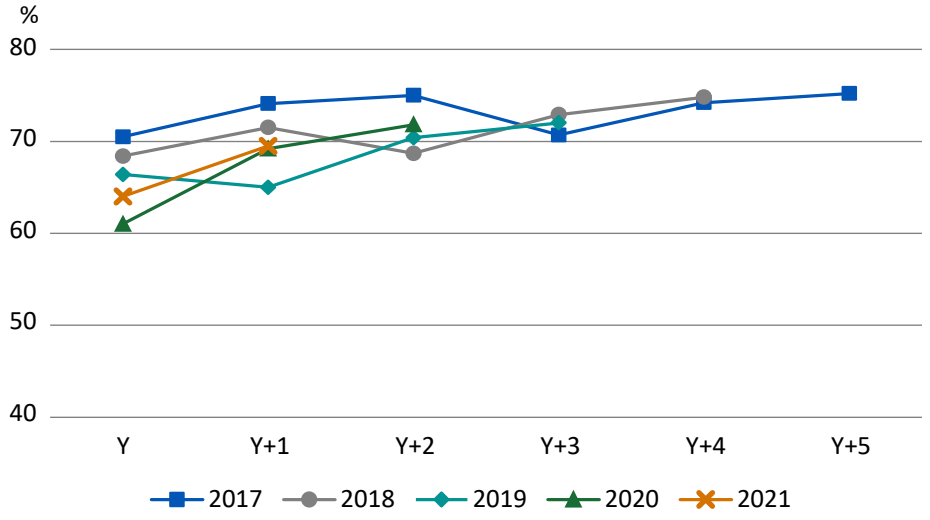


Table 4.8 and Table 4.9 show the results of a set of linear probability models for the likelihood of being employed one or two years after exiting light entrepreneurship. Again, those who were already employed as employees in the year of exiting light entrepreneurship had substantially higher chances of being employed one and two years after exit than students (34–38 percentage points one year and 22–26 percentage points two years after), pensioners (63–65 percentage points and 53–60 percentage points) and the unemployed (39–46 percentage points and 29–37 percentage points), while the self-employed performed somewhat better than employees. Income from light entrepreneurship does not show a straightforward relationship with employment prospects after exit and had only small effect sizes. We also included a variable that measured the number of years observed as light entrepreneur in the years prior to exit, but this showed no clear relationship with the likelihood of employment afterwards.

Gender differences in employment after quitting were small or insignificant. We find no major differences between age groups, except for older groups that were probably more likely to retire. Foreign-born light entrepreneurs were three to five percentage points less likely to be employed after exiting than Finnish-born light entrepreneurs after two years. This may be partly due to many of them leaving the country (see also Chapter 6). Again, the chances of being employed increase with level of education.

Table 4.8
Linear probability model for being employed one year after exiting light entrepreneurship, by last year of light entrepreneurship.

Explanatory variable	2017	2018	2019	2020	2021
Labour market status (ref. Employee)					
Self-employed	0.031**	0.045***	0.066***	0.039***	0.048***
Student	-0.340***	-0.361***	-0.372***	-0.379***	-0.369***
Pensioner	-0.648***	-0.637***	-0.628***	-0.639***	-0.650***
Unemployed	-0.425***	-0.429***	-0.462***	-0.387***	-0.412***
Other/unknown	-0.493***	-0.547***	-0.496***	-0.499***	-0.498***
Log income from LE in Y	0.005	-0.002	0.002	0.010***	0.002
Duration of light entrepreneurship (ref. 1 year)					
2 years		0.009	-0.008	-0.000	-0.004
3 years			0.018*	-0.014	0.022*
4 years				0.002	-0.002
5 years					0.004
Gender (ref. Male)					
Female	-0.005	-0.009	-0.013	-0.008	-0.002
Age group (ref. 17–29)					
30–39	0.017	-0.000	0.017	0.008	0.012
40–49	0.006	0.016	0.006	0.010	-0.003
50–59	-0.015	-0.017	-0.025*	-0.022	-0.006
60–68	-0.215***	-0.167***	-0.141***	-0.186***	-0.143***
Country of birth (ref. Finland)					
Other	-0.020	-0.020	-0.033**	-0.041***	-0.030***
Education (ref. Primary)					
Secondary	0.051***	0.037**	0.076***	0.055***	0.055***
Tertiary	0.099***	0.104***	0.167***	0.119***	0.123***
Intercept	0.770***	0.799***	0.674***	0.724***	0.758***
R^2	0.267	0.271	0.265	0.274	0.260
N	9,792	12,065	16,336	15,457	18,602

Notes: Controls for marital status, children and municipality included in the models but not reported. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 4.9
Linear probability model for being employed two years after exiting light entrepreneurship, by last year of light entrepreneurship.

Explanatory variable	2017	2018	2019	2020
Labour market status (ref. Employee)				
Self-employed	0.062***	0.080***	0.055***	0.027**
Student	-0.243***	-0.224***	-0.229***	-0.260***
Pensioner	-0.604***	-0.534***	-0.577***	-0.536***
Unemployed	-0.340***	-0.367***	-0.347***	-0.293***
Other/unknown	-0.408***	-0.435***	-0.464***	-0.394***
Log income from LE in Y	-0.001	-0.002	0.006*	0.008***
Duration of light entrepreneurship (ref. 1 year)				
2 years		0.015	-0.011	0.005
3 years			-0.006	-0.014
4 years				-0.009
Gender (ref. Male)				
Female	-0.010	-0.019*	-0.015*	-0.021**
Age group (ref. 17–29)				
30–39	-0.014	-0.007	0.008	-0.013
40–49	-0.014	-0.013	-0.006	-0.017
50–59	-0.051**	-0.049**	-0.055***	-0.049***
60–68	-0.285***	-0.224***	-0.245***	-0.294***
Country of birth (ref. Finland)				
Other	-0.040**	-0.054***	-0.032**	-0.042***
Education (ref. Primary)				
Secondary	0.062***	0.078***	0.090***	0.064***
Tertiary	0.118***	0.159***	0.173***	0.145***
Intercept	0.793***	0.699***	0.677***	0.720***
R^2	0.215	0.204	0.222	0.214
N	8,401	10,698	13,832	12,992

Notes: Controls for marital status, children and municipality included in the models but not reported. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

5 Scope of light entrepreneurship

In this chapter, we study the scope of light entrepreneurship. In section 5.1, we analyse the regularity of light entrepreneurship in terms of the number of months per year when there are payments from invoicing service companies. Section 5.2 moves on to analyse income from light entrepreneurship. We examine trends in 2017–2022 but also close in on the year 2022 to better understand the differences between sociodemographic groups.

5.1 Regularity of light entrepreneurship

In Chapter 4, we showed that the share of those who continue as light entrepreneurs decreases from year to year after the year of entry. This section turns the focus to the number of months in which light entrepreneurs receive payments from invoicing service companies in order to study the extent of light entrepreneurship during the calendar year. We only count the number of months with payments and disregard the fact that light entrepreneurs may receive multiple payments from one or many invoicing service companies during the month. The payment period does not always coincide with the calendar month of the payment and may be shorter and longer than one calendar month.

We do not know to what extent light entrepreneurs have control over the frequency of payments. Neither do we know whether the billing practices of invoicing service companies have changed over time. Therefore, changes in payment frequencies may reflect changes in the regularity of light entrepreneurship activities and/or changes in the billing practices of light entrepreneurs and invoicing service companies.[7]

7 Analyses not reported here show that there is a positive correlation between the number of months with payments and the size of the monthly payment. In addition, the standard deviation of payments increases with the number of payments. In other words, there is no evidence that some light entrepreneurs receive one large payment rather than several monthly payments.

Table 5.1
Mean and median number of months with payments from light entrepreneurship in 2022, by age group, country of birth and gender.

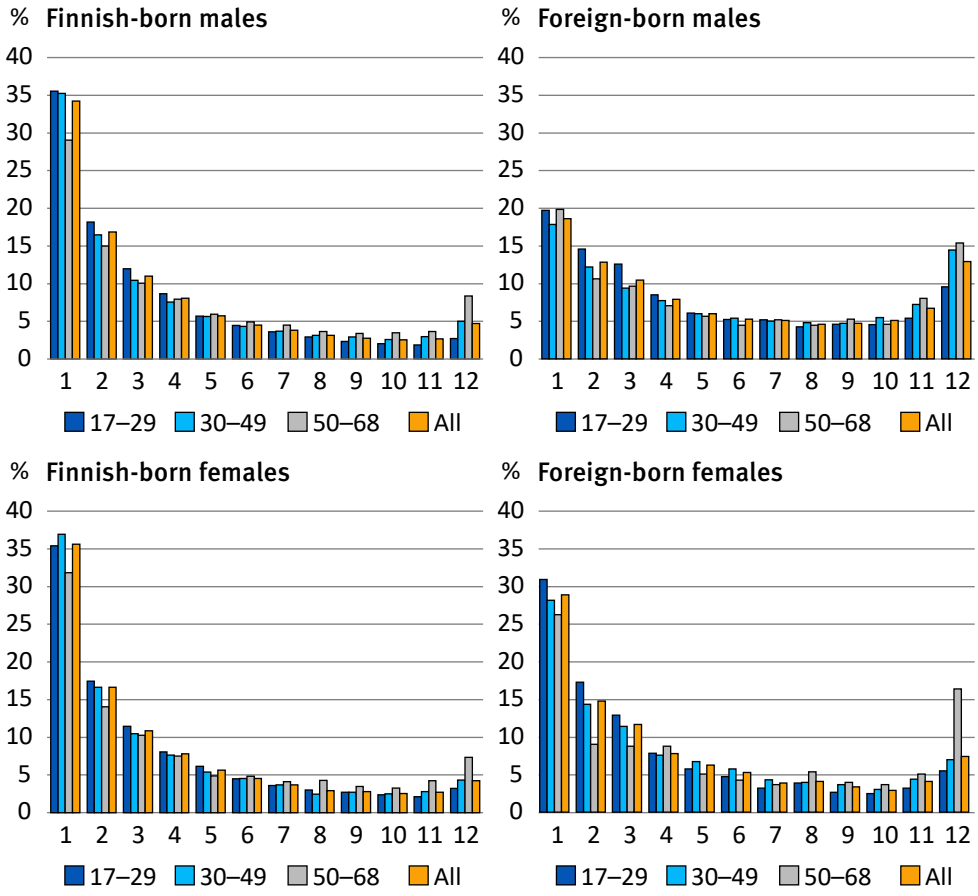
Variable	Finland 17–29	Finland 30–49	Finland 50–69	Other 17–29	Other 30–49	Other 50–68	All
All							
Mean number of months	3.5	3.7	4.4	4.9	5.6	5.8	4.2
Median number of months	2	2	3	3	4	5	3
N	19,200	20,487	7,479	5,252	9,607	1,364	67,995
Men							
Mean number of months	3.4	3.8	4.5	5.1	5.9	5.9	4.0
Median number of months	2	2	3	4	5	5	3
N	10,457	11,473	4,820	4,063	7,501	1,009	39,323
Women							
Number of months	3.5	3.6	4.4	3.9	4.5	5.5	3.7
Median number of months	2	2	3	3	3	4	2
N	8,743	9,014	2,659	1,189	2,106	355	24,066

In this section we present three sets of results. Table 5.1 focuses on 2022 and shows the mean and median number of months with income from invoicing service companies by gender, birth country and age group. Figure 5.1 plots the distribution of months with income from invoicing companies in 2022. Figure 5.2 describes the average yearly number of months with payments from invoicing service companies in 2019–2022 among light entrepreneurs by age group, country of birth and gender.

We find that most light entrepreneurship is occasional. In 2022 light entrepreneurs received payments on average in 4.2 months; the median number of months was 3 (Table 5.1). During the year 35 per cent of light entrepreneurs received only one payment from invoicing companies, and

13 per cent received payments in 10 to 12 months (Figure 5.1). Note that this group also contains true employees of the invoicing companies, as we cannot identify and remove them from the analysis.

Figure 5.1
Distribution of number of months with payments from invoicing service companies in 2022, by age group, country of birth and gender.

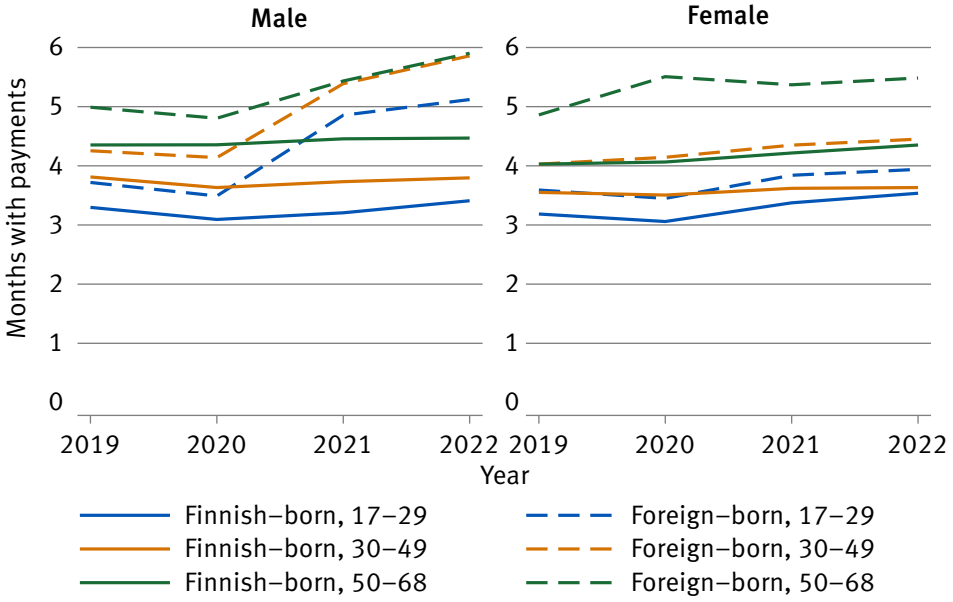


There was considerable variation between sociodemographic groups. In general, older and foreign-born individuals received payments more often than others (Figure 5.1). Gender differences were small among light entrepreneurs born in Finland, but larger among foreign-born light entrepreneurs, with males engaging in light entrepreneurship more frequently than females. Among the demographic groups in Table 5.1, young individuals born in Finland stood out as the group that least

frequently received payments from invoicing companies, with a median of two months. 35 per cent received only one payment and about seven per cent received payments in 10–12 months. At the other end of the spectrum were middle-aged and older foreign-born males, for whom the average number of months with payments was 5.9. A little less than 20 per cent received one payment and about 28 per cent received payments in 10 to 12 months in 2022.

In most sociodemographic groups the average number of months with payments has increased since 2019, especially after 2020 (Figure 5.2). The increase has been particularly strong among foreign-born males, among whom the average has risen by between one and two months with payments between 2019 and 2022. Among both Finnish- and foreign-born light entrepreneurs, the increase was largest in the youngest age group.

Figure 5.2
Average number of months per year with income from light entrepreneurship in 2019–2002, by age group, country of birth and gender.



5.2 Income from light entrepreneurship

In this section, we study income from light entrepreneurship using several distributional measures. We examine the level and distribution of yearly income from light entrepreneurship, including how it relates to the YEL insurance threshold. Furthermore, we examine how dependent light entrepreneurs are on their income from light entrepreneurship by calculating its share of total earned income as recorded in the Incomes Register, as well as the share of light entrepreneurs with no other source of earned income in the Incomes Register. As mentioned in Chapter 3, we are unable to distinguish employees of invoicing companies from light entrepreneurs, which means we may slightly overestimate the amount of income from light entrepreneurship.

Table 5.2 shows average and median yearly incomes from light entrepreneurship and the share of light entrepreneurs whose income from light entrepreneurship exceeds the YEL threshold in 2022. Further, it shows the share of earned income recorded in the Incomes Register that stems from light entrepreneurship, and the share of light entrepreneurs with no other earned income in the Incomes Register.

In 2022, average yearly income from light entrepreneurship was EUR 7,058. Median income was only EUR 1,703, indicating that the income of most light entrepreneurs was considerably below the mean. As mentioned in Chapter 2, pension insurance for the self-employed and light entrepreneurs is mandatory only if their income exceeds a certain threshold. In 2022, that threshold was EUR 8,262, which was exceeded by only 22 per cent of light entrepreneurs. Income from light entrepreneurship accounted for an average of 39 per cent of earned income, and 21 per cent of light entrepreneurs had no other income according to the Incomes Register. Note that social security benefits, pensions, and entrepreneurial income are not included in the Incomes Register, and therefore the share of those with no other income at all is likely to be lower than one in five.[8]

8 The measure of total taxable income that includes all sources of taxable earned income, benefits, pensions, and entrepreneurial income, and that we use in Chapter 7, is not yet available for 2022, and therefore it could not be included in the analysis. In 2021, light entrepreneurship income made up on average 27 per cent of the total income of light entrepreneurs, ranging from less than 20 per cent of the income of females born in Finland to 55 per cent of the income of foreign-born male light entrepreneurs aged 50–68.

There was considerable variation within the group of light entrepreneurs. On average, males, foreign-born, and older individuals had higher income from light entrepreneurship, and that income accounted for a larger share of their earned income. Mean yearly income from light entrepreneurship ranged from EUR 2,540 among young females born in Finland to EUR 15,150 among older foreign-born males. Income from light entrepreneurship accounted for between 24 per cent of earned income among middle-aged women born in Finland and 57 per cent of earned income among older foreign-born males. Among both Finnish and foreign-born males aged 50–68, almost one in three had no other earned income. The high numbers are naturally explained in part by retirement.

Table 5.2
Income from light entrepreneurship in 2022, by age group, country of birth and gender.

