Female Entrepreneurship in Germany: Will the German Oprah Please Stand up

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This paper would not be possible without the generous and fascinating insights from a handful of wise, impressive, and savvy female German business founders. They are an inspiration for many...and not because they look or do not look great, or have or do not have husbands and children.

Introduction

Valuable to every society, country, city, and neighborhood, female entrepreneurship creates jobs; brings new products and services to fruition; and challenges established businesses to be more efficient. Women make up half the population but a mere 37 percent of business founders worldwide. Europe is home to the world's most dire rates of entrepreneurship while Germany takes the Kuchen. Encouraging more women to start businesses is crucial to the future of Germany, the European region, and the rest of the world.

This paper first discusses the economics literature available on the entrepreneurship decision. Next it shines a light on entrepreneurship around the world, looks at the recent trends in German entrepreneurship, and examines the policy landscape. Lastly, the paper discusses the particular cultural challenges that face German women who start businesses and provides some policy suggestions.

Why Choose Entrepreneurship

Starting a new business can be an intimidating step in any culture, especially when walking away from full-time employment, a steady paycheck, health insurance coverage, and possibly a retirement plan. What makes entrepreneurs do what they do? "The startup decision is understood as a cognitive individual choice—the expected utility of becoming an entrepreneur must be higher than the expected utility derived from alternative occupations. The risk calculation is made considering a combination of factors. Hard factors, like economic conditions, socio-demographics such as age and education and soft factors such as the personality traits someone brings to the table all play a role. As with many things in life, it often comes down to money.

The classic economic model by Evans and Jovanovic tells us individuals are able to acquire the following income, Y, from wage or salary employment: Y = w + rA, where w is the wage, r is the interest rate, and A the individual's assets. Estimates a bit more complicated but an individual can earn income X, where $X = \theta f(k)\epsilon + r(A-k)$, where θ is entrepreneurial ability, f(.) is a production function whose only input is capital, ϵ is a random component to the production process, and k is the amount of capital purchased by the worker. One becomes an entrepreneur when X is greater than Y.

These calculations highlight the ways in which various factors might impact the entrepreneurial decision. For example, when an economy is struggling, often people are put out of work, wages are cut, and opportunities for new employment become few and far between. Entrepreneurship can be a viable option for someone recently laid off in a tough economy where it may be hard to get a raise or find an entirely new job. Potential employees for a newly founded business are also easy to find when an oversupply of labor exists. A number of studies have found that job loss and reduced labor market opportunities lead to self-employment. iiiiv

On the other hand, in a stronger economy, greater demand for new products and services is likely. One may also be more comfortable taking on the risk of

entrepreneurship. If that new business falls apart, there could be a variety of job opportunities on which to fall back.

Assets and wealth accumulation also play a role in the start-up decision. Often the first dollar invested in a new business is personal capital. The economic literature states that for Americans, net worth in one year increases the probability of starting new businesses the following year. Property or home ownership is often the single biggest asset for Americans and Europeans. Research from Finland and the United Kingdom indicate that homeownership and equity are linked to entrepreneurship and the ability to obtain financing for business loans.

One typically acquires capital, wealth, and a home by working hard in a highly skilled job over a number of years. As one gets older, we develop more and more financial and human capital. As we age we tend to gain more skills, and more money. We become bound to dependent employment by accumulating more in the way of health or retirement benefits, the potential for future raises and promotions and even just an increased level of comfort.

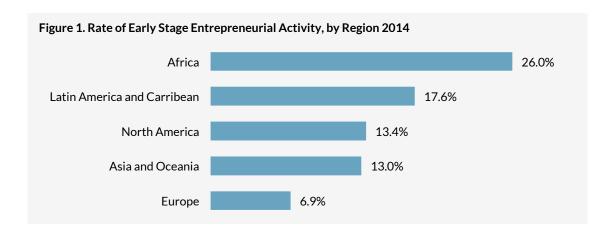
Younger workers have less to lose in the way of pay or benefits, but also tend to lack the skills or business acumen that comes with age. When plotting the relationship between age and entrepreneurship, an inverted U-shape arises. Middle-aged workers have enough skills and financial capital to start a business of their own, but are not so far along in their careers that they are concerned about losing retirement benefits. As such, they are most likely to start a business at that point in life, before they are too tied to dependent employment prospects but after some entrepreneurial skills have been honed.

When it comes to the skills required to start a business, research finds that a "jack of all trades" is far more likely to be an entrepreneur than someone with more specialized abilities. At least for Americans, research suggests that a variety of skills and education is necessary to start a business.

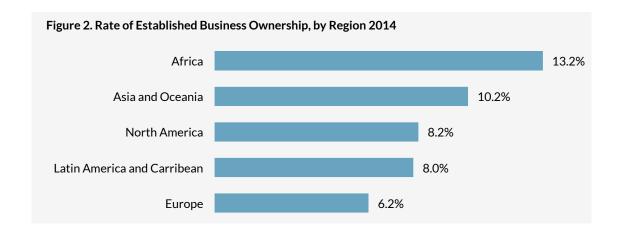
Entrepreneurship happens when the right combination of factors converge both externally and internally. A personal cost-benefit analysis is run and when the stars align, an entrepreneur is born.

Europe is the Worst

Europe is home to the worst rates of entrepreneurial activity. According to the 2014 Global Entrepreneurship Monitor (GEM)vii only 6.9 percent of Europeans were in the process of starting a business. Viiiix Figure 1 highlights regional rates of early stage entrepreneurship, defined as the first three and a half years of a business' establishment. Africa leads at 26 percent.



