Yuri Pettinicchi and Axel Börsch-Supan

12 The economic situation of formerly self-employed workers

- Formerly self-employed workers earn lower pension incomes than formerly traditionally-employed workers
- Formerly self-employed workers are more at risk of poverty during retirement
- Formerly self-employed workers rely more on financial assets outside the public pension systems

12.1 Introduction

Many self-employed workers deal with more precarious working conditions than their traditionally-employed counterparts and lack the safety net provided by job-related agreements between workers and employers. During their working life, many earn less and bear more risk than employees (Hamilton 2000, Maskowitz and Vissing-Jørgensen 2002). In many countries, self-employed workers also have reduced access to public pension rights and often need to manage on an individual basis their risky financial decisions, such as pension plan participation and contributions (Möhring 2014). Thus, their pension adequacy is of significant concern (EU Pension Adequacy Report 2018).

The aim of this chapter is to use the SHARE life histories collected in Wave 7 to compare the economic situation in old age of formerly self-employed and formerly traditionally-employed workers.

A closer look at self-employed workers shows different groups of these workers. One group chooses self-employment to have a greater degree of control over their working conditions. For the other group, self-employment is a transitory stage in the struggle to access a traditionally-employed job.

The first group offsets the higher costs involved in the risky income profile with higher income growth. The jobs taken by the first group can be viewed as experiments of innovative ideas that continue in the case of success or that revert to employed jobs in the case of failure (Kerr et al. 2014). These workers can rely on market solutions to insure themselves against negative shocks (income, health, others) that could lead to poverty.
The second group is self-employed for exogenous factors specific to the labour market. Their self-employment could be the result of sector characteristics, such as seasonality in agriculture and fishery. Self-employment could also be the result of legal innovations aimed at increasing the flexibility of the labour market, which is in turn exploited by employers to externalize labour costs, creating *bogus* self-employment figures (self-employed with a one-to-one work relationship). Self-employment could be the result of technological innovation that fosters the so-called gig-economy and on-demand jobs. These workers are constrained by lower labour income when they rely on personal savings to insure themselves.

### 12.2 Prevalence of former self-employment

The comparison between current retirees who were formerly self-employed versus those who were formerly employees in dependent employment is made possible by the availability of the retrospective information of respondents in Wave 7. SHARE asked each respondent about each working spell longer than 6 months. A similar set of retrospective questions was asked in Wave 3 (named ‘SHARELIFE’). We use the information available in the interim Waves (4, 5 and 6) to bridge the information gap for respondents who were interviewed in Wave 3.

We distinguish two subsamples: retirees and workers. In both subsamples, individuals are older than 50 years according to the SHARE eligibility age. We call a respondent ‘formerly self-employed’ if she has worked for at least 50 per cent of her working life to date. More information about the sample selection criteria is available in Pettinicchi and Börsch-Supan (2018). The average duration of working lives accounts for 38 (41) years for workers (retirees).

Figure 12.1 reports the prevalence of former self-employment in the two subsamples.

Differences between countries reflect differences in labour markets. South European countries display a higher prevalence of self-employed, whereas the lower prevalence in eastern European countries is the result of the non-market economy in place during the pre-1990 period.

### 12.3 Old-age poverty measures

We follow two different approaches to measure monetary poverty: self-reported financial distress and an income-based poverty measure.
Self-reported financial hardship is captured by the SHARE question ‘Thinking of your household’s total monthly income, would you say that your household is able to make ends meet... 1. With great difficulty 2. With some difficulty 3. Fairly easily 4. Easily’. This computation is based on recoded answers (1 to ‘easily’ and 4 to ‘with great difficulty’). Higher values mean a greater inability to make ends meet. Figure 12.2 displays the weighted average values by country. Formerly self-employed workers (retirees) report higher financial distress with respect to formerly traditionally-employed workers.

The income-based poverty measure is computed using equivalized disposable income, which is the total income of a household after taxes and other deductions that is available for spending or saving, divided by the equivalized number of household members. Household members are equivalized by weighing each member according to their age using the so-called modified OECD equivalence scale.

Figure 12.3 displays country-specific median values of the equivalized disposable income. The values are adjusted for international differences in purchasing power.

Although we find mixed evidence for current workers, we find a statistically significant income gap between the formerly self-employed and the formerly traditionally-employed in the subsample of retirees.
The income-based poverty measure is computed as the share of people with equivalized disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 per cent of the national median equivalized disposable income (after social transfers). This indicator, the at-risk-of-poverty (AROP) rate, does not measure wealth or poverty but rather income relative to other residents in that country, which does not necessarily imply a low standard of living.

Figure 12.4 reports the AROP rates by country. The formerly self-employed receive a lower income than the formerly traditionally-employed, perhaps explained by missing opportunities in income growth. The gap becomes more severe during retirement and is almost twice as large as that of current workers.

![Financial Distress](image-url)

**Figure 12.2: Average financial distress by country.**

**Note:** A high score indicates lower quality of life. Min: 1, Max: 4. Panel (a) refers to workers. Panel (b) refers to retirees. N-SE refers to formerly traditionally-employed. SE refers to formerly self-employed. Horizontal lines are weighted averages over the SHARE countries. The value is not reported if the sample size is smaller than 25 observations.