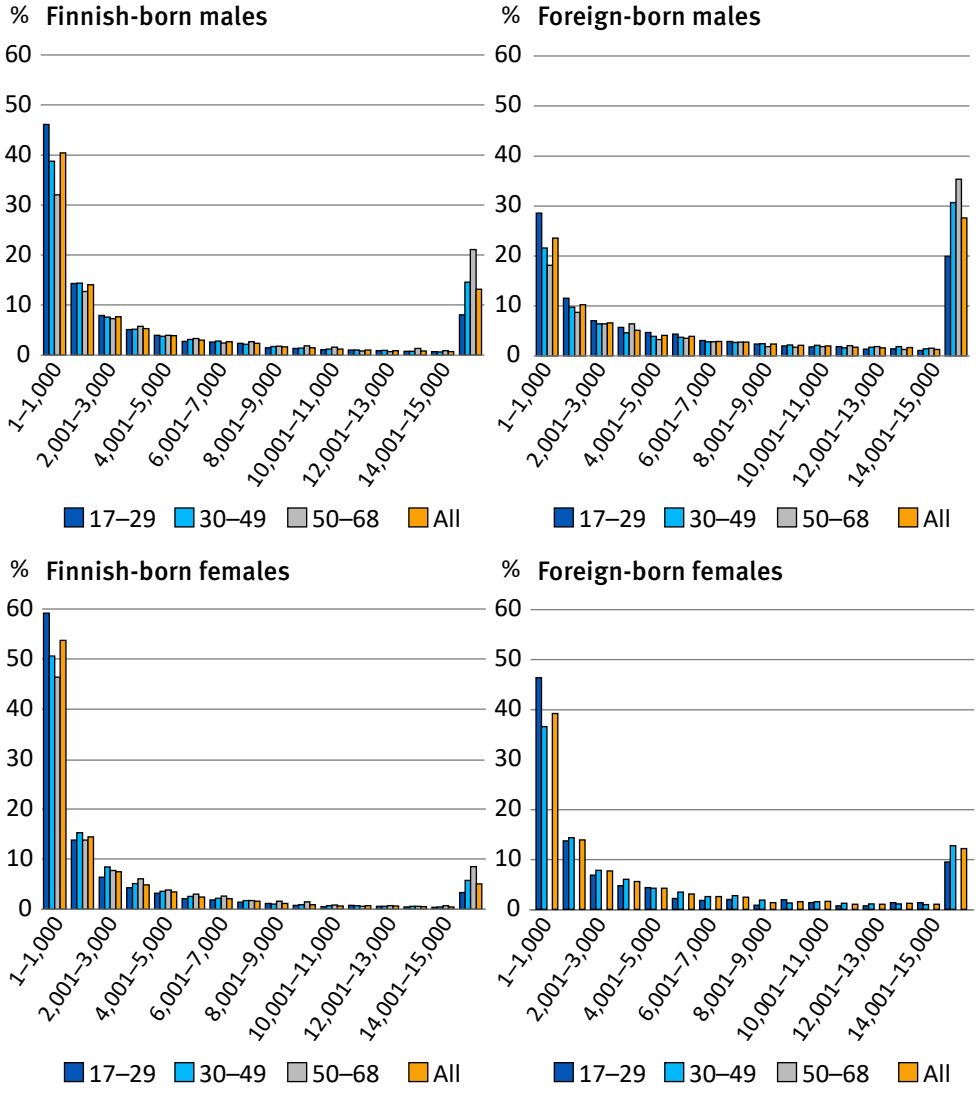
Variable	Finland 17–29	Finland 30–49	Finland 50–69	Other 17–29	Other 30–49	Other 50–68	All
All							
Mean yearly income from LE, €	3,678	6,125	8,881	7,603	11,305	13,296	7,058
Median yearly income from LE, €	928	1,339	2,000	2,764	4,646	5,615	1,703
Share with LE income above YEL threshold, %	11.4	16.6	24.0	28.1	38.6	42.2	22.1
LE income share of earned income, %	33.4	28.3	43.4	44.0	46.6	53.7	38.9
Share with no other earned income, %	15.0	14.9	28.4	19.7	24.0	31.4	21.0
N	19,200	20,487	7,479	5,252	9,607	1,364	67,995
Males							
Mean yearly income from LE, €	4,629	8,071	10,973	8,471	12,724	15,150	8,559
Median yearly income from LE, €	1,223	1,728	2,708	3,467	5,964	7,150	2,235

Variable	Finland 17–29	Finland 30–49	Finland 50–69	Other 17–29	Other 30–49	Other 50–68	All
Share with LE income above YEL threshold, %	14.6	21.7	29.4	31.2	43.4	47.6	26.4
LE income share of earned income, %	37.7	31.5	47.7	45.5	47.8	56.5	41.1
Share with no other earned income, %	17.6	17.7	32.1	19.5	23.6	33.1	21.8
N	10,457	11,473	4,820	4,063	7,501	1,009	40,187
Females							
Mean yearly income from LE, €	2,540	3,648	5,088	4,636	6,252	8,027	3,719
Median yearly income from LE, €	684	998	1,200	1,200	1,965	2,600	939
Share with LE income above YEL threshold, %	7.5	10.2	14.3	17.6	21.4	26.8	11.2
LE income share of earned income, %	28.2	24.2	35.5	38.9	42.3	45.6	30.2
Share with no other earned income, %	11.9	11.3	21.7	20.4	25.4	26.5	15.2
N	8,743	9,014	2,659	1,189	2,106	355	24,568

Figure 5.3 shows the distribution of yearly income from light entrepreneurship in 2022 by age group, country of birth and gender. Individuals with light entrepreneurship income above EUR 15,000 are grouped in one bin. The graphs highlight just how skewed the income distribution is, as an income below EUR 1,000 is by far the most common income bracket in most demographic groups. Among Finnish-born males and females and foreign-born females, the share of light entrepreneurs with an income below EUR 1,000 ranges from 40 to 55 per cent. Foreign-born males stand out with a lower share in the lowest income bracket (28%) and a higher share in the income bracket above EUR 15,000 (27%).

Among Finnish-born males and foreign-born females, the share earning more than EUR 15,000 from light entrepreneurship was 12 per cent; among Finnish-born females the corresponding share was as low as five per cent. In all demographic groups there was a positive relationship between age and income from light entrepreneurship.

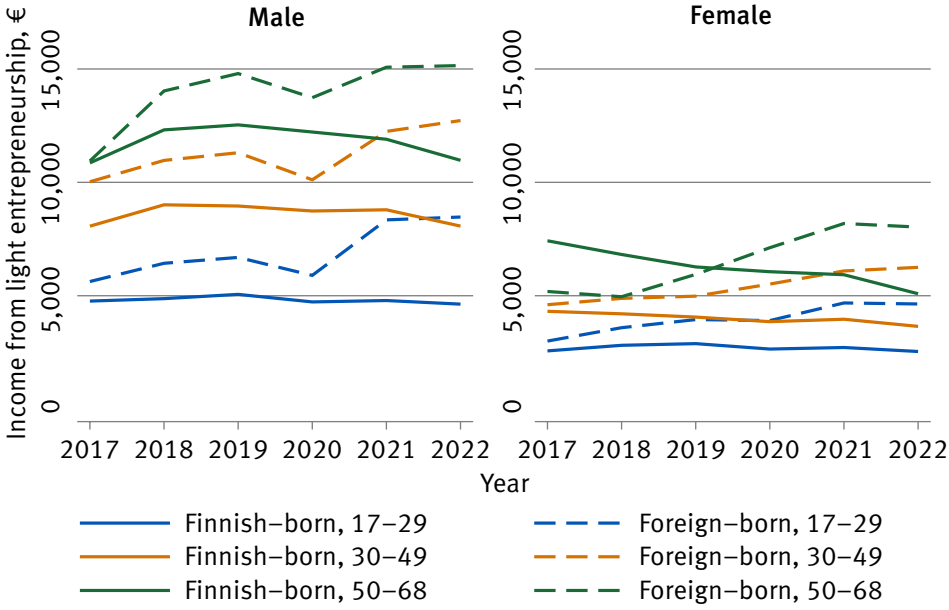
Figure 5.3
Yearly income from light entrepreneurship in 2022, by age group, country of birth and gender.



Note: Foreign-born females in age group 50–68 excluded due to low number of observations.

Below we examine how the income of light entrepreneurs changed in 2017–2022 (Figure 5.4). Among foreign-born light entrepreneurs, income from light entrepreneurship increased over this period, despite a dip among males in the Covid year 2020. Income from light entrepreneurship has been more stable among Finnish-born light entrepreneurs, although figures did dip slightly in 2022, especially in the oldest age group (both males and females).

Figure 5.4
Mean yearly income from light entrepreneurship in 2017–2022, by gender, birth country and age group.



Note: Income is adjusted to 2022 prices using the consumer price index.

The share of those whose income from light entrepreneurship exceeded the YEL threshold has increased among foreign-born light entrepreneurs, especially among males and after 2020. The corresponding share has been stable among Finnish-born light entrepreneurs, or even decreased in the oldest age group.

Figure 5.5
Share with income from light entrepreneurship above YEL threshold in 2017–2022, by gender, birth country and age group.

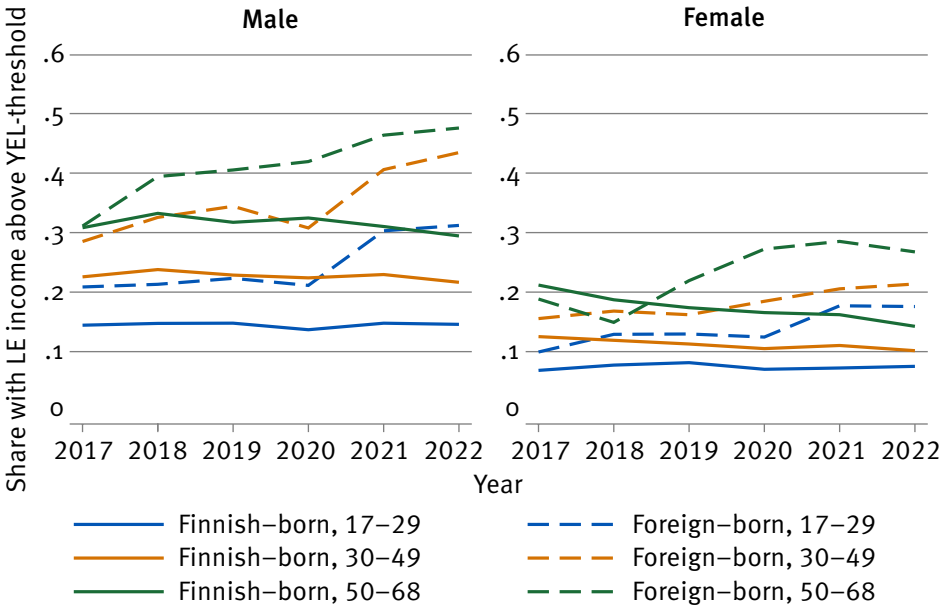


Figure 5.6 describes income from light entrepreneurship as a share of earned income in the Incomes Register. Among foreign-born males, the share of light entrepreneurship income has increased after 2020 in all age groups. Among Finnish-born males, the share has decreased after 2020, especially in the oldest age group. Among female light entrepreneurs, there has been a trend towards lower shares of light entrepreneurship income, irrespective of birth country. We see similar tendencies in Figure 5.7, which shows the share of light entrepreneurs with no other earned income in the Incomes Register. After 2020, the share increased among foreign-born males but decreased among females and Finnish-born males.

Figure 5.6
Income from light entrepreneurship as a share of earned income in the Incomes Register in 2017–2022, by gender, birth country and age group.

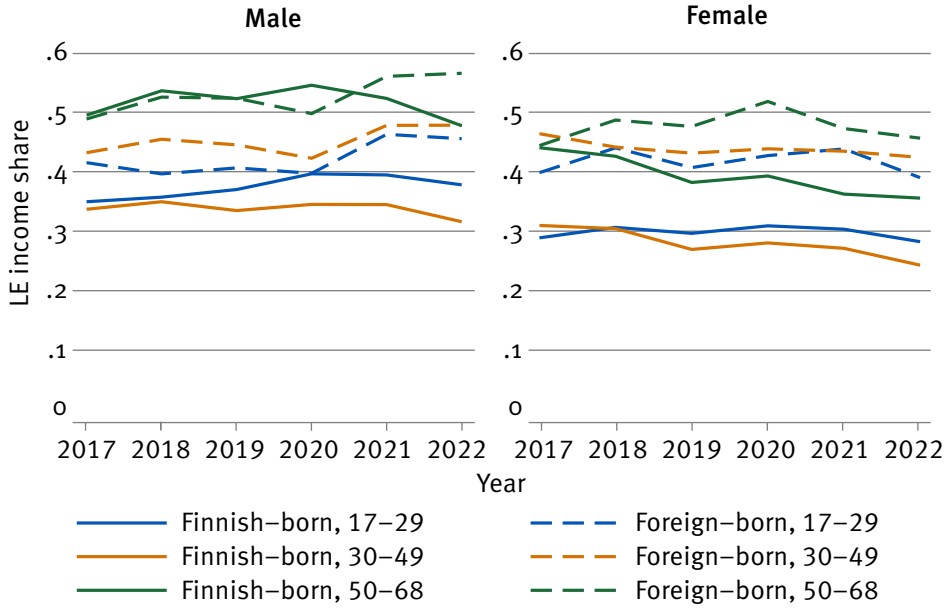
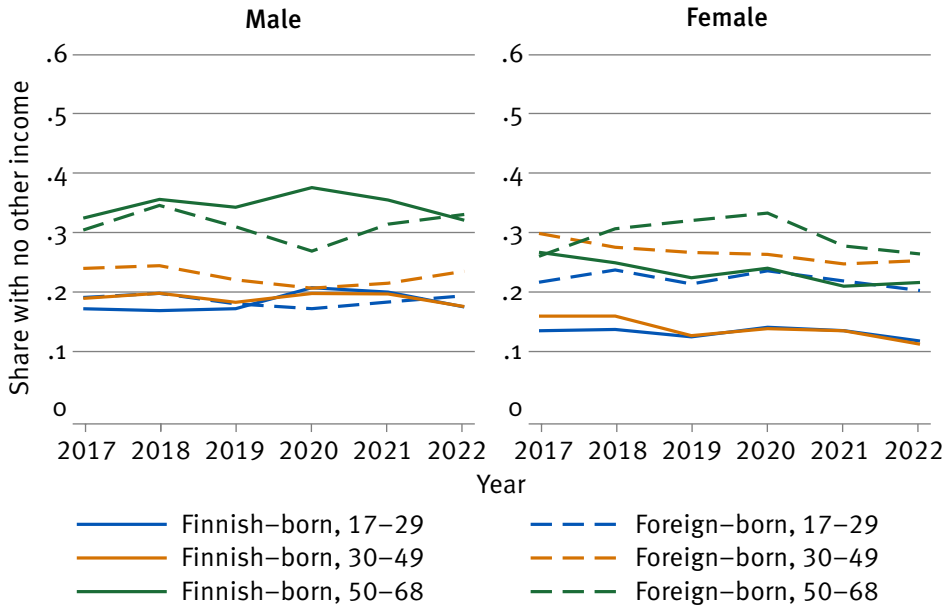


Figure 5.7
Share of those with no other earned income in the Incomes Register in 2017–2022, by gender, birth country and age group.



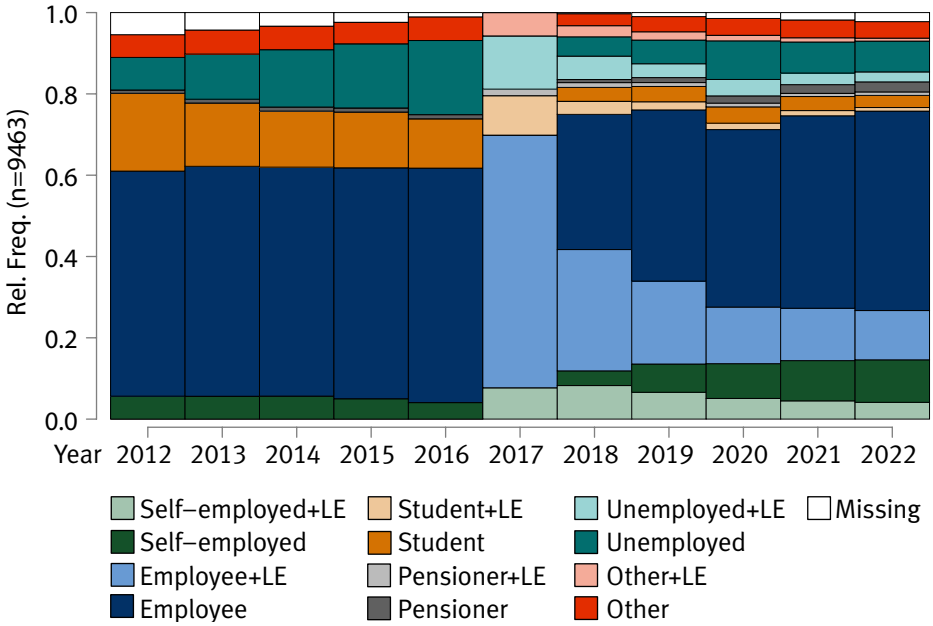
6 Career trajectories

This chapter picks up the analysis of Chapter 4, but turns the focus to how light entrepreneurs' labour market statuses have changed over a longer period. This analysis is limited to those who entered light entrepreneurship in 2017 and were aged between 22 and 63 at the time (N = 9,463). We follow them for five years before and five years after the year of entry, or in other words, from 2012 to 2022. While previous studies on light entrepreneurs have been strictly cross-sectional, our longer-term examination of the careers of light entrepreneurs sheds light on both the antecedents and the consequences of light entrepreneurship. We regard light entrepreneurs' careers as sequences or trajectories of labour market statuses and use visualisation and descriptive methods of sequence analysis to explore these trajectories. Our aim is to further investigate how stable light entrepreneurship is, how stable the careers of light entrepreneurs are, what kind of typical labour market transitions light entrepreneurs make, and how career trajectories vary between sociodemographic and socioeconomic groups.

6.1 Transitions between labour market statuses

Figure 6.1 shows the distribution of labour market and light entrepreneurship statuses by year. There are six different labour market statuses, and in each status an individual can be a light entrepreneur or not. When someone is completely missing from the data, this is indicated by a separate state. The darker shade of each colour indicates that someone was not a light entrepreneur, while the lighter shade indicates that they were. Before 2017 no one was yet a light entrepreneur, while in 2017 (the year of entry) everyone was. After 2017, in line with our findings in section 4.4, we can see that the share of those in light entrepreneurship continued to decline year by year as the lighter shades of the colours diminish.

Figure 6.1
State distribution plot of light entrepreneurs' careers, 2012–2022.



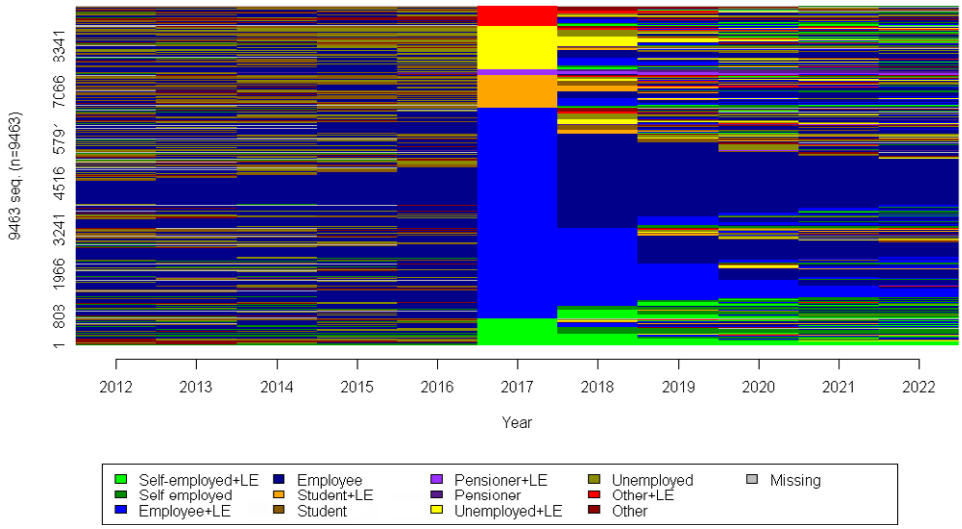
In 2012, 61 per cent of future light entrepreneurs were either self-employed or employed as employees. This share remained largely stable until 2016. Students constituted around 20 per cent of the sample in 2012 and their share declined during the next four years, as many of them probably graduated. The share of unemployed grew noticeably during the five years preceding light entrepreneurship: while eight per cent were unemployed in 2012, this figure increased to 18 per cent by 2016. The share of missing states dropped from five per cent in 2012 to close to zero in 2016, suggesting that these individuals entering the data most likely moved to Finland from abroad.

In 2017, the year of entry into light entrepreneurship for all, the share of those who were observed as working as an employee or in self-employment at the end of the year rose sharply to 70 per cent. Unemployment was reduced to 13 per cent. Overall, there were only small changes in the share of students and pensioners. After the year of entry, the degree of light entrepreneurship quickly declined, while the shares of the various labour market statuses remained relatively stable. Self-employment, especially without using invoicing service companies, continued to increase after

2017, suggesting that light entrepreneurship may, for some, serve as a step towards full entrepreneurship. Employment as an employee remained rather stable, except for the Covid year 2020 when especially unemployment increased momentarily. The share of missing values again increased towards 2022, suggesting outward or return migration, and possibly mortality.

Analysis of the distribution of different states in each year is informative as a series of cross-sections, but it says little about the states that individuals experience within their careers and how these states might be interrelated. In Figure 6.2, each state sequence for all light entrepreneurs is represented by one thin line and subsequently sorted and stacked to create a plot. It shows that there is much variation in the states within each sequence and that sequences consisting of only one colour (i.e., one labour market status) are rare. On average, a light entrepreneur made 2.9 transitions between statuses during the period between 2012 and 2022. Continuous spells of employment as an employee were most common, while especially those who entered light entrepreneurship as self-employed, students and unemployed made multiple transitions before and after entry. This suggests that many light entrepreneurs' careers were far from stable. Moreover, the plot shows that there was substantial heterogeneity between individuals' career trajectories.