Europe not only has the fewest new entrants to entrepreneurship, but the region also lacks established business owners. Figure 2 identifies the percentage of each regional population that owns a business over three and a half years old. Europe's 6.2 percent stands in contrast to the 8.2 percent rate of established business owners in North America and the 13.2 percent in Africa.



The future does not look too much better. When asked, "Do you have plans to start a business in the next three years?" 12.1 percent of Europeans and Americans said "yes." On the other hand, 45.1 percent of Africans replied in the affirmative in the 2014 survey.

In 2009 and 2012 the European Commission conducted its own surveys on entrepreneurial attitudes and beliefs. Concerned with the low number of entrepreneurs, the EU began collecting data on and promoting entrepreneurship in 2000, and recently lumped the effort into its Europe 2020 strategy. The surveys indicate that Europeans are comfortable where they are.

In 2012, 58 percent of Europeans said they would prefer to be an employee, a jump from 49 percent in 2009.xi Not only is there a limited desire to be one's own boss, but the bulk of Europeans do not even think it is possible for them to do so. Of those surveyed in

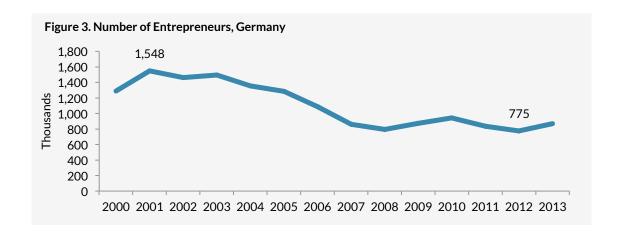
2012, 67 percent said it would not be feasible to become self-employed in the next five years. When asked why being an employee was preferred, 27 percent of those said it was because of the job security and 24 percent cited the steady income.

The European Commission also surveyed Americans about their beliefs and preferences, 46 percent of Americans preferred to be an employee while 51 percent preferred self-employment. When asked if it would be feasible, 44 percent of Americans thought they could become self-employed in the next five years.

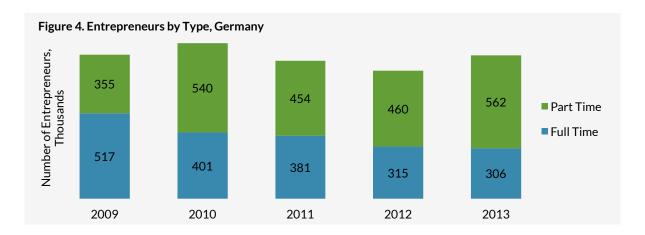
Despite the comparatively higher education and wealth levels in the western world, literature suggests it is largely to be expected that there are more entrepreneurs in Ghana than in Germany. In stable, high-income economies, businesses are developed, jobs are secure, and benefits are tied to employment. All of these factors alter the riskbenefit calculation in favor of remaining in dependent employment and against risking it all to start a business. In countries within Africa, for example, there are a large number of "necessity" entrepreneurs, those who start a new business out of need rather than because of a new idea, new product or some sort of innovation. Without deeply engrained labor market benefits and protections, the calculation changes, making it much easier to dive into entrepreneurship.

Germany

Looking within Europe to Germany, Figure 3 highlights the number of entrepreneurs by year since the turn of the century. In the last 15 years, 2001 saw the highest number at 1.5 million entrepreneurs. In 2013, the most recent year of data, Germany had 868,000 entrepreneurs create 419,000 full-time equivalent^{xii} jobs for themselves and others.^{xiii}



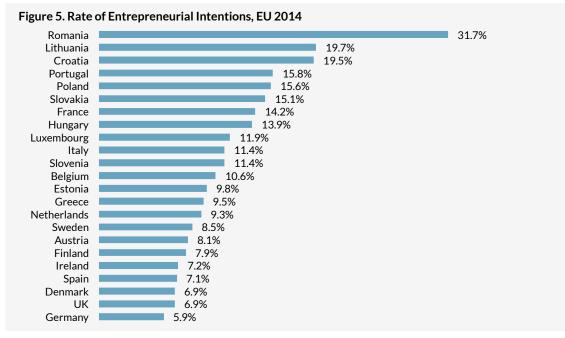
While total entrepreneurship in Germany may be ticking up, full-time entrepreneurship is at an all time low. Recent gains in overall numbers are solely due to the large increases in part-time entrepreneurs. Figure 4 shows the breakdown over the last 5 years.xiv The share of full-time entrepreneurs with employees, however, is on the rise; enhancing the economic importance of these new business starts.

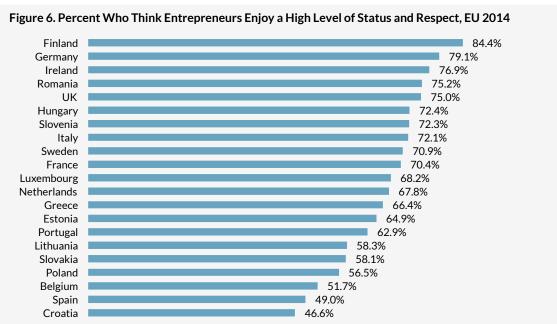


Of the 868,000 entrepreneurs in 2013, 53 percent started businesses because they saw an opportunity rather than out of necessity. Not only were opportunities seized, but a record number of new innovations were brought to market in 2013.xv

As of 2014, a mere 5.9 percent of Germans indicated they had plans to start a new business in the near future.xvi Americans came in at 12.1 percent. Figure 5 displays rates of entrepreneurial intentions by country within the EU. Germany stands out. The only country surveyed by the Global Entrepreneurship Monitor with a lower rate of entrepreneurial intentions was Russia at 3.5 percent.

