Homeownership and Happiness: Evidence for Switzerland*

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Owning a house is a dream for many people. Moreover, numerous countries support homeownership by providing financial contributions or tax advantages. We investigate whether homeownership makes people happy in Switzerland. Global research has shown mixed results so far. We use data from the Swiss Household Panel and apply different research designs. The findings show no or even negative evidence. Other factors such as the financial status of the household, health, age, and partnership have a much stronger impact on happiness.

1. INTRODUCTION

«My home is my castle.»
«Build a house, plant a tree, father a child.»

People have a natural preference for homeownership (Saunders, 1990). Owning a house has a highly symbolic meaning, is central to the «American Dream» and is the hallmark of the US housing policy (Bucchianeri, 2011; Shlay 2006). In Switzerland too, the preference for

homeownership is high (Bourassa et al., 2010). Furthermore, a house can serve as a provision for old age. To a certain extent, pension wealth and home-ownership are substitutes (Müller, 2019). It is well documented that homeowners have greater total wealth than renters (without residential property) do. However, it is not clear that homeownership causes this wealth differential (Beracha et al., 2017).

Government programs promote homeownership in numerous countries (Shlay, 2006). In Switzerland, Article 108 of the Federal Constitution requires to support private residential property. Principal measures are the withdrawal option of pension funds for the purchase of a home and special tax treatments (Federal Department of Finance Switzerland, 2010). Besides, homeownership offers personal benefits, such as protection from the termination of a rental agreement by the proprietor. Property rights allow occupiers to exclude others from their estate as well as the right to use it or sell it (Dietz and Haurin, 2003). The literature provides evidence for many economic and social benefits associated with homeownership. Homeowners may be more satisfied with their lives in general than tenants because they can shape their living space without restriction (Federal Department of Finance Switzerland, 2010).

As stated, homeownership is a dream for many people, and many governments promote it. The question arises as to whether it also makes people happy. This paper investigates the link between homeownership (to be an owner-occupier) and the ultimate objective of having a happy life (perceived happiness). Are homeowners in Switzerland more satisfied with their lives than tenants are?

We will argue that we doubt that homeownership is the key argument that explains happiness. Our principal findings show no positive (or even negative) evidence of a causality between homeownership and happiness. Other factors such as the financial status of a household, health, age, and partnership have a greater impact. These results are broadly consistent with recent international research.

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2. THEORETICAL CONSIDERATIONS AND LITERATURE REVIEW¹

2.1 Homeownership and Happiness

Various scientific disciplines investigate «what makes people happy.» Happiness (overall subjective wellbeing in all aspects of life) is a useful proxy in economics when investigating preferences and utilities (Frey, 2017). Economic research on the determinants of happiness has yielded interesting results (Powdthavee and Stutzer, 2014; Frey, 2017). With higher income, individuals and households are happier, but with a decreasing marginal effect. Among the most critical factors are satisfying personal relationships and good health. Moreover, unemployed people are much less happy than those in paid employment are. The consequences of happiness are also manifold. Among other things, happy individuals are more productive, healthier, and more intrinsically motivated to engage in work.

Since homeownership is also an important goal for many people, there may be a link between homeownership and happiness. The literature usually describes four channels positively influencing life satisfaction (Zumbro, 2014): housing quality, economic effects, prestige, and freedom. Positive economic effects of homeownership include the accumulation of wealth and tax benefits. Homeownership is also a key symbol of personal success, prestige, and freedom. A change from tenant to homeowner status without relocation leads to higher satisfaction with the same property. Bucchianeri (2011) and Diaz-Serrano (2009) describe this phenomenon as «pride of homeownership» and Kearns et al. (2000) as «home as a haven, as a locus of autonomy and as a source of status». Morris (2018) confirms for the US that homeowners are more satisfied with their lives. There is a myriad of possible explanations for this finding (elevated social status, greater autonomy, more freedom, enhanced security, pride in the dwelling and so on). However, he stresses that more satisfied people may be more likely to own a house. Omitted variables such as wealth (as distinct from income) may be causing ownership and satisfaction to covary. Guven and Sørensen (2012) underline the importance of perception and comparison. Being a homeowner in a neighbourhood where only homeowners live may be less beneficial than being the only owner. Happiness strongly correlates with perceptions. And Kearns et al. (2000), too, show «that housing tenure is less important as an influence upon the attainment of psycho-social benefits from the home than the neighbourhood context.»