Figure 6.2
State index plot of light entrepreneurs' careers, 2012–2022.



To gain better insight into the stability and predictability of light entrepreneurs' careers, we first calculated how many of them changed their labour market status during the year they became light entrepreneurs (Table 6.1). Continuity between 2016 and 2017 was greatest for employees and pensioners, among whom more than 80 per cent remained in the same status. Among the self-employed in 2016 only around half continued to remain self-employed, while almost one-third qualified as employees in the first year of entry into light entrepreneurship. Among students, unemployed and others, almost 40 per cent became employees together with light entrepreneurship. Transitions to self-employment from other statuses were relatively rare in the first year of light entrepreneurship.

Second, we calculated shares of transitions between 2017 and 2022 to provide an indication of how predictable labour market statuses are five years after entry into light entrepreneurship (Table 6.2). Again, employees and pensioners showed the greatest continuity, with more than 70 per cent in the same status at both points in time. Transitions to the employee status from the other statuses were common. Out of those who were self-employed in 2017, 36 per cent were employees in 2022. For students this share was 61 per cent and for the unemployed 46 per cent. Between 12 and 16 per cent of those who were not self-employed in 2017 were self-employed in 2022. This share was highest for those with no identified status other than being a light entrepreneur in 2017 (i.e., those classified as "other"). In the "other" group, a transition to unemployment or exit from the data was also more common than in the other groups. Self-employed and pensioned light entrepreneurs in 2017 were most likely to continue to be light entrepreneurs in 2022, while students and others were least likely.

Table 6.1
Shares of transitions between labour market statuses from 2016 to 2017, %.

Transition between	Status in 2017						N
Status in 2016	Self-employed	Employee	Student	Pensioner	Unemployed	Other	
Self-employed	49.9	31.7	5.5	0.5	6.0	6.5	385
Employee	5.4	80.4	5.5	0.7	6.1	1.9	5,457
Student	5.4	39.0	40.1	0.4	9.8	5.3	1,149
Pensioner		9.3		84.5			97
Unemployed	7.0	39.7	5.3	1.3	38.9	7.8	1,725
Other	8.9	36.6	6.0	0.7	17.5	30.4	550
Missing	11.0	26.0	13.0			48.0	100

Note: Cells left empty due to low number of observations.

Table 6.2
Shares of transitions between labour market statuses from 2017 to 2022, %.

Transition between	Status in 2022							Light entrepreneur in 2022	N
Status in 2017	Self-employed	Employee	Student	Pensioner	Unemployed	Other	Missing		
Self-employed	44.8	35.8	1.6	4.4	7.7	4.0	1.8	29.7	730
Employee	11.7	71.0	3.1	1.8	7.2	3.7	1.6	20.5	5,880
Student	12.5	60.5	8.2	1.1	9.0	6.1	2.6	18.7	919
Pensioner		15.1	4.0	73.0	2.6		2.6	26.3	152
Unemployed	13.3	45.6	4.8	3.5	24.8	5.8	2.3	21.6	1,239
Other	15.7	38.3	5.5	3.0	14.6	14.2	8.8	19.2	543

Note: Cells left empty due to low number of observations.

6.2 Career trajectories by sociodemographic groups

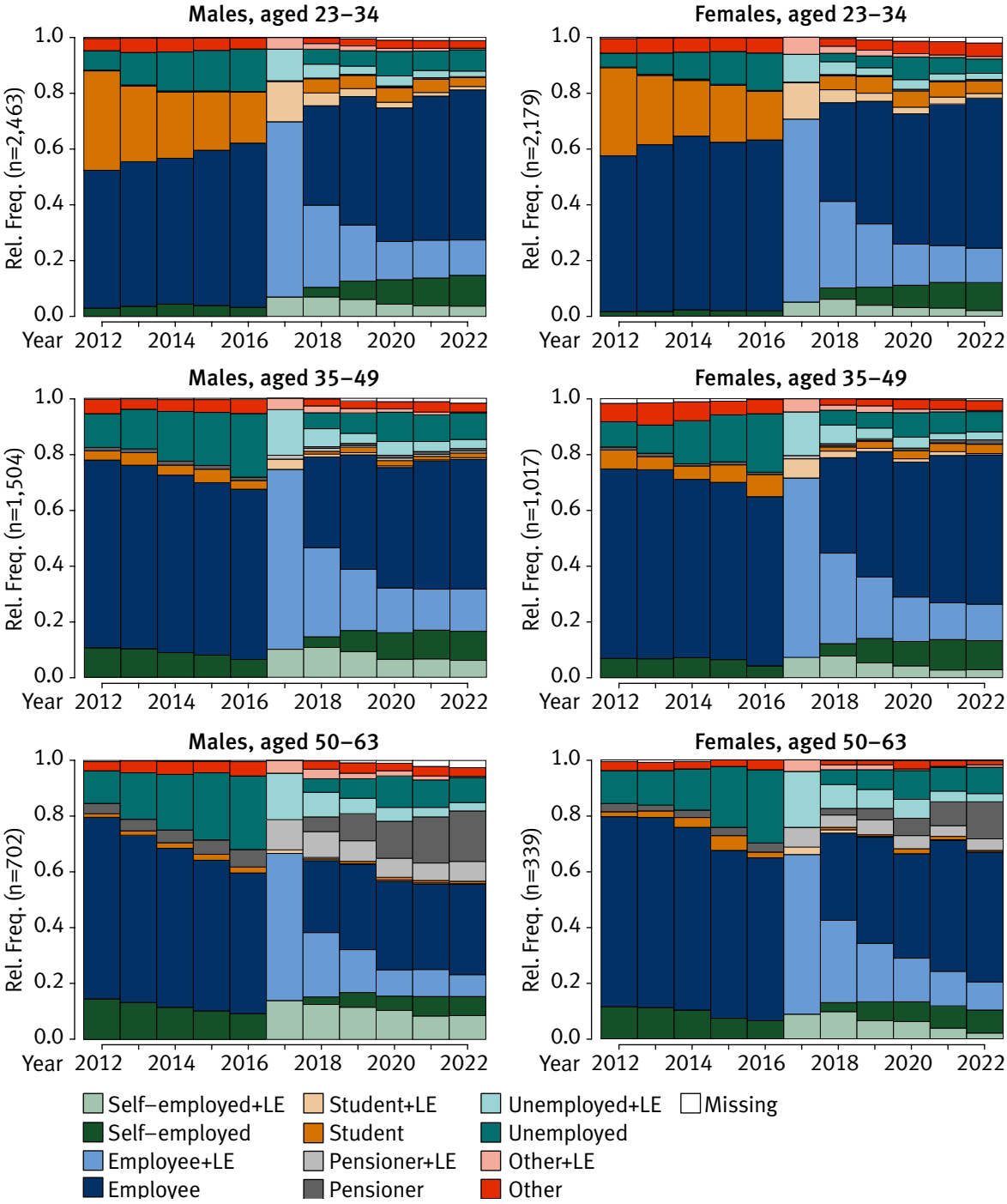
Given the heterogeneity of sequences and the assumption that entry into light entrepreneurship may have different reasons and different consequences at various stages of the life course, we split the sample into three age groups: young (aged 22–34 and born between 1983 and 1995), middle-aged (aged 35–49, born between 1968 and 1982), and older (aged 50–63, born between 1954 and 1967). Additionally, the sequence analysis is split by gender and by whether the light entrepreneur is born in Finland or not, yielding a total of 12 sociodemographic groups.

6.2.1 Finnish-born light entrepreneurs

Starting with Finnish-born men and women (Figure 6.3), we notice that in the youngest group aged 22–34, entry into light entrepreneurship seems to be part of the process of entry into the labour market. In 2012, 35 to 40 per cent of the young light entrepreneurs were still students, but that share continuously declined over the next 10 years. Employment as employees continued to increase throughout the period, especially among young men, and received a boost in the year that light entrepreneurship started. Self-employment also received a small boost in that year and started to grow, slightly more among men than among women. After 2018 self-employment increased only among those who stopped using invoicing service companies. Unemployment was increasing among both men and women in the youngest cohorts before entry into light entrepreneurship, but from there on unemployment shares remained stable, except in 2020. Unemployment spells often lasted one or two years, and longer-term unemployment was relatively rare in this youngest group.

Among Finnish-born light entrepreneurs aged 35–49 at the time of entry, there was a substantial group who were almost continuously employed as employees during the 11-year follow-up period (Figure 6.3). Yet, the share of employment declined until 2017 while unemployment increased. Moreover, unemployment was more often continuous than in the younger cohort and lasted for several years. As in the younger cohort, employment received a boost in the year that these individuals became light entrepreneurs, and the shares remained relatively stable afterwards. Among those who were self-employed in the year of entering light entrepreneurship, only few had previous experience of self-employment, especially among women. Overall, self-employment was more popular among men than among women.

Figure 6.3
State distribution plots for Finnish-born men and women.



Among older Finnish-born light entrepreneurs aged 50–63 in 2017, we also notice a decline in employment (both as employees and self-employed) and a rise in unemployment up to the point of entering light entrepreneurship (Figure 6.3). Among men, entry into light entrepreneurship provided a similar though less strong boost in employment as among the younger cohorts. Among women, this boost did not occur in 2017, but there was an increase in employment one year later. At the same time, starting as a light entrepreneur was often paired with retirement in this cohort. After 2017, employment as an employee continued to decline and retirement increased while self-employment and unemployment remained rather stable, especially among men. Out of all the sociodemographic groups, older men were most likely to remain light entrepreneurs after five years: in 2022, 27 per cent were still light entrepreneurs, compared to 21 per cent on average.

Table 6.3
Average number of years spent in each labour market status and average number of transitions in 2012–2022 (2017–2022), Finnish-born light entrepreneurs.

Finnish-born light entrepreneurs	Men 22–34	Men 35–49	Men 50–63	Women 22–34	Women 35–49	Women 50–63
Mean number of years in state						
Self-employed	0.9 (0.7)	1.3 (0.9)	1.5 (0.9)	0.7 (0.6)	1.1 (0.7)	1.2 (0.7)
Employee	6.6 (3.9)	6.9 (3.7)	5.6 (2.7)	6.9 (3.9)	7.2 (3.9)	6.7 (3.5)
Student	1.8 (0.5)	0.3 (0.1)	0.2 (0.1)	1.7 (0.5)	0.6 (0.3)	0.2 (0.1)
Pensioner	0.0 (0.0)	0.2 (0.1)	1.3 (1.1)	0.0 (0.0)	0.1 (0.1)	0.8 (0.6)
Unemployed	1.2 (0.6)	1.7 (0.8)	1.8 (0.8)	1.0 (0.5)	1.4 (0.7)	1.8 (0.9)
Other	0.5 (0.3)	0.6 (0.3)	0.6 (0.4)	0.7 (0.4)	0.6 (0.3)	0.4 (0.2)
Light entrepreneur	2.5	2.7	2.9	2.5	2.5	2.8
Mean number of transitions between labour market statuses	3.1 (1.3)	2.4 (1.1)	2.5 (1.2)	3.2 (1.5)	2.7 (1.2)	2.6 (1.3)
N	2,463	1,504	702	2,179	1,017	339

Table 6.3 summarises the average number of years spent in each state and the average number of transitions made during the period 2012–2022, with measurements for the period 2017–2022 given in brackets. It

shows that the time spent in self-employment was longer for men and older light entrepreneurs. For example, older men spent on average 1.3 years in self-employment, while the average for younger women was 0.7 years. Overall women spent more time as employees. For middle-aged women the average was 7.2 years. For older men, the figure was only 5.6 years. Older men spent more time in retirement than older women: 1.3 years compared to 0.8 years. Out of all groups, older male light entrepreneurs also spent the longest amount of time in unemployment, namely 1.8 years on average. Among the younger women the average duration of unemployment was just under one year. The average duration of light entrepreneurship among all groups was 2.6 years, with little variation between groups. However, older men were the most persistent light entrepreneurs, recording an average of 2.9 years. Younger cohorts made more transitions between labour market statuses than older cohorts.

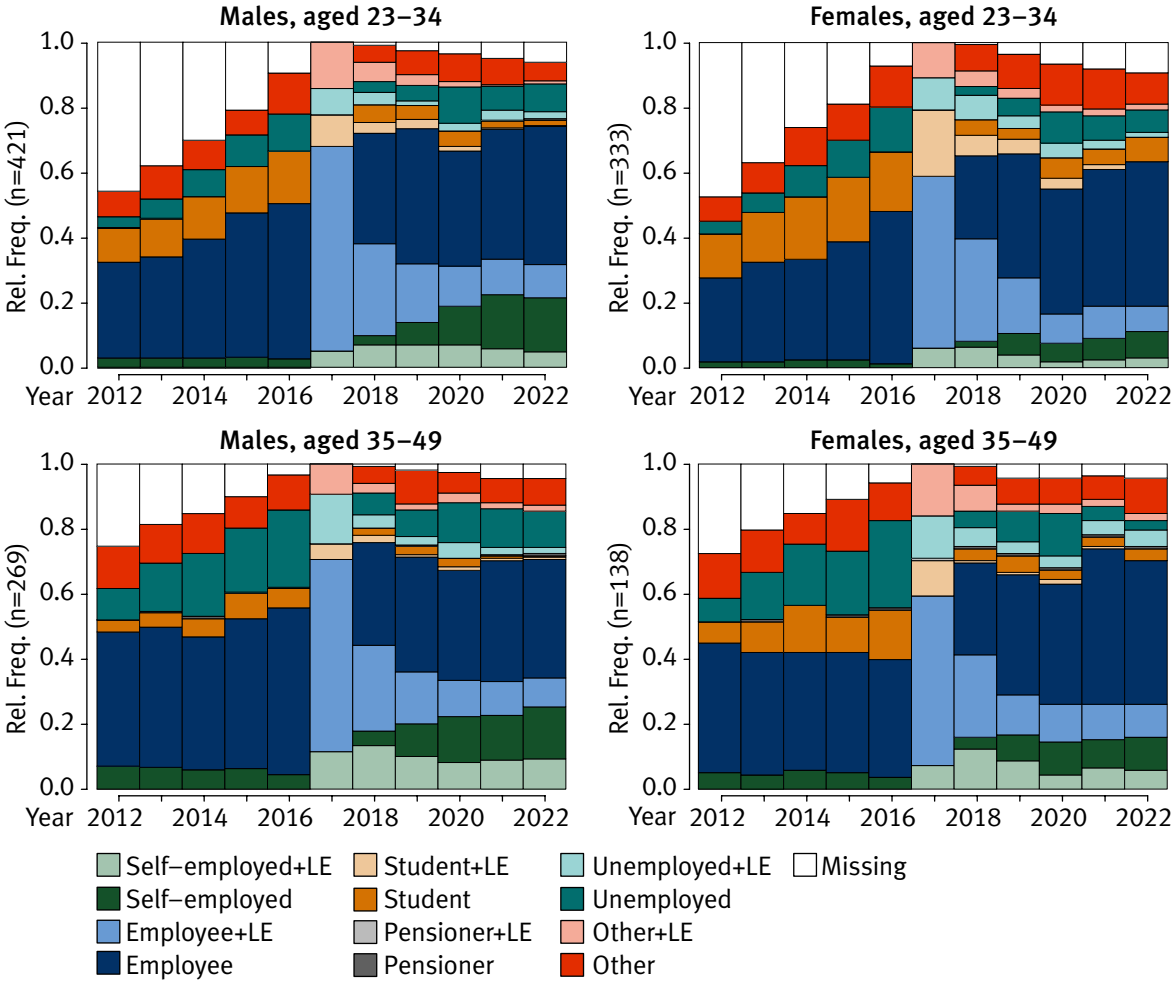
6.2.2 Foreign-born light entrepreneurs

Further analyses of foreign-born light entrepreneurs starting in 2017 aged 50–63 were not possible due to the low number of observations (N = 67 for men and N = 31 for women). Otherwise, the picture of younger and middle-aged foreign-born light entrepreneurs differs clearly from Finnish-born light entrepreneurs (Figure 6.4). This is mainly due to higher missingness in the data. In 2012, slightly less than half of the younger foreign-born light entrepreneurs were missing from the data, suggesting that they were not yet in Finland five years before entering light entrepreneurship. After becoming a light entrepreneur, less than 10 per cent seemed to exit the data again. Among younger foreign-born light entrepreneurs, less than half were employed in the year before entering light entrepreneurship. The boost in employment that followed in the year after entry was greater among men than in women. Women more often entered or stayed in education. In the years following entry, employment levels remained relatively stable among young foreign-born light entrepreneurs. Self-employment was particularly popular among young foreign-born men: by 2022 around 20 per cent were self-employed, mostly without using the services of invoicing service companies.

The share of the missing status was also considerable in the group of light entrepreneurs born outside Finland and aged 35–49, but smaller than in the younger age group. In other words, a larger proportion were most likely already in Finland in the years preceding entry into light entrepreneurship.

Out of those who were in Finland before 2017, a large share of men were employed, while women were in education more frequently than men. Among both foreign-born men and women, unemployment was on the rise in the years before entry into light entrepreneurship. After entry, employment received the same boost that was observed in the other groups, paired with a reduction in unemployment. The distribution of states remained relatively stable after 2017, although self-employment increased continuously among men. By 2022, more than one in four foreign-born male light entrepreneurs in the age group 35–49 were self-employed, with many making this transition from employment as employees and from unemployment.

Figure 6.4
State distribution plots for foreign-born men and women.



While foreign-born young women spent on average the least amount of time in self-employment (0.6 years), male light entrepreneurs who were born outside of Finland and aged 35–49 were self-employed for the longest amount of time: 1.5 years, out which 1.2 years after entry into light entrepreneurship (Table 6.4). Overall, foreign-born light entrepreneurs spent less time working as employees than their Finnish-born counterparts, especially among women. Younger foreign-born light entrepreneurs experienced on average shorter unemployment than Finnish-born light entrepreneurs. This may be due to the fact that part of them only entered the country after 2012 and possibly to their lower eligibility to unemployment benefits. However, the average duration of unemployment among middle-aged foreign-born light entrepreneurs was similar to and even slightly higher than among Finnish-born light entrepreneurs in the same age group. The number of years spent in light entrepreneurship did not differ substantially between Finnish- and foreign-born persons.

Foreign-born light entrepreneurs had more unstable careers than Finnish-born light entrepreneurs. Foreign-born women in particular made more transitions than other groups. On average, female light entrepreneurs born abroad and aged 22–34 and 35–49 changed status 3.5 times, compared with 2.7 and 2.6 times in the respective birth cohorts among Finnish-born female light entrepreneurs.

Table 6.4
Average number of years spent in each labour market status and average number of transitions in 2012–2022 (2017–2022), foreign-born light entrepreneurs.

Foreign-born light entrepreneurs	Men 22–34	Men 35–49	Women 22–34	Women 35–49
Mean number of years in state				
Self-employed	1.1 (0.9)	1.5 (1.2)	0.6 (0.5)	1.1 (0.9)
Employee	5.3 (3.4)	5.3 (3.1)	4.9 (3.2)	5.0 (3.2)
Student	1.0 (0.4)	0.5 (0.2)	1.5 (0.6)	0.9 (0.3)
Pensioner	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.1 (0.0)
Unemployed	0.9 (0.6)	1.7 (0.8)	1.1 (0.6)	1.6 (0.7)
Other	2.7 (0.8)	2.0 (0.7)	2.9 (1.1)	2.3 (0.9)
Light entrepreneur	2.4	2.6	2.4	2.5
Mean number of transitions between labour market statuses	3.0 (1.5)	3.1 (1.4)	3.5 (1.7)	3.5 (1.5)
N	421	269	333	138

6.3 Employment trends in the comparison groups

The sections above have shown that unemployment increased in the years preceding entry into light entrepreneurship. This was followed by a marked rise in employment as employees and self-employed in the year of becoming a light entrepreneur. To rule out the possibility that these observations merely reflect overall employment trends in the population, we also calculated the shares in the comparison groups (by age) in self-employment, employment as employees and unemployment in 2012–2022.[9] This comparison also gives us an indication of how light entrepreneurs perform overall in the labour market relative to others in the same age groups. These figures can be found in the Appendix.