Despite the low level of entrepreneurial intentions relative to the rest of the world, Germans really love their entrepreneurs. They love entrepreneurs more than Americans do. The Global Entrepreneurship Monitor asks survey respondents if entrepreneurs receive a high level of status and respect. 79 percent of Germans and 76.9 percent of Americans replied in the affirmative. Figure 6 shows the EU country rates.



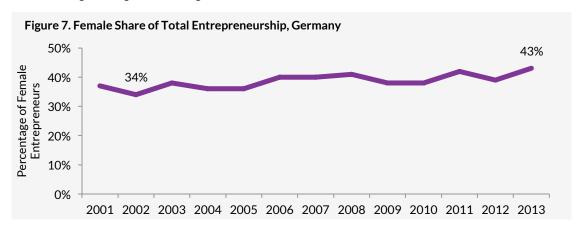


Die Gründerinnen

Where do women fit? A record 43 percent (373,240) of all entrepreneurs in Germany were women in 2013. For part-time entrepreneurship, women were equally represented for the first time in history. xvii Figure 7 shows the share of female entrepreneurs over time.

Missing from the chart (due to limited year-by-year data) is the large upswing in women's participation in entrepreneurship during the 1990s, attributed to a hefty increase in the number of female university graduates that entered self-employment. Between 1991 and

2001, the number of university educated female entrepreneurs increased 114 percent. xiii University graduates who start businesses often do so within knowledge-intensive services. Research indicates that women entrepreneurs in Germany manage to reach higher professional status when compared to women who studied the same subjects but remained in dependent employment.xix Another study confirms this internationally as well, finding that while women are more likely to be employees than they are to be entrepreneurs; they are also more likely to be entrepreneurs than they are to be highlevel managers. Entrepreneurship in Germany is one way for educated women to break through the glass ceiling.



Today, the average German female entrepreneur is between 35 and 44 years old and a mother to young children. Prior to starting her business she is out of the labor force and plans to work alone, without employees. The average female entrepreneur is also West German. On the other hand, the typical male entrepreneur is younger, between 25 and 34 years old, employed with management experience, and single.xxi

Across cultures, a number of covariates are associated with female entrepreneurship, namely, being married; having infants or school-aged children in the household; and having a husband who is currently or once was self-employed. XXIII A transfer of knowledge occurs with an entrepreneurial spouse, making it easier to make a transition into self-employment. They also serve as a role model, someone to make the risks look less risky.

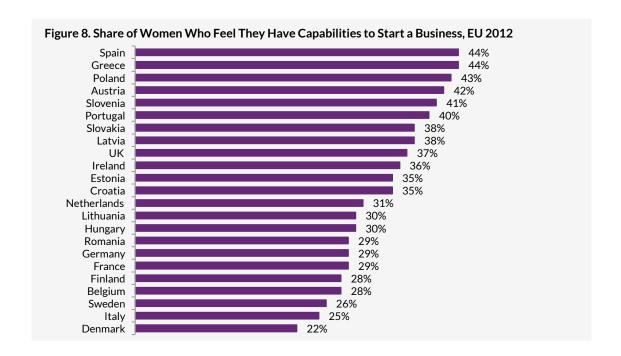
Germany is not unique in that most women who start businesses do so without employees. These smaller ventures tend to be less profitable due to their size. An analysis of psychological characteristics of female entrepreneurs found that women tend to be less profit-driven. Women put a higher emphasis on "autonomy, self-actualization and adaptability." The research also found that "female entrepreneurs act more cautiously and more deliberately, but also more anxiously and uncertain than their male counterparts."

Starting a part-time venture is an attractive option for German women. It is more likely than not that they run their households and are the primary caretakers of children. A part-time business provides them more flexibility, allowing them to manage other

responsibilities while bringing in money. This preference for part-time entrepreneurship is true for women in a number of economically-developed countries. Additionally, more cautious women may choose the lower risk of a part-time start-up first with the option to later move to full-time after the establishment of their business.xxiv

In the EU's 2012 survey, 63 percent of EU women said they would prefer to be an employee while only 53 percent of men indicated such a preference. The Germanspecific report does not differentiate by gender, but indicates that 65 percent of all Germans surveyed preferred to be an employee compared to the 58 percent EU average. XXX Thus indicating that the percentage of German women preferring to be an employee may be even higher than the 63 percent EU average.

Why would German women have such a strong preference for dependent employment? On top of Germany's stable economy and strong labor laws, they are scared, feel illequipped, and lack role models to prove self-employment is possible. When the GEM asked if they felt they had the capabilities to start a business in six months, 29 percent of German women said yes compared to 45 percent of men.xxxi Figure 8 displays the percentage of women who feel they have the skills to start a business by EU country. While German women do not feel the least equipped, they are certainly on the lower end of the scale when considering how well the country is educated. Just under 50 percent of American women felt they had the capabilities.

