

Working Paper

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Rosemarie Kay, Teita Bijedić-Krumm, Siegrun Brink, Sebastian Nielen

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Institut für Mittelstandsforschung Bonn
Maximilianstr. 20, 53111 Bonn

Telefon +49/(0)228 / 72997 - 0
Telefax +49/(0)228 / 72997 - 34

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Public childcare – its impact on gender equality in entrepreneurship revisited

Rosemarie Kay, Teita Bijedić-Krumm, Siegrun Brink, Sebastian Nielen¹

Keywords: Public childcare provision, Start-up propensity, Gender

Abstract

Objectives:

The aim of this paper is to analyze the impact of public childcare provision on women's and men's start-up rates in Germany. Going beyond previous studies, we also analyze its impact on the extent of the gender gap in start-up rates.

Literature review:

The current state of research indicates that public childcare provision generally reduces women's start-up propensity. However, recent studies suggest that the relationship between public childcare provision and women's start-up propensity is not that clear-cut. It rather depends on the age group childcare is provided for. As the evidence regarding public childcare's impact on men's start-up propensity is mixed, it is unclear whether public childcare contributes to closing the gender gap in entrepreneurial activities.

Approach/Method:

We analyze the impact of public childcare provision on the start-up rate of women and men, as well as its impact on the corresponding Gender Parity Score (GPS) at a regional level. To do this, we generated a database based on public statistics covering the years 2012 up to 2018 and estimated Fixed Effect models.

Results/Findings:

Our results show that the effect of public childcare provision on women's and men's start-up propensity depends on the type of the venture and the age group the childcare is provided for. Moreover, public childcare affects women's and men's start-up propensity differently. All in all, public childcare provision decreases the GPS, indicating a widening of the gender gap.

Implications and Value:

As important as public childcare provision for women's general labor market participation is, it does neither improve their start-up propensity (quite the contrary) nor contribute to closing the entrepreneurial gender gap generally. Thus, public childcare provision seems not to be a policy for reducing the gender gap in entrepreneurship, apart from establishing economically substantial businesses.

¹ Rosemarie Kay (corresponding author), Teita Bijedić-Krumm, Siegrun Brink, Sebastian Nielen, Institut für Mittelstandsforschung (IfM) Bonn, Maximilianstr. 20, 53111 Bonn, email: kay@ifm-bonn.org.

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1 Introduction

Despite an increasing number of women entrepreneurs in recent decades, women's start-up rates remain markedly below men's start-up rates in most countries (GEM (Global Entrepreneurship Monitor), 2022). As a result, the gender gap in entrepreneurship only gradually closes (Kay, 2023). According to research on gender differences in entrepreneurship, a variety of factors contribute to this gender gap, such as demographics, socio-economics as well as cultural and institutional factors (Minniti, 2009). In this paper, we focus on the institutional context, specifically on subsidized public childcare provision, a family policy discussed as a measure for promoting women's self-employment. Though there is no doubt that public childcare is crucial for mitigating the work-family conflict and increasing women's labor market participation generally (e.g., Müller & Wrohlich, 2020; Neuberger et al., 2022; Scherer & Pavolini, 2023), there is some evidence that public childcare provision may not promote women's self-employment in the same way as women's participation in paid employment. Most studies suggest that public childcare provision even reduces women's propensity of starting a business (Estrin & Mickiewicz, 2011; Gimenez-Jimenez et al., 2020; Noseleit, 2014; Thébaud, 2015). The studies of Wang and Lin (2019) and Kay et al. (2025), however, suggest that the relationship between public childcare provision and women's start-up activities is not that clear-cut. It rather depends on which age group a child belongs to. While both studies found a positive correlation between childcare provision for children under the age of three and four, respectively, they either found no correlation for older children (Wang & Lin, 2019) or a negative correlation for children aged three to five years (Kay et al., 2025). Given the conflicting findings, it remains unclear whether public childcare provision contributes to closing the gender gap in entrepreneurial activities. This is particularly true because public childcare provision also affects men's start-up activities, both positively and negatively (Estrin & Mickiewicz, 2011; Kay et al., 2025; Thébaud, 2015). The aim of this paper is therefore to clarify the effect of public childcare provision on the gender gap in entrepreneurship.

