

SUPPORTING WOMEN ENTREPRENEURS IN GERMANY

Rapid Policy Assessments of Inclusive
Entrepreneurship Policies
and Programmes



FOREWORD

Entrepreneurship development is an important requirement for achieving the goal of smart, sustainable and inclusive growth set out in the Europe 2020 strategy. It is also a means to respond to new economic challenges, to create jobs and to fight social and financial exclusion. The impact of the global financial and economic crisis calls for giving entrepreneurship and self-employment a stronger role in economic and social development policies. Inclusive entrepreneurship policies and programmes are particularly relevant for women who continue to face challenges in the labour market and are under-represented in entrepreneurship activities.

However, the effectiveness of national, regional and local measures and actions to promote inclusive entrepreneurship development in Europe can be hindered by a fragmentation of responsibilities, resources and strategies, and a failure to understand the goals of inclusive entrepreneurship.

This project is part of a series of rapid policy assessment projects on inclusive entrepreneurship policies and programmes that are conducted by the Local Economic and Employment Development (LEED) Programme of the Organisation for Economic Co-operation and Development (OECD) in collaboration with the Directorate General for Employment, Social Affairs and Inclusion of the European Commission. This work builds on a collaborative project between the OECD and the European Commission on inclusive entrepreneurship. For more information on this project, please refer to: <http://www.oecd.org/employment/leed/inclusive-entrepreneurship.htm>.

ACKNOWLEDGEMENTS

This study has been a collaborative project between the Local Economic and Employment Development (LEED) Programme of the Organisation for Economic Co-operation and Development (OECD) and the Directorate General for Employment, Social Affairs and Inclusion of the European Commission, with the co-operation of the German Federal Ministry for Economic Affairs and Energy. It is part of a multi-year programme of work on inclusive entrepreneurship, undertaken by the LEED Programme of the OECD and DG Employment of the European Commission.

The report was prepared by Dr. Teita Bijedić and Dr. Friederike Welter of Institut für Mittelstandsforschung, and David Halabisky of the LEED Programme of the OECD.

The report authors would also like to acknowledge the assistance received from the Federal Ministry of Economic Affairs and Energy who provided background material, commented on a draft report and assisted with the organisation of a workshop on 2 September 2015. Discussions at the workshop were valuable for the preparation of this report. Participants included representatives from the Fraunhofer CERRI, Beirat Junge Digitale Wirtschaft of the BMWi, Bundesministerium für Familie, Senioren, Frauen und Jugend (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth), RKW Kompetenzzentrum, IW JUNIOR, DIHK and Verband deutscher Unternehmerinnen.

Guy Lejeune and Risto Raivio from DG Employment of the European Commission also provided insightful comments on a draft report.

Finally, Eleanor Davies and François Iglesias of the LEED Programme had an invaluable role in providing technical assistance.

ABBREVIATIONS

AWE	Alberta Women Entrepreneurs
bga	<i>Bundesweite Gründerinnenagentur</i> (National Agency for Women Start-up Activities and Services)
BMBF	<i>Bundesministerium für Bildung und Forschung</i> (German Federal Ministry for Education and Research)
BMFSFJ	<i>Bundesministerium für Familie, Senioren, Frauen und Jugend</i> (German Federal Ministry for Family Affairs, Seniors, Women and Youth)
BMWi	<i>Bundesministerium für Wirtschaft und Energie</i> (German Federal Ministry for Economic Affairs and Energy)
CAD	Canadian Dollars
DM	<i>Deutsches Mikrofinanzinstitut</i>
EC	European Commission
ERDF	European Regional Development Fund
ESF	European Social Fund
FEI	Female Entrepreneurship index
GEI	Global Entrepreneurship Index
HVB	<i>Hypo Vereinsbank</i>
IW	<i>Institut der deutschen Wirtschaft</i>
KfW	<i>Kreditanstalt für Wiederaufbau</i>
LEED	Local Economic and Employment Development
NRW	North Rhine-Westphalia
OECD	Organisation for Economic Cooperation and Development
R&D	Research and development
SME	Small and medium-sized enterprises

STEM Science, technology, engineering and mathematics

TWIN Two Women Win

VdU *Verband deutscher Unternehmerinnen*

WEI Women's Enterprise Initiative

TABLE OF CONTENTS

FOREWORD	2
ACKNOWLEDGEMENTS	3
ABBREVIATIONS.....	4
EXECUTIVE SUMMARY.....	8
Key strengths of women's entrepreneurship support.....	8
Areas for improvement	8
Key recommendations	9
INTRODUCTION.....	11
OECD-European Commission rapid policy assessments on inclusive entrepreneurship policy	11
OECD-European Commission rapid policy assessment criteria	11
Project methodology	12
CHARACTERISTICS OF WOMEN'S ENTREPRENEURSHIP.....	13
Frequency of self-employment by women	13
Scope of self-employment activities by women	15
Women's self-employment and industry	15
Start-up capital for women's self-employment activities	15
Performance of women-operated businesses	16
Demographic characteristics of self-employed women	16
POLICIES AND PROGRAMMES TO SUPPORT WOMEN'S ENTREPRENEURSHIP	18
Policies and programmes to foster entrepreneurial skills for women	19
Policies and programmes to facilitate access to financing with a focus on women	25
The institutional environment for women entrepreneurs.....	30
CONCLUSIONS	35
REFERENCES.....	37
Website references.....	41
ANNEX A. LIST OF WORKSHOP PARTICIPANTS	45

Tables

Table 1. SWOT analysis of women's entrepreneurship support in Germany	36
---	----

Figures

Figure 1. Frequency of self-employment in Germany and European Union, 2014.....	14
Figure 2. Number of total annual business entrants, 2004-13	14
Figure 3. Financial resources during business foundation, 2013.....	16
Figure 4. Women's labour market activity in Germany by education level, 2014.....	17

Boxes

Box 1. OECD-European Commission rapid policy assessment criteria.....	12
Box 2. <i>Bundesweite Gründerinnenagentur</i> (bga - National Agency for Women Start-up Activities and Services).....	18
Box 3. Examples of business counselling and consulting in Germany	20
Box 4. Examples of mentoring and role model initiatives for women entrepreneurs in Germany	21
Box 5. Two Women Win (TWIN).....	22
Box 6. Examples of entrepreneurship networks for women in Germany	23
Box 7. Going for Growth, Ireland.....	25
Box 8. The <i>HVB-Frauenbeirat</i>	30
Box 9. National Women's Enterprise Day, Ireland.....	34
Box 10. Fostering business development and growth – The Alberta Entrepreneurs Centre, Canada	34
Box 11. An action plan for women's employment, Scotland	34

EXECUTIVE SUMMARY

This project is part of a series of “rapid policy assessments” that are undertaken by the Local Economic and Employment Development (LEED) Programme of the Organisation for Economic Co-operation and Development (OECD). This work is undertaken in partnership with the Directorate General for Employment and Social Affairs of the European Commission. This report presents a brief overview of current and planned support for women’s entrepreneurship in Germany and provides an assessment of the key strengths and weaknesses of current and planned offerings in the areas of entrepreneurship skills, access to finance and the regulatory and institutional environment. It also makes recommendations for improvement under each area.

Key strengths of women’s entrepreneurship support

Entrepreneurship skills

- There is a well-developed entrepreneurship support infrastructure that offers a wide variety of supports, including training, coaching and mentoring and business counselling.
- Entrepreneurship education is becoming more widespread and is advanced relative to most European Union countries. There are a number of extra-curricular activities in primary and secondary schools and a growing number of inter-curricular activities in many states. Further, entrepreneurship education is expanding in higher education and the vocational training system, notably with support from programmes such as EXIST (for higher education).
- A number of business associations and women’s entrepreneurship networks offer opportunities for peer-learning.
- The new initiative *FRAUEN unternehmen* is a good step towards increasing the visibility of women entrepreneurs and inspiring women to consider entrepreneurship as a labour market activity.

Access to financing

- New, young and established businesses are able to access a wide variety of financial supports.

Institutions and regulatory environment

- Overall, Germany has a supportive regulatory environment for entrepreneurship.
- Family policies are advanced in Germany among European Union countries, offering parental allowances, public childcare services and tax deductions for childcare. These instruments help women participate in the labour market and are also supportive of self-employment.

Areas for improvement

Entrepreneurship skills

- Where entrepreneurship education exists, it mainly promotes a classic model of entrepreneurship (i.e. full-time self-employment) rather than the full spectrum of

possibilities, including social entrepreneurship, part-time self-employment, group entrepreneurship, etc.

- The education system does little to encourage more female entrepreneurs and gender segregation persists when girls and young women choose careers and professions.
- More can also be done to encourage young women to pursue growth-oriented businesses with role models and mentors who have grown successful companies.

Access to financing

- Mainstream financing programmes often implicitly discriminate against female entrepreneurship by focussing on areas where women are less active (e.g. technological innovations) and by not considering the specific characteristics and needs of women-owned businesses.
- Women are under-represented in the financing industry itself, as, for example, venture capitalists, business angels and investors on crowdfunding platforms.

Institutions and regulatory environment

- German society continues to ascribe housebound and family-related roles to women, thus implicitly rendering entrepreneurship as a less desirable career choice for women. This is reinforced by tax policies that favour households with a single income earner.
- Germany ranks 24th among European Union countries for ease of business start-up.