Owners require high financial reserves. Future owners usually have to invest a considerable proportion, if not all, of their savings. Any remaining financing through mortgages leads to long-term financial liabilities. Tenants have no comparable financial obligations (Dietz and Haurin, 2003). We assume that such financial aspects can influence happiness.

Empirical research found for Germany (Zumbro, 2014) a positive relationship between homeownership and life satisfaction, particularly significant for low-income households. In urban China, Hu (2013) also found a strong positive relationship. The study of Coates et al. (2013) in Western Europe showed that migrants experience lower levels of correlations between life and housing satisfaction. An analysis for twelve EU countries (Diaz-Serrano, 2006) indicated that the status (owner or tenant) is critical for the satisfaction with the housing situation and this in turn is an important trigger for the housing mobility. Tenants who are dissatisfied with their housing situation move more quickly as owners do. However, Bucchianeri (2011) found no causality between homeownership and happiness in the *United* States. Older studies generally found a positive relationship. The results of studies concerning integration in the community remained unclear, either confirming a greater involvement in the community (Rossi and Weber, 1996) or rejecting neighborhood participation and social interaction (Rohe and Basolo, 1997). In addition, Rohe and Stegman (1994) attributed living conditions (living in a safe, clean, calm, central residential area), not the homeownership as such, to increased life satisfaction.

For Switzerland, Seiler Zimmermann and Wanzenried (2016) reported empirical evidence for 2000 to 2014 that homeowners are happier than tenants are. They showed that women, older people, and Swiss nationals combined with rising incomes, good health, and integration in the labor market, living together in partnerships, and a good quality of housing result in more happiness.

Whether homeownership alone makes people happier remains unclear (Zumbro, 2014; Bucchianeri, 2011). «[...] The literature provides evidence that homeowners are financially better off than renters [...]» (Beracha et al., 2017). However, homeownership studies often neglect the influence of household wealth on happiness. A broad range of research suggests that wealth may be

^{1 -} A comprehensive appendix is available on request from the corresponding author, providing further background information and explanations. In particular, we discuss the research design, the econometrics, and further estimations in detail.

a crucial factor in happiness studies. Wealth obviously has a positive effect on happiness when avoiding poverty (Diener and Biswas-Diener, 2002), but the wealthier seem less able to enjoy life (Quidbach et al., 2010).

We assume that homeowners, in general, are happier than tenants are. However, this effect diminishes when further control variables, especially the financial situation of a household, are considered. The question has already been examined in Anglo-American areas, Europe, and China. Studies in Switzerland are still rare. As a new aspect and a contribution to the field, we consider in the empirical model an extended set of variables (especially wealth) and apply various research settings and designs, which we test on Swiss data. This provides further evidence for this debate.

2.2 Homeownership in Switzerland

The population of Switzerland is predominantly tenant (Federal Statistical Office Switzerland, 2017; Bourassa and Hoesli, 2010; Federal Department of Finance Switzerland, 2010; Seiler Zimmermann and Wanzenried, 2016). The country has a relatively low homeownership quota of around 40%. Since 1970, homeownership has steadily increased from 29%. The cantonal² differences in the quota are considerable (Basel-Stadt 15%, Wallis 55%). The key drivers of this trend in recent years have been immigration, low mortgage interest rates, and the increasing use of pension fund money. The rate of homeownership among Swiss citizens is significantly higher (46%) than among the foreign population (14%). Moreover, 50% of families and couples living together are homeowners, but only 25% of single-person households.