Figure A6.1 shows that before 2017, the share of light entrepreneurs who were self-employed did not differ markedly from the corresponding share in the comparison groups. However, in 2017 it increased suddenly and substantially among light entrepreneurs and remained at a higher level than among the comparison groups.

The share of employees was higher in the comparison group throughout the period from 2012 to 2022 (Figure A6.2). While the younger cohort started at a similar level in 2012, the growth in employment as employees was lower among light entrepreneurs. The decline in the share of employees in the age group 35–49 is clearly visible compared to the comparison group, where the share was relatively stable until 2017. Although the oldest comparison group also experienced a decline in employment, this decline was faster in the group of light entrepreneurs. In 2020, the shock to employment from the Covid pandemic was greater for light entrepreneurs than for the comparison group.

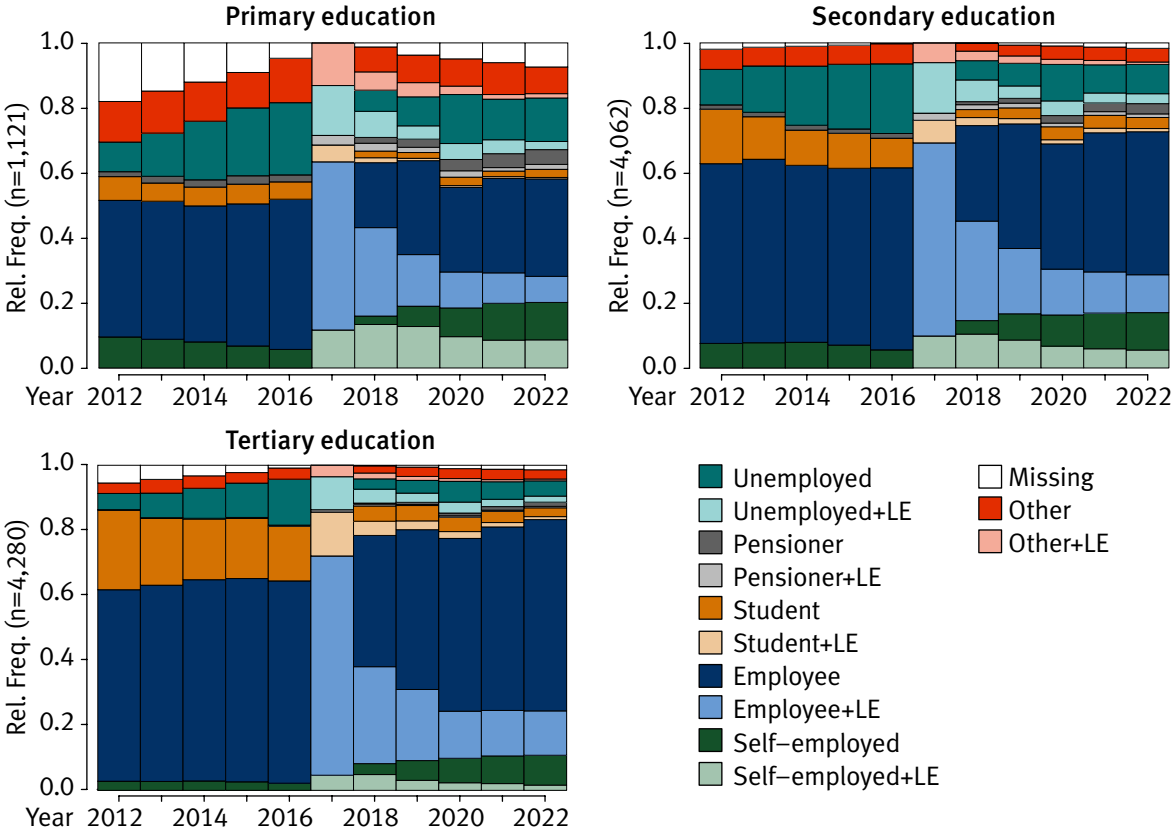
Light entrepreneurs did experience substantially greater unemployment than those in the comparison groups, especially in the older age groups (Figure A6.3). While the shares of unemployment in the comparison groups in 2016 were around nine per cent in the age group 35–49 and 13 per cent in the age group 50–63, among light entrepreneurs the corresponding figures were around 23 per cent and 27 per cent. After entry into light entrepreneurship, the gap in unemployment with the comparison groups narrowed, especially in the younger age group. However, the impact of the Covid shock on unemployment was greater for light entrepreneurs than for non-light entrepreneurs.

9 The comparison group is described in more detail in Chapter 3.2.

6.4 Differences by level of education and income

Sections 6.2.1 and 6.2.2 showed that career trajectories are highly dependent on the light entrepreneur's life-course stage and on whether or not the light entrepreneur is born in Finland. In this section we look more closely at possible socioeconomic heterogeneity by comparing light entrepreneurs' careers by level of education and income. Figure 6.5 shows the state distribution plots for light entrepreneurs by highest level of education in 2022 (primary, secondary and tertiary). The category of primary education includes those for whom information on education is missing, which is the case for many immigrants. This explains why, similar to many foreign-born light entrepreneurs, information on labour market status is missing more often than among those with higher levels of education.

Figure 6.5
State distribution plots by level of education.

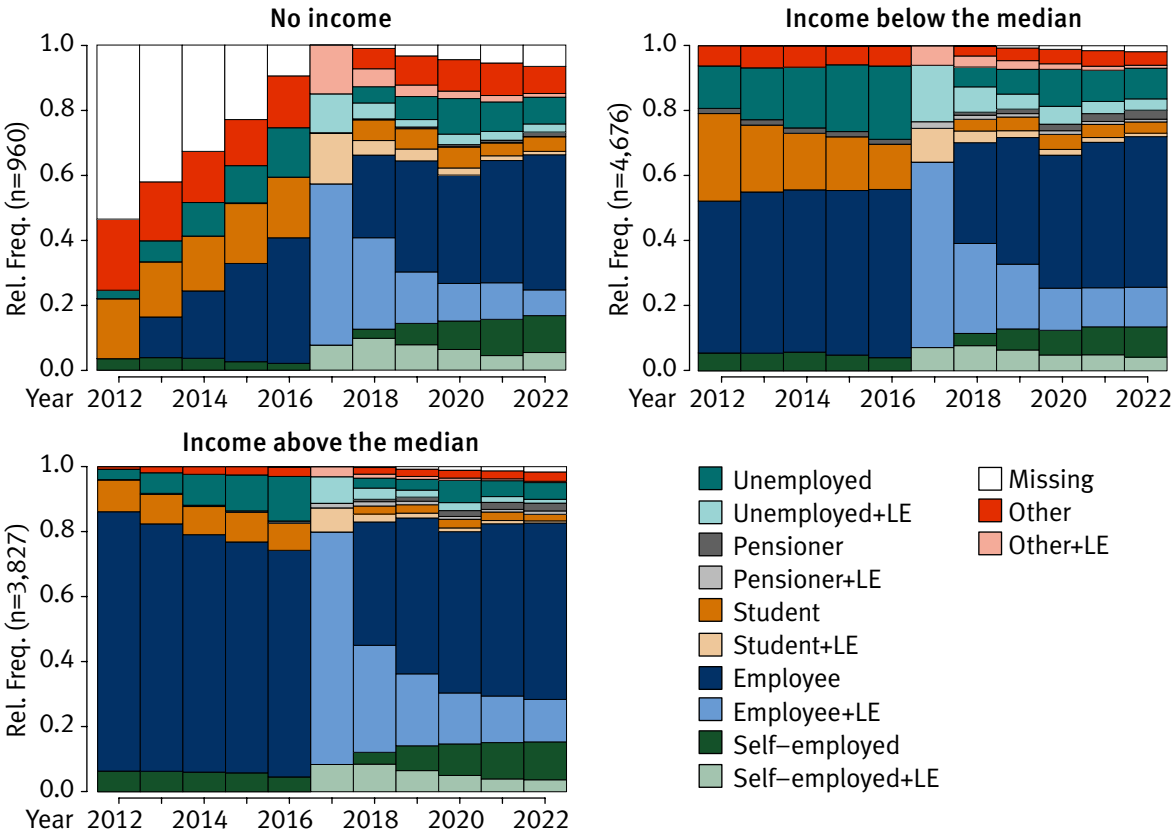


Before entry into light entrepreneurship, the share of unemployed increased at all levels of education. This share and the increase were lowest for those with tertiary education. Until 2017, levels of employment remained largely stable among those with primary education (although self-employment decreased), declined somewhat among those with secondary education and steadily increased among those with tertiary education. The latter seems to be mainly due to transitions from being a student to being employed. After entry into light entrepreneurship, employment continued to increase among the higher educated but stagnated at lower levels for the primary and secondary educated. While less than 60 per cent of the lowest educated were employed in 2022, this share was more than 80 per cent among the highest educated. At the same time, the share of self-employed was lowest among the highest educated (around 10%) and highest among the low educated (more than 20%). The share of those who were still light entrepreneurs in 2022 was somewhat higher among those with primary and secondary education (22.5% and 23.0%, respectively) than among those with tertiary education (19.0%).

Although light entrepreneurs' level of education can be expected to correlate with level of income, we can see some clear differences when looking at career trajectories by level of income (Figure 6.6). Those who had no income in 2012 or whose income was not reported appear often to be foreign-born who were not yet in the country at the time. In addition, as income is measured in terms of income from employment, none of the light entrepreneurs in this first group were employed in 2012. Most were students, "other" or, towards 2017, unemployed. Those who did receive income from employment but whose earnings were below the median, included a large group of students. As many most likely graduated in the years before becoming light entrepreneurs, they became mostly employed or unemployed. Among those with income above the median, almost 86 per cent were employed in 2012. This share had decreased to around 75 per cent by 2016.

At entry into light entrepreneurship, we observe the usual boost in employment in all income groups, but this boost was largest among those with no income in 2012 (from 41% to 57%) and smallest for those with incomes above the median (from 75% to 80%). Employment still increased in 2018 in all groups but then largely stabilised. It is unclear if employment would have increased in some group had it not been for the Covid pandemic. In 2022, only 18 per cent with no income in 2012 were still light entrepreneurs, compared to 20 per cent of those with incomes above the median and 23 per cent of those with incomes below the median.

Figure 6.6
State distribution plots by level of income.



To further illustrate that education in 2022 and income in 2012 capture socioeconomic heterogeneity in somewhat different ways, Table 6.5 shows the mean number of years spent in each labour market status and light entrepreneurship, as well as the average number of transitions between labour market statuses by level of education and income. The duration of self-employment decreases substantially with level of education, while there is no relation with level of income. There was a positive association between education and income, on the one hand, and the duration of being employed as an employee, on the other. Those with primary education and those with incomes above the median spent less time as students than especially those with tertiary education and no income or an income below the median. The duration of unemployment decreases with level of education, and tertiary educated light entrepreneurs spent only half the amount of time in unemployment (0.9 years) than those with primary education do (1.8 years). By income group, the duration of unemployment was longest among those with an income below the median

(1.6 years), but there were hardly any noticeable differences between those with no income (1.1 years) and those with an income above the median (0.9 years). However, those with no income were mostly unemployed after becoming a light entrepreneur (0.7 years), while most of the unemployment of higher-income light entrepreneurs was observed before 2017.

Individuals with only primary education spent the longest period of time in light entrepreneurship, on average 2.8 years. Light entrepreneurship tended to last for a shorter time among those with tertiary education, namely 2.4 years. No marked differences are seen between the income groups in the duration of light entrepreneurship. We do, however, observe substantial differences in the average number of transitions between labour market statuses. Light entrepreneurs with an income above the median made only 2.2 transitions, while those with no income and an income below the median made close to 3.5 transitions on average. This is mostly due to the first group already being firmly attached to the labour market in 2012. Those with only primary education made the most transitions among the three educational groups.

Table 6.5
Average number of years spent in each labour market status and average number of transitions in 2012–2022 (2017–2022), by level of education and income.

Socioeconomic variable	Education in 2022			Income in 2012		
Category	Primary	Secondary	Tertiary	No income	Below median	Above median
Mean number of years in state						
Self-employed	1.4 (1.1)	1.3 (0.9)	0.7 (0.5)	1.0 (0.8)	1.0 (0.7)	1.1 (0.8)
Employee	4.7 (2.6)	6.2 (3.4)	7.3 (4.2)	4.0 (3.0)	5.9 (3.4)	7.8 (4.1)
Student	0.5 (0.2)	0.9 (0.3)	1.4 (0.4)	1.5 (0.6)	1.4 (0.4)	0.7 (0.3)
Pensioner	0.4 (0.3)	0.3 (0.2)	0.1 (0.1)	0.0 (0.0)	0.2 (0.2)	0.2 (0.1)
Unemployed	1.8 (1.0)	1.6 (0.8)	0.9 (0.5)	1.1 (0.7)	1.8 (0.9)	0.9 (0.4)
Other	2.2 (0.9)	0.7 (0.4)	0.6 (0.3)	3.4 (0.9)	0.7 (0.4)	0.3 (0.2)
Light entrepreneur	2.8	2.7	2.4	2.5	2.6	2.5
Mean number of transitions between labour market statuses	3.2 (1.6)	3.0 (1.4)	2.7 (1.2)	3.5 (1.7)	3.3 (1.5)	2.2 (1.0)
N	1,121	4,062	4,280	960	4,676	3,827

7 Income growth of light entrepreneurs

Previous studies have analysed the income of light entrepreneurs from a cross-sectional perspective, focusing on the income of light entrepreneurs in one given year. Also, their main focus has been on income directly tied to light entrepreneurship. In this chapter, we extend the perspective and study how the income of light entrepreneurs develops over time. The income measure we use is taxable income, defined as the sum of earned income and entrepreneurial income, i.e., including both earned wage income, taxable social benefits such as unemployment benefits, disability pensions and pensions, and income from entrepreneurship. Our purpose is to build upon the analysis in Chapter 6 where we showed that there is a trend towards higher employment rates among light entrepreneurs in the years after entry. In this chapter, we examine the development of income in the years prior to and after entry into light entrepreneurship.

As in Chapter 6, our analysis here is restricted to individuals who started as light entrepreneurs in 2017, and we follow them five years before and after their starting year, in the period 2012–2021.10 We further restrict the sample to individuals born between 1954 and 1995, aged 22–63 in 2017. The total number of light entrepreneurs in the analysis is 9,463 (see Table A7.1 in the Appendix).

The income of light entrepreneurs is compared with that of a 10 per cent random sample of the population who were not light entrepreneurs in 2012–2022. The gender, birth year and birth country composition of the random sample is the same as in the total population who were not light entrepreneurs. We call this group “the comparison group”. Note that these groups may still be different in terms of employment history, education, and other factors that may affect their income growth. Therefore, the results cannot be given a causal interpretation.

In this chapter we calculate the mean taxable income of light entrepreneurs in different age groups and their peers in 2012–2021. Further, we study the association between light entrepreneurship and income in different sociodemographic groups.

10 Information about total taxable income is not available for 2022.

7.1 Income growth by age group

Figure 7.1 shows the mean taxable income of light entrepreneurs in age groups 22–34, 35–49 and 40–63 (in 2017) and their peers in 2012–2021. Solid lines represent light entrepreneurs and dashed lines of the same colour represent their peers in the comparison group of the same age.

In all age groups (except for the oldest age group in 2012 and 2013), the level of income was lower among light entrepreneurs compared to their peers. In the youngest age group, mean income increased over time both for light entrepreneurs and in the comparison group. In the years prior to entry, light entrepreneurs experienced slower income growth than their peers. In 2016, the year before entry, the gap was at its largest at about EUR 6,000. In the years after entry, the income of light entrepreneurs increased more than in the comparison group, and in 2021 the gap was just below EUR 800.

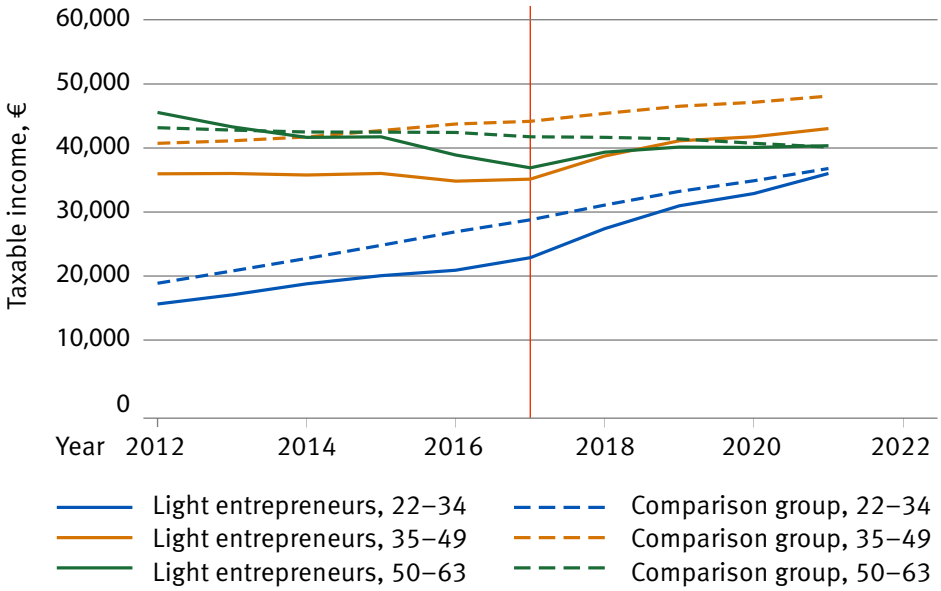
In the middle-aged group, income also increased in both groups over time. The increase was quite linear in the comparison group, but less steep than in the youngest group. In the years prior to entry, light entrepreneurs in this age group experienced no wage growth, and in 2016 their income decreased by about EUR 1,500. In the first two years after entry, light entrepreneurs experienced faster wage growth than their peers, but in 2021 the gap was still about EUR 5,000 (and corresponded to 10.6 per cent of the income of the comparison group).

In the oldest age group, mean income decreased over time. This is partly explained by individuals in the group reaching old-age pension age, but as shown in Chapter 6, increasing levels of unemployment may also have contributed. Light entrepreneurs experienced a larger decrease in income than the comparison group in the years before entry into light entrepreneurship. Their income increased slightly in the first year after entry, but thereafter there was no change in income. The income gap between light entrepreneurs and their peers in the oldest age group closed by 2021 because income of light entrepreneurs largely stabilised, while income in the comparison group continued to decline.

Given the increased levels of unemployment in the years prior to entry and the increased levels of employment in the years after entry into light entrepreneurship, the results in Figure 7.1 are as expected. Entry into light entrepreneurship coincided with a break in the trend in the income

growth of light entrepreneurs, and that growth was faster among light entrepreneurs than their peers in the years after entry. We do not know, however, to what extent this increase stems from higher employment rates, from better-paid jobs in the years after entry, or from the extra income generated by light entrepreneurship alongside other sources of income, or whether it is explained by other coinciding factors.

Figure 7.1
Yearly taxable income of light entrepreneurs and the comparison group in 2012–2021, by age group.



Note: Income is adjusted to 2022 prices using the consumer price index.