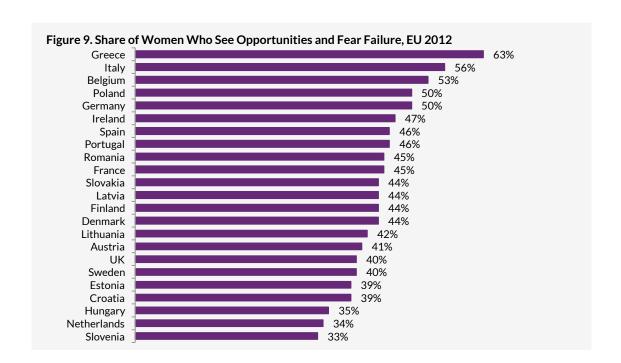


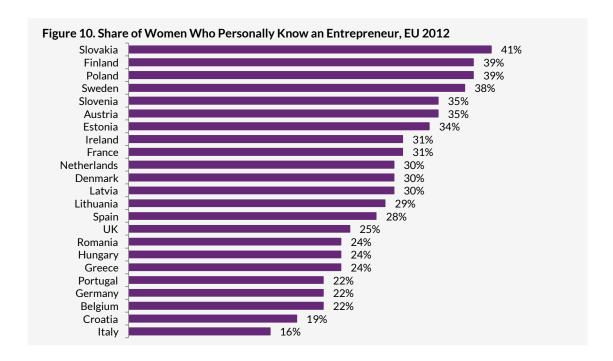
Fear stops a lot of German women in their tracks. The GEM asks if one does see an opportunity to start a business, would a fear of failure stop the person from doing so. 50 percent of German women expressed this level of fear while only 35 percent of men

agreed.xxxii Figure 9 displays results from the GEM question at the EU country level. German women display a large amount of fear relative to the rest of the world.

German women also lack entrepreneurial peers. Entrepreneurship has been documented, in the United States at the very least, to be contagious. When you know an entrepreneur, you are more likely to be one yourself. Peers serve as role models, mentors throughout tough moments in the start-up phase, and show that "it can be done." The GEM found that 22 percent of German women knew an entrepreneur in 2012, while 27 percent of men did. Figure 10 displays EU country-level data. 60 percent of Sub-Saharan African women, on the other hand, knew an entrepreneur. It is not shocking that those countries with high rates of entrepreneurship are also home to large rates of women that know other entrepreneurs. But when entrepreneurship begets entrepreneurship, it is important to note how few German women are surrounded by entrepreneurs.

While Germans have a great affection and respect for entrepreneurs, they may view them as too high and mighty. Women especially, who discount their own abilities a great deal, may see the gap between themselves as employees and business founders as too wide. The limited number of role models for German women widens the gap even further; if they see so few accomplishing highly-lauded entrepreneurship, how will they know what is possible?





German Policy Toward Entrepreneurs

After the fall of the Iron Curtain and a market-oriented economic system came to the former East Germany, a push began for a more "entrepreneurial culture" in Germany. Reinhard Mohn of Bertelsmann, a famous German entrepreneur, suggested that one did not exist, only to be remedied by political action. A number of policy programs and regulatory changes were introduced at the federal- and state-level to encourage entrepreneurship and business starts. Namely, the Meisterbrief, or master craftsman designation, requirement was lowered for 52 craft occupations. In addition, the minimum capital requirements necessary to set up a limited liability corporation were lessened, and the possibility of personal bankruptcy that capped private debts was introduced. New programs through the unemployment system were also implemented.

German Unemployment Benefits

For the last 30 years or so, Germany has most directly supported entrepreneurs through unemployment benefits. Unlike its counterpart in the United States, both employees and employers fund the unemployment insurance program in Germany. Depending on family status, a registered unemployed person receives between 60 and 70 percent of their former salary, up to a limit. Benefits are available for a maximum of one year (if under 45 years old) and one must regularly report to the Arbeitsamt to show proof of seeking employment. One must also accept any job found for for them by the Ministry if the skills and training are a match. Alternatively, one can establish their own business.

In 1986 the Überbrückungsgeld, or Bridging Allowance, was passed into law as a part of the Active Labor Market Policy. The Bridging Allowance was designed to "bridge" the transition between unemployment and entrepreneurship. Under the allowance, one could start a business with the approval of a business plan and continue to receive

unemployment benefits for up to six months. Participation in the social security program was voluntary; 70 percent of the cost was subsidized if one elected to contribute. Table 1 compares programs below.

In 2003, a major overhaul to the labor market and social policy programs took place in Germany. Led by Hartz, the primary goal was to bring the unemployed back into the labor market as quickly as possible. Overall unemployment benefits were cut, making unemployment even more unattractive, and a shift took place away from training measures and public job creation. Within the Hartz reforms was a new start-up subsidy for the unemployed (in addition to the Bridging Allowance) meant to encourage more entrepreneurship, known as Ich, AG or, Me, Inc. Those unemployed and starting a business received a fixed but declining amount of cash. So long as annual business revenues were below €25,000, one received €600 per month in the first year, €360 in the second, and €240 in the third. Social security participation was mandatory within Ich. AG.

Between 2003 and 2006 one million unemployed people took advantage of both the Bridging Allowance and the Ich, AG programs. 2004 saw a sharp spike in supported businesses, when business plans did not need approval. In 2004, 10 percent of the registered unemployed participated in one of the two programs. XXXIII Since then, businesses started on the heels of unemployment have declined.

The 2003 lch, AG program is credited with bringing German women into entrepreneurship. Prior to 2003, the ratio was 2:1, male to female, for those receiving support to start new businesses. The Hartz reform subsidy saw a 1:1 ratio. While the Bridging Allowance was found to have supported more demographically traditional entrepreneurs, the Ich, AG program drew underrepresented populations like women and young men into entrepreneurship.

In 2006 the Gründungszuschuss, or founder's grant, replaced both the Bridging Allowance and the Ich, AG programs. Today, an unemployed German who decides to start a new business receives their standard unemployment benefit for nine months, plus a lump sum payment to cover the costs of participation in the social security program.