**Source:** SHARE Wave 7 release 0.
To shed light on the composition of the formerly self-employed group, we look at country-specific income distributions. For several countries, the mode of income distribution of the formerly self-employed is just before the AROP threshold. This finding implies that a lump-sum transfer in addition to their pension income would considerably reduce the AROP rates.

The income distribution of the formerly self-employed has a fatter right tail than that of the formerly traditionally-employed. This distribution reflects the presence of highly successful self-employed. For more details, see Figure 12.3.

**Figure 12.3:** Equivalized disposable income by country (median values).

*Note:* Panel (a) refers to workers. Panel (b) refers to retirees. N-SE refers to formerly traditionally-employed. SE refers to formerly self-employed. Horizontal lines are weighted averages over the SHARE countries. The value is not reported if the sample size is smaller than 25 observations.

*Source:* SHARE Wave 7 release 0.

### 12.4 Income distributions and inequality

To shed light on the composition of the formerly self-employed group, we look at country-specific income distributions. For several countries, the mode of income distribution of the formerly self-employed is just before the AROP threshold. This finding implies that a lump-sum transfer in addition to their pension income would considerably reduce the AROP rates.

The income distribution of the formerly self-employed has a fatter right tail than that of the formerly traditionally-employed. This distribution reflects the presence of highly successful self-employed. For more details, see
Pettinicchi and Börsch-Supan (2018). We can describe income inequality with a single number using the income quintile share ratio (also called the S80/S20 ratio). This ratio is calculated as the ratio of total income received by the 20 per cent of the population with the highest income (the top quintile) to that received by the 20 per cent of the population with the lowest income (the bottom quintile). Figure 12.5 displays the income quintile share ratio by country.

Formerly self-employed workers displayed higher income inequality than formerly traditionally-employed workers. This difference is smaller for the subsample of retired workers.

Figure 12.4: At-risk-of-poverty (AROP) rates by country.
Note: Panel (a) refers to workers. Panel (b) refers to retirees. N-SE refers to formerly traditionally-employed. SE refers to formerly self-employed. Horizontal lines are weighted averages over the SHARE countries. The value is not reported if the sample size is smaller than 25 observations.
Source: SHARE Wave 7 release 0.
Financial assets as self-insurance

SHARE also provides information about the accumulated financial assets of the formerly self-employed out of the public pension system. We compute the net liquid assets–income ratio, that is, the ratio of liquid assets minus debts to household annual income. This ratio conveys the notion of how many years a household can live on only its liquid assets. We use SHARE Wave 6 data.

Relative to their income, formerly self-employed workers accumulate more financial assets outside the public pension system than formerly traditionally-employed workers. This is illustrated in Figure 12.5, which shows the income quintile share ratio by country, defined as the ratio of the sum of the average equivalized household size of the top quintile to that of the bottom quintile of the income distribution.

**Figure 12.5**: Income quintile share ratio by country, which is the ratio of the sum of the average equivalized household size of the top quintile to that of the bottom quintile of the income distribution.

**Note**: Panel (a) refers to workers. Panel (b) refers to retirees. N-SE refers to formerly traditionally-employed. SE refers to formerly self-employed. Horizontal lines are weighted averages over the SHARE countries. The value is not reported if the sample size is smaller than 25 observations.

**Source**: SHARE Wave 7 release 0.

### 12.5 Financial assets as self-insurance

SHARE also provides information about the accumulated financial assets of the formerly self-employed out of the public pension system. We compute the net liquid assets–income ratio, that is, the ratio of liquid assets minus debts to household annual income. This ratio conveys the notion of how many years a household can live on only its liquid assets. We use SHARE Wave 6 data.

Relative to their income, formerly self-employed workers accumulate more financial assets outside the public pension system than formerly traditionally-
employed workers. This situation holds for both workers and retirees and is stronger for richer countries. Moreover, the gap between the two groups widens when they retire, which may be the result of cashing in work-specific assets. Figure 12.6 displays the net financial asset to income ratio by country.

Figure 12.6: Net financial asset to income ratio by country.

Note: Net financial assets are calculated as the sum of the value of deposits, mutual funds, bonds, non-self-employment business wealth, (publicly traded) shares and managed accounts, net of credit line/overdraft debt, credit card debt and other non-mortgage debt. Income is the total household income. Both measures use imputed values. Panel (a) refers to workers. Panel (b) refers to retirees. N-SE refers to formerly traditionally-employed. SE refers to formerly self-employed. Horizontal lines are weighted averages over the SHARE countries. The value is not reported if the sample size is smaller than 25 observations.

Source: SHARE Wave 6 release 6.1.0.
12.6 Conclusions

Formerly self-employed retirees report a higher degree of financial distress and have lower incomes. They rely more on financial assets outside the public pension systems to cope with income and health shocks during their retirement. Their empirical income distribution represents them as a highly diverse group with a high degree of income inequality. Although some are rich in retirement, the formerly self-employed are more often at risk of poverty than their formerly traditionally-employed counterparts.

References