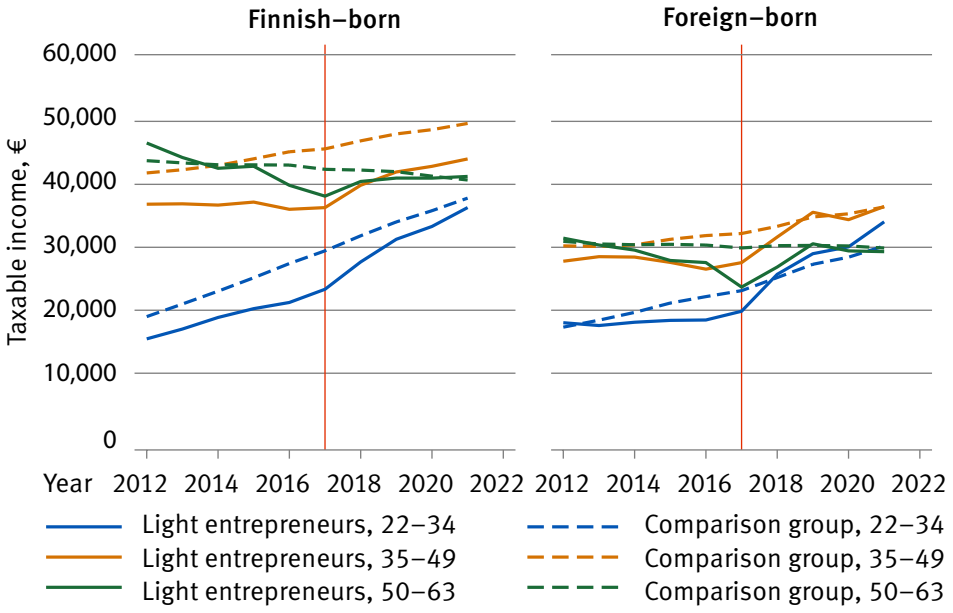
7.2 Income growth by birth country and gender

In this section, we repeat the analysis above by further splitting the sample by birth country and gender.

In Figure 7.2, the study population is separated according to whether they were born in Finland (to the left) or abroad (to the right). The pattern of individuals born in Finland closely follows that in Figure 7.1 because most light entrepreneurs are born in Finland. Therefore, we focus here on light entrepreneurs born abroad.

In the comparison group, we see the same patterns with respect to age as in Figure 7.1: income increased over time among the young and the middle-aged. In the oldest age group, on the other hand, there was no income growth over time. In 2012, there was no income gap between light entrepreneurs and their peers in the youngest or oldest age group, while light entrepreneurs aged 35–49 earned EUR 2,500 less than their peers. In the years prior to entry, light entrepreneurs in all age groups experienced poorer income growth than their peers. Middle-aged and especially older light entrepreneurs even saw their income decrease between 2012 and 2017. In the years after entry, light entrepreneurs in all age groups experienced positive income growth, which also was faster than recorded for their peers. The income of light entrepreneurs reached the same level as their peers within one to two years after entry and thereafter followed the same trend as in the comparison group. In the youngest age group, the income level of light entrepreneurs was even significantly higher than in the comparison group in the years after entry. In 2021, the difference in mean income was just above EUR 4,000.

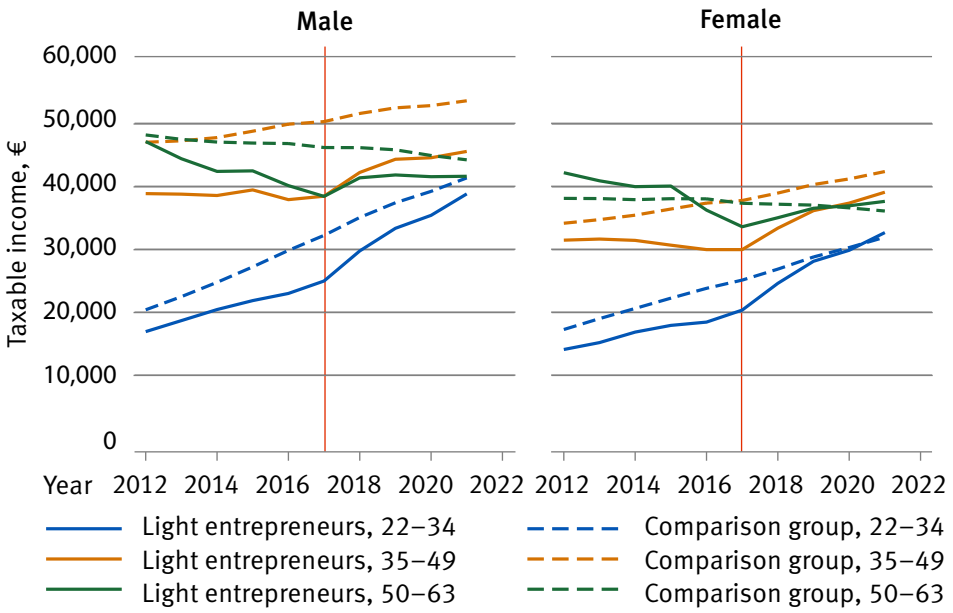
Figure 7.2
Yearly taxable income of light entrepreneurs and the comparison group in 2012–2021, by age group and birth country.



Note: Income is adjusted to 2022 prices using the consumer price index.

Figure 7.3 shows data for men (to the left) and women (to the right) separately. In all age groups, the difference between light entrepreneurs and their peers was larger among men than women. In addition, and as expected, men had higher incomes than women. In all age groups, male light entrepreneurs had lower incomes in 2012 and the development of their income in 2012–2017 was less favourable than that of their peers. The youngest age group experienced an increase, the middle-aged group no change, and the oldest group a decrease in their real income. In 2017, the income of light entrepreneurs was 17–24 per cent lower than that of their peers, depending on the age group. In the years after entry, the income gap narrowed in all age groups. Middle-aged and especially young light entrepreneurs experienced faster income growth than their peers. In the oldest age group incomes increased somewhat in the first year after entry, whereafter there was no change. In 2021, the income gap between light entrepreneurs and the comparison group was about the same as in 2012, except in the oldest age group where the income gap was larger in 2021. In 2021, the income of light entrepreneurs in the youngest/middle-aged/oldest age group was 6/15/6 per cent lower than in the comparison group.

Figure 7.3
Yearly taxable income of light entrepreneurs and the comparison group in 2012–2021, by age group and gender.



Note: Income is adjusted to 2022 prices using the consumer price index.

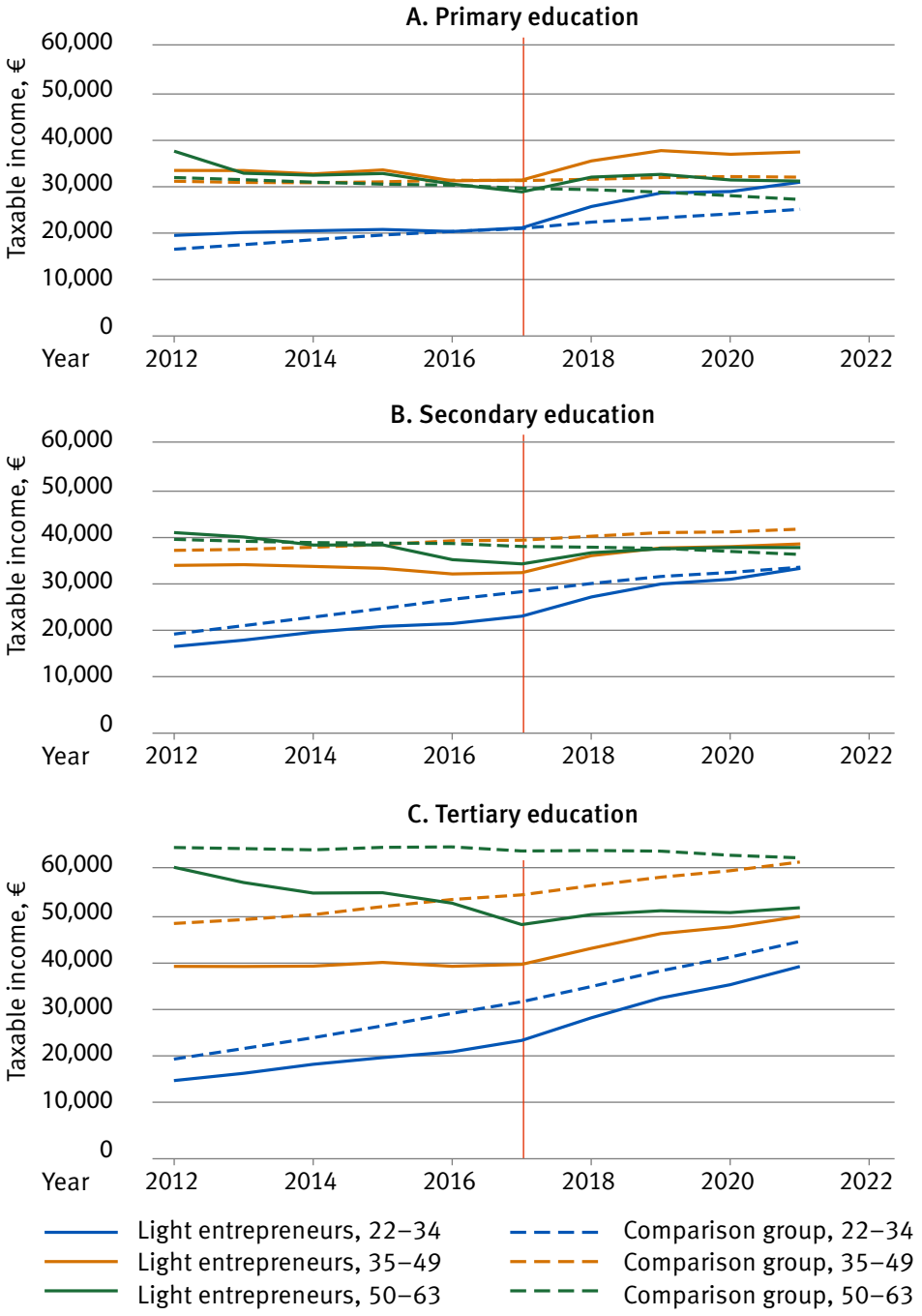
Among women, the differences between light entrepreneurs and the comparison group were smaller. The main patterns were the same as described earlier, showing a less favourable development in the years before entry and a more favourable development in the years after entry. It is noteworthy that female light entrepreneurs in the oldest age group on average had higher levels of income in the years before entry (except for 2016). In the years after entry, the income gap in the youngest and oldest age groups closed completely. The income gap narrowed in the middle-aged age group, but in 2021 the income of light entrepreneurs was still 8 per cent lower than that in the comparison group.

7.3 Income growth by socioeconomic characteristics

Figure 7.4 divides the sample into three groups based on level of education in 2022 (primary, secondary, and tertiary education). The pattern in panel A, where we study those with primary education, differs quite substantially from that in previous figures. In all age groups, light entrepreneurs on average had higher income than their peers in 2012–2015 (although the difference was statistically significant only in the oldest group in 2012). Light entrepreneurs in the youngest age group experienced no change in real income in the years prior to entry, while those in the middle-aged and oldest group experienced decreases in real income. In 2017, the income of light entrepreneurs was at the same level as in the comparison group in all age groups. In the first two years after entry, light entrepreneurs in all age groups experienced considerable increases in income relative to previous years and relative to their peers. After 2019, income growth slowed down or even reversed in the oldest group. In 2021, the income of light entrepreneurs in all age groups was 15–23 per cent higher than in the control group, depending on age group.

In panel B, the development among those with secondary education more closely resembles the situation in the total population of light entrepreneurs. In all age groups, the income development of light entrepreneurs was less favourable than in the comparison group: light entrepreneurs in the oldest and middle-aged age group experienced a decrease in real income, while light entrepreneurs in the youngest age group experienced a slower increase in income relative to the comparison group. In the years after entry, income increased in all age groups, and the gap to the comparison group narrowed among the middle-aged and closed in the youngest and oldest age group.

Figure 7.4
Yearly taxable income of light entrepreneurs and the comparison group in 2012–2021, by age group and education in 2022.



Note: Income is adjusted to 2022 prices using the consumer price index.

The weakest income development relative to the comparison group was observed for light entrepreneurs with tertiary education (panel C). In 2012, the income level of light entrepreneurs in all age groups was already significantly lower than that of their peers. In 2012–2017 the gap widened due to slower growth/no growth/decrease in income in the young/middle-aged/oldest age group. In the years after entry, the income of light entrepreneurs increased in all age groups but at around the same pace as their peers, and therefore the gap did not narrow. In 2021, the income of light entrepreneurs was 12–17 percent lower than that of their peers.

Based on these results, it seems that different mechanisms are at play for light entrepreneurs with different educational levels. In particular, light entrepreneurs with primary education were doing as well as their peers in the years prior to entry into light entrepreneurship, and in the years after entry their income even increased to a higher level than their peers. Light entrepreneurs with tertiary education, on the other hand, had a significantly lower income level than their peers throughout the follow-up period, and the gap remained unchanged in the years after starting as a light entrepreneur. While these findings are interesting, it is unclear whether they result from different types of selection into light entrepreneurship, i.e., whether those with primary education who enter light entrepreneurship are somehow more motivated or have different skill sets or different preferences for flexibility than their peers, which again affects their income before and after entry into light entrepreneurship, or whether the opposite applies to light entrepreneurs with tertiary education. In the case of light entrepreneurs with tertiary education in the oldest age group (50–63 in 2017), the observed decrease in income relative to their peers could also be explained by a conscious choice to downshift when approaching and reaching retirement age.

To further investigate the heterogeneity in the income growth of light entrepreneurs, we divide the sample into three groups based on whether their taxable income in 2012 was below or above the population median. We also add one group for whom income was missing in 2012.

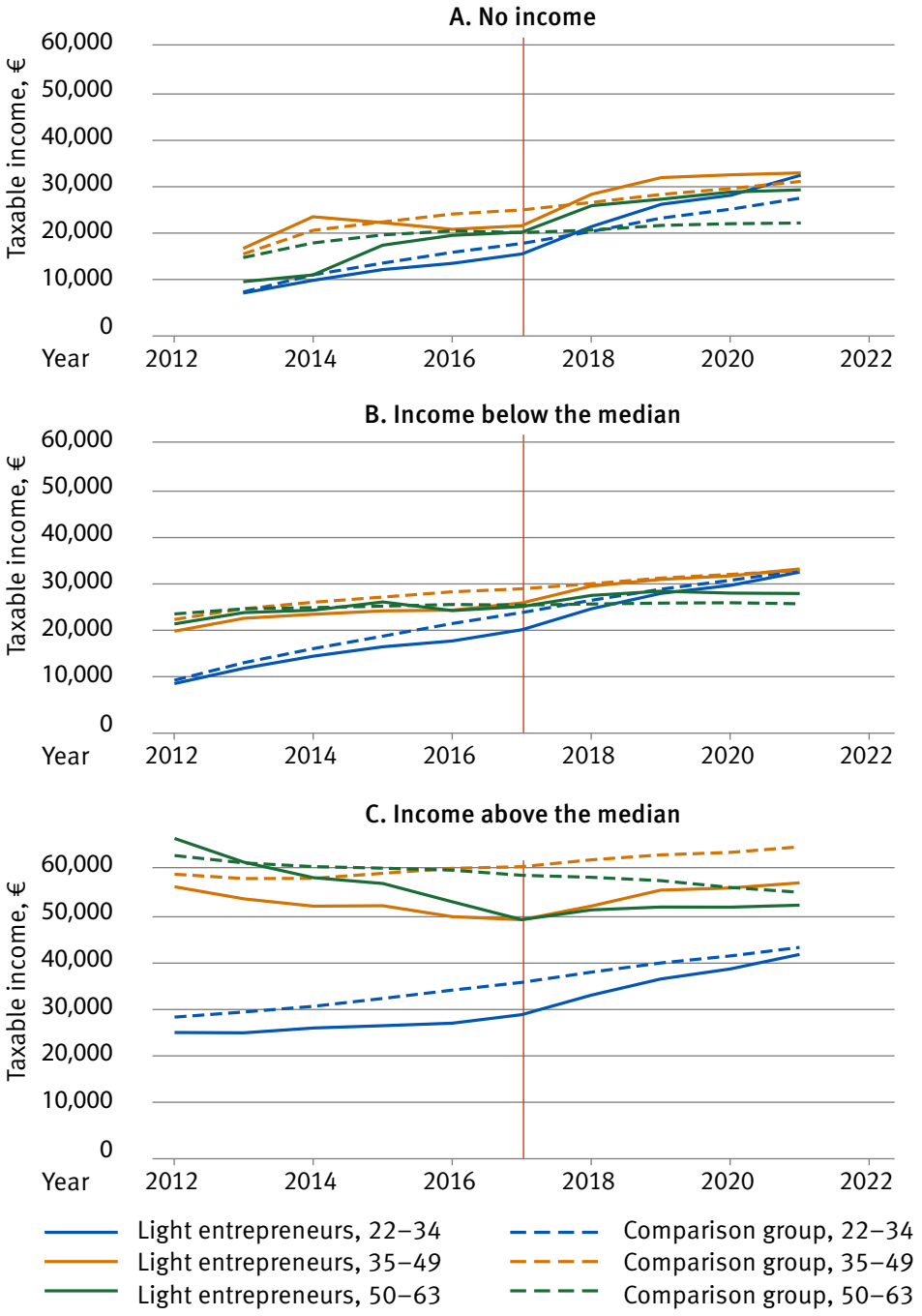
Panel A in Figure 7.5 examines individuals who had no registered income in 2012. The analysis of their income starts in 2013. Due to the small number of light entrepreneurs, especially in the oldest age group, the results should be interpreted with care. In 2013, the income of light entrepreneurs in the oldest cohort was significantly lower than that of their peers. During the follow-up period, they experienced steady income growth compared to their peers, whose income level was unchanged after 2015.

In 2021, light entrepreneurs' income was on average EUR 7,000 higher than that of their peers, and the difference was statistically significant. The increase in income happened steadily over the follow-up period and therefore it is impossible to say whether light entrepreneurship contributed to this development. The income of the middle-aged group was basically unchanged in the years prior to entry. They experienced considerable income growth in the first two years after entry, both in real terms and relative to the comparison group. This growth flattened out after 2019, and in 2021 the income difference to the comparison group was not statistically significant. The youngest age group experienced slightly slower income growth than their peers in the years prior to entry but faster growth in the years after entry. In 2021 their income was significantly higher than that of the comparison group.

Those with income below the median (panel B) show similar patterns as those with no income. Light entrepreneurs in the oldest age group experienced positive income growth throughout the period, although the pace of growth was slower than in the group with no income. In 2021, the income of light entrepreneurs in the oldest age group with income below the median in 2012 was significantly higher (on average EUR 2,200) than in the comparison group. Light entrepreneurs in the middle-aged and youngest age group experienced slower wage growth than their peers in the years prior to entry, and in the years after entry income growth reached the same level as experienced by their peers.

Panel C examines light entrepreneurs with income above the median in 2016. Light entrepreneurs in the youngest age group experienced almost no increase in income in the years prior to entry, and the wage gap to their peers increased on average to EUR 7,000 (or 19 per cent of the income of the comaprison group) in 2017. After entry, income growth was faster than in the comparison group. In 2021, the income gap had decreased to EUR 1,500 but was still significant. The middle-aged group saw a significant decrease in real income in the years prior to entry and an increase of similar magnitude in the years after entry. Although the income gap to the comparison group narrowed somewhat in the years after entry, it was still significant in 2021 (EUR 7,700). In the oldest age group, real income decreased both among light entrepreneurs and in the comparison group throughout the follow-up period. In the comparison group, the decrease was linear. Among light entrepreneurs, the decrease was faster in the year prior to entry and flattened out after entry. In 2017, the income of light entrepreneurs in the oldest age group was significantly lower than in the comparison group, but in 2021 the difference was no longer significant (EUR 2,800).

Figure 7.5
Yearly taxable income of light entrepreneurs and the comparison group in 2012–2021, by age group and level of income in 2012.



Note: Income is adjusted to 2022 prices using the consumer price index.

8 Pension accrual

As described in Chapter 2, light entrepreneurs are required to take out pension insurance for the self-employed if they are not in an employment relationship. In practice, few light entrepreneurs have an employment contract and therefore many of them are responsible for their own pension insurance.