Table 1. German Unemployment Benefits and Entrepreneurship								
Program	Program Duration	Nature of Benefit	Length of Benefit					
Überbrückungsgeld	1986-2006	Full unemployment benefits	Up to 6 months					
Ich, AG	2003-2006	€600/month for first year, €360/month for second, €240/month for third (while revenues less than €25,000)	Up to 3 years					
Gründungszuschuss	2006-present	Full unemployment benefits	Up to 9 months					

Money, Money, Money

A variety of financial resources are available to German entrepreneurs. Grants, loans, capital investments, and loan guarantees are made available through the KfW, a German government-backed development bank; EXIST, a government grant program; and the High-Tech Gründerfonds, a public-private partnership based investment fund. Table 2 (found at the very end of this paper) includes detailed explanations of the various types of government-supported finance for entrepreneurs.

The EXIST program was born in 1997 out of a desire to disseminate knowledge and innovation from university research and projects. Based on an American wish to strengthen the lines of innovation from classroom to research to industry, the German Ministry of Education, Science, Research, and Technology followed suit. One of EXIST's goals is to nurture an entrepreneurial culture that was felt to be missing in Germany on university campuses. Since 1998, over 120 universities have received financial resources from EXIST to develop this culture. XXXIII As outlined in Table 2, EXIST provides grants directly to individuals and teams with the purpose of assisting in the start-up phase. The extra child benefit provided to grant recipients is particularly beneficial for fostering female entrepreneurship.

The High-Tech Gründerfonds also provide a special female benefit, but it remains unadvertised; every request made by a woman to pitch the fund for an investment is honored. In its history, 395 investments have been made with 20 percent to businesses with at least one woman involved in its founding.xxxiv

Financial support directed exclusively to female founders remain largely at the state, rather than federal, level. One example was a small credit line solely for women that operated in Mecklenburg-Western Pomerania from 1996 to 2002. €11 million was doled out across almost 400 enterprises. XXXV In North-Rhine Westphalia, the state government accepted loan applications from female entrepreneurs who lacked relevant industry experience. And in Mecklenburg-Vorpommern, the state investment bank handed out loans directly to female entrepreneurs that were rejected by banks. XXXXVI These state-level programs were relatively small in those they attracted and the level to which they helped move the dial for female entrepreneurs.

Non-Financial Federal Resources

Three federal ministries co-sponsor the newly launched bundesweite gruenderinnenagentur (bga), or the National Agency for Women Start-ups, Activities and Services. The bga provides advice and counseling to women starting down the road of entrepreneurship, hosts networking events for female founders, collects research on female entrepreneurship and business succession, and issues an online course that "imparts knowledge and skills related to preparing, implementing and securing a business start-up."xxxviii

Outside of any formal agency, Marie-Luise Dött, an esteemed member of German Parliament since 1998, also provides guidance and networking opportunities for female business owners. Twice per year she hosts women in Berlin for a two-day meeting. She provides a platform for them to air their concerns, learn about resources available, and meet other women running businesses all over Germany.

Childcare

One of the most important factors for female entrepreneurs is childcare. Germany's childcare system has changed a great deal over the last 30 years. The former East Germany provided free daycare centers and full days of school while the former West encouraged mothers to remain home with their children via limited daycare and shortened school days. As the Wall fell, female employment in the East was 90 percent and just 55 percent in the West. In 2010, 37 percent of children under three had a place in a nursery in the former East while a mere 3 percent of those in the West did. xxxviii

As of 2013, every child over one year, down from three years, is guaranteed a spot in subsidized daycare in Germany. But in many cities the infrastructure and needed staff are yet to be found, resulting in "Kita wars." Kita, short for Kindertagesstätte, refers to the nursery. The war is over coveted spots for the children of working parents. xxix Some parents are attempting to pay or bribe their way in to the few spaces available. In more rural areas, with a lack of a critical mass, Kitas just do not exist. Regardless of the kinks that need to be worked out, the policy of guaranteed daycare starting at 12 months is a large step in the right direction for German women.

Many resources and opportunities do exist for women in Germany seeking to start a business. Financial, social, and educational help is all generously provided. But is it necessarily the right mix? Do the policies in Germany actually encourage women to start businesses? And if not, what can and should be done about it?

Challenges for German Female Entrepreneurship

Despite available resources, Germans, in general, and German women, in particular, do not start businesses at the same rate as other countries both within Europe and beyond. Cultural and personal hurdles appear to be the culprit, and the solutions are tough to spot. Germans are risk averse and culturally opposed to change, while women double down on these sentiments. The historical roles of women in German culture make the cycle hard to break.

Until the 1970s, German women needed their husband's signature on labor contracts and to open bank accounts. A woman's role was at home, keeping her house, husband, and children happy and in order. While legally, women today are considered equal under the law, social norms prevail. The old German adage, which remains today, "Kinder, Kirche, und Küche" refers to a woman's priorities: children, church, and kitchen.

When a woman does not fall in line with the three K's by seeking out paid employment, the term "Rabenmutter" is freely used. It translates to "raven mother," one who pushes her babies out of the nest. Women interviewed for the purposes of this paper echoed this sentiment wholeheartedly, indicating they had a choice to be a "good mother" at home with their children or a "bad mother" who started a business. In a 2010 New York Times article, a woman tells readers about being publicly humiliated in a grocery store because she put her child in daycare so she could work.xd

One woman interviewed for this paper shared a story of her own. In the weeks after giving birth to her third child, she started on a project for her business. Afraid of some of the potential backlash, she would lie to anyone who asked, making sure no one thought she had gone back to work so guickly.