3. EMPIRICAL APPROACH

3.1 Methodology and Operationalization

The Swiss Household Panel (SHP) is a yearly panel study following a random sample of private households over time. The SHP constitutes a unique longitudinal database for Switzerland since 1999 (FORS, 2018). We used the waves 2012 and 2016, because only these two years collected data on household wealth, as well as data on all other control variables, exploiting 4,957 observations.

We apply a pooled ordinary least square (OLS) regression and explain the effect of homeownership and other

variables on happiness of a household for the years 2012 and 2016. The baseline estimation is given by the following equation:

$$\hat{y}_i = \hat{\alpha}_0 + \hat{\beta}_1 \cdot Owner_i + \hat{\beta}_2 \cdot Wealth_i + \hat{\beta}_3$$
$$\cdot Income_i + \hat{\beta}_4 \cdot \delta_i + \hat{\beta}_V \cdot Year_{2016} + \hat{\varepsilon}_i$$

The dependent variable y_i refers to satisfaction with life in general, captured by the subjective well-being variable (happiness). The independent variables consist of a variable for the homeownership status, wealth, income, and a vector of controls δ_i , which capture further person- and household-specific characteristics. The year dummy isolates 2016 and captures the trend between the two observation years.

We define our dependent variable as the reported subjective well-being (Diener, 1984)³ of the person who manages the household's finances. The SHP variable captures «satisfaction with life in general» (happiness). Since the early 2000s, a range of studies has been conducted using survey data of subjective well-being, which is an appropriate methodology in Switzerland for identifying happiness (Frey and Stutzer, 1999; Frey and Stutzer, 2000; Dorn et al., 2008; Seiler Zimmermann and Wanzenried, 2016; from an international perspective, see Ferrer-i-Carbonell and Frijters, 2004 or Pedersen and Schmidt, 2011). The SHP captures the housing status and asks whether the households are homeowners or tenants (homeownership). Unfortunately, the SHP does not distinguish between owners of single-family houses and owners of apartments. We consider further control variables discussed in the literature, like wealth, income, sociodemographic factors or factors related to the living situation.

4. RESULTS

4.1 Descriptive Analysis

Table 1 (page 7) gives a descriptive overview of the data and confirms our assumptions. Homeowners tend to be happier than tenants (a slight difference of + 0.225 points). As expected, wealth and income is unequally distributed between homeowners and tenants. Homeowner's wealth is significantly, income is slightly higher. However, we consider that (some) pension assets are included in the wealth of homeowners.

² – Cantons are the second federal level of government in Switzerland, like US states, Canadian provinces or German Bundeslaender.

 $^{3\,\}text{-}\,\text{Throughout}$ this paper, we use the terms subjective well-being, happiness, and life satisfaction interchangeably.

Variables	Mean	Mean	Mean	StD
Sample	all	homeowners only	tenants only	all
Happiness	8.103	8.179	7.954	1.244
Homeownership	0.661	1.000	0.000	
Wealth	943.9	1.326	198.3	5.881
Income	125.1	134.7	106.4	73.07
Male	0.505	0.524	0.466	
Age	54.16	56.79	49.032	14.96
Swiss	0.930	0.939	0.912	
Kids	0.301	0.316	0.271	
Health	0.856	0.860	0.848	
Unemployed	0.007	0.006	0.010	
Living with Partner	0.803	0.872	0.668	
House Quality	0.985	0.992	0.972	
Bad Neighborhood	0.326	0.279	0.417	0.618
Length Residence	24.54	26.69	20.33	15.36
Recent Mover	0.061	0.029	0.123	
Housing Costs	18.60	16.479	24.90	15.46

TABLE 1: Descriptive Statistics. All data (homeowners and tenants), n = 4,957; Homeowners only, n = 3,278; Tenants only, n = 1,679; Source: Swiss Household Panel (SHP).

4.2 Difference in Difference Analysis

First, we investigate changes in happiness from socalled «status changers» households (Table 2, below). The difference in difference approach calculates the differential effect of a treatment (status change from tenant

to homeownership, et vice versa) on an outcome (happiness), measuring a treatment group (status changers), and a control group (non status changers) between two years (2012 and 2016). All households have been included for which data was available for both years (n = 1,086).

	Homeowners Control	Homeowners to Tenants	Difference
2012	8.111	7.833	0.278
2016	8.111	7.875	0.236
Difference	0.000	0.042	0.042
T-test		-0.164 (0.870)	
n	757	24	
	Tenants Control	Tenants to Homeowners	Difference
2012	Tenants Control 7.971	Tenants to Homeowners 8.230	Difference -0.259
2012			
	7.971	8.230	-0.259
2016	7.971 8.070	8.230 8.230	-0.259 -0.160

TABLE 2: Difference in Difference Analysis: Status Changes. T-test with independent samples shows whether the differences of two groups are statistically significant, p-value in parenthesis; Source: Swiss Household Panel (SHP).

In general, non-changing homeowners are happier than non-changing tenants are for both years. The results for status changers, however, are interesting. Firstly, homeowners who sold their property (24) became happier than homeowners who kept their property (Δ + 0.042). Secondly, the happiness of tenants who bought a property (61) increased less than the happiness of the control group who remained tenants (Δ – 0.099). However, the T-tests are not statistically significant (and that the sample size of both treatment groups is low). These results indicate that homeownership perhaps may not be a direct determinant of happiness.

4.3 Results of the Pooled OLS Baseline Regressions

We estimate different regression models, applying the pooled OLS method (n = 4,957 observations). The dependent variable is *happiness*. The baseline estimation consists of three models: 1) we estimate homeownership as the only explanatory variable; 2) we append log wealth and log income into the model; 3) homeownership, log wealth, log income, and an additional set of common control variables complete the model. All models include a constant and a year dummy for 2016. As we estimate panel data and some household were observed twice, the models include clustered standard errors. The proportion of the explained variance is 0.0085, 0.0274, and 0.1538, respectively, a rather low value (Table 3, page 9).

In model 1, homeownership is significant (p < 0.01, a probability of 99% or higher). Predicted happiness of homeowners would be slightly higher (0.23 points) than for tenants. The coefficient for the year dummy 2016 is 0.0908 and significant (p < 0.01), a hint of an increased general trend in happiness from 2012 to 2016. The further models indicate that other variables may act as a mediator to the relationship between happiness and homeownership. In model 2, homeownership becomes insignificant (probability is lower than 90%) once we add the variables for wealth and income in the estimation. The coefficient for homeownership decreases from 0.2253 to -0.0345 and the sign changes. Every unit increase in log wealth predicts a 0.09 unit increase in happiness, holding all other variables constant, statistically significant (p < 0.01). For log income, the coefficient is 0.1744 (p < 0.01).

Finally, we see in model 3, once an additional set of control variables is added, that homeownership becomes significant again, but that the sign changes to a negative value (coefficient -0.1003, p <0.05). The predicted happiness would be slightly lower than for ten-

ants (0.10 points), making homeowners unhappier. The wealth and income variables remain significant (coefficients 0.0536, p < 0.01; 0.1048, p < 0.05), reaching a considerably lower level than in model 2. Wealth and income make people happy. However, the effect is small. The additional control variables increase the explanatory power of the model to 0.1538 without offering any surprising insight. The variables in the model explain only 15% of the variation of happiness. Most variables of the control set are significant (p < 0.05 or higher), except for length of residence and housing costs. The year dummy shows a significant increase in happiness by 0.13 points between 2012 and 2016. The relatively low explanation of variance is, overall, in line with previous studies (Bucchianeri, 2011: around 0.18 to 0.25; Frey and Stutzer, 2000: 0.09).

The standardized beta coefficients show that the variables health (30%), partnership (13%), and age (10%) have the strongest effect on happiness. Together, these variables explain around 53% of the variance of happiness. The contribution of homeownership (-4%), log wealth (7%), and log income (4%), on the other hand, is modest. This is in line with the current state of research. These initial results suggest that other variables than homeownership boost happiness, as already documented.

We verified these findings with a series of extensions and robustness analyses and applied various strategies to investigate further the relationship between homeownership and happiness. The results show that the impact of homeownership on happiness is no longer significant (or even becomes negative) when wealth, income, and other control variables are included in the model. The results can withstand changes in the dependent variable and alternative econometric estimation methods.

5. DISCUSSION AND CONCLUSION

It is commonly agreed, also in Switzerland, that homeownership is worth promoting (Bourassa et al., 2010; Federal Department of Finance Switzerland, 2010). However, are homeowners really happier than tenants are? The main objective of this paper was to examine this relationship the first time in the Swiss context using data from the SHP.

Most of the analysis presented here established a non or even negative relationship between homeownership and happiness. Nevertheless, advanced models with additional variables showed that homeownership alone cannot explain the reported happiness in Switzerland.

Pooled OLS	Year = 2012 + 2016			
Dependent Variable = Happiness	Model 1	Model 2	Model 3	
Constant	7.8931***	4.8532***	3.9784***	
Constant	(0.0407)	(0.4903)	(0.5728)	
Homeownership	0.2253***	-0.0345	-0.1003**	
	(0.0403)	(0.0503)	(0.0478)	
Log Wealth		0.0946***	0.0536***	
		(0.0149)	(0.0150)	
Log Income		0.1744***	0.1048**	
		(0.0429)	(0.462)	
M-1.			-0.0995***	
Male			(0.0354)	
Age			0.0086***	
			(0.0018)	
Swiss			0.2696***	
			(0.0647)	
Kids			-0.1030** (0.0428)	
			1.0784***	
Health			(0.0612)	
			-1.1114***	
Unemployed			(0.2989)	
Linius and Donton			0.4120***	
Living with Partner			(0.0527)	
House Quality			0.3973**	
			(0.1888)	
Bad Neighborhood			-0.0834***	
			(0.0282)	
Length Residence			-0.0003 (0.0016)	
Recent Mover			0.1407**	
			(0.0674)	
Housing Costs			-0.0014	
			(0.0014)	
Year Dummy (2016)	0.0908***	0.1033***	0.1301***	
rear Dummy (2016)	(0.0335)	(0.0336)	(0.0325)	
Observations	4,957	4,957	4,957	
\mathbb{R}^2	0.0085	0.0274	0.1538	
Entities	3,871	3,871	3,871	

TABLE 3: Pooled OLS Regression, Baseline Model, Happiness. Clustered (entity) standard errors in parentheses, *p < 0.10, **p < 0.05, *** p < 0.01.⁴; Source: Swiss Household Panel (SHP).

^{4 -} The p-value indicates whether the impact of the variable on the dependent variable (happiness) is random or not (then it is significant). If the p-value is less than 10% (or 5%, or 1%), the variable has a non-random influence on the dependent variable. The lower the p-value, the less random the impact can be.

The addition of controls has a major impact on the effect of homeownership and the financial situation on happiness. In most models, the core variables *age*, *health* and *partnership* remain significant and have a strong impact.

A separate analysis between single-family houses ownership and apartments ownership would be interesting for further studies, which was not possible due to a lack of data. It is to be expected that conflicts will occur more frequently in apartments.

What policy impact do our results have? The Swiss government promotes homeownership through a variety of measures. This can be viewed critically. Housing is undoubtedly an important good. Whether people in Switzerland should become homeowners or whether a functioning rental market is sufficient to satisfy this demand remains to be seen.

Our findings should not be generalized. The economic, political, and cultural conditions in Switzerland do not allow direct comparisons with other countries without considering these factors. Finally, we must emphasize that homeownership has other advantages that may explain why households want to become homeowners and the government wishes to subsidize homeownership. The effects of homeownership on financial aspects of retirement (Müller, 2019) may well be an interesting area for future research. This question will be answered later in this journal.

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