However, even for light entrepreneurs not in an employment relationship, YEL pension insurance is required only if they work as a light entrepreneur for more than four months and if their yearly income from light entrepreneurship exceeds a specified threshold (EUR 9,010 in 2024) (Työeläke.fi, 2024). If these criteria are met and they are obliged to take out insurance, light entrepreneurs are required to report their estimated entrepreneurial income, which will determine the amount of their pension contribution. Given that it remains for the light entrepreneurs themselves to establish whether they need to take out pension insurance, and given the complexity of the associated pension rules, concerns have been voiced over whether light entrepreneurs possibly underinvest in their pension insurance.

In the light of these concerns, it is relevant to study whether the increases in income associated with light entrepreneurship are reflected in pension accrual. This is a challenging undertaking. Because not all earned and entrepreneurial income is necessarily insured (e.g., income below the YEL insurance threshold), and because pension accrual for social security benefits differs from accrual for earned income, there is not a one-to-one relationship between our aggregate measure of income and that of pension accrual.[11] Further, based on our register data we do not know whether or not a light entrepreneur has YEL insurance, nor do we know how many were are insured under the TyEL act. In Chapter 5, however, we showed that in 2022, 78 per cent of light entrepreneurs had income from light entrepreneurship

11 Pension accrual from earned income and social security benefits is calculated using the formula: monthly pension accrual=yearly income*1.5%/12. For social security benefits the amount of pension accrual is based on the earnings used to calculate earnings-related benefits. The percentage differs between different benefits and pensions. In the case of unemployment, for example, pension accrual is calculated based on 75 per cent of the earnings used to calculate the unemployment benefit. In the case of parental leaves, pension is accrued based on 121 per cent of the earnings used to calculate the parental leave benefit. In the case of sickness leave, the percentage is 62. Pension also accrues for completion of a vocational upper secondary or tertiary degree. The amount depends on the level of the degree. (Työeläke.fi, 2023)

that was below the YEL insurance threshold. On this basis we assume that YEL insurance is mandatory only for a minority of light entrepreneurs, and we do not expect to see large changes in pension accrual in the years after entry into light entrepreneurship. All these issues make comparisons of income and pension accrual noisy and difficult to interpret.

To understand the patterns of pension accrual among light entrepreneurs, we here repeat the analysis of Chapter 7, but use yearly pension accrual as the outcome variable. In Chapter 7, we showed that in most groups of light entrepreneurs, taxable income decreased relative to the comparison population in the years prior to entry into light entrepreneurship and increased in the years after entry. If income from light entrepreneurship were fully insured, we would expect to see similar trends in pension accrual as observed for income in Chapter 7. The analysis here is based on comparisons of the graphs in Chapter 7 and this chapter, as well as on comparisons of the related 95 per cent confidence intervals, which are not presented in the graphs but available as a data appendix on request.

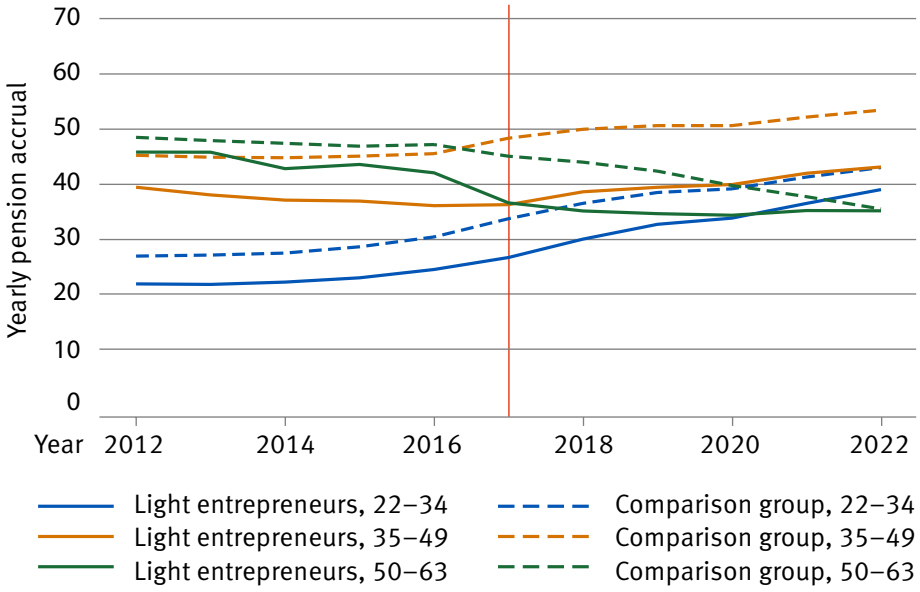
8.1 Pension accrual by age group

Figure 8.1 shows the yearly increase in pension accrual for light entrepreneurs and the comparison group in 2012–2022. Pension accrual is expressed as gross monthly pension: Figure 8.1 thus describes by how much the monthly pension of the individuals in the sample has increased on average since the previous year. Similarly, Figure A8.1 in the Appendix shows the accumulated pension accrual.

The average increase in yearly pension accrual ranges from EUR 22 to 53, depending on age group. Given the standard accrual rate of 1.5 per cent, this corresponds to yearly income of EUR 17,600 to 42,400, indicating that yearly pension accrual is mainly in the expected range based on Figure 7.1. The patterns in Figure 8.1 are fairly similar to those in Figure 7.1 in the years prior to entry. In the years after entry, on the other hand, the graphs differ. Whereas the income gap between light entrepreneurs and their peers narrowed, the gap in yearly pension accrual remained stable in the young and middle-aged group in the years after entry. In the oldest age group, yearly pension accrual shows a steeper downward trend in the years after entry, especially in the comparison group. This is explained by the increasing share of those reaching retirement age and entering retirement. Since old-age pensions are included in our measure

of income but do not accrue pension, the trends in the two graphs differ. In other words, only those who remain in employment continue to accrue pension after retirement. The gap in yearly pension accrual between the oldest light entrepreneurs and their peers eventually closes, which is due to higher employment rates among light entrepreneurs. While the analysis above is rather granular, it suggests that some of the income from light entrepreneurship may not be fully insured.

Figure 8.1
Increase in yearly pension accrual of light entrepreneurs and the comparison group in 2012–2022, by age group.



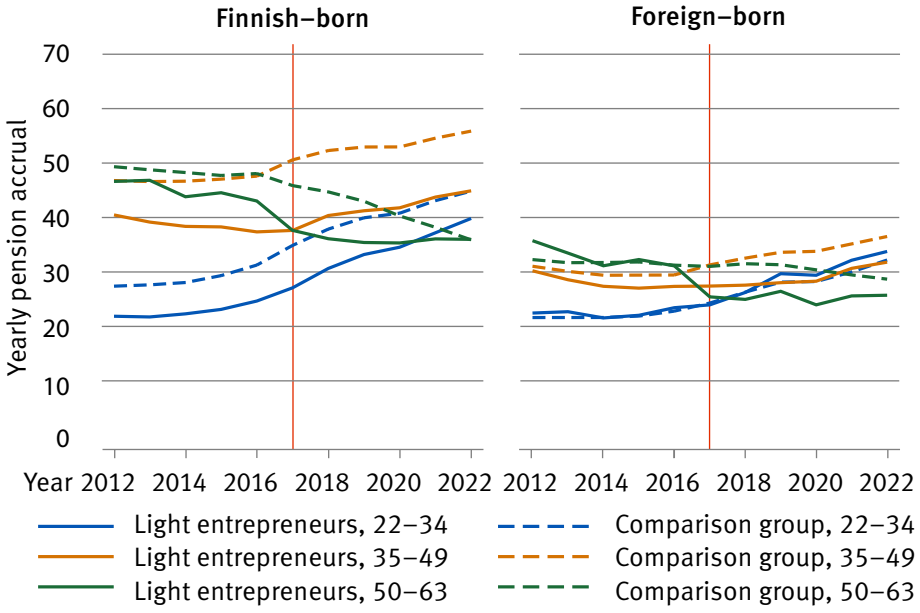
Note: Yearly pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

8.2 Pension accrual by birth country and gender

In Figure 8.2 we further split the sample by birth country. In line with income, yearly pension accrual is generally lower among the foreign-born than among the Finnish-born, and its growth is slower. Further, the level of yearly pension accrual is lower among light entrepreneurs than in the comparison group in all age groups, but the differences are smaller among foreign-born than among Finnish-born light entrepreneurs.

The pattern of yearly pension accrual among Finnish-born light entrepreneurs closely mirrors what we saw in Figure 8.1, and therefore we focus on the right-side panel, which depicts foreign-born light entrepreneurs. In the youngest age group, the yearly pension accrual of light entrepreneurs is very similar to that in the comparison group in the years prior to entry, despite a slightly lower level of income. In the years after entry, yearly pension accrual was statistically significantly higher among light entrepreneurs than among their peers, which was in line with the development in income. In the middle-aged group, the gap in yearly pension accrual between light entrepreneurs and their peers increased somewhat in the years prior to entry, again in line with the development in income. Contrary to the development in income, the gap in yearly pension accrual continued to increase in the years after entry. Up to 2020, there was no increase in yearly pension accrual, despite a rather sharp increase in income. A similar development was seen in the oldest age group, with no increase in yearly pension accrual despite an increase in income in the first two years after entry.

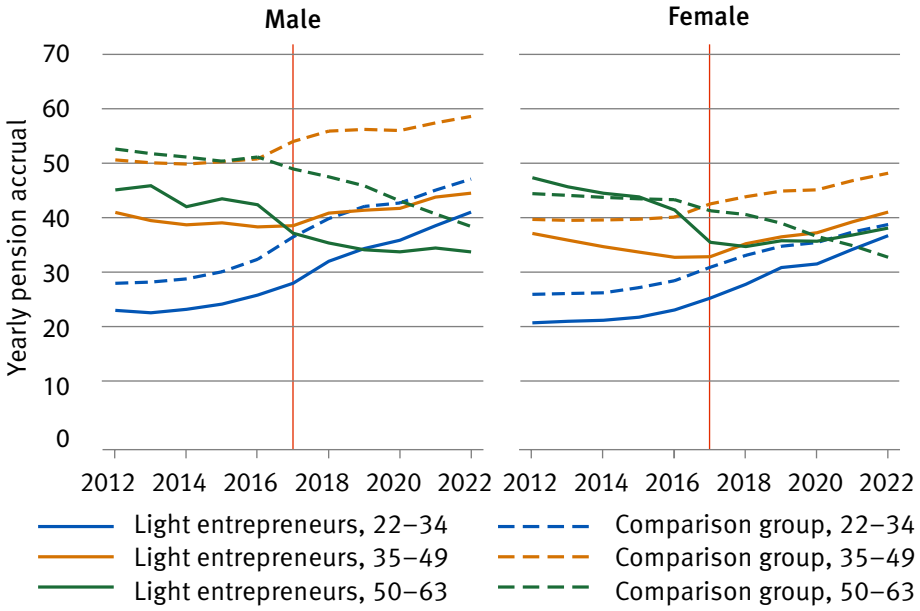
Figure 8.2
Increase in yearly pension accrual of light entrepreneurs and the comparison group in 2012–2022, by age group and birth country.



Note: Yearly pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

In line with what we observed in Chapter 7 regarding income, men recorded higher yearly pension accrual than women in all groups (Figure 8.3). Further, on average, both male and female light entrepreneurs accrue less pension than their peers. The patterns in Figure 8.3 resemble those in previous figures, and there is no need to go into detail. The main finding is that among both women and men, the gap in yearly pension accrual between light entrepreneurs and their peers is wider than their gap in income in the years after entry. One exception is women in the oldest age group, where the yearly pension accrual of light entrepreneurs significantly exceeded that of their peers. This is explained by higher employment in the light entrepreneur group than in the comparison group, where many retire and thus do not accrue pension.

Figure 8.3
Increase in yearly pension accrual of light entrepreneurs and the comparison group in 2012–2022, by age group and gender.



Note: Yearly pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

8.3 Pension accrual by socioeconomic characteristics

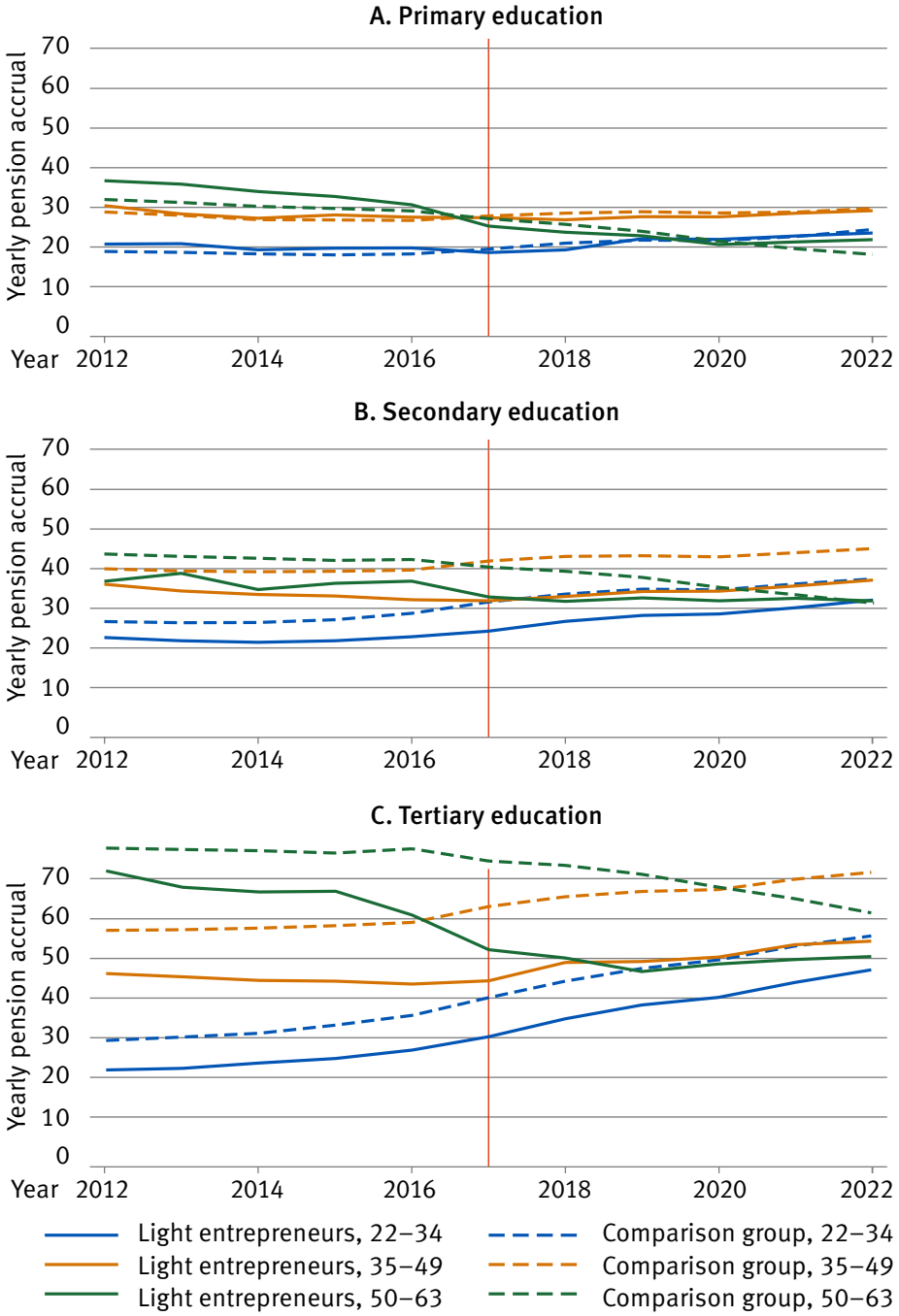
In Chapter 7, we found that light entrepreneurs with only primary education had higher income than their peers in the years prior to entry into light entrepreneurship (except for the year before entry and the year of entry). They also had higher income than their peers in the years after entry, irrespective of age group (Figure 7.4). In panel A of Figure 8.4, we see that the yearly pension accrual of light entrepreneurs is very similar to that of their peers both before and after entry, and none of the differences between the light entrepreneurs and their peers are statistically significant.

Among those with secondary (panel B) and tertiary education (panel C), we observe similar patterns to those seen for income in Figure 7.4, with slightly increasing gaps in yearly pension accrual between light entrepreneurs and their peers in the years prior to entry, and fairly stable gaps in the years after entry, except in the oldest age group, where the gap in yearly pension accrual again decreases due to differences in employment and retirement.

In Figure 7.5, we found that light entrepreneurs with no income in 2012 experienced similar income growth as their peers before, and faster income growth than their peers in the years after entry into light entrepreneurship. In panel A of Figure 8.5 we see that in the youngest and the middle-aged age group, the development of light entrepreneurs' yearly pension accrual was very similar to that of their peers, throughout the follow-up period, and we saw no change in trends after entry into light entrepreneurship. In the oldest age group, it seems that the yearly pension accrual of light entrepreneurs was higher throughout the follow-up period, but standard errors are large and the differences were not statistically significant.

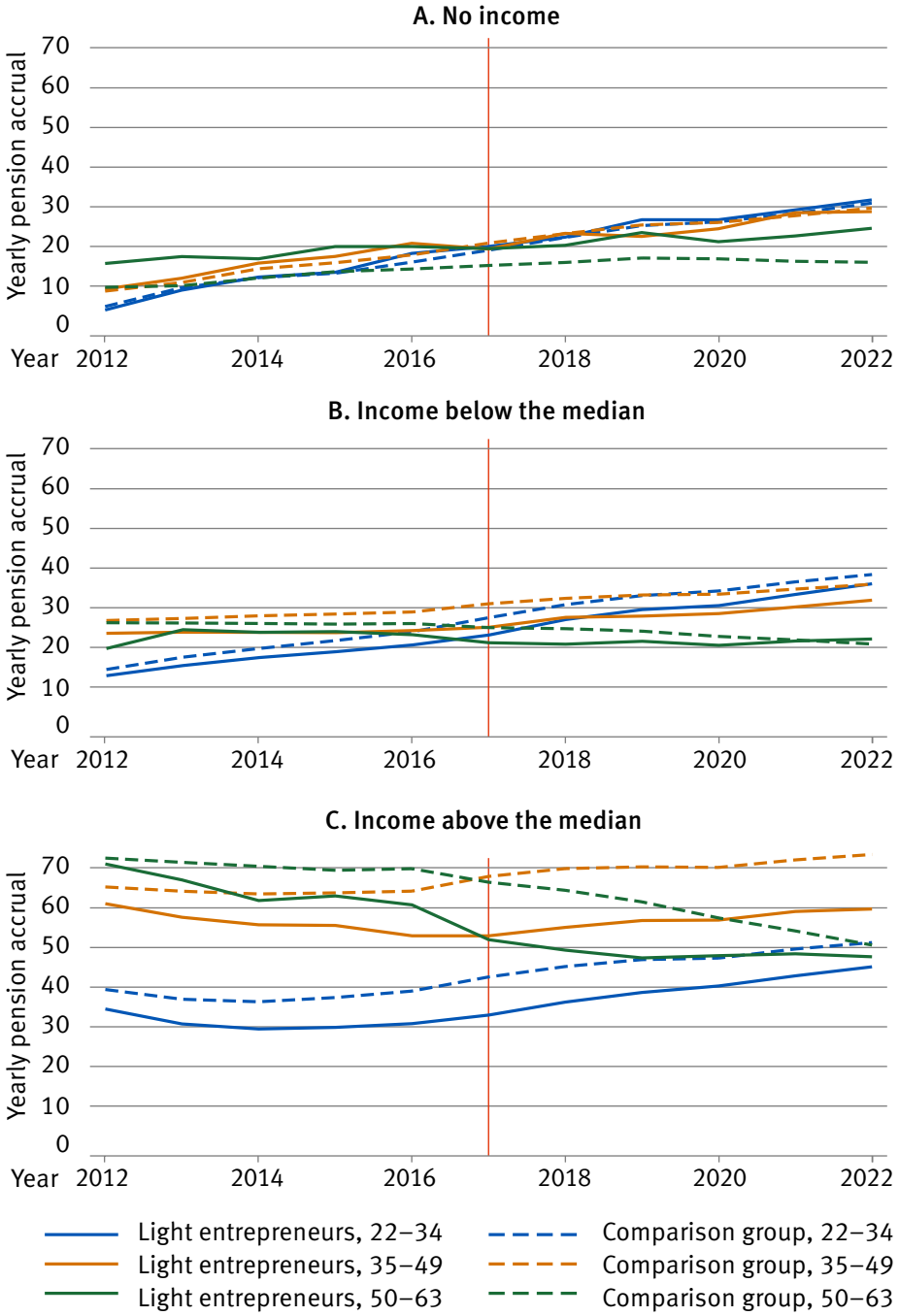
Among those with income below the median in 2012 (panel B) and above the median (panel C), we see the same pattern described as in previous sections: yearly pension accrual largely follows the trends in income with constant or slightly widening gaps between light entrepreneurs and their peers in the years prior to entry, and rather constant gaps between the groups in the years after entry.