Key recommendations

1. Create a formal inter-ministerial group to coordinate women's entrepreneurship support within the federal government to ensure that policy actions are consistent and coordinated. The inter-ministerial group could be chaired by the Ministry of Economic Affairs and Energy, given their central role in economic policy. The group could develop an action plan for policy support for women's entrepreneurship that communicates government priorities, sets goals and assigns responsibilities to ministries and agencies. The Scottish example (Box 10) could serve as a good model for an action plan.
2. Increase awareness about the potential of women's entrepreneurship through career guidance and the promotion of women entrepreneur roles models in the media. The new initiative *FRAUEN unternehmen* is a good step but more can be done to reach society more broadly through the media and through entrepreneurship education in primary and secondary schools, as well as in the vocation training system and in higher education. It is important to promote all models of entrepreneurship, including part-time and social entrepreneurship, and to reinforce the idea that entrepreneurship is not only about technology innovations. A national event such as National Women's Enterprise Day in Ireland could be a source of inspiration (Box 9).
3. Ensure that entrepreneurship support programmes for women reflect the reality of family life. Many women turn to self-employment because of the flexibility that it provides in balancing the work and family aspects of their lives. Training, coaching, mentoring and business counselling should reflect this in the support and advice given.
4. Promote growth-oriented entrepreneurship to women. Programmes such as *FRAUEN unternehmen* could be leveraged to inspire women to seek high growth. Group mentoring

could be built into this programme to support growth-oriented businesses that are operated by women. The Going for Growth initiative in Ireland (Box 7) could be replicated in Germany. Alternatively, growth-specific support (e.g. management skills, opportunity recognition, internationalisation) could be provided as is done in the Women's Enterprise Initiative in Canada (Box 10).

5. Align tax policy objectives with those of family policies to ensure that parental allowances and childcare measures achieve their intended impact in supporting women and families fully participate in the labour market.

INTRODUCTION

OECD-European Commission rapid policy assessments on inclusive entrepreneurship policy

“Inclusive Entrepreneurship in Europe” is a joint project conducted by the Local Economic and Employment Development (LEED) of the Organisation for Economic Co-operation and Development (OECD) and the Directorate-General for Employment, Social Affairs and Inclusion of the European Commission. The project aims to identify and analyse barriers for entrepreneurial activities faced by groups that are under-represented or disadvantaged in self-employment or the labour market, i.e. youth, seniors, the disabled, women, ethnic minorities, the unemployed. Based on this diagnosis, this work provides policy guidance to help policy makers design and implement policies and programmes to address these barriers and promote entrepreneurship within these groups (OECD/EC, 2013).

This report is part of a series of “rapid” policy assessment projects within the inclusive entrepreneurship work programme. These rapid policy assessments provide a baseline analysis with focus on one of the key target groups of inclusive entrepreneurship policy (i.e. youth, seniors, women, migrants or the unemployed). The assessments examine the nature and appropriateness of existing and proposed policies and programmes with the aim of providing guidance on priorities for future activities in this area, notably activities that can be funded by the European Social Fund (ESF). The analysis identifies gaps in current and planned support, as well as areas where current and planned support can be improved. The recommendations aim to provide assistance to European Union Member States in the design and implementation of policies and programmes for business creation by youth, seniors, women, migrants or the unemployed, through:

- Tailored advice and assessments for individual national or regional administrations in the design and implementation of policies and programmes for business start-up and self-employment, including through ESF support; and
- Facilitation of mutual learning among national and regional authorities, stakeholders and practitioners concerned with ESF support from different Member States, through monitoring and comparison of policy and programme approaches, collection and dissemination of good practice examples and provision of tools to support learning networks, events and platforms.

In the case of Germany, the assessment focuses on women’s entrepreneurship. It provides an overview and assessment of current support of women’s entrepreneurship in Germany in the areas of entrepreneurship skills, access to finance and the regulatory and institutional environment (e.g. business regulations, culture). The report also provides policy recommendations for policy makers in each of the thematic areas.

OECD-European Commission rapid policy assessment criteria

The OECD-European Commission collaboration on inclusive entrepreneurship has produced a series of reports and policy briefs that examine the barriers faced by different under-represented and disadvantaged groups in business start-up and self-employment, as well as appropriate policy

responses to address these barriers. This work has covered several social target groups, including women, youth, seniors, migrants, the unemployed and people with disabilities.

Based on this work and consultation with international experts, the OECD has developed a list of principles for inclusive entrepreneurship policy (see Box 1). This list of principles is intended to give guidance to policy makers in designing and implementing a comprehensive support system for inclusive entrepreneurship. These principles underpin the analytical framework used in this series of rapid policy assessments.

Box 1. OECD-European Commission rapid policy assessment criteria

1. Generic principles

- Policies and programmes are framed within a broader strategy.
- Outreach to the target group is targeted and sufficient.
- Use competitive selection mechanisms to target intensive support.
- Support provisions are regularly monitored and periodically evaluated for impact and effectiveness.

2. Entrepreneurship skills

- Entrepreneurship education and training for the target group is available and covers pre-start-up, start-up and growth phases.
- Coaching and mentoring programmes are available and provide one-on-one or group support using experienced entrepreneurs and/or business professionals.
- Public policy supports network development within the target group and builds linkages with mainstream entrepreneurs and services.
- Entrepreneurship skills support offerings are linked with financial supports.
- Entrepreneurship skills support offerings are resourced appropriately and those delivering the support are trained.

3. Access to finance

- Information is available about funding opportunities and lender requirements.
- Access to micro-finance is facilitated, either through schemes that are dedicated to the target groups or through enhanced access to mainstream schemes.
- Targeted credit guarantee and mutual guarantee schemes aim to support entrepreneurs from the selected target group.
- Where micro-finance is not available, small grants are available.
- Financial supports are complemented with training and advisory services to develop entrepreneurship skills.

4. Institutional environment and policy delivery

- A culture of entrepreneurship is promoted and supported.
- Information about business creation is readily available.
- Efforts to reduce the burden and complexity of business regulation at all stages of enterprise development are ongoing.
- Opportunities for e-services are pursued, including online business registration and tax filing.
- Ministries, agencies and relevant stakeholders work together.

Project methodology

The OECD-European Commission rapid policy assessments are conducted in two stages. First, desk research is conducted to uncover basic information on the quality of the environment for business start-up and self-employment policy, the levels and nature of start-up and self-employment activities,

and the nature and scope of existing policy and programme activities. This report was prepared primarily through desk research that covered locally published information brochures, reports and studies from ministries, support agencies, webpages.

Second, a one-day seminar was held in Berlin, Germany on 2 September 2015 and hosted by the Federal Ministry for Economic Affairs and Energy. Participants represented the mentioned Ministry as well as the Federal Ministry for Family Affairs, Seniors, Women and Youth; research institutes; women entrepreneurs; and industrial and business associations. A list of participants is included in Annex A. The objective of the seminar was to discuss preliminary findings from the desk research and to collectively identify areas for policy action.

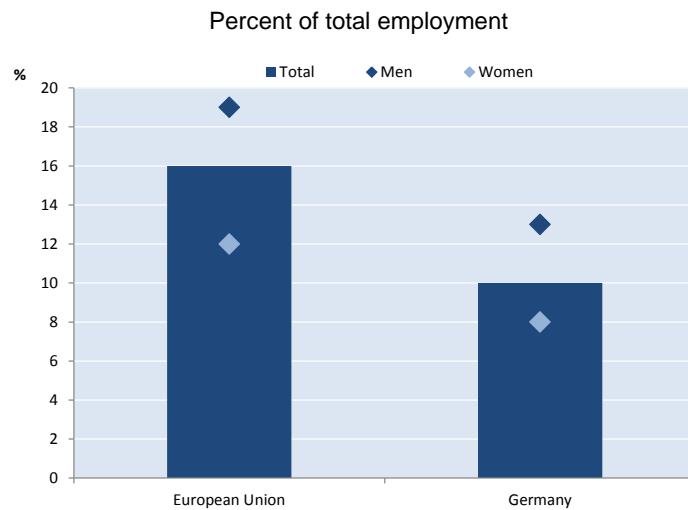
CHARACTERISTICS OF WOMEN'S ENTREPRENEURSHIP

The German labour market shows significant gender differences regarding the frequencies, scope and industries of employment. Many of these gender differences are also reflected in self-employment. The labour market participation rate for women in Germany is 69%, lower than the rate of male participation (83%). Furthermore the employment rates for women depend strongly on their marital status and whether they have children, unlike respective male employment rates. The employment rate for women between 25 and 54 years old decreases with an increasing number of children, but it stagnates or increases slightly for men in the same age group (Dehoff-Zuch, 2012).

Frequency of self-employment by women

Overall in 2014, 10% of employed people in Germany were self-employed: 13% of men and 8% of women (Figure 1). This is below the overall average self-employment rate of European Union countries of 16% and also below the European Union average for women's self-employment (12%). Moreover, in 2013 only one out of three (32%) self-employed people in Germany were women (Neuffer, 2015) and only 18% of SME (small and medium-sized enterprises) had a woman as principal owner (Creditreform, 2014).

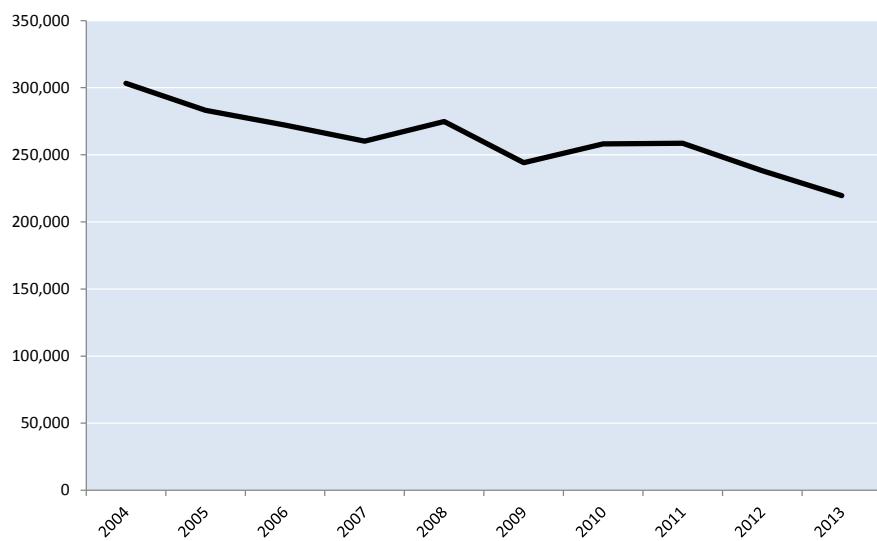
Figure 1. Frequency of self-employment in Germany and European Union, 2014



Source: Eurostat (2015), Labour Force Survey.