These culturally developed roles for women have consequences beyond rude name-calling. Research has confirmed that women heavily consider "what society deems desirable and 'correct' for their gender."xli Germany highly values a woman responsible for her family and home, with female entrepreneurship as implicitly less desirable; this affects self-perceptions and individual attitudes of potential female entrepreneurs. This is also reflected in the rates of women who report feeling they have the skills necessary to start businesses. When we do not think we can accomplish something, we do not. So, German women stay home and remain out of the workforce. Research has also found that it is exactly this time spent at home child-rearing, and the resulting time not spent on business development, that explains some of the differences in start-up rates. For American entrepreneurs, this difference can account for between 30 and 50 percent of the earnings differential.xiii

Social pressures encourage women to stay out of the workforce, but the German government actually doubles down. In an effort to increase the extremely low birth rate in Germany, the government began paying people to have children. The government spends roughly €200 billion a year promoting children and families by handing out money to parents.xiii One of those benefits is Kindergeld, literally translated as "child money," which provides €184 a month per child.

The plethora of expensive child-encouraging policies were largely found ineffective at influencing its fertility rate, 1.39 births per woman, according to recent research. What Germany's policies do encourage, however, is lower-educated, rural women to keep their children at home and remain out of the workforce themselves. Recent research, commissioned by the Family Ministry found that in some rural districts, "an increase in the number of daycare spots for children by 10 percent led to an increase in the fertility rate to 3.5 percent from 2.4 percent within two years."xliv Increasing the availability of daycare has the added benefit of encouraging growth in the rate of entrepreneurship. German women stop working when they have kids, and they stop having kids because they do not want to stop working. The country is on track to increase daycare, as previously mentioned, but obstacles remain.

When women in Germany challenge their role as housewives and start businesses on their own, against all odds, they get covered in the media in particularly marginalized ways. The few that are reported on, are praised for starting a business "despite having a husband and children." Or, "She works hard and still manages to look great." Research analyzing two prominent German newspapers^{xlv} found that women who start businesses are reported on with adjectives like "resolut, schlau, energisch" or determined/feisty. clever/cunning, and vigorous/forceful.xivi While these are not necessarily negative terms. reporting on female entrepreneurs is often about their personalities or looks and rarely about the business itself or its economic impacts.

German women face a number of hurdles if they want to start more businesses. Culturally, their role is largely defined for them, and it has yet to include "business ownership" as a key component. And even if they are willing to risk social scorn and take a chance on a new venture, they have trouble finding care for their children, or raising money to finance the operation.

Women usually start small, part-time businesses and they are more than likely not scientifically groundbreaking technological advancements. But most private financing, especially capital investments, is focused on the tech space. For a while it was thought that women were actively discriminated against when trying to finance businesses. More recent research has found that, more simply, women start businesses in sectors that have less growth potential and are therefore less attractive to outside money.

When they do borrow, women tend to take out smaller loans, or more often than not in Germany, borrow directly from family. Whether it is because they have relatively smaller growth plans in mind or they do not think they will be very successful, women just do not invest as much financially as men do.

There is no question that German female entrepreneurs must overcome quite a bit. The hurdles they face are not about their education, lack of customers or available resources. They are deeply rooted personal and cultural challenges.

Conclusion - Onwards and Upwards

The common response to a challenge like female entrepreneurship is to throw more money at the issue. But where should Germany spend the Euros? Every German entrepreneur spoken to about this challenge echoed the same sentiment; that they did not want any female-specific policies. They wanted more women to take advantage of what is available to all entrepreneurs and to increase the take-up rates of existing financing options. In the United States we notice a policy problem and develop an incredibly targeted, perhaps limiting, program. But the German women all said 'no thanks' to such an idea.

Gender theorists draw attention to the fact that when we focus on the barriers women face when becoming business owners, we only make it seem as though these barriers are easily removable with individual action. What is needed, instead, is to find ways for women to train and educate themselves better, to empower them to develop better networks of their own, and to reassign domestic responsibilities. xivii

And this speaks to exactly what the women interviewed asked for: nothing. They want women to want to help themselves, but they do not want the heavy hand of government to tell them how to do it.

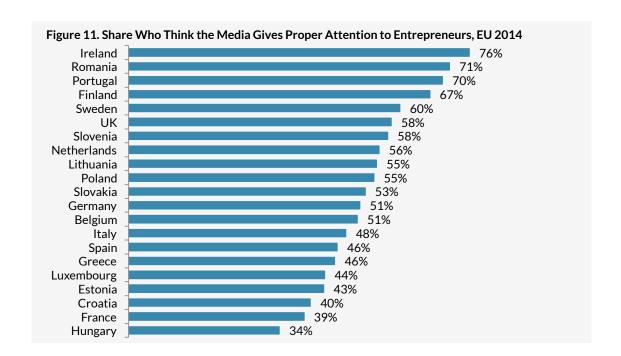
One not-so-easy suggestion for Germany is to increase the positive media attention that female entrepreneurs receive as observing entrepreneurship encourages others to start businesses. This creates a uniquely German problem: German people are very private and very humble about their accomplishments and successes. But without sharing their stories, potential entrepreneurs may not see a way forward with their ideas; they have no roadmap. The GEM asked if the media in one's country gave proper attention to

entrepreneurs and only 51 percent of Germans said yes. (See Figure 11 for the country level results). 76 percent of Americans thought there was adequate coverage of entrepreneurs. One particularly impressive young entrepreneur interviewed for this paper said it perfectly, "We do not have a German Oprah."

While Oprah is hard to replicate, role models do exist in Germany. It is just a matter of finding them and encouraging them to share their voices and stories.

The deeply rooted cultural history of "the proper role of women" will forever be a challenge, especially if Germany succeeds at increasing their fertility rates. More mothers means more women shamed for working. But perhaps this upcoming generation will see the successes of women in business worldwide thanks to the availability of global news, making entrepreneurship less intimidating.