Figure 8.4
Increase in yearly pension accrual of light entrepreneurs and the comparison group in 2012–2022, by age group and education in 2022.



Note: Yearly pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

Figure 8.5
Increase in yearly pension accrual of light entrepreneurs and the comparison group in 2012–2022, by age group and income in 2012.



Note: Yearly pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

9 Discussion and conclusion

In this study, we have explored the careers of light entrepreneurs using administrative data from Statistics Finland and the Finnish Centre for Pensions. In the first part of the study, we surveyed trends in the number and composition of light entrepreneurs in 2017–2022. We also studied the extent of light entrepreneurship in terms of continuity, regularity and income from light entrepreneurship. In the second part of the study, which is our main contribution to the literature on light entrepreneurs, we examined how the careers, income and pension accrual of light entrepreneurs who started in 2017 developed in the years before and after entering light entrepreneurship. Our analysis of income and pension accrual compares light entrepreneurs with a 10 per cent random sample of the population who were not light entrepreneurs in 2012–2022.

9.1 Main results

The number of light entrepreneurs has increased rapidly in recent years. In 2017, about 23,000 light entrepreneurs received income through invoicing service companies. In 2022, that number stood at almost 68,000. The composition of light entrepreneurs has also changed. Light entrepreneurs have become younger, they are more often born outside Finland, and an increasing share have only completed primary education. Nonetheless, most light entrepreneurs are still males born in Finland.

The short duration of light entrepreneurship, the irregularity of payments, and the low average income from light entrepreneurship indicate that for the most part, light entrepreneurship is occasional and serves as a source of extra income. There are, however, considerable differences within the group of light entrepreneurs. As the share of light entrepreneurs born outside Finland has increased, so too has the extent of their light entrepreneurship. The mean income from light entrepreneurship has increased substantially among male immigrant light entrepreneurs of all ages. Income from light entrepreneurship also makes up an increasing share of total earned income in this group. Among foreign-born males, the share of total earned income that came from light entrepreneurship varied between 46 and 57 per cent depending on age in 2022, and that share

increased by about six percentage points since 2017. It seems then that light entrepreneurship is of increasing importance for the livelihood of immigrant male light entrepreneurs.

This study is the first longitudinal study of light entrepreneurs that follows them over several years. Using sequence analysis, we examine the labour market status of light entrepreneurs five years before entering light entrepreneurship and five years after entry. In the years prior to entry, unemployment increased in all demographic groups and reached an average of 18 per cent in 2016. This rise in unemployment was greater than in the overall population. In the years after entry, unemployment rates declined, while employment rates (both as employees and self-employed) first increased and then remained largely stable. Five years after entry only 22 per cent of those who started in 2017 were still active light entrepreneurs. Light entrepreneurs' careers were relatively unstable: they made about three transitions between labour market statuses during the 11-year follow-up. The career trajectories of light entrepreneurs varied widely.

The increasing unemployment rates in the years prior to entry are also reflected in the income of light entrepreneurs, as their income growth was slower than in a comparison group in these years. In the years after entry, the income of light entrepreneurs increased relative to the comparison group. While the increases in income were substantial relative to total yearly income, they were not always enough to compensate for the weaker income growth in the years prior to entry. It is important to note that this analysis tells us nothing about the reasons for the increase in income after entry. It could be a direct or indirect effect of light entrepreneurship, i.e., either the result of income from light entrepreneurship or improved employment prospects and thus higher earnings resulting from light entrepreneurship. It is also possible that the increase in income is entirely independent of entry into light entrepreneurship.

The pension and social security of light entrepreneurs has attracted some public debate, which has drawn attention to the fact that most light entrepreneurs are treated as self-employed under the pension system and that therefore they are required to take out their own pension insurance. This, coupled with the fact that individuals who are possibly less informed about and interested in the pension system (e.g., young people and individuals with an immigrant background) are overrepresented among light entrepreneurs, have led to concerns that light entrepreneurs may

be underinvesting in their social security, leaving them in a vulnerable position both in case of sickness and in old age retirement. Our analysis shows that, on average, the increase in income in the years after entry into light entrepreneurship is not accompanied by a corresponding increase in pension accrual. In the presence of the YEL insurance threshold, this finding is in line with our expectations. To better understand the relationship between light entrepreneurship and pension accrual, further research is needed that uses more detailed information about pension insurance.

We also found that light entrepreneurs are a rather diverse group and that their careers, earnings and pension accrual differ according to demographic and socioeconomic characteristics. There were more male than female light entrepreneurs, and the share of males has increased in recent years. Male and female light entrepreneurs had relatively similar careers, but we found that men's earnings and pension accrual did not catch up with the comparison group to the same extent as women's. While we do not know the exact reasons for this, it is possible that men's decision to enter light entrepreneurship is more often a choice motivated by flexibility and reduced working hours, leading to lower earnings. It is also possible that with light entrepreneurship, men are selected into jobs and sectors with lower earnings.

There are also differences in light entrepreneurship by stage of life course. Light entrepreneurship is especially popular among people in their twenties and thirties. Many of them are students or have just completed their studies and undertake light entrepreneurship only for a short time, possibly to make extra earnings or a start in the labour market. Among those in their mid-career, we observed that many were already in employment, but at the same time unemployment was increasing. It is possible that in this group light entrepreneurship is a response to a negative shock (e.g., redundancy or health problems) or a worsening labour market situation. The same increasing risk of unemployment, as well as the risk of retirement, was seen in the oldest age group of light entrepreneurs. This oldest age group also experienced the sharpest drop in earnings in the years prior to becoming a light entrepreneur. For a considerable group among them, entry into light entrepreneurship coincided with the transition to retirement, indicating that light entrepreneurship is used to top up one's pension. We also found that older individuals tended to continue longer as light entrepreneurs than their younger counterparts.

We found differences between Finnish-born and foreign-born light entrepreneurs. The popularity of light entrepreneurship among immigrants should probably be seen in the context of the growth of immigration into Finland in recent years, labour shortages in certain occupations and sectors, and the relative ease of becoming a light entrepreneur to make a living. Around half of the younger foreign-born light entrepreneurs were not yet in Finland five years prior to becoming a light entrepreneur, and around 10 per cent had exited our data five years after. Foreign-born light entrepreneurs relied more heavily on light-entrepreneurial activities for income, as witnessed by the larger share of their income from light entrepreneurship, the greater number of months per year that they received income from light entrepreneurship, and their greater likelihood to continue as light entrepreneurs. We also found that foreign-born light entrepreneurs caught up with the income of their non-light entrepreneur peers faster than Finnish-born light entrepreneurs.

Light entrepreneurs were also a heterogeneous group in terms of level of education and income, although these differences were somewhat more difficult to interpret. While in 2017 light entrepreneurs were a rather well-educated group, the share of those with only primary increased over time. The group of lowest educated includes those for whom information the level of education was not available, which is partly explained by the overrepresentation of immigrants in this group. Although employment levels were lower among lower educated light entrepreneurs throughout the follow-up period, their income was on average as high or higher compared to the non-light entrepreneur comparison group, especially in the years after entry. Those with secondary education experienced weaker income development in the years prior to entry into light entrepreneurship but closed the gap with the comparison group after two or three years (except the middle-aged group). The higher educated had clearly better employment outcomes than those with lower education, but their income and pension accrual development was less favourable than among their peers who were not light entrepreneurs.

Our analysis of career trajectories, income and pension accrual also made a distinction between three income groups. Light entrepreneurs who had no earned income in 2012 were often still residing outside Finland several years before becoming light entrepreneurs. Employment but also unemployment rose in this group in the years prior to entry into light entrepreneurship, while income increased at the same pace as in the

comparison group (and faster in the oldest group of light entrepreneurs). After entry into light entrepreneurship, employment rose sharply in this group, and this was accompanied by higher income than in the comparison group. The second income group – those with income below the median – included many students who in the years prior to light entrepreneurship tended to become employed or unemployed. After entry into light entrepreneurship there was a further increase in employment and a decrease in unemployment. Income and pension accrual in this group was closely in line with the comparison group. Finally, light entrepreneurs with incomes above the median in 2012 overall had the most stable careers and highest levels of employment. However, unemployment levels rose in the years prior to entry into light entrepreneurship, while the development of income and pension accrual was less favourable than among their non-light entrepreneur peers.

9.2 Discussion

In Chapter 2 we briefly explored the nature of light entrepreneurship and asked whether it could be a mechanism for topping up income, an incubator of entrepreneurialism, a stepping stone towards standard employment, or a trap into precarity. The short answer, based on our empirical results and given the great heterogeneity of the light entrepreneur population, is that it is potentially all of those.

It seems that light entrepreneurship is often used to top up other income. In 2022, only one in five light entrepreneurs had no other (earned) income than income from light entrepreneurship. In the same year, 57 per cent of light entrepreneurs were in an employment relationship. In addition, a substantial group of those with no earned income most likely received a student grant, unemployment benefits or a pension. The median income from light entrepreneurship in 2022 was only EUR 1,700 – a nice extra for anyone with income from other sources.

Some people may decide to become light entrepreneurs because of their particular skills or preferences for flexibility or risk-taking (Boeri et al., 2020). If light entrepreneurs on average have a higher preference for flexibility, as is suggested by the user surveys of Uusi Työ ry (Uusi työ ry and Kantar TNS, 2022), that flexibility may come at the cost of lower earnings. This could explain the patterns we observed in income and pension accrual especially among higher-earning, highly educated and

older light entrepreneurs. These light entrepreneurs likely constitute a group of high-skilled professionals who can afford to work less or less regularly in exchange for being their own boss. In the oldest age group, preferences for downshifting in the years prior to retirement or continuing to work on an occasional basis in retirement could also affect the decision to enter into light entrepreneurship.

Light entrepreneurship may also serve as a way of trying one's wings as an entrepreneur. We observed that entry into light entrepreneurship in 2017 was followed by an increase in self-employment in the following years: the share of those who moved on to become self-employed increased from four per cent in 2016 to 15 per cent in 2022. We also found that employees who became light entrepreneurs were less likely to make the switch to self-employment than those who were previously outside the labour market or the country. Among immigrants and those with only primary education who entered light entrepreneurship in 2017, more than one in five were self-employed by 2022. This suggests that light entrepreneurship does not necessarily incentivise those who already have jobs to make the shift to full entrepreneurship, but it suits the needs of those who may have difficulties finding standard employment, such as the young, low-skilled, the unemployed and immigrants (Boeri et al., 2020; Brynin et al., 2019). However, we do not know whether they became *successful* entrepreneurs. Previous research has shown that those who become entrepreneurs from more disadvantaged positions are less likely to succeed (Andersson & Wadensjö, 2007).

Our results support the hypothesis that light entrepreneurship can serve as a stepping stone towards employment. We found that the share of those employed was usually lower in the year preceding entry into light entrepreneurship than in the following years. Employment increased noticeably in the year of starting as a light entrepreneur and the years after, while the employment and income gap to the overall population started to close. Also, among those who quit light entrepreneurship, employment rates were stable or continued to increase. The stepping stone image is further reinforced by the often relatively short duration of light entrepreneurship. For most people, light entrepreneurship is not a long-term career path. After one year only between 50 and 60 per cent continued as light entrepreneurs, and this share continued to decrease with each year.

At the same time, the growing popularity of light entrepreneurship is possibly an indicator of increasing precarity and dualisation in the labour market (Boeri et al., 2020; Tammelin, 2019). We found that light entrepreneurs are not a randomly selected group, but that they experienced low or decreasing labour attachment in the years prior to entry and lower income development compared to peers who did not become light entrepreneurs. Entry into light entrepreneurship may provide a boost in employment and income, but we also found that earnings and pension accrual did not fully catch up with the comparison groups five years after entry. Light entrepreneurship could be the preferred alternative to being out of work, but it may also be a trap that does not allow for stable salaried employment or self-employment.

It should be emphasised that light entrepreneurs are a heterogenous population that is possibly segmented into a lower-skilled, lower-earning part who have fewer employment options, and a higher-skilled, higher-earning part who make a deliberate choice for more flexibility and for being their own boss (Cieślik & Dvouletý, 2019). High-earners may use light entrepreneurship as a way of downshifting or working to their own schedules, as we saw that those who had above-median earnings in 2012 had lower earnings in the following years than their peers who did not become light entrepreneurs. Light entrepreneurs with earnings below the median or no income in 2012, on the other hand, saw their income rise compared to their peers, indicating that light entrepreneurship may be a necessity for them to generate or complement their income.

Our results suggest that the nature of light entrepreneurship has been shifting during our relatively short observation period from 2017 to 2022. We saw changes in the sociodemographic composition of the light entrepreneur population. The shares of younger individuals, immigrants and those with only lower education grew substantially, meaning that people in weaker labour market positions increasingly became light entrepreneurs. We found that these groups have lower incomes and weaker employment prospects during and after light entrepreneurship. Moreover, these groups became increasingly dependent on light entrepreneurship for their livelihood, as they received a greater share of their income from invoicing service companies.

9.3 Limitations

There are several limitations to this study, and more research will be needed to address those limitations. First, the analysis in this study is descriptive and does not allow for conclusions about causes and effects. We showed that even before entry, light entrepreneurs seem to follow different employment and income trajectories than the comparison group. It is clear from this that the changes in income after entry into light entrepreneurship should not be interpreted as a causal effect of light entrepreneurship, but rather as a correlation that could also reflect omitted factors that affect both the decision to become a light entrepreneur and career trajectories and income growth. For example, our analysis of income and pension accrual does not control for labour market status, and therefore the observed pattern may be driven by differences in unemployment, retirement or similar. Thus, the pattern of income growth observed in Chapter 7 is consistent with the observation of increased unemployment in the years prior to entry in Chapter 6. Future studies could address these selection biases using causal research designs and restricted research settings that would allow for causal interpretations.

Second, since light entrepreneurship is a relatively new phenomenon and our list of invoicing service companies only dates back to 2017, we were able to follow a relatively small group of light entrepreneurs for only a limited number of years. We chose to follow in more detail the cohort of light entrepreneurs who started in 2017 since that gave us the longest observation period. However, we also know that the composition of entrants has changed considerably since then, which limits our ability to generalise the findings to later cohorts of entrants. Therefore, continued research is needed as new data become available.

Third, we did not and were not able to analyse the invoicing service companies that were used to identify light entrepreneurs. We cannot be sure, and certainly do not claim that the list made available to us comprises all invoicing service companies in Finland. This list was compiled in the first place for monitoring and supervising purposes, not for research. It is therefore possible that we overestimate or underestimate the number of light entrepreneurs. Moreover, it seems that the invoicing service companies themselves are quite heterogeneous, ranging from those that strictly offer invoicing services to those with a whole range of financial, administrative, support and training services for light entrepreneurs. It is possible that different types of invoicing service companies attract

different types of light entrepreneurs and that some are used to facilitate "quasi" and others "real" light entrepreneurship.

Fourth, we focused our analysis on those aspects of light entrepreneurship that we identified as most relevant and that we could address with our register data, most importantly characteristics, entry and continuity, employment, scope, income, and pension accrual. The rich register data available to us would have allowed for a more detailed examination, including for example the composition of income sources or transitions in the labour market. On the other hand, some characteristics of light entrepreneurship are difficult to study using register data. More research is needed especially into the industries and occupations in which light entrepreneurs operate. This is challenging, however, as occupation is measured based on the individual's main job, which may be different from their activities as light entrepreneurs. Industry, then, is measured at the level of the establishment, which is either the invoicing service company or the light entrepreneur's primary workplace, not necessarily the industry where the light-entrepreneur activities take place.

The definition of employment status in Statistics Finland's FOLK data, based on the situation at year-end, also poses challenges. This definition means that it is impossible to pick up and identify changes in labour market status happening during the year. In the case of light entrepreneurs, whose career trajectories are rather volatile, as shown in Chapter 6, this definition of employment status may lead us to underestimate career volatility and to miss certain labour market events, especially if the spells were short.

The register data at hand also precluded a more detailed and extensive analysis of the nature of light entrepreneurs' employment. In the case of the self-employed, we could not determine whether this was self-employment as a light entrepreneur with a valid YEL insurance or more standard self-employment, using an invoicing company for activities on the side. In the case of employees, we were unable to distinguish between employees of invoicing service companies, employees with an employment contract elsewhere but paid through an invoicing service company, and employees with a job elsewhere but making extra income though light entrepreneurship. More research is needed to distinguish between these types.

Finally, while the use of register data does offer many strengths and advantages, especially in allowing us to cover the whole light entrepreneur population and to analyse income and employment histories in great detail,

we still have limited knowledge about the motivations, experiences and expectations of light entrepreneurs. If we want to gain a deeper understanding of the phenomenon, we are going to need more interview or survey research.

9.4 Conclusion

Light entrepreneurship is still a rather limited phenomenon, but it has increased substantially in recent years. Our research shows that in many ways, it is a highly complex phenomenon. It attracts individuals from very different backgrounds, and it can be used to conduct very different types of work, and of different extent. While for some light entrepreneurship is an occasional way to top up their income, for others it means full-time employment. Our analyses show that light entrepreneurship is associated with positive outcomes, such as higher employment rates and income. However, this does not always translate into parallel increases in pension accrual, weakening the social security of light entrepreneurs relative to their peers.

It is unlikely that light entrepreneurship will emerge as a major form of employment in the years ahead, but at the same time there are no signs of slowdown in the current upward trend. As light entrepreneurship continues to increase in popularity, so does the need to reform the social security system to better accommodate this and other new forms of work. The need for reform is also highlighted by our research, which shows that immigrants and other individuals in vulnerable groups choose to enter light entrepreneurship more often than others. For them, foregone pension accrual under the current YEL insurance scheme may have a substantial impact on their social security.