Overall, the number of business start-ups in Germany decreased nearly 30% between 2004 and 2013 (Figure 2). This decrease is explained by a healthy job market and a higher than usual level of business creation at the beginning of the new millennium due to a rapidly growing high tech sector. Among these new start-ups, the proportion that have been started by women has increased. When both full- and part-time businesses are considered, the share of women among new business owners increased from 38% in 2003 to 43% in 2014 (KfW, 2014a). This increase was driven by the growth of the proportion of women among full-time new business owners, which increased from 33% in 2013 to 41% in 2014 (KfW, 2014a).

Figure 2. Number of total annual business entrants, 2004-13



Source: Eurostat (2015), Structural Business Statistics.

Scope of self-employment activities by women

Although women's self-employment has increased over the last decade (Statistisches Bundesamt, 2014b), this increase is largely due to an increase in the number of solo entrepreneurs. Two-thirds of self-employed women have no employees whereas only half of self-employed men are solo entrepreneurs (Neuffer, 2015). Moreover, women-owned businesses account for 21% of enterprises with fewer than 5 employees and less than 10% of enterprises with 50 or more employees (KfW, 2014b; bga, 2015a). The mean number of employees for women-owned enterprises is 0.9, whereas the mean for men-owned enterprises is 3.0 (KfW, 2011).

More women than men choose part-time entrepreneurship over full-time entrepreneurship. In 2013, 38% of self-employed women worked part-time, relative to 12% of self-employed men (KfW, 2014a). Further, women owned half of the part-time businesses but only one-third of full-time businesses (KfW, 2014a). This gender gap is typically explained by the presence of underage children in the household; self-employment often offers increased flexibility to balance childcare and household responsibilities with professional activities.

Women's self-employment and industry

Women's self-employment activities are concentrated in the following industries: personal services (43%), business services (32%) and retail (7%) (KfW, 2014a). Women are increasingly active in the liberal professions (e.g. health care, business services and cultural industries), which have grown constantly in recent years, and especially among individuals with tertiary education and in service industries (BMWi, 2013). In 2014, 1 265 000 individuals worked in the liberal professions. 31% of them were active in health care industries, 27% in business services (e.g. tax accountancy, legal services) and 18% in cultural industries – all of which are sectors where women are predominantly active (Institut für Freie Berufe, 2014). Only 13% of high tech start-ups are led by women (Deutscher Startup Monitor, 2015).

Occupational and career choices are strongly influenced by gender, which is already visible in the education and training systems (IWD, 2015): 44% of female trainees start in occupations that are dominated by women (i.e. occupations where at least 80% of all trainees are women) and another 14% choose an occupation where the majority are women (at least 60%). One out of four female trainees favour business assistance occupations (e.g. clerks, administration) and 18% favour business services (e.g. tourism and catering), followed by health, care and social services (13%). At the same time, only 20% of the male trainees were interested in these three occupational areas (Beicht and Walden, 2014). Taking into account that one out of three women and men were indifferent towards their future occupation, these numbers suggest a strong gender segregation as young men and women prepare for their careers.

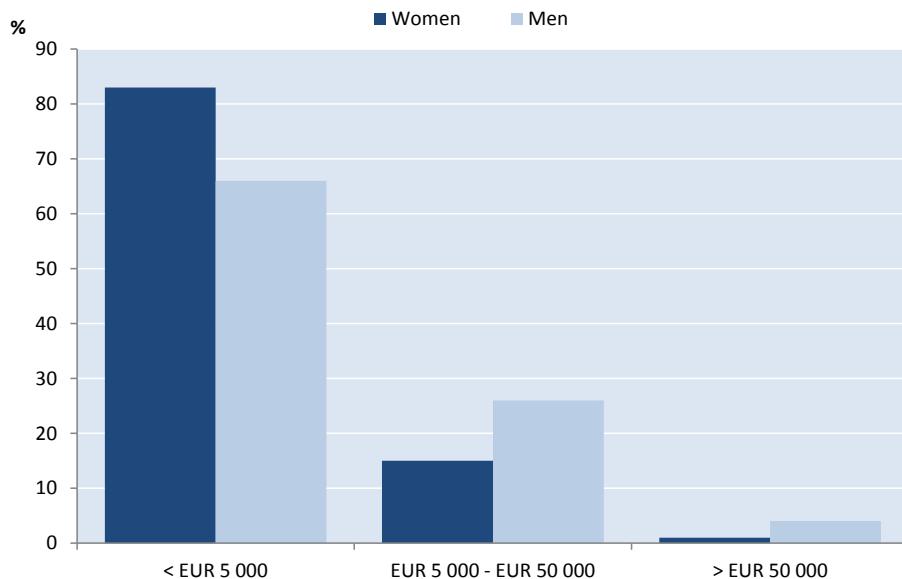
Start-up capital for women's self-employment activities

In 2013, 83% of self-employed women and 64% of self-employed men started their businesses with EUR 5 000 or less (Figure 3). Furthermore, 12% of self-employed men started their business with seed money of EUR 25 000 to EUR 100 000, but only 4% of self-employed women had this level of funding (KfW, 2014b; bga, 2015a).

It is important to note that this gap is not only a gender effect, but also an industry effect. Self-employed women are predominantly active in less capital-intensive industries and therefore often require less initial capital. In addition, women entrepreneurs are much less likely to seek high levels of growth for their businesses so they often require less financing. The low level of capitalisation of

businesses operated by women entrepreneurs is often one reason for banks to dismiss credit enquiries (bga, 2015a).

Figure 3. Financial resources during business foundation, 2013



Source: KfW-Mittelstandspanel (2014).

Performance of women-operated businesses

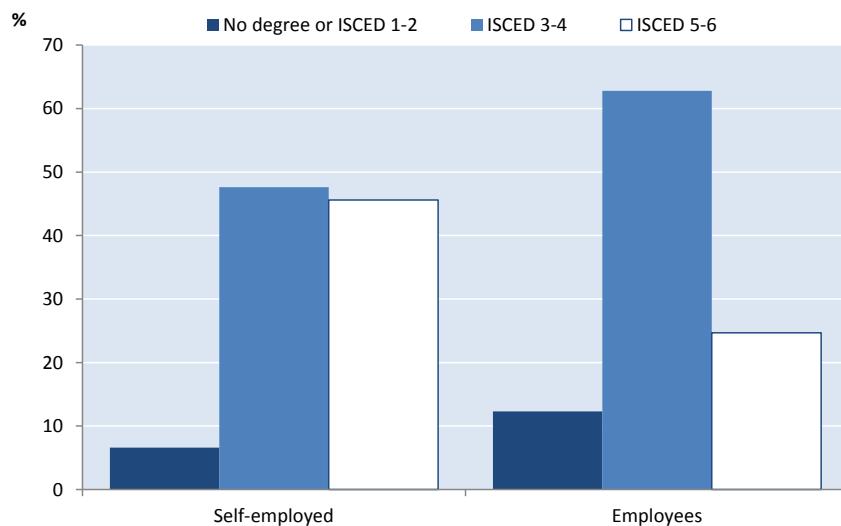
Although women-owned businesses tend to be smaller, less likely to achieve high growth and attract smaller levels of investment, women-owned enterprises appear to be more stable and resilient to changes in economic conditions. During the recent economic crisis, women-led enterprises were less likely to experience declines in revenues (bga, 2015a). This resilience can be partially explained by the nature of women-operated businesses, which tend to focus on health services, educational services and other personal service sectors that are less susceptible to economic downturns.

Self-employment offers women a greater opportunity to earn a high income relative to working as an employee. Nearly one-third of self-employed women (29%) have a net income greater than EUR 2 000 per month and nearly 5% earn more than EUR 5 000 per month. Only 16% of women who work as employees earned EUR 2 000 per month and 0.4% earned EUR 5 000 per month (Neuffer, 2015).

Demographic characteristics of self-employed women

Self-employed women are often highly educated relative to those working as employees. Nearly 50% of self-employed women have completed higher education (ISCED 5-6), whereas only one out of four female employees have (Neuffer, 2015) (Figure 4). The high proportion of highly educated women in self-employment is often viewed as evidence that women are trying to escape the “glass ceiling” faced as employees in male-dominated professions.

Figure 4. Women's labour market activity in Germany by education level, 2014



Source: Eurostat (2016), Labour Force Survey.

Although self-employment rates increase with age, women entrepreneurs are generally younger than male entrepreneurs. 14% of women entrepreneurs were between 15 and 34 years old, whereas only 11% of male entrepreneurs were (Neuffer, 2015). Nearly half of self-employed women have children and women with underage children are more likely to be self-employed than working in wage employment (bga, 2015a). This suggests that starting a family may foster entrepreneurial intentions, notably due to the flexibility that self-employment offers relative to wage employment and due to difficulties re-entering the labour market after a career break (bga, 2015a; Kay et al., 2014).

Migrant women are more likely to be self-employed than working as an employee. One out of ten self-employed women has a migration background, whereas only 8% of women who work as employees have a migration background (Neuffer, 2015). Migrant women entrepreneurs are more highly educated than migrant men entrepreneurs, although there is a variation across different cultures. For example, more than 50% of women entrepreneurs from Central and Eastern European countries who set up a business in North-Rhine Westphalia had a higher education, compared to only 10% of women entrepreneurs from Turkey or Italy (Leicht and Welter, 2009). The motivation for entering self-employment for migrant women stems from a lack of adequate alternatives on the primary labour market. Women from Central and Eastern Europe frequently start businesses because they faced difficulties entering the labour market due to a lack of transferability of their skills and certifications (Leicht and Welter, 2009). Thus, entrepreneurship can offer migrant women an opportunity for greater participation in the labour market and upward social mobility (bga, 2015a; Leicht and Welter, 2009).

As highlighted in this section, women entrepreneurs are not a homogeneous group. Different groups of women face different barriers to business creation and self-employment and it is therefore important for policy makers to recognise that many women entrepreneurs face “double discrimination” due to being a woman and facing additional barriers due to another demographic characteristic (e.g. age, immigration status, physical disability). For example, migrant entrepreneurs often face higher barriers to business creation relative to non-migrant entrepreneurs due to a lower level of familiarity with societal and regulatory norms and on top of this, migrant women entrepreneurs face additional barriers related to being women (OECD/EC, 2013).

POLICIES AND PROGRAMMES TO SUPPORT WOMEN'S ENTREPRENEURSHIP

Policy makers in Germany have treated entrepreneurship as a gender-neutral phenomenon for many of the past decades but launched several targeted policies and programmes in the late 1990s. Much of the current support is guided by the National Agency for Women Start-up Activities and Services (bga) (see Box 2). It acts as the central women's entrepreneurship network by promoting and directing women entrepreneurs to national and state-level support programmes.

Box 2. *Bundesweite Gründerinnenagentur (bga - National Agency for Women Start-up Activities and Services)*

The National Agency for Women Start-up Activities and Services (bga) was established in 2004. It bundles programmes, information and services regarding female entrepreneurship provided by different initiatives at the state or federal levels. bga targets potential women entrepreneurs and women business starters and support is offered to women operating in all industry sectors and at all phases of business development. It also supports academic research and promotes women's entrepreneurship in the media. bga's purpose and mission is to encourage women to become entrepreneurs by:

- Offering female-specific support services at all stages of business development;
- Developing women's entrepreneurship networks;
- Promoting women's entrepreneurship role models; and
- Promoting an entrepreneurial culture among women and society, more generally.

bga is active at the national policy level, regional policy level and in engaging and working with many social partners at the local level. The head office is in Stuttgart. It has national responsibilities, including information bundling, agency and advisory services. Regional offices exist in all federal states and are located within different institutions, which are selected within a public tender procedure. The responsibilities of regional offices include development and coordination of support programmes and to link regional activities into national actions. In addition, bga works with more than 2 000 local partners, including professional business consultants, women's entrepreneurship network organisations, women's business centres, and public and private business development agencies. Support for women entrepreneurs is provided through these partnership networks whereas the regional and national offices primarily coordinate communication (i.e. media) and political activities.

bga's head office has been funded by the federal state Baden-Württemberg since 2010. The federal ministries for Education and Research, for Economic Affairs and Energy and for Families, Senior Citizens, Women and Youth cover specific programmes and initiatives, which are bundled by the head office. Co-funding on regional level is also provided by the ESF. Members of bga's steering committee, which are involved in bga's head office's strategic decisions, consist of representatives of the above mentioned federal ministries. Ministries' involvement in bga's strategic process also ensures bga's involvement in political lobbying activities related to women's entrepreneurship.

Support for women entrepreneurs includes a wide range of activities, services and initiatives, including sign-posting information, business counselling, entrepreneurship training, coaching and mentoring, networking support, facilitating access to financing and political lobbying.

Policies and programmes to foster entrepreneurial skills for women

Entrepreneurship education

Entrepreneurship education has become increasingly important in recent decades. However, entrepreneurship education often does not appear in the curricula of German primary and secondary schools. When it is taught, it is almost always linked to economic education. Since entrepreneurship education is not a mandatory subject within general education, it receives little attention. There are no substantial awareness raising programmes to promote entrepreneurship within schools. Where entrepreneurship is featured in learning material, the stereotypical male entrepreneur is depicted. Thus, entrepreneurship is implicitly reinforced as a male activity (Grindel and Lässig, 2007).

Despite not being included in the curricula within mandatory schooling, in all states, there are several extra-curricular entrepreneurship initiatives. For example, the project JUNIOR, co-ordinated by the IW Cologne, provides a one-year training programme for students from middle school up to senior high school to foster economic and entrepreneurial competencies and awareness. Students work in teams to generate business ideas, develop business plans and implementation strategies. They can also take part in regional and nationwide contests for best business ideas. Another example is “*Unternehmergeist in die Schulen*”, a national programme by BMWi which aims to foster an entrepreneurial spirit among school-age children, and also provides training for teachers and supports them in delivering the programme. The programmes are generally thought to be positive but are seldom evaluated for impact.

Entrepreneurship education is more established in post-secondary vocational training and in higher education. Vocational training centres offer entrepreneurship education programmes within many formal learning programmes. However, these offerings are predominantly oriented towards “mainstream” self-employment (e.g. orientation towards full-time employment, certain attitudes like assertiveness and risk taking propensity and a significant company size), thus implicitly reinforcing a male image of entrepreneurship. Furthermore, the majority of public start-up promotion programmes focus on “innovative” business foundations, which are still associated with technology innovations, mostly within STEM fields (i.e. science, technology, engineering and mathematics) (for a summary of programmes Brink et al., 2014). Due to the occupational segregation and an under-representation of women in these occupational and academic fields, it seems likely that they are also under-represented as entrepreneurs, although several adult and further education programmes for female entrepreneurship by public and private providers exist. One notable example is the e-training developed by the bga, which puts female business start-ups into the wider context of their life circumstances and also uses examples of female entrepreneurs from different industries, thus reflecting the diversity of female entrepreneurship (bga eTraining).

Most higher education institutions have integrated entrepreneurship modules into their curricula, but this is often limited to business schools. The Federal government is supporting the expansion of entrepreneurship activities in higher education through the EXIST programme. This is a national competition for higher education institutions where their entrepreneurship strategies are assessed and winners receive funding to support their implementation. Other elements of the programme focus on financing and commercialising research results (also see the next section on current approaches to financing start-ups).

Business counselling

There is a broad range of female-specific counselling and consulting services, which are easy to reach through the bga’s homepage (see Box 3). Business counselling is individual in nature and

therefore offers an opportunity to not only deliver business-related support, but also to provide this support within the context of the entrepreneur's life circumstances (e.g. work-life balance, business foundation as part-time employment or means for re-entering the job market).

Few initiatives give much attention to the entrepreneur's broader life perspective, but one example is the ESF-supported initiative "*Perspektive Wiedereinstieg*" of the BMFSFJ and the *Bundesagentur für Arbeit* (BA). It advises women (and men) who seek to re-enter the labour market after family-related career breaks and also provides personal coaching. This support is provided through 23 centres across Germany and a substantial number of services are also available online, including as virtual networks, employment matching, technical papers and an online calculator that helps compute the economic benefits of returning to the labour market.

Box 3. Examples of business counselling and consulting in Germany

The bga hosts a database of counselling agencies (*bga Beratungseinrichtungen*) for female entrepreneurs in all federal states in Germany. It contains approximately 500 agencies. There are counselling offers for different target groups, different stages of entrepreneurship and different life circumstances, respectively as general or industry-specific programmes (e.g. real estate, crafts, trade, hosting services, IT, creative industries):

- Business plan and business concepts
- Challenges balancing self-employment and family life
- Business development and growth
- Technical skills including financial planning and management, marketing, taxation, legal and administrative requirements, leadership
- Franchising
- Business succession
- Solo self-employment and part-time self-employment
- Migrant entrepreneurship
- Entrepreneurship for seniors
- Crisis management
- Entrepreneurship in rural vs. urban areas

bga also hosts a database of experts for different industry-specific questions and for different circumstances within self-employment. Much like the database for counselling, the experts can be identified by industry, region and area of specialised knowledge. In addition, entrepreneurs can submit questions to experts through the website according to themes (e.g. business planning, financing, business succession, seeking customers, e-business and internationalisation). This offer (*bga Expertenforum*) is intended to provide more specialised information that is offered during basic start-up and business advisory support. The bga regional offices also provide regional services (*Wirtschaftsförderung auf lokaler Ebene*).

Furthermore, the bga provides a telephone hotline for self-employed women and women business starters (*bga Gründerinnenhotline*) with following services:

- Guidance in all stages of business foundation and development, as well as business succession
- Information about counselling centres for women entrepreneurs
- Contacts for experts in different fields
- Information about support programmes for self-employed women
- Legal advice
- The "nexxt" initiative (*bga nexxt*) by BMWi supports potential female business successors and provides:
 - Contacts to business owners who are looking for potential successors
 - Information for planning and preparing a business succession
 - Learning and information material about business succession

Role models and mentors

Role models can play a crucial role in developing entrepreneurial spirit and have impact on the entrepreneurial propensity. Research shows that children with entrepreneurs as parents or close relatives have much higher entrepreneurial intentions and are much more likely to own a business later in life than individuals without an entrepreneurial family background (von Lang, 2003; Parker, 2004; Lindquist et al., 2012). Role models can foster entrepreneurship through role representations and images in educational system and textbooks, in media or peers (Bijedic et al., 2014; Stuart and Ding, 2006; Nanda and Sørensen, 2010).

Mentoring relationships between experienced and novice entrepreneurs can also have many benefits for new and potential entrepreneurs. These relationships can increase awareness for entrepreneurship, help with developing entrepreneurial attitudes and provide support and encouragement during business creation and development.

In Germany, there are a variety of public mentoring programmes and role model initiatives for women entrepreneurs, including the recently created initiative “*FRAUEN unternehmen*”, “Push-up” in Berlin by *Weiberwirtschaft eG* (Box 4) and one of the best-known initiatives, Two Women Win (TWIN) (see also Box 5).

In addition to these public policy initiatives, some financial institutions are increasingly supporting mentoring for women entrepreneurs. For example, the *Hypo Vereinsbank* (HVB) which has a business contest for women entrepreneurs that provides winners an opportunity to work with a mentor for 6 months. Mentors are successful business owners and CEOs from several business fields. In addition to providing individual support, the aim of this mentoring relationship is to help grow the business network of the contest winner. In 2015, 7 winners were selected out of 170 applications.

Box 4. Examples of mentoring and role model initiatives for women entrepreneurs in Germany

- “*FRAUEN unternehmen*” is a national initiative that has created a network of “role model” women entrepreneurs who travel to universities, schools and economic development events to promote

entrepreneurship to women. The network is maintained by the national co-ordinating body in the RKW Competence Centre with the support of nationwide *Gründerinnenagentur*. Women role models apply to participate in the initiative and can benefit from participating through workshops and having opportunities to network among other role models. In 2014, a jury selected 180 out of 260 applicants.

- “Push up” was established by **Weiberwirtschaft eG**, a women’s co-operative, as part of the suite of support offerings available at a drop-in self-employment service centre for women. The initiative is located in Berlin and the centre can be used by all women with a business idea or plan, or with a business less than two years old. However, “Push up” has a limited number of opportunities for women seeking a business mentor so a jury selects the mentees based on evaluation of their business idea.

Box 5. Two Women Win (TWIN)

The TWIN initiative was launched in 2001 by the *Käte Ahlmann Stiftung* (KAS), a foundation set up in the same year by experienced women entrepreneurs who perceived a need for a mentoring programme for new female entrepreneurs (<http://www.kaete-ahlmann-stiftung.de/home.html>). TWIN started as two-year-pilot project, initially restricted to objective-2 zones in North-Rhine Westphalia (i.e. regions in the European Union that faced industrial decline) and supported by the state Ministry of Economics and ESF funding. In 2004, the initiative was expanded to cover all regions in Germany and is now co-ordinated by KAS while the Federal Ministry for Family, Seniors, Women, Youth (BMFSFJ) supported the national expansion.

Mentees can apply for a one-year mentorship, provided that they still are in the first years of their business activity. Mentors are experienced women entrepreneurs, who volunteer their time. The matching process draws on the comprehensive interviews with applicants and seeks to match mentors and mentees according to business profiles and personal needs (bga TWIN).

Over the period 2001-11, approximately 400 young women entrepreneurs received mentoring through TWIN, (around 30-50 annually) involving 270 mentors. The success rate of TWIN is high: only one percent of the TWIN-teams discontinue their mentorship relation. Some mentors already supervise their third or fourth mentee. TWIN has been promoted widely throughout Europe and beyond. According to KAS, the demand for mentorship services is growing constantly and as illustrated by feedback of mentees on their website, many mentees have successfully managed to grow their businesses. KAS conducts ongoing monitoring of the programme.

Networking

Entrepreneurship networks have a strong impact on enterprise development as they provide access to resources such as ideas, business partners, customers and financing (Welter and Trettin, 2006; OECD/EC, 2015). Women entrepreneurs tend to have smaller and more informal networks than their male counterparts. Women entrepreneurs are also less inclined to join business associations, special interest groups and other formal large networks (Klyver, 2011; Carter et al., 2006). Furthermore, women face barriers entering informal networks, including a lack of self-confidence and anxiety about discrimination by others in the network (OECD/EC, 2015). This is also a form of glass ceiling, which not only applies for access to promotions in the workplace but also access to social networks (Allmendinger and Hinz, 2000). Due to the responsibilities within the family, women also tend to have little time to engage in networks and therefore choose them selectively (bga, 2015a).

Several women’s business associations offer networking opportunities for women entrepreneurs in Germany. VdU, a national association for German women entrepreneurs, is one of the oldest and largest. It has 22 regional offices in all 16 federal states. VdU’s goals include promoting a positive image of women entrepreneurs to women and society; creating equal opportunities for women

entrepreneurs in local, state and federal politics, economy and society; and, lobbying for women's entrepreneurship in the media and to policy makers.

Other examples of networking initiatives for women entrepreneurs are briefly described in Box 6.

Box 6. Examples of entrepreneurship networks for women in Germany

- bga hosts a database with more than 350 registered associations, centres, working groups and women entrepreneurs as networking opportunities for (future) women entrepreneurs and business owners nationwide (*bga Netzwerke*). There are offers for different industries, topics and stages of entrepreneurship. bga's regional centres are established in all federal states and provide (potential) women entrepreneurs with local networking opportunities (*bga Regionalverantwortliche*).
- **WeiberWirtschaft eG**, was established 1992 as a network for female entrepreneurship centres ("Gründerinnen und Unternehmerinnenzentren"). Currently the network consists of 15 centres in nine federal states in Germany (*WeiberWirtschaft eG*). The goals of the network are to:
 - Facilitate the establishment of more female entrepreneurship centres
 - Offer subsidised office space and meeting rooms for women entrepreneurs
 - Assess gender mainstreaming in German fiscal policy

Assessment and policy recommendations

The public policy approaches used to foster entrepreneurial skills for women in Germany have many strengths. The infrastructure offers a wide array of supports that are available for all entrepreneurs, including several that are tailored for women. Targeted and tailored supports include business counselling for women, role models to promote women's entrepreneurship to women and society, coaching and mentoring for women entrepreneurs and many business networking opportunities to help women build up their social capital. Germany is also among the most advanced countries at delivering entrepreneurship education, especially in post-secondary vocational training and in higher education.

Nevertheless, there are areas for improvement in moving towards a general gender-sensitive approach in fostering entrepreneurial skills. Where entrepreneurship education exists, it mainly is oriented towards "*klassisch*", i.e. as a full-time labour market activity by a single entrepreneur and often within male-dominated industries. There is a need to expand this perspective to include the many other models of entrepreneurship that are used, including part-time self-employment, group entrepreneurship and social entrepreneurship. The education system could do more to promote entrepreneurship to girls and young women, especially during the career guidance that is provided in schools.

Another area for public policy action is to further tailor mainstream support offerings that facilitate the acquisition of entrepreneurship skills (e.g. entrepreneurship training, business counselling, coaching and mentoring) to the needs of women. This includes supporting a wide variety of business models and aspirations in different industries. It is also important to help women entrepreneurs balance their business aspirations with their personal and family life.

Policy recommendations

1. Create more awareness about female entrepreneurship through awareness campaigns and career guidance.

- Most entrepreneurship support initiatives focus on women who are already self-employed. There is a need to do more to increase the awareness for female entrepreneurship as a viable career option. The new initiative by *FRAUEN unternehmen* by the BMWi is a good start since it uses role models that women can identify with to promote entrepreneurship widely. The scale of this approach could be expanded since it is a relatively low-cost initiative.
- Scale-up ongoing initiatives aimed at promoting entrepreneurship for high school students, e.g. the programme *Berufs- und Studienorientierung* by the state NRW; the initiatives *Berufsorientierung* and Girls' Day by the federal ministry BMBF (n.b. other ministries also support Girls' Day); and *Bundesagentur für Arbeit* by the Federal Employment Bureau.

2. Ensure that entrepreneurship support initiatives consider how entrepreneurship can be applied to different life contexts.

- The agencies and entrepreneurship support organisations should do more to provide a more holistic approach in fostering the development of entrepreneurial skills through education, counselling, mentoring or networking. This approach should be tailored to meet the needs of life-work circumstances of women. One good practice example that could be implemented on a wider scale is "*Perspektive Wiedereinstieg*", which is not specifically targeted at women, but addresses both women and men wishing to re-enter the labour market. This initiative offers support and information on family issues (e.g. childcare) and re-entry into the labour market (including entrepreneurship).

3. Use successful mentors and role models to promote growth for women entrepreneurs.

- Use role model and mentoring programmes can be used to promote growth-oriented entrepreneurship for women. Research often points to lower levels of confidences among women entrepreneurs so it is important to demonstrate that they can achieve very high levels of success with their businesses. Role models and mentors are important tools to accomplish. The new *FRAUEN unternehmen* initiative could expand its mandate to build in some growth-oriented workshops and smaller sessions that provide group-mentoring and support for women entrepreneurs who seek growth. The Going for Growth initiative in Ireland has been successful at inspiring and supporting women entrepreneurs in defining and achieving growth objectives. It could serve as a model for special sessions within the *FRAUEN unternehmen* initiative, or for an additional initiative (Box 7).

4. Embed and formalise entrepreneurship education in primary and secondary school with a gender-sensitive approach.

- Entrepreneurship education should be integrated into the regular curriculum of primary and secondary schools, with particular emphasis paid to a gender-sensitive approach to entrepreneurship education at all levels of education. This refers to, for example, including female role models in the teaching material and in entrepreneurship education modules. The *Kultusministerkonferenz*, which co-ordinates educational and cultural policies on federal and state levels, could be a possible stakeholder to take action.

- Provide training on how to teach entrepreneurship to teachers and instructors. This training should also cover how they can develop entrepreneurial attitudes among their students. It is also important to develop new teaching material to equip teachers to introduce their students to the many different facets of entrepreneurship, including different models (e.g. social entrepreneurship, part-time entrepreneurship, group entrepreneurship) and that all groups are encouraged to pursue entrepreneurship if they are interested in it. Universities can play a larger role by putting more attention on entrepreneurship in teacher training.

Box 7. Going for Growth, Ireland

Going for Growth was launched in 2009 with the objective of supporting ambitious women entrepreneurs in growing their business and expanding their networks. The initiative helps women entrepreneurs with growth aspirations by supporting the development of their businesses by focusing on growth goals and time-defined milestones. It uses volunteer entrepreneurs to lead group and peer mentoring sessions in 6-month sessions. The group meetings are facilitated by the volunteers, who are called “Leads”. They share their experiences with their groups and facilitate the sharing of experiences and challenges among group members. This group mentoring provides encouragement, support and “positive” peer pressure to inspire participants to achieve their goals.

The project is currently in its 7th edition and more than 400 women entrepreneurs have participated. Of those who participated in the 6th edition, more than 70% reported sales growth of 15%, on average, in the following 6 months. There was also an increase (22%) in the number of participants who exported their goods and services.

In addition to the group mentoring, the initiative has a national forum for the “Leads” to facilitate networking among the successful women entrepreneurs. This forum also has workshops and training sessions.

Going for Growth is funded by the Equality for Women Measure, which is financed by the ESF through the Human Capital Investment Operational Programme. It also receives funding from Enterprise Ireland, the Government organisation responsible for the development and growth of Irish Enterprises. It also receives private sector donations. Between 2010 and 2014, it also received funding from the Department of Justice and Equality.

Policies and programmes to facilitate access to financing with a focus on women

Women account for one-third of debtors in Germany and thus are significant client to the financial industry. However, they have needs and preferences that are typically not met by mainstream start-up financing products (Dehoff-Zuch, 2012). Historically, women entrepreneurs in Germany have been supported with “mass programmes”, including group-specific regulations within “mass programmes”, and small-scale targeted programmes (Welter, 2006). In the late 1990s, some states launched financing programmes that were exclusively for female entrepreneurs. However, these programmes typically assisted only a small number of women. For example, 322 female entrepreneurs received credits in Mecklenburg-Western Pomerania during the period 1996-2002.

In parallel to these small targeted programmes, state governments frequently introduced women-specific regulations into mass credit programmes to support women entrepreneurs,. This approach was especially common when the programmes were jointly financed by the federal and state governments. One such example referred to a credit programme in North-Rhine Westphalia where the state government allowed credit applications of women entrepreneurs without previous industry knowledge, which was otherwise required to access the support. Another example of women-specific measures in mass programmes was introduced in Mecklenburg-Western Pomerania, where the state

investment bank provided credits directly to women entrepreneurs when they had previously been rejected for a bank loan (Kehlbeck and Schneider, 1999). These women-specific regulations aimed to counteract the negative effects of the German “housebank system”, where commercial banks potentially act as “gatekeepers” to business financing as they would normally process all applications for financial support programmes.

However, there is currently little tailored financial support for women entrepreneurs in Germany. The vast majority of business start-up financing programmes do not target any specific population group.

Current approaches

Women can access a range of financial supports through mainstream offers at both the national and state-levels. KfW (*Kreditanstalt für Wiederaufbau*), the third largest bank in Germany (measured by total assets), is responsible for designing national programmes and subsidies on behalf of federal ministries. It offers several financial products for business starters, business owners and entrepreneurs seeking to take over a business in co-ordination with the Federal Ministry for Economic Affairs and Energy. None of its products explicitly target women entrepreneurs. Its key offers are:

- Two versions of *ERP Gründerkredit programm* are open to anyone who starts a business:
 - The *ERP Gründerkredit Startgeld* offers financing of up to EUR 100 000 for any business concept; there are no restrictions in terms of industry and there are no requirements for equity capital. The bank assumes only 20% of the credit risk, KfW bears 80% on behalf of the government, which provides an incentive for the bank to lend money. This product is attractive for women entrepreneurs because it can be used for any scale of business, including part-time businesses (*ERP Startgeld*).
 - *ERP Gründerkredit Universell* applies to projects up to EUR 25 million. It is designed for companies which have been active in the market for less than 5 years and have more substantial funding needs.

An important element of KfW’s products is that business counselling is included with the financial support to help entrepreneurs withstand business challenges. KfW also promotes other sources of business start-up information on its website, notably providing links to female entrepreneurship centres and to bga.

In addition to the national offers through KfW, states are also active in facilitating access to finance for entrepreneurs. For example, NRW.Bank is a public subsidiary bank in North Rhine Westphalia, owned by the state government. One of the bank’s missions is to foster business start-ups and ownership in the region and therefore has a number of products to support entrepreneurs:

- *NRW.Kreativkredit* is a loan product for innovative “young” enterprises (less than 3 years old) and freelancers in creative industries (e.g. architecture, design, arts, media, software, advertising). It provides between EUR 5 000 and EUR 25 000. This offer is not targeted at women entrepreneurs but is particularly relevant given that women account for 40% of self-employment in creative industries (bga, 2015b).
- NRW.Bank also offers general start-up loans, such as *NRW.Bank.Gründungskredit* and *NRW.Bank.Universalkredit* for new start-ups, freelancers and businesses less than 5 years

old and annual revenues less than EUR 500 million. These loans range from EUR 25 000 to EUR 1 million.

- NRW.Bank also supports innovative and growth-oriented enterprises with equity funds. *NRW.Bank.Seed.Fonds* supports regional seed funds that fund technology-based enterprises and provides up to EUR 500 000 equity as a minority shareholder. Similarly, NRW.Bank Business Angels Initiative funds innovative and technology-driven businesses.
- In addition to these financial products, NRW.Bank offers non-financial support including on-site business counselling for scientists in German universities and research institutions (NRW.Bank.Venture Center).

Public funding for business start-ups is also available through the higher education system. EXIST is a nationwide programme for fostering and facilitating university start-ups. This BMWi programme aims to promote entrepreneurship in higher education and also provides seed funding for innovative start-ups through the *EXIST Gründerstipendium*. The grant focuses on innovative technology-driven start-ups or start-ups with innovative services with unique selling proposition and excellent long-term business prospects. It is intended to support subsistence, finance business start-up and also fund other supports such as coaching seed phase for 1 year. The grant supports university staff and researchers. Women are under-represented as participants of *EXIST Gründerstipendium*, with only 11.5% of the participants being women. Even in female-dominated disciplines (e.g. humanities and social sciences), only 30%-40% of those who receive a *Gründerstipendium* are women (Becker et al., 2011).

Microcredit

Microcredit is a relatively new instrument for supporting business creation by entrepreneurs from under-represented and disadvantaged social groups in the European Union. Public microcredit programmes in Germany started in early 2010 with the “Microcredit Fund”, which was launched by the Federal Ministry of Labour and Social Affairs and the Federal Ministry for Economic Affairs and Technology. The ministries commissioned the *GLS Gemeinschaftsbank* to implement the Fund, which dispersed more than 6 500 loans in 2010-11 (*Mein Mikrokredit*).

Microcredit is currently granted by microfinance institutions that are accredited by the German Microfinance Institute e.V. (*Deutsches Mikrofinanzinstitut*, DMI), an umbrella organisation of microfinance institutions in Germany. Several microfinance institutions are active in Germany, each with different objectives (Dehoff-Zuch, 2012). A number of microfinance institutions are dedicated to supporting women entrepreneurs such as the association *Goldrausch*, which provides microcredit to self-employed women and women business owners who are seeking to expand their business. *Goldrausch* is financed by donations and membership fees.

The microcredit sector is supported by *Mikrokreditfonds Deutschland*, a national fund that supports microfinance institutions with capital and refinancing options, when needed. Its annual budget is EUR 80 million.

To increase the range of financing opportunities for very small businesses and new start-ups, the Federal Ministry for Economic Affairs and Energy launched a Micro-mezzanine Fund (*Mikromezzaninfonds Deutschland*) in 2013 with EUR 35 million. It was funded from the ERDF and the ESF. The Fund provides small and young enterprises and company starters with economic equity (silent participations) of up to EUR 50 000. This improves the companies’ credit ratings and increases their chances of securing new loans. The Fund offers financing for up to 10 years at a fixed rate of 8%

per annum and with a profit-sharing component of 1.5% per annum. The Fund is managed by NBank, Lower Saxony's investment and development bank. The Fund is open for all business starters but is targeted to women and people with migrant background. To support the young entrepreneurs further and to ensure continued funding, the Federal Ministry for Economic Affairs increased the size of the Fund from EUR 35 million to EUR 85 million in 2015.

Although the microfinance sector in Germany is reasonably established, microfinance products are still not widely known and often do not seem to reach the target group of women entrepreneurs (Dehoff-Zuch, 2012). Part of the challenge is that there is an awareness issue and business start-up support organisations could do more to promote microfinance to women entrepreneurs. *Goldrausch e.V.* interviewed employees at 27 women's start-up counselling centres. One out of three centres did not have any experience with microcredit despite offering consulting and counselling services on start-up financing (von der Bey, 2012). Another challenge is that microcredit products are largely too rigid for the life circumstances of many self-employed women. Interest rates are typically high and repayment requirements are inflexible to career breaks due to family responsibilities (von der Bey, 2012).

Crowdfunding

Crowdfunding first appeared in Germany in 2011 and has grown continuously since. Crowdfunding was originally used largely for art projects but has recently transformed into a vehicle for funding capital-intensive start-ups. There were 31 active platforms in Germany in 2015 (EMN, 2015).

One of the largest platforms, Kickstarter, is based in New York and operates worldwide, including in Berlin. Research on this platform (globally) has investigated the gender dynamics of crowdfunding and found that men seek significantly more capital through crowdfunding than women and they raise more funds (Marom et al., 2015). This is likely due to a gender gap among investors; i.e., men tend to invest in projects led by men and women tend to invest in projects led by women. Thus increasing the representation of women among investors appears to be key to increasing the potential of crowdfunding for women entrepreneurs but experiments suggest that it is also important to promote projects as women-backed projects so that investors are aware (OECD, 2015).

Crowdfunding appears to have potential for providing access to start-up financing for women entrepreneurs since it helps link women investors with women entrepreneurs. This is an important function since there are few female business angels in Germany and in the European Union. Research estimates that women account for between 1% and 12% of business angels (Harrison and Mason, 2007; Mason and Botelho, 2014). However, recent regulatory changes (in July 2015) that aim to protect small investors risk dampening the growth of crowdfunding in Germany, despite some exemption for the sector, because surveys suggest that investors find the regulations too strict (EMN, 2015).

Private sector financing

Commercial and private banks offer their own credit programmes, but rarely offer tailored products for women entrepreneurs (both financial products and related supports such as business counselling). However, there are examples of banks using mentoring support as a method of attracting women entrepreneurs into mainstream offers. One such example is *HVB Branchen*.

In addition, commercial and private banks play a strong role in advising the public sector in designing and implementing public programmes (e.g., ERP, KfW programmes).

Assessment and policy recommendations

Financial support for new, young and established businesses is widely available in Germany. This includes a range of financial products and several innovative financing measures. There is no evidence that women systematically face discrimination by the financial sector.

A strong feature of most start-up financing initiatives is that the offers include non-financial support to support entrepreneurs with business counselling, mentoring and training. While most of these offers are not tailored to the needs of women, there are examples of products that support the types of businesses that are more commonly operated by women (e.g. service businesses, part-time businesses). Further, some private sector banks such as *HVB Branchen* are using mentoring offers to attract women entrepreneurs, which is effective and also increases the likelihood that clients will develop sustainable businesses.

On the other hand, financing programmes may implicitly discriminate against women entrepreneurship when they do not consider the characteristics of women-owned businesses. For example, women entrepreneurs are often ineligible for programmes that focus on technology-oriented innovations.

Another challenge in supporting access to finance for women entrepreneurs is that women are under-represented in the financing industry itself. There are few women venture capitalists and business angels, and women investors are also under-represented in crowdfunding platforms. This, however, is not specific to Germany.

Policy recommendations

1. Increase confidence of women to seek external funding for their businesses.

- Offer training for women entrepreneurs on financial literacy and business planning to help them design and communicate their business ideas and plans so that they can be more successful at accessing the funds needed to start and grow their business. It is important to provide women entrepreneurs information about all of their options when seeking financing, and to educate them about the advantages and disadvantages of each.

2. Include more women in decision-making about lending.

- Organisations involved in financing female entrepreneurs should take care to include more women on committees and advisory boards that advise on which projects to fund. The *HVB Frauenbeirat* illustrates how such a separate advisory board consisting of female entrepreneurs can shape a bank's policies and programmes towards including female perspectives and creating greater awareness for female entrepreneurs (Box 8).
- Women working in the finance industry as venture capitalists and business angels should be made more visible and promoted as role models. Organisations such as the Germany-wide network of business angels (BAND, <http://www.business-angels.de/en/>) could assist in this regard, for example, when recognising the “Business Angel of the Year”.

Box 8. The HVB-Frauenbeirat

The *HVB Frauenbeirat* was set up in 2010, with the aim to advise the executive of the bank's board and to act as sounding board. Today, it consists of 30 women from all over Germany, who are experienced entrepreneurs and managers. The advisory board has created several initiatives to promote diversity, entrepreneurship, and a regional start-up culture. The *HVB Gründerinnenmentoring* is specifically aimed at women entrepreneurs, other initiatives have a broader focus, but all implicitly emphasize entrepreneurship. Recently, two regional "*Frauenbeiräte*" have been set up: one in Berlin because of its role as creative and innovative start-up hub and one in Frankfurt (*Hypovereinsbank Frauenbeirat*).

The institutional environment for women entrepreneurs

Regulatory institutions

Business start-up and self-employment in Germany is supported by a coherent regulatory framework. The Global Entrepreneurship Index (GEI) ranks the German regulatory environment for start-ups as 4th in the European Union and 11th internationally (Acs et al., 2015). However, the business registration process continues to be long despite recent improvements. It takes an average of 6 working days to register a business, which is double the European Union average (3 days); Germany ranked 24th out of 28 European Union countries in terms of ease of registering a business (IfM Statistic Mittelstand, Gesellschaft, Staat, 2015).

To assess the business environment for women entrepreneurs (and potential women entrepreneurs), the Female Entrepreneurship Index (FEI) was created to complement the GEI. It analyses the overall environmental conditions for high-potential female entrepreneurship in 77 countries, covering the entrepreneurial environment (e.g. equal rights issues, access to education, internet and childcare), entrepreneurial eco-system (e.g. burden of regulation, tech absorption, SME support and training, market competition and labour force parity between genders) and entrepreneurial aspirations (e.g. technology transfer, R&D spending, globalisation, financing). Germany ranked 14th out of 77 countries in 2015 (Terjesen and Lloyd, 2015).

Germany is ranked lower in the FEI than in the GEI (Acs et al., 2015; Terjesen and Lloyd, 2015). However, Germany scores above average with regards to its regulatory institutions and policies for women's entrepreneurship. One of the primary reasons for this positive outcome is that the legal and education systems are essentially gender neutral and the government has created agencies to address women's issues. Germany scores lower on individual-level scores within the FEI, which drags down the overall score. This suggests that the regulatory framework is inclusive but that there is room for progress in informal institutions (e.g. entrepreneurial culture for women). These are, however, much more difficult to influence and change.

Family policies

The prevalence and nature of women's self-employment is often linked to the prevailing household income model. When the single-provider household model is prevalent (i.e. men are the principal income generator), there tends to be a less developed childcare infrastructure and a higher incidence of part-time women's self-employment. Where dual-income households are the dominant model, there tends to be a more developed infrastructure to support families and women entrepreneurs tend to work full-time in their businesses (Strohmeyer et al., 2006).

Germany is a country where the single-income household model still dominates, but this is changing. Germany is generally considered to have advanced family policies relative to other European Union countries and several approaches are taken to support the participation of women in the labour market, should they choose to do so. These measures include public funding for childcare, parental allowances and tax deductions for childcare. These efforts have increased recently with a new parental allowance (*Elterngeld Plus*) and a new partnership bonus (*Partnerschaftsbonus*). The new parental allowance aims to address disadvantages associated with part-time work in the previous parental allowance scheme. The new partnership bonus extends the new parental allowance by 4 months per parent and will be provided when both parents work between 25 and 30 hours per week and care for their child together.

Childcare is another important area of family policy. In Germany, public childcare primarily falls under the responsibility of states and municipalities. However, the federal government has increased funding to make more spaces available and to improve the quality of care provided. Beginning in 2015, the federal government will provide an additional EUR 845 million annually on a permanent basis.

Informal institutions

Media attention to women's entrepreneurship is increasing and tends to be supportive (Ettl et al., 2015). However, German society continues to generally view entrepreneurship as a male-dominated activity (Achtenhagen and Welter, 2011; Grindel and Lässig, 2007). This is driven by gender segregation on the labour market and a lack of highly-visible role models and champions for women's entrepreneurship. Girls tend to cluster in a few occupations and industries despite long-established programmes to support a wider occupational choice for girls and young women such as the "*Kompetenzzentrum Technik-Diversity-Chancengleichheit*". This is also reinforced by the often-held notion that entrepreneurship and innovation are driven by technology and STEM fields (Brink et al., 2014). As a result, women often do not identify with the role of an entrepreneur or innovator, even if they are actually self-employed (Welter, 2015).

Governments have launched a number of initiatives to promote and encourage women's entrepreneurship. Initiatives such as the portraits of female entrepreneurs within the programme "*FRAUEN unternehmen*", the portrait gallery on the webpage of the bga (*bga Gründerinnen-Galerie*) and the "*Digital Gründerinnen*" videos, supported by the Advisory Board on Digital Economy of the BMWi (BJDW) are a good step towards promoting modern female role models and the diversity of women's entrepreneurship. Ongoing implementation of the federal bill for a women's quota of 30% on supervisory boards of public corporations (BMFSJ) also demonstrates additional progress towards gender equality.

The interplay of regulatory and normative institutions

Regulatory institutions play a strong role in influencing and reinforcing social attitudes towards women's entrepreneurship. For example, the German tax system favours single-earner households through its spousal income-splitting system, which was introduced to benefit married couples with children. This tax model reinforces traditional gender roles with men working and women staying at home (Holst, 2001). In other words, the system is more beneficial for partners with one primary income earner with a high income (traditionally the man) and one (part-time) employed person with a lower income (traditionally the woman) who also tends to be responsible for the bulk of unpaid household. A recent study shows that the labour market participation of women (including self-employment) would increase by 2.4 percentage points and that average weekly working hours would increase by 7.4 percentage points, if Germany was to tax the individual incomes of married couples

(Bach et al., 2011). Sweden changed its tax laws in 1971, favouring a dual-income earning household model by taxing individual incomes (Bourne, 2010). Gustafsson (1995) illustrated that if such a tax system were implemented in West Germany, the employment rate for women would increase by 10 percentage points and that if Sweden were to introduce the German spousal splitting system, the employment rate for women would decrease by 20 percentage points.

Family policies are also a good example for the complex interaction of regulatory and normative institutions (Pfau-Effinger and Smidt, 2011) and influence labour market activities through their effect on societal perceptions and the ability of women to reconcile family obligations with employment, be that as employee or entrepreneur. Where “women feel that employment is incompatible with being a good mother, they may feel considerable role-conflict and strain” (Sjöberg, 2004). While labour market activities (both employment and self-employment) are accepted widely in Germany, the work-family balance remains a “women-only” topic (Ettl et al., 2015).

Another area where regulatory institutions influence cultural attitudes is the level of social benefits that are accessible to self-employed people. In Germany, the benefits for the self-employed are still less comprehensive than those enjoyed by employees and it is much more difficult to access them. This is especially the case for family and child care benefits, including family allowances, parental leave and coverage for parents when children are sick. In this regard, the recent initiative of BMWi and BMFSJ is a positive step towards improving the regulatory and – in the longer run – the informal institutions for women entrepreneurs. In 2014, both ministries agreed on a joint initiative “*FRAUEN gründen: Gründerinnen und Unternehmerinnen in Deutschland stärken*”, which includes several actions related to women’s entrepreneurship, including migrant women’s entrepreneurs, women role models and mentoring, on re-entry of the labour market after periods of family care and social security for entrepreneurship.

Assessment and policy recommendations

Germany can rely on a generally well-established and strong regulatory environment for entrepreneurship. However, some areas of economic policies such as tax and family policies still contribute to reinforcing traditional gender role models despite the manifold activities outlined above to promote female entrepreneurship and female role models. German society continues to ascribe housebound and family-related roles to women, thus implicitly rendering entrepreneurship as a less desirable career choice for women. Where a society generally admires and respects entrepreneurs, the share of female entrepreneurs is higher; and research has shown that women cherish this specific normative support for entrepreneurship to set up their own business.

Policy recommendations

1. Ensure that an inclusive and gender-aware approach is used in broad entrepreneurship promotion activities.

- A gender-sensitive approach in fostering female entrepreneurship does not necessarily require special programmes and offers for (potential) women entrepreneurs, but, especially in the longer run, an integration of gender issues into mainstream support offers. Gender-segregated support reinforces the occupational and entrepreneurial gender segregation because it supports the notion of female entrepreneurship as “norm-deviant”. While there are good arguments for specifically targeting women (potential) entrepreneurs, especially where subgroups such as women migrants or female youth are concerned, separate support offers are less sustainable in the longer run and their outreach remains limited. Therefore, support agencies and those involved in designing new programmes, should, where possible and

feasible, extend and adapt mainstream support offers to integrate respectively or pay attention to the specifics of female entrepreneurship. Those researching women's entrepreneurship could offer their insights into women entrepreneurship and its specificities and how that could be reflected when designing new policies and programmes to governmental actors and support agencies.

2. Promote and campaign for female entrepreneurship.

- A more active approach is needed to promote an image of female entrepreneurship that captures all its diverse facets: female entrepreneurs own both high-tech and low-tech businesses, they operate part-time and full-time, they manage larger businesses in manufacturing sector, but also innovative internet-based start-ups and technology-based start-ups. Several initiatives to promote a modern image of female entrepreneurship exist, but they would benefit from wide-spread promotion beyond the target group "female entrepreneurs". Together with business associations and other stakeholders, the BMWi could organise a large-scale national event similar to National Women's Enterprise Day in Ireland (Box 9).
- Where programmes specifically target female entrepreneurs, business development and growth paths of female businesses are an option which currently receives little attention in Germany. Box 10 offers a good practice from Canada showing an initiative targeting women entrepreneurs that wish to grow and develop their business. Support agencies and those ministries involved in supporting female entrepreneurship may consider developing an initiative focusing on female business development.
- Overall, a joined-up approach towards female entrepreneurship could be used across Federal ministries. There are a small number of partnerships in this area, including "*Perspektive Wiedereinstieg*" by BMFSFJ and BA; "*Aktionsprogramm Zukunft Mittelstand*" by the BMWi, which was accompanied by intensive discussions with major stakeholders and a joint declaration of the ministry and major industry and business associations; and the "*High-Tech Strategy*" which was planned and is now implemented as inter-departmental co-operation between 11 German federal ministries (*High-Tech-Strategie*). A more formal inter-departmental working group could, together with interested stakeholders (e.g., associations, women entrepreneurs), coordinate these activities more systematically and to develop an action plan to foster women's entrepreneurship.
- Box 11 presents an international good practice where the Scottish government, together with private and public stakeholders, developed an action plan. "Women in Enterprise" is a master-plan to foster female entrepreneurship and female corporate participation on all levels. By holistically fostering skills, access to finance and raising awareness for stakeholders and generating academic findings about the topic, the initiative contributes to raising awareness of female entrepreneurship and corporate participation within the regulatory framework. Furthermore it puts female entrepreneurship into the wider perspective of female corporate participation and thus gender equality in the labour market.

3. Align income tax policies with family policies.

- Remove disincentives to work in the income tax system so that women are not discouraged from working and bring the taxation system in-line with family policies.

Box 9. National Women's Enterprise Day, Ireland

National Women's Enterprise Day is an annual 2-day event led by the 35 City and Country Enterprise Boards (CEBs) and co-financed by the European Social Fund, with support from the Department of Justice and Equality. This event started in 2008 and aims to encourage women entrepreneurs and help them build network and promote women's entrepreneurship to society.

The main element of the event is a conference that showcases role models, promotes public enterprise support services, provides networking opportunities and helps entrepreneurs find mentors. The conference seeks to provide women with information about setting-up or expanding a business and to motivate them to fully exploit their potential as entrepreneurs. The event is paired with a major media campaign to highlight the achievements of women entrepreneurs.

The event is typically attended by more than 250 women entrepreneurs. The media campaigns receive wide coverage in newspapers and on the national television station RTE One. It is estimated that the 2013 television campaign reached 2 million people between July and October 2013.

A large part of the success of the event is in its branding, which is easy for the media to communicate. The media coverage not only promotes the event but also carries its message to a much wider audience aims to positively influence social attitudes towards women's entrepreneurship. The content of the event also has an important role in providing useful and relevant information and support to women entrepreneurs.

Box 10. Fostering business development and growth – The Alberta Entrepreneurs Centre, Canada

The Centre Alberta Women Entrepreneurs (AWE) in the Province Alberta is part of the Women's Enterprise Initiative (WEI), which consists of non-profit Entrepreneurship Centres funded by Canadian government. WEI started in 1995 in 4 western provinces of Canada and spread nationally since 2003. The Centres operate independently and target self-employed women and women entrepreneurs in the process of company growth which often face competitive disadvantages, e.g. caused by the individual, industry sector company size or equity. They provide information services, business guidance, training and consulting, loans and agency for financial investors.

Unlike regular female entrepreneurship support initiatives, AWE focuses on growth-oriented female founded enterprises in business-to-business domain because this target group is generally not represented within the traditional female entrepreneurship programmes. AWE offers individually tailored services for this target group, including coaching, mentoring, consulting, networking, facilitating access to finance and professional support. For example, the Grow to Greatness Accelerator Programme by AWE (AWE Grow) provides is a 10 months programme for growth-oriented women entrepreneurs in the business-to-business sector, including professional executive development training, skill development and mentoring. In order to qualify for the programme, the women entrepreneurs need to be in business for at least 2 years, have at least 1 full-time employee and have annual revenues of at least CDN 250 000.

On average, the participants of the last programme cohort had CDN 1.5 Million in annual revenues, 8.5 employees and were 10 years in business. AWE charges a fee of CDN 5 000 for each participant, the rest is funded by WEI. The initiative shows appreciable results: by providing a support system for female entrepreneurs and business starters, the count of female entrepreneurs increased by 27% between 1995 and 2011 (Western Economic Diversification Canada, 2014).

Box 11. An action plan for women's employment, Scotland

Women in Enterprise is a framework and action plan to increase the contribution of women's enterprise to the Scottish economy and generally women's participation in the corporate area. It is developed and implemented by the Scottish Government as part of the "Scotland can do" initiative, a national statement of the ambition

towards becoming a world-leading entrepreneurial and innovative nation where the cabinets are working in a collaborative and complementary manner.

Women in Enterprise includes the following action schedule:

- **Mentoring and networking:** In order to foster these activities, an online database was generated including previously trained female mentors with diverse business backgrounds and demographics. The initiative facilitates their visibility in media as well as speaking engagements on conferences and events for different target groups (e.g. stakeholders or schools).
- **Financing:** The initiative intends to increase the count of female business angels and other financial investors. Furthermore it provides microloans and a "soft loan fund" for female business starters.
- **Support for awareness:** The initiative offers awareness trainings for bank employees regarding gender issues in loan negotiations and support for development of gender specific-financial products.
- **Support for skill development:** The initiative provides entrepreneurial skill training for female business starters as well as an online networking site "women business community" for individual counselling.
- **Academic assistance and evaluation** are also part of the action schedule.

CONCLUSIONS

Although business creation by women has increased over the last decade in Germany, they remain under-represented among the self-employed. Germany has taken significant steps towards facilitating and fostering female entrepreneurship in recent years and many results have been achieved. Table 1 provides a summary of the strengths and weaknesses of the current support system, as well as opportunities for further development and threats that risk undermining recent efforts.

Table 1. SWOT analysis of women's entrepreneurship support in Germany

Strengths	Weaknesses
<ul style="list-style-type: none"> • Targeted entrepreneurship training, coaching and mentoring and business counselling is widely available for women. • A number of business associations and women's entrepreneurship networks offer opportunities for peer-learning. • Start-ups are generally able to access a wide variety of financial supports. • The regulatory environment is generally supportive of entrepreneurship. 	<ul style="list-style-type: none"> • Where entrepreneurship education exists, it mainly promotes a classic model of entrepreneurship, i.e. full-time self-employment • Targeted support for female entrepreneurs is not integrated into mainstream support and female life circumstances (e.g. family and household responsibilities) are not taken into account. • The education system does little to encourage more female entrepreneurs and gender segregation persists when girls and young women choose careers and professions. • Financing programmes implicitly discriminate against female entrepreneurship in those cases where the programmes do not consider the specific characteristics and needs of women-owned businesses.
Opportunities	Threats
<ul style="list-style-type: none"> • Support for entrepreneurship education (at all levels) is growing and as a result, there are many EU initiatives and funds available to support further development of entrepreneurship education. • Use ESF funds to organise a large national event such as National Women's Entrepreneurship Day to increase the impact of ongoing women's entrepreneurship promotion activities