Until then, the hardworking spirit of German women will prevail despite the many hurdles in their way.



ⁱ Krueger, N. F., Reilly, M., & Carsrud, A. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, *15*(5/6), 411–432.

Evans, D. S. and Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy*, 97(4), 808-827.

Farber, H. S. (1999). Alternative and part-time employment arrangements as a response to job loss. *Journal of Labor Economics*, *17*(4), Part 2, S142-S169.

Parker, S. C. (2009). *The economics of entrepreneurship.* Cambridge: Cambridge University Press.

V Johansson, E. (2000). Self-employment and liquidity constraints: evidence from Finland. Scandinavian Journal of Economics, 102(1),123-134.

black, J., de Meza, D. & Jeffreys, D. (1996). House prices, the supply of collateral and the enterprise economy. *The Economic Journal*. 106(434), 60-75.

The Global Entrepreneurship Monitor is a global study conducted by a consortium of universities. Started in 1999, it aims to analyze the level of entrepreneurship occurring in a wide basket of countries. The 2013 report included 70 countries. It measures entrepreneurship through both surveys and interviews to field experts, conducted by the teams of each country.

viii GEM defines the first 3.5 years as "Early Stage Entrepreneurship". Money does not yet have to be spent on the business to be in such a stage.

Singer, S. Amorós, J. E., & Arreola, D. M. (2015). *Global entrepreneurship monitor 2014 global report.* London, United Kingdom: Global Entrepreneurship Research Association.

x Europe 2020 is "the EU's growth strategy for the coming decade." See: http://ec.europa.eu/europe2020/index_en.htm

European Commission. (2012). Flash Eurobarometer No. 354 Entrepreneurship in the EU and beyond vii Full-time equivalent (FTE) is a unit that indicates the workload of an employed person in a way that makes workloads or class loads comparable across various contexts.

xiii KfW Group. (2014). *KfW start-up monitor 2014*. Frankfurt, Germany: Dr. G. Metzger. Retrieved from: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Gründungsmonitor-englische-Dateien/KfW-Gründungsmonitor-2014-EN.pdf

xiv Ibid

xv Ibid

Singer, S. Amorós, J. E., & Arreola, D. M. (2015). *Global entrepreneurship monitor 2014 global report*. London, United Kingdom: Global Entrepreneurship Research Association.

^{xvii} KfW Group. (2014). *KfW start-up monitor 2014.* Frankfurt, Germany: Dr. G. Metzger. Retrieved from: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Gründungsmonitor/Gründungsmonitor-englische-Dateien/KfW-Gründungsmonitor 2014-EN.pdf

Strohmeyer, R. (2003). *Gender differences in self-employment: does education matter?* Paper presented at the ICSB 48th World Conference, Belfast.

Strohmeyer, R. (2004). Studienfachwahl und berufliche platzierung von selbständigen akademikerinnen. In R. Leicht & F. Welter (Eds.), *Gründerinnen und selbständige Frauen - Potenziale, Strukturen und Entwicklungen in Deutschland* (119-137). Karlsruhe: Loeper.

xx Lazear, E. (2005). Entrepreneurship. Journal of Labor Economics. 23(4), 649-80.

Furdas, M. & Kohn, K. (2010). What's the difference?! Gender, personality, and the propensity to start a business (IZA Discussion Paper No. 4778). Bonn, Germany: Institute for the Study of Labor.

xxii See: Macpherson, D. A. (1988). Self-employment and married women. Economics Letters, 28, 281-84. Caputo, R. K. & Dolinsky, A. (1998). Women's choice to pursue self-employment: The role of financial and human capital of household members. Journal of Small Business Management, 36, 8-17. Bruce, D. (1999) Do husbands matter? Married women entering self-employment. Small Business Economics, 13, 317-29.

Tchouvakhina, M., & Tilleßen, P. (2006). Unternehmensgründungen durch frauen in Deutschland: Ergebnisse des KfW-Gründungsmonitors. *Finanz Betrieb* 8(2), 125–128.

xxiv Ibid

^{xxv} 2012 Flash Eurobarometer No. 354 on Entrepreneurship for the European Commission

Kelley, D. J., Brush, C.G., Greene, P.G., & Litovsky, Y. (2013). *The global entrepreneurship monitor 2012 report on women entrepreneurs*. Wellesley, MA: Babson College and the Global Entrepreneurship Research Association.

XXVIII Kedrosky, P. (2013) Getting the bug: Is (growth) entrepreneurship contagious? The Ewing Marion Kauffman Foundation.

Kelley, D. J., Brush, C.G., Greene, P.G., & Litovsky, Y. (2013). *The global entrepreneurship monitor 2012 report on women entrepreneurs*. Wellesley, MA: Babson College and the Global Entrepreneurship Research Association. Revnolds, P. D. & Curtin, R. T. (2010). *New Business Creation: An International Overview*. New York, NY:

Springer.

Welter, F. (2006). Women's entrepreneurship in Germany: Progress in a still traditional environment. In Brush, C., Carter, N., Gatewood, E. & Hart, M. (Eds.). *Growth-oriented Women Entrepreneurs and their Businesses: A Global Research Perspective*. Boston, Ma: Edward Elgar Publishing.

caliendo, M. & Kritikos, A. S. (2007). Start-ups by the unemployed: Characteristics, survival and direct employment effects (IZA Discussion Paper No. 3220). Bonn, Germany: Institute for the Study of Labor.

Kulicke, M. (2014). 15 years of EXIST university-based start-up programmes: Development of the EXIST funding programme between 1998 and 2013. Karlsruhe, Germany: Fraunhofer-Institut für System- und Innovationsforschung.