References

Alasoini, T., Joensuu, M., Juvonen-Posti, P., Järnefelt, N., Riekhoff, A.-J., Toivio, P., & Turunen, J. (2022). *Työelämän ja työmarkkinoiden muutos: Haasteita ja kehittämistarpeita sosiaaliturvan uudistamiselle.* Sosiaaliturvakomitean julkaisuja 2020:7. Helsinki: Sosiaali- ja terveysministeriö. http://urn.fi/URN:ISBN:978-952-00-8671-8

Andersson, P., & Wadensjö, E. (2007). Do the unemployed become successful entrepreneurs? *International Journal of Manpower, 28*(7), 604–626. https://doi.org/10.1108/01437720710830070

Boeri, T., Giupponi, G., Krueger, A. B., & Machin, S. (2020). Solo self-employment and alternative work arrangements: A cross-country perspective on the changing composition of jobs. *Journal of Economic Perspectives, 34*(1), 170–195. https://doi.org/10.1257/jep.34.1.170

Brynin, M., Karim, M. S., & Zwysen, W. (2019). The value of self-employment to ethnic minorities. *Work, Employment and Society, 33*(5), 846–864. https://doi.org/10.1177/0950017019855232

Cieślik, J., & Dvouletý, O. (2019). Segmentation of the population of the solo self-employed. *International Review of Entrepreneurship, 17(*3), 281–304. http://hdl.handle.net/2262/104719

Cieślik, J., & van Stel, A. (2023). Solo self-employment––Key policy challenges. *Journal of Economic Surveys* (published online ahead of print). https://doi.org/10.1111/joes.12559

Cowling, M. L., & Wooden, M. (2021). Does solo self-employment serve as a 'stepping stone' to employership? *Labour Economics, 68*, 101942. https://doi.org/10.1016/j.labeco.2020.101942

Finnish Centre for Pensions (2021). Polkupyöräruokalähetin työtä tehnyt A oli työsuhteessa alustayritykseen. Decision 17.06.2021. https://www.telp.fi/oikeuskaytannot/6064/

Finnish Centre for Pensions (2023). Alustavälitteistä ruoankuljetustyötä tehnyt A oli työsuhteessa alustayritykseen. Decision 27.11.2023. https://www.telp.fi/oikeuskaytannot/alustavalitteista-ruoankuljetustyota-tehnyt-a-oli-tyosuhteessa-alustayritykseen/

Finnish Centre for Pensions (2024a). Earnings-related Pension Indexes. Accessed 06.03.2024. https://www.etk.fi/en/finnish-pension-system/pensions/pension-indexation/earnings-related-pension-indexes/

Finnish Centre for Pensions (2024b). Self-employed. Accessed 12.03.2024. https://www.etk.fi/en/finnish-pension-system/pensions/pension-coverage-and-insurance/self-employed/

Eurofound (2024). *Self-employment in the EU: Job quality and developments in social protection*. Luxembourg: Publications Office of the European Union. https://www.eurofound.europa.eu/en/publications/2024/self-employment-eu-job-quality-and-developments-social-protection

Fachinger, U., & Frankus, A. (2017). Self-employed people and pension: Is old age poverty the inevitable dark side of an entrepreneurial society. In J. Bonnet, M. Dejardin, & D. García-Pérez-de-Lema (Eds.), *Exploring the entrepreneurial society: Institutions, behaviors and outcomes* (pp. 245–256). Cheltenham and Northampton: Edward Elgar.

Gabadinho, A., Ritschard, G., Studer, M., & Müller, N. S. (2009). *Mining sequence data in R with the TraMineR package: A user's guide*. Geneva: University of Geneva. http://mephisto.unige.ch/pub/TraMineR/doc/TraMineR-Users-Guide.pdf

Grey economy & economic crime (2022). Forced and bogus self-employment. Accessed 02.04.2024. https://www.vero.fi/en/grey-economy-crime/phenomena/new-ways-of-working/forced-and-bogus-self-employment/

Hannula, T., & Jylhämäki, S. (2022). *Laskutuspalveluyritykset ja niiden käyttäjät 2021*. Asiakasluokittelu A25/2022. Verohallinto, Harmaan talouden selvitysyksikkö.

Hellsten, J. (29.01.2021). Mieluummin palkkatyötä kuin yrittäjyyttä. *Rakentaja-lehti*. Accessed 14.03.2024. https://rakennusliitto.fi/rakentaja/mieluummin-palkkatyota-kuin-yrittajyytta/

Hershey, D. A., van Dalen, H. P., Conen, W., & Henkens, K. (2017). Are "voluntary" self-employed better prepared for retirement than "forced" self-employed? *Work, Aging and Retirement, 3*(3), 243-256. https://doi.org/10.1093/workar/wax008

Hipp, L., Bernhardt, J., & Allmendinger, J. (2015). Institutions and the prevalence of nonstandard employment. *Socio-Economic Review, 13*(2), 351–377. https://doi.org/10.1093/ser/mwv002

Höppner, J. (2021). How does self-employment affect pension income? A comparative analysis of European welfare states. *Social Policy & Administration, 55*(5), 921–939. https://doi.org/10.1111/spol.12676

Ilsøe, A., Larsen, T. P., & Bach, E. S. (2021). Multiple jobholding in the digital platform economy: Signs of segmentation. *Transfer: European Review of Labour and Research, 27*(2), 201–218. https://doi.org/10.1177/1024258921992629

Johansson, P. (03.11.2022). Kevytyrittäjyys – vaivatonta yrittäjyyttä vai pakkoyrittäjyyttä? [blog post] Accessed 20.02.2024. https://www.etk.fi/blogit/kevytyrittajyys-vaivatonta-yrittajyytta-vai-pakkoyrittajyytta/

Kauhanen, M. (2021). Multiple job holding in the changing labour market – Evidence from Finland. *Labour Institute for Economic Research Discussion Papers, 330*. https://labore.fi/wp-content/uploads/2021/06/Tyopaperi331.pdf

Kautonen, T., Down, S., Welter, F., Vainio, P., Palmroos, J., Althoff, K., & Kolb, S. (2010). "Involuntary self-employment" as a public policy issue: A cross-country European review. *International Journal of Entrepreneurial Behavior & Research, 16*(2), 112–129. https://doi.org/10.1108/13552551011027002

Kotiranta, M., & Sannikka, S. (2020). *Laskutuspalveluyritykset ja niiden käyttäjät.* Selvitys 4/2020. Verohallinto, Harmaan talouden selvitysyksikkö. https://www.vero.fi/globalassets/harmaa-talous-ja-talousrikollisuus/selvitykset/2020_04_laskutuspalveluyritykset-ja-niiden-k%C3%A4ytt%C3%A4j%C3%A4t.pdf

Kösters, L., & Smits, W. (2022). 'Genuine'or 'Quasi' self-employment: Who can tell? *Social Indicators Research, 161*(1), 191–224. https://doi.org/10.1007/s11205-021-02794-5

Mattijssen, L., Pavlopoulos, D., & Smits, W. (2020). Occupations and the non-standard employment career: How the occupational skill level and task types influence the career outcomes of non-standard employment. *Work, Employment and Society, 34*(3), 495–513. https://doi.org/10.1177/0950017020902984

Muehlberger, U., & Pasqua, S. (2009). Workers on the border between employment and self-employment. *Review of Social Economy, 67*(2), 201–228. https://doi.org/10.1080/00346760701875215

Niinivuo, S., & Raeste, J.-P. (21.02.2024). Hallinto-oikeus: Wolt-lähetit ovat yrittäjiä. *Helsingin sanomat*. Accessed 13.03.2024. https://www.hs.fi/talous/art-2000010243478.html

Nivalainen, S., & Tenhunen, S. (2020). *Kuinka yrittäjät eläkevakuuttavat?: Yrittäjien omat näkemykset ja YEL-työtulon ja yrittäjän tulojen suhde*. Helsinki: Eläketurvakeskus. https://urn.fi/URN:ISBN:978-951-691-304-2

OECD (2019). *OECD Employment Outlook 2019: The Future of Work*. Paris: OECD Publishing. Accessed 19.02.2024. https://doi.org/10.1787/9ee00155-en

Perkiö, M., Mbare, B., Svynarenko, A., Kokkonen, L., & Koivusalo, M. (2023). *Occupational safety and health risks amongst food delivery workers*. Working paper 116/2023. https://trepo.tuni.fi/bitstream/handle/10024/149081/978-952-03-2926-6.pdf?sequence=2&isAllowed=y

Polvinen, A., Riekhoff, A.-J., Nivalainen, S., & Kuivalainen, S. (2024). Patterns of work and retirement in a pension system with a flexible old-age retirement age: a register study of Finnish employees and self-employed persons born in 1949. *Work, Aging and Retirement*, waad032. https://doi.org/10.1093/workar/waad032

Pukkinen, T., Stenholm, P., Heinonen, J., Naumanen, M., & Vainikainen, S. (2023). *Vauhtia yritysten perustamisaktiivisuuteen ja kasvuun: Tilannekuva yrittäjyydestä ja uuden yritystoiminnan edistämisestä Suomessa*. Helsinki: Valtioneuvoston kanslia. http://urn.fi/URN:ISBN:978-952-383-345-6

Regional State Administrative Agency (01.11.2021). Työsuojeluviranomainen katsoo, että Woltin ruokalähetit ovat työsuhteessa. Accessed 13.03.2024. https://avi.fi/tiedote/-/tiedote/69923205

Rostamkalaei, A., Nitani, M., & Riding, A. (2022). Self-employment, financial knowledge, and retirement planning. *Journal of Small Business Management, 60*(1), 63–92. https://doi.org/10.1080/00472778.2019.1695497

Salonen, J. (14.10.2020). Laskutuspalveluyritysten asiakkaat läpivalaisussa. [blog post] Accessed 14.04.2023. https://www.etk.fi/blogit/laskutuspalveluyritysten-asiakkaat-lapivalaisussa/

Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics, 87*(3), 355-374. https://doi.org/10.2307/1882010

Tammelin, M. (2019). The solo self-employed person and intrinsic financial security: does the promotion of self-employment institutionalise dualisation? *Journal of Poverty and Social Justice, 27*(2), 219–234. https://doi.org/10.1332/175982719X15535215192741

Työeläke.fi (29.12.2023). Pension for social security benefits. Accessed 14.03.2024. https://www.tyoelake.fi/paljonko-saan-elaketta/sosiaalietuuksista-elaketta/#title

Työeläke.fi (2024). Pensions for the self-employed. Accessed 14.03.2024. https://www.tyoelake.fi/en/pensions-for-the-self-employed/when-do-i-need-insurance/

Uusi työ ry (2024). Menestyvässä Suomessa kaikilla on oikeus tehdä työtä. Accessed 14.01.2024. https://uusityo.fi/visio/

Uusi työ ry and Kantar TNS (2021). Kevytyrittäjyys vuonna 2021. Accessed 14.01.2024. https://uusityo.fi/tilastotietoa/

Uusi työ ry and Kantar TNS (2022). Kevytyrittäjyys 2022. Accessed 14.01.2024. https://uusityo.fi/tilastotietoa/

Vallas, S., & Schor, J. B. (2020). What do platforms do? Understanding the gig economy. *Annual Review of Sociology, 46*, 273–294. https://doi.org/10.1146/annurev-soc-121919-054857

van Stel, A., & van der Zwan, P. (2020). Analyzing the changing education distributions of solo self-employed workers and employer entrepreneurs in Europe. *Small Business Economics, 55*, 429–445. https://doi.org/10.1007/s11187-019-00243-9

Zwysen, W., & Piasna, A. (2023). Juggling online gigs with offline jobs: How local labour markets are driving the growth in internet and platform work. *ETUI Research Paper-Working Paper, 2023/2*. https://dx.doi.org/10.2139/ssrn.4401054

Appendix

Figure A6.1
The share of self-employed persons in the group who started light entrepreneurship in 2017 and the comparison group, by year and age group.

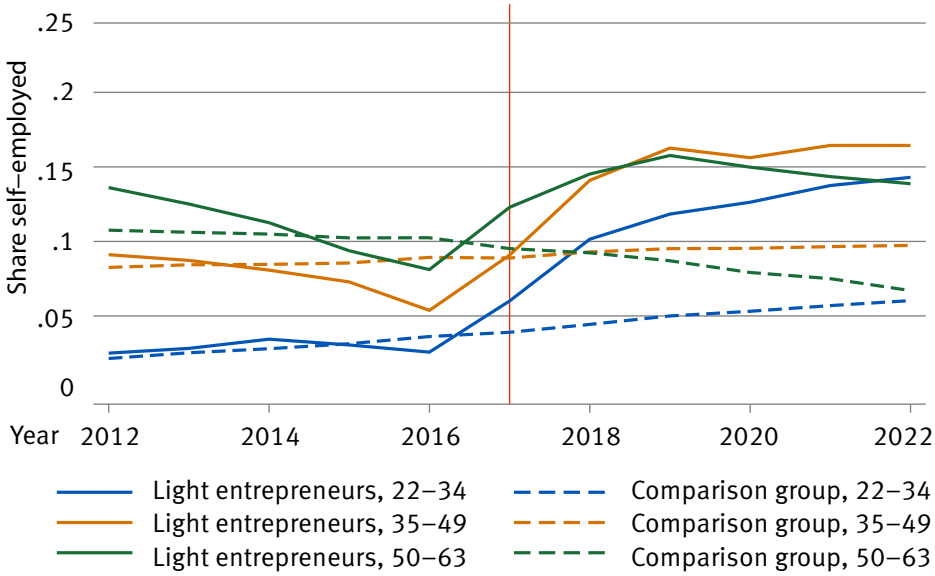


Figure A6.2
The share of employees in the group who started light entrepreneurship in 2017 and the comparison group, by year and age group.

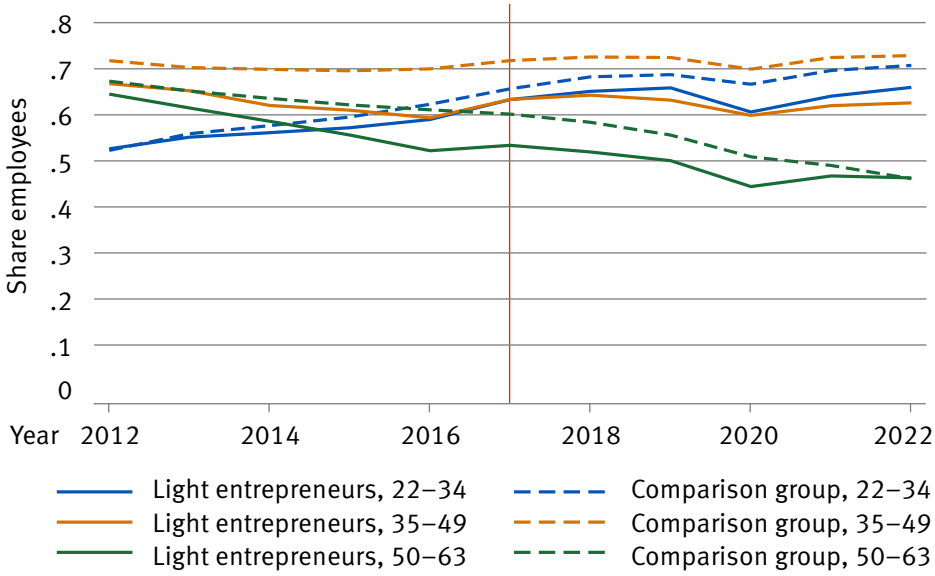


Figure A6.3
The share of unemployed persons in the group who started light entrepreneurship in 2017 and the comparison group, by year and age group.

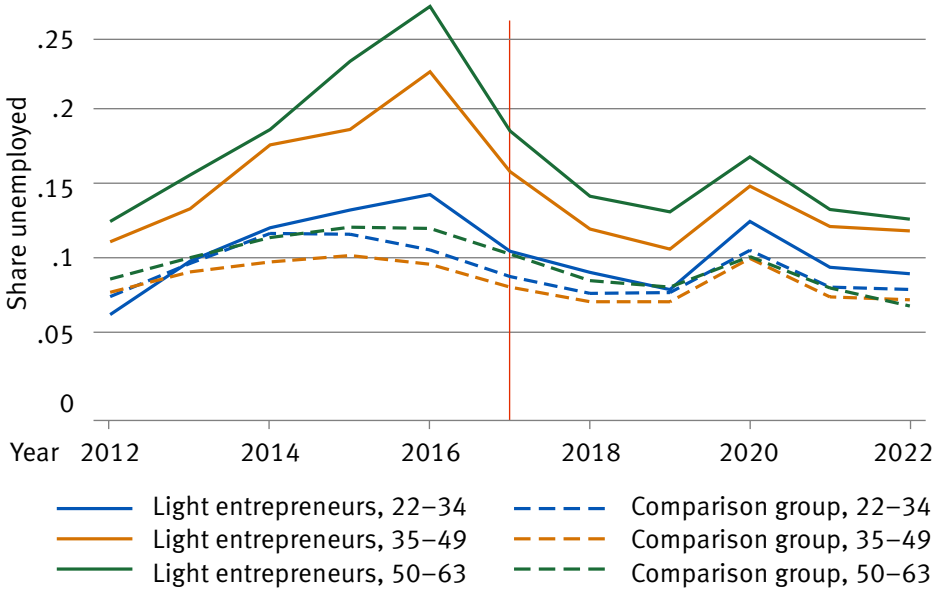
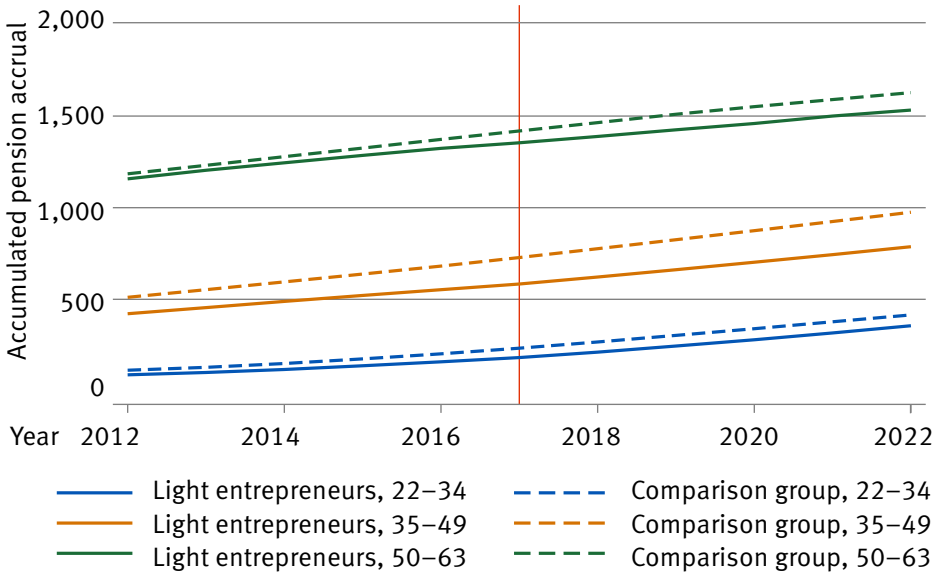


Figure A8.1
Accumulated pension accrual of light entrepreneurs and the comparison group in 2012–2022, by age group.



Note: Yearly pension accrual is adjusted to 2022 prices using the wage coefficient (Finnish Centre for Pensions, 2024a).

Table A7.1
Number of observations in sample used in analysis in Chapters 7 and 8.

Group	Light entrepreneurs				Comparison group			
Age	**22–34**	**35–49**	**50–63**	**All**	**22–34**	**35–49**	**50–63**	**All**
All	5,396	2,928	1,139	9,463	93,387	10,2367	10,4995	300,749
Birth country								
Finnish-born	4,642	2,521	1,041	8,204	76,674	87,393	98,674	262,741
Foreign-born	754	407	98	1,259	16,713	14,974	6,321	38,008
Gender								
Male	2,884	1,773	769	5,426	47,786	52,380	52,361	152,527
Female	2,512	1,155	370	4,037	45,601	49,987	52,634	148,222
Education in 2022								
Primary education	521	422	178	1,121	16,212	15,238	18,588	50,038
Secondary education	2,091	1,302	669	4,062	41,406	49,418	65,832	156,656
Tertiary education	2,784	1,204	292	4,280	35,769	37,711	20,575	94,055
Income in 2012								
No income	663	225	72	960	15,903	8,560	4,320	287,83
Income below median	2,680	1,501	495	4,676	38,067	46,505	50,335	134,907
Income above median	2,053	1,202	572	3,827	39,417	47,302	50,340	137,059

04
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Light entrepreneurs in Finland

A longitudinal study of careers, income and pension accrual

This study examines how the careers, income and pension accrual of light entrepreneurs have developed over time. The main focus is on individuals who started as light entrepreneurs in 2017. They are followed from 2012 to 2022. The study also includes comparisons between light entrepreneurs and their peers who were not light entrepreneurs. The analyses are based on register data from Statistics Finland and the Finnish Centre for Pensions.

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