This question is not immediately answered theoretically because childcare provision affects two complex, interrelated decisions – of the mother and the father – on the type and extent of labor force participation on the one hand and the type of childcare on the other hand. But even if the effect of public childcare provision on the occupational choice of mothers and fathers were clearly predictable theoretically, the combined effect for both parents on the gender gap would still remain unclear. The question raised can therefore only be answered empirically.

For doing so, we follow the approach of Kay et al. (2025) and investigate public childcare provision's impact at the regional level. We generated a database containing information on the number and type of start-up activities and on public childcare provision, covering the years 2012 up to 2018. By estimating Fixed-Effect Models, we investigate the impact of public childcare provision on the start-up rate of women and men as well as on the corresponding Gender Parity Score (GPS), while controlling for the regional birth rate and other factors.

Our results show that the availability of public childcare affects the propensity of women and men to start a business differently, depending on the type of business and the age of the children. Overall, however, public childcare provision appears to increase gender differences in start-up activities rather than reducing the gender gap.

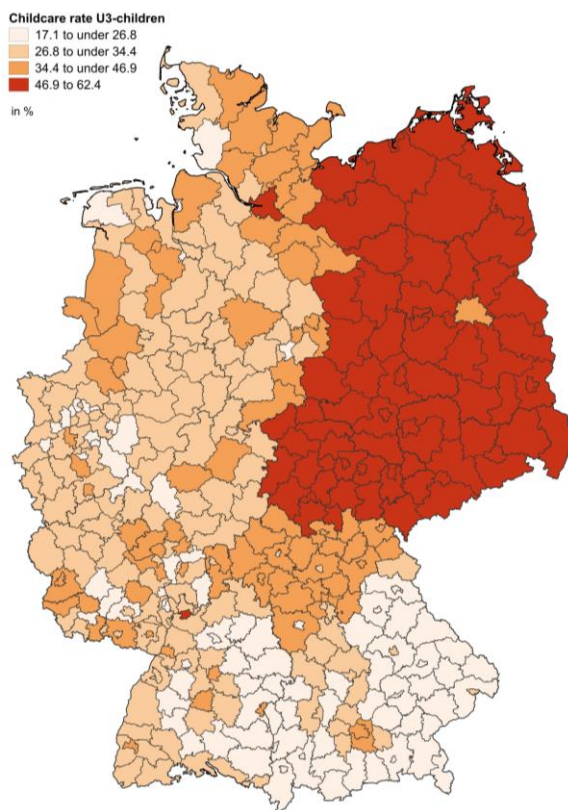
2 Institutional Framework in Germany: Policies Balancing Work and Family Commitments

In Germany, like in many other Western countries, child-rearing still mostly affects the labour market participation of women. In 2022, 69.3 percent of mothers of underage children were employed, compared to 91.8 percent of fathers (Keller & Körner, 2023, p. 93). To reduce this gender gap, policies

mitigating the work-family-conflict have been expanded over the last three decades. Particularly, a statutory entitlement to childcare was introduced: Since 1996, every child aged three to six years (so-called U6) is entitled to a kindergarten place. And since 2013, every child aged one and two years (so-called U3) is entitled to day care. Public childcare not only aims at mitigating the work-family-conflict but also, among others, at fostering early childhood development.

In addition, the so-called *Elterngeld* – a statutory entitlement to paid parental leave – was introduced in 2007 to which mothers and fathers independent of their employment status are eligible (for an overview of preceding measures see Suprinovič et al. (2015)). Since 2001, employees are entitled to part-time work, if their employer's workforce exceeds 15 employees and there are no serious operational reasons to the contrary. Additionally, two federal bills "*Tagesbetreuungsausbaugesetz*" (2005) and "*Kinderförderungsgesetz*" (2008) led to an expansion of the childcare provision, particularly for children under the age of three (U3). While the regulations regarding public childcare provision apply throughout Germany, they are implemented and subsidized at the regional level.

Despite childcare regulations applying country-wide, there are huge differences among the regions, not only between West and East Germany due to the historical context (Kayed et al., 2023, p. 10), but even within federal states (see Figure 1). These differences are more pronounced regarding children under three years old than regarding those under six years old:



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Figure 1. Childcare rates 2022, for children under three years old (U3) and for children under six years old (U6), in percent. Source: Statistisches Bundesamt (2023). Graph by the authors.

In 2021, nationwide, 98 percent of children under the age of six (Kayed et al., 2023, p. 11) and 75 percent of children under the age of three who needed a day-care place were provided with one. Therefore, childcare provision for children under three years old does not meet the demand (Kayed et al., 2023). Regionally, the childcare rate for children under three ranges from 17.1 to 62.4 percent, while the childcare rate for children under six varies between 74.6 and 103.6 percent. The childcare provision

for both groups is low in the south of Germany as well as in some western districts. Public childcare in Germany is generally subsidized. A few regions even provide public childcare for children of all ages free of charge or exempt children of specific ages from charges.

3 Concept

For better understanding the impact of public childcare provision on the entrepreneurial gender gap, we need to consider the complex decision-making situation that occur when a working woman gives birth to a child. She has simultaneously to decide how the child is to be cared for and to what extent and in what form she wants to be working. Referring to the economic framework of the family (Becker, 1993; Blau, 2001) and occupational choice theory (Douglas & Shepherd, 2000), we thus deal with a mother maximizing a utility function considering consumption, leisure, and quality of care subject to budget and time constraints (Müller & Wrohlich, 2020). The provision of (subsidized) public childcare affects the budget constraint by reducing costs for this form of care.

As we are not interested in the mother's general decision on workforce participation – we take it as a given –, we refrain from discussing public childcare provision's impact on this decision in detail (e.g., Müller & Wrohlich, 2020; Neuberger et al., 2022; Scherer & Pavolini, 2023). Rather, we are interested in whether the provision of public childcare affects the working mother's self-employment decision. It may affect this decision because paid employment and self-employment have different degrees of temporal and spatial flexibility and autonomy. It is generally argued that self-employment offers more such flexibility and autonomy, compared to paid employment (e.g., Gimenez-Nadal et al., 2012; Jeon & Ostrovsky, 2018; König & Cesinger, 2015; Lim, 2019). Thus, self-employment facilitates the reconciliation of work and family life. As a result, the birth of a child increases the likelihood of women becoming self-employed (e.g., Andersson Joona, 2018; Jeon & Ostrovsky, 2018; Kanji & Vershinina, 2024; Lloyd, 2020; Semykina, 2018). However, mothers' general need for flexibility and autonomy decreases when alternative childcare arrangements, for example affordable public childcare, are available. Consequently, we posit:

H1a: Public childcare provision generally decreases women's start-up propensity.

The literature on the relationship between having children and being self-employed indicates, that the age of the child is crucial. Roughly, the older the children, the weaker the association between motherhood and self-employment (e.g., Andersson Joona, 2018; Lim, 2019; Lohmann, 2004; Semykina, 2018). Caring for (very) young children not only requires a substantial amount of time, but is also – due to intensive care needs and toddlers' vulnerability – unforeseeable (Kay et al., 2025). Public childcare usually cannot provide the care needed in times of crises. On the contrary, if the child is sick, public childcare is not available. As self-employment provides the freedom “when, where and how to work” (König & Cesinger, 2015, p. 532), self-employment better meets the needs of caring for (very) young children, compared to paid employment. However, the older the children grow, the more the childcare demands decrease and the easier it is to reconcile paid employment with childcare (Andersson Joona, 2018; Jayawarna et al., 2021; Lim, 2019). Consequently, public childcare provision for children aged three to six years better meets the needs of caring for children of this age group than the childcare provision for younger children. Thus, we assume that:

H1b: Public childcare provision for children between the ages of three and six has a larger negative effect on women's start-up propensity than public childcare provision for children under the age of three.

To what extent self-employment provides better opportunities for balancing work and family also depends on the demands of leading the business in terms of when, where and how much to work. Hence, the effect of childcare provision on starting a business also depends on the type of business, amongst

others, its size. Establishing and managing an economically substantial business usually takes up more time than a small, possibly part-time business. It is usually also less flexible in terms of when and where to work. As a result, the flexibility benefits of self-employment diminish when running a larger business. Assuming there was no public childcare available, women with children would therefore be more likely to start small businesses than large ones. Now, the provision of public childcare provides additional time resources that may enable women with children to start and run larger businesses. While, by providing sufficient public childcare, leading a small business might lose its edge over paid employment, leading a larger business may only then become an advantageous alternative to paid employment. Therefore, public childcare provision should have less of a negative impact on the likelihood of starting a larger business than on the likelihood of starting a small one. Thus, we posit:

H1c: Public childcare provision has a smaller negative effect on women's propensity to start an economically substantial business than to start a small business.

Most working mothers are married or in committed relationships, meaning that mothers' decision on how their child is cared for and to what extent and in what form they want to be working is usually embedded in a household context (Carter et al., 2017; Kanji & Vershinina, 2024; Parker, 2008). Hence, the partner's behavior – in terms of their own employment and involvement in childcare – also influences the mothers' decision. For the sake of simplicity, however, we restricted our reasoning to the most common division of labor within the family: Women are predominantly responsible for childcare (Boll, 2017; Statistisches Bundesamt, 2025). The reverse case is negligible in Germany for the foreseeable future. Nonetheless, we have to bear in mind, that the birth of a child could also affect the male partner's decision to become self-employed directly (Lohmann, 2004) or indirectly via the mother's decision. Consequently, public childcare provision at least indirectly affects the partner's decision on working paid employed or self-employed. Concretely, women's labor market participation rises when public childcare provision is extended (Müller & Wrohlich, 2020; Neuberger et al., 2022; Scherer & Pavolini, 2023). If the female partner is employed, men usually are more involved in housework and childcare (Boll, 2017), reducing their available time resources and flexibility and in turn increasing their need for an occupational opportunity that provides this flexibility – self-employment. Furthermore, a second income in the household eases funding of the start-up and therefore increases men's propensity to start a business (Werner & Kay, 2006), an economically substantial business particularly. Therefore, we expect:

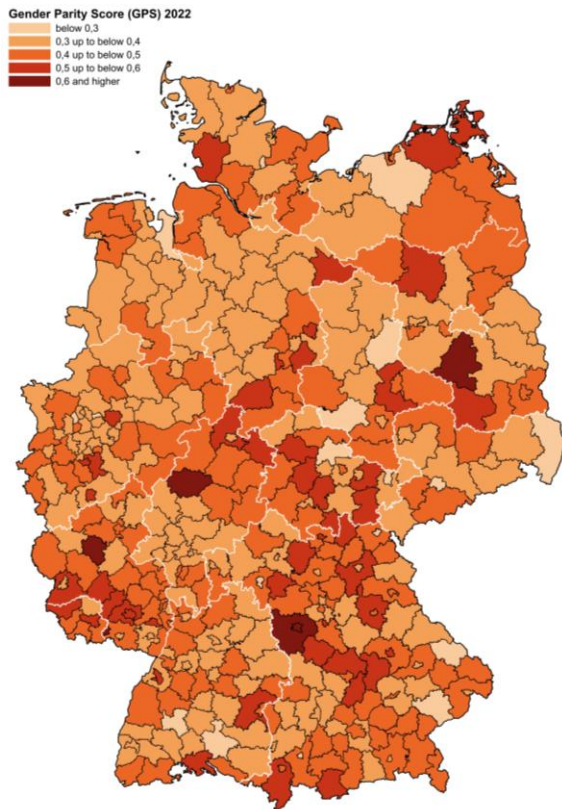
H2: Public childcare provision has a positive effect on men's propensity to start a business in general and an economically substantial one in particular.

As we suppose that public childcare provision generally has a negative impact on women's start-up propensity and a positive impact on men's start-up propensity, it follows, that extending public childcare deepens the entrepreneurial gender gap. Thus, we posit:

H3: Public childcare provision has a negative effect on gender equality in starting a business.

4 Method

To analyze how public childcare provision affects the gender gap in starting a business, we make use of the fact that public childcare in Germany varies considerably from region to region, as does the propensity of women and men to start a business. Consequently, the respective gender gap varies regionally (see Figure 2). In Germany, there are 400 districts for which we have built up a database based on public statistics containing information on women's and men's start-up rates, public childcare provision and various further factors influencing regional start-up activities.



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Figure 2. Gender Parity Score 2022. Source: Statistische Ämter des Bundes und der Länder (2023). Calculations and graph by the authors.

In contrast to other studies, we choose the regional rather than the individual level as the unit of investigation, which allows us to consider the regional environment of the potential entrepreneur as a determinant of an individual's start-up decision (Wagner & Sternberg, 2004). Because of this approach, we calculated the start-up intensity of women and men and as a measure for the gender gap the respective Gender Parity Score as dependent variable. The start-up intensity is measured as the relation of total start-ups (of the respective sex) within a region to 10.000 individuals (of the respective sex) in employable age of the previous year (for details see Table 1). We furthermore distinguish between start-ups in general, sole trader start-ups and economically substantial start-ups. Due to the availability of data, we do not include freelancers. As freelance start-ups account for only about a quarter of all start-ups in Germany, we still cover most start-up activities. For the start-up intensity in general, the sole trader start-up intensity and the economically substantial start-up intensity, we calculate the so-called Gender Parity Score (GPS) as the ratio between women's and men's start-up intensity within a region, indicating the extent of the gender gap. The GPS can take on values between 0 and 1, with 1 reflecting parity between the genders. Therefore, the lower the GPS, the greater the gender gap.

For capturing the impact of public childcare provision in more detail, we draw on information on the extent of public childcare provision. Concretely, we use the childcare rate.² We distinguish between childcare for children younger than three years (U3) and those who are between three and six years old (U6).

² Because childcare demand exceeds public childcare provision in Germany (Kayed et al., 2023), we consider the childcare rate as a full reflection of childcare provision.

Variable	Description	Mean
Dependent variables		
<i>Total start-up intensity</i>	Total start-ups (without Freelancers) within a region per 10.000 individuals in employable age of the previous year.	Women: 29,4 Men: 74,0
<i>Sole trader start-up intensity</i>	Start-ups (without Freelancer) of sole trader business within a region per 10.000 individuals in employable age of the previous year.	Women: 17,4 Men: 42,0
<i>Economically substantial start-up intensity</i>	Start-ups (without Freelancer) with at least one employee, an entry in the German register of craftsmen or an entry in the commercial register within a region per 10.000 individuals in employable age of the previous year.	Women:12,0 Men:32,0
<i>Gender Parity Score (GPS) Total start-up intensity</i>	Ratio of women's start-up intensity to men's start-up intensity within a region.	0,41
<i>Gender Parity Score (GPS) Sole trader start-up intensity</i>	Ratio of women's sole trader start-up intensity to men's sole trader start-up intensity within a region.	0,44
<i>Gender Parity Score (GPS) Economically substantial start-up intensity</i>	Ratio of women's economically substantial start-up intensity to men's economically substantial start-up intensity within a region.	0,39
Independent variables		
<i>U3-childcare rate</i>	Percentage of children under the age of three in public childcare of all children in the corresponding age group.	30,3
<i>U6-childcare rate</i>	Percentage of children in the age of three to under six in public childcare of all children in the corresponding age group.	93,1
Control variables		
<i>Birth rate</i>	Number of births within a region per 1.000 inhabitants.	8,5
<i>Unemployment rate</i>	Ratio of unemployed to the total population in employable age (in percent).	5,1
<i>GDP per capita</i>	Ratio of total value of goods and services produced to its inhabitants (in 1.000 €).	34,3
<i>Population density</i>	Ratio of inhabitants to area.	524,6

Table 1: Variable description

Finally, we added a set of further regional factors that also may affect the extent of start-up activities. As many regional factors are (highly) interdependent (Kay et al., 2022a; Stam & Van de Ven, 2021), we restricted the number of factors to obtain meaningful results. We included the number of births in the region as it mainly determines the future childcare demand. We also accounted for the regional unemployment rate as a population characteristic at the local level that significantly affects start-up creation (e.g., Fritsch et al., 2015). Furthermore, we considered the regional GDP as indicator of economic development and prosperity. Finally, we controlled for population density in our model. Literature on new business creation at the local level indicated that population density is a major determinant of regional start-up rates (Armington & Acs, 2002; Fritsch & Falck, 2003; Kay et al., 2022b). Population density is often considered as a proxy for various regional factors as costs of resources, size and structure of the labor market, proximity to customers and quality of life. Consequently, it is highly correlated with other regional factors, especially physical infrastructure, labor supply, and demand (e.g., Kay et al., 2022a). So, a high population density generally reflects good infrastructure, a large workforce and high demand and vice versa.

To examine the impact of public childcare provision on the Gender Parity Score of women's and men's start-up intensity while controlling for women's labor market participation and other factors, we estimated a fixed-effects linear regression model based on a data set covering the years 2012 to 2019. A fixed-effects model takes into account district specific fixed effects that may influence childcare rates and start-up intensity at the same time. The fixed-effects mode subtracts the mean over time from each variable. This eliminates the cross-sectional variation between the districts. Hence, our results are based on variation over time and not between the districts. To reduce the potential problem of reverse causality all independent variables refer to the previous year. Each region in each year is treated as one observation. The entire data set consists of 3.200 observations (400 regions in eight years).

5 Results

Our results show that the effect of public childcare provision on women's and men's start-up propensity depends on the type of the venture and the age group the childcare is provided for (see Table 2). Moreover, public childcare provision affects women's and men's start-up propensity differently. All in all, public childcare provision decreases the GPS, indicating a widening of the gender gap.

Starting with the sole-trader start-up intensity, our results show that childcare provision for U3-children has no statistically significant association with women's and men's start-up intensity as well as the respective GPS. Childcare provision for U6-children is negatively associated with women's start-up intensity but has no statistically significant association with men's start-up intensity, resulting in a statistically significant negative association with the respective GPS.

Turning to the economically substantial start-up intensity, our results reveal no statistically significant correlation between both childcare for U3- and U6-children on women's start-up intensity. However, U3-childcare is positively associated with men's start-up intensity and U6-childcare is negatively associated with men's start-up intensity. As a result, U3-childcare provision is negatively correlated with the corresponding GPS while U6-childcare provision is positively correlated with the corresponding GPS.

The results for the total start-up intensity roughly mirror the results for the sole-trader start-up intensity regarding women's and men's start-up intensity. Nonetheless, childcare provision for U3- and U6-children affect the total start-up intensity GPS and the sole trader start-up intensity GPS differently: U3-childcare provision is negatively correlated with the total start-up intensity GPS, while there is no statistically significant association between U6-childcare provision with the total start-up intensity GPS.

Turning to our hypotheses (see Table 3): Our results reveal that public childcare provision does not generally decrease women's start-up propensity. Rather, this depends on the age group the childcare is provided for and the type of venture. Thus, hypothesis 1 is only partly supported. As only U6-childcare provision affects women's start-up propensity, hypothesis 2 is supported. If childcare provision has an impact on women's start-up propensity at all, it affects the propensity to start as a sole trader. Insofar hypothesis 3 is supported. Public childcare provision only affects men's propensity to start an economically substantial business. Depending on the age group the childcare is provided for it decreases or increases men's start-up propensity. Insofar hypothesis 4 is mostly rejected. Finally, if childcare provision affects the GPS, the impact is mostly negative. However, U6-childcare provision increases the GPS related to economically substantial start-ups. Thus, hypothesis 5 is partly supported.

	(1)	(2)	(3)	(4)	(5)	(6)
	Women		Men		GPS	
	Total start-up intensity					
U3-childcare rate	-0.110 (0.099)		0.111 (0.190)		-0.003*** (0.001)	
U6-childcare rate		-0.150** (0.073)		-0.071 (0.184)		-0.001 (0.001)
Birth rate	-0.035 (0.391)	-0.085 (0.401)	-0.664 (0.813)	-0.858 (0.789)	0.001 (0.004)	0.003 (0.005)
Unemployment rate	12.801 (36.337)	1.427 (38.223)	-276.089*** (84.779)	-265.666*** (81.937)	1.888*** (0.409)	1.626*** (0.424)
GDP per capita	0.198 (0.121)	0.207* (0.122)	0.479 (0.299)	0.482 (0.293)	-0.000 (0.001)	0.000 (0.001)
Population density	-0.080*** (0.029)	-0.080*** (0.029)	-0.257*** (0.075)	-0.256*** (0.075)	0.000 (0.000)	0.000 (0.000)
Year Dummies	Yes		Yes		Yes	
Constant	70.967*** (12.086)	82.856*** (11.481)	219.877*** (30.309)	229.562*** (29.177)	0.349*** (0.054)	0.381*** (0.091)
Observations	3,200	3,200	3,200	3,200	3,200	3,200
R-squared	0.225	0.226	0.440	0.439	0.020	0.017
	Sole trader start-up intensity					
U3-childcare rate	-0.114 (0.087)		-0.057 (0.164)		-0.002 (0.002)	
U6-childcare rate		-0.134** (0.065)		0.112 (0.172)		-0.003** (0.001)
Birth rate	0.180 (0.357)	0.152 (0.367)	-1.376* (0.780)	-1.194 (0.762)	0.011 (0.007)	0.010 (0.007)
Unemployment rate	-3.822 (34.625)	-15.506 (36.338)	-257.211*** (76.498)	-262.156*** (72.790)	3.065*** (0.572)	2.830*** (0.686)
GDP per capita	0.178 (0.120)	0.186 (0.121)	0.417 (0.287)	0.412 (0.281)	0.001 (0.002)	0.001 (0.002)
Population density	-0.074*** (0.027)	-0.074*** (0.027)	-0.231*** (0.072)	-0.232*** (0.071)	-0.000 (0.000)	-0.000 (0.000)
Year Dummies	Yes		Yes		Yes	
Constant	54.695*** (11.159)	64.958*** (10.220)	183.143*** (28.159)	170.805*** (26.718)	0.219** (0.107)	0.444*** (0.149)
Observations	3,200	3,200	3,200	3,200	3,200	3,200
R-squared	0.200	0.201	0.438	0.438	0.028	0.029
	Economically substantial start-up intensity					
U3-childcare rate	0.004 (0.032)		0.168** (0.066)		-0.002* (0.001)	
U6-childcare rate		-0.016 (0.026)		-0.182*** (0.059)		0.002* (0.001)
Birth rate	-0.215 (0.146)	-0.236 (0.152)	0.712** (0.317)	0.336 (0.294)	-0.012** (0.005)	-0.008 (0.005)
Unemployment rate	16.623 (11.558)	16.933 (10.760)	-18.878 (24.470)	-3.510 (24.461)	0.576 (0.428)	0.410 (0.402)
GDP per capita	0.020 (0.031)	0.021 (0.030)	0.062 (0.065)	0.069 (0.064)	-0.000 (0.001)	-0.000 (0.001)
Population density	-0.006 (0.004)	-0.006 (0.004)	-0.026 (0.018)	-0.024 (0.018)	0.000 (0.000)	-0.000 (0.000)
Year Dummies	Yes		Yes		Yes	
Constant	16.272*** (2.638)	17.898*** (3.727)	36.734*** (9.901)	58.756*** (11.443)	0.503*** (0.057)	0.305*** (0.098)
Observations	3,200	3,200	3,200	3,200	3,200	3,200
R-squared	0.054	0.054	0.069	0.071	0.007	0.007

Table 2: Regression results: Impact of childcare provision on women's and men's start-up intensity as well as on the corresponding Gender Parity Score

Notes: Fixed-effects regression estimates. Robust standard errors in parentheses. Results are statistically significant at the *** 1%-, ** 5%- and * 10%-level.

	Hypothesis	
H1a	Public childcare provision generally decreases women's start-up propensity.	Partly supported
H1b	Public childcare provision for children between the ages of three and six has a larger negative effect on women's start-up propensity than public childcare provision for children under the age of three.	Supported
H1c	Public childcare provision has a smaller negative effect on women's propensity to start an economically substantial business than to start a small business.	Supported
H2	Public childcare provision has a positive effect on men's propensity to start a business in general and an economically substantial one in particular.	Rejected
H3	Public childcare provision has a negative effect on gender equality in starting a business.	Partly supported

Table 3: List of hypotheses alongside the relevant results.

6 Discussion and Implications

Even though our analyses yield mixed results, it was worthwhile to revisit the relationship between public childcare provision and the start-up propensity of women and men. Above all, our findings underline the importance of a differentiated look at the provided public childcare services and the type of venture. Both factors affect the extent of temporal and spatial flexibility provided by self-employment on the one hand and required for childcare on the other hand, particularly for mothers. In addition, they also affect fathers' need for such flexibility and autonomy. However, the relationships between childcare provision, women's and men's labor market participation, the interdependences in the household context, and their start-up decision are not completely understood yet. This calls for a more in depth and systematic analysis of these relationships, which considers the economic incentives and preferences, the market for childcare, and the given 'care culture' (Müller & Wrohlich, 2020).

As important as public childcare provision for women's general labor market participation is, a more differentiated look is needed to identify the particular effects. It does neither improve their start-up propensity (quite the contrary) nor does it contribute to closing the entrepreneurial gender gap in general. For instance, childcare provision for children between the ages three and six has a positive impact on the GPS related to the economically substantive start-up intensity. However, this seems to be an effect of men reducing their respective start-up activities. Public childcare provision seems not to be a policy for reducing the gender gap in entrepreneurship generally, at least not under the currently given conditions in Germany.

In this paper, we considered the impact of public childcare provision on starting a business. However, public childcare provision is also crucial for established women entrepreneurs who are mothers of (very) young children. Studies suggest that they struggle to combine child-rearing with the demands of leading a business (e.g., Peters et al., 2025), resulting in long-lasting sales and income losses (Core & Karpanti, 2024; Rutigliano, 2025). Rutigliano (2025) demonstrates that childcare availability significantly mitigates the negative impact of childbirth on the performance of firms run by women. Against this background, it seems worthwhile to have a closer and differentiated look at how public childcare provision affects the performance of businesses led by parents of young children and whether it contributes to closing the performance gender gap.

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