Innovationsforschung.

Solid C. Sommer (2015). Personal interview on April 16, 2015 with High-Tech Gründerfonds Investment Manager.

Welter, F. (2006). Women's entrepreneurship in Germany: Progress in a still traditional environment. In Brush, C., Carter, N., Gatewood, E. & Hart, M. (Eds.). *Growth-oriented Women Entrepreneurs and their Businesses: A Global Research Perspective*. Boston, Ma: Edward Elgar Publishing.

Kehlbeck, H. & Schneider, U. (1999). Frauen als Zielgruppe von Existenzgründungen unter besonderer Berücksichtigung der Finanzierungsaspekte. Hamburg, Germany: Senatsamtes für die Gleichstellung.

Federal Ministry of Economics and Energy. bundesweite gruenderinnenagentur. http://www.existenzgruenderinnen.de/EN/Home/home_node.html

Bennhold, K. (2010, January 17). In Germany, a tradition falls, and women rise. *The New York Times*. Retrieved from: http://www.nytimes.com/2010/01/18/world/europe/18iht-women.html

xxxix Heine, F. (2013, August 1). Birth rate boon? Germany promises daycare for all. Spiegel Online International. Retrieved from: http://www.spiegel.de/international/germany/law-goes-into-effect-requiring-child-care-for-mostgerman-children-a-914320.html

Bennhold, K. (2010, January 17). In Germany, a tradition falls, and women rise. *The New York Times*. Retrieved

from: http://www.nvtimes.com/2010/01/18/world/europe/18iht-women.html

Welter, F. (2004). The environment for female entrepreneurship in Germany. Journal of Small Business and Enterprise Development 11(2), 212-221. citing: Holst, E. (2001). Institutionelle Determinanten der Erwerbsarbeit: Zur Notwendigkeit einer Gender-Perspektive in den Wirtschaftswissenschaften, DIW Diskussionspapier Vol. 237. Berlin, Germany: DIW.

***IIII Hundley, G. (2001). Why women earn less than men in self-employment. *Journal of Labor Research*, 22, 817-29.

Spiegel Staff. (2013, February 5). A 200-billion-euro waste: Why Germany is failing to boost its birth rate. *Der* Spiegel Online International. Retrieved from: http://www.spiegel.de/international/germany/study-shows-germanywasting-billions-on-failed-family-policy-a-881637.html

^{xlv} Achtenhagen, L. & Welter, F. (2005). The attractive blond lady in a pink business suit: Analyzing the discourse on female entrepreneurship in German newspapers between 1997 and 2003. Amsterdam, Netherlands: 2005 IECER

Welter, F., Kolb, S., Ettl, K, & L. Achtenhagen. (2006). Süßes Leben mit bitteren Noten. Unternehmerinnen und Gründerinnen in der deutschen Presse - eine diskursanalytische Betrachtung. Düsseldorf, Germany: Ministerium für Generationen, Familie, Frauen und Integration des Landes Nordrhein-Westfalen.

Mirchandani, K. (1999). Feminist insight on gendered work: new directions in research on women and entrepreneurship. Gender, Work and Organization, 6(4), 224-35.

High-Tech Gründerfonds	EXIST - Transfer of Research	EXIST - Grant	Start Up Capital	Universal	StartGeld	Startfonds	Name	Table 2. Gove
Public-Private Partnership: Federal government, KfW, 17 private companies	Economics Ministry and European Social Fund	Economics Ministry and European Social Fund	KfW	KfW	KfW	KfW	Host	Table 2. Government Backed Financing Options for Entrepreneurs
Investment	Grant	Grant	Loan guarantee	Loan	Loan guarantee	Investment	Туре	ncing Options fo
up to €2 million			up to €500,000	up to €25 million	up to €100,000		How much	r Entrepreneurs
The High-Tech Gründerfonds finances innovative, high-tech enterprises in their seed phase (less than 1 year old) via a public-private partnership. Largest investor is the Federal government, followed by the KfW and 17 private companies. The HTG provides up to €2 million in financing, typically in the form of an initial €500,000 seed financing and €1.5 million in follow on rounds. HTG retains a 15 percent equity stake in the company.	The Transfer of Research grant provides staff expenses for four people plus €250,000 for materials and equipment over an average funding period of 18 months.	The EXIST grant supports innovative business start-ups at universities and research institutions aimed at scientists, university graduates and students. EXIST grants cover living expenses via a monthly stipend of €1,000 to €3,000 up to a year. Grants for materials and equipment up to €10,000 for solo start-ups and €30,000 for team start-ups are also available. In addition, the EXIST grant provides €5,000 for business coaching and, if necessary, a child benefit of €100 per month, per child. Infrastructure – lab or office space – is provided as well through the hosting University.	KfW backs entire loans at a private bank with the following terms – Business (less than 3 years old) finances 15 percent of total costs with its own capital, private bank provides up to 30 percent (capped at €500,000). Remaining 55 percent of financing needs must come from other loans or investments.	The Universal loan provides favorable interest rates on 20-year loans to SMEs younger than 5 years for capital expenditures.	StartGeld is issued under the European Commission's competitiveness framework for SMEs younger than 3 years old. A private bank bears 20 percent of the credit risk; the rest is placed on KfW. A StartGeld loan also bears a lower interest rate than a commercial loan.	The Startfonds is an investment into tech-based, innovate small- and medium-sized enterprises (SMEs) younger than 10 years old. The business must privately get a lead investor and together they apply to the Startfonds. KfW and the lead investor become equal equity partners. In effect, it is a matching investment.	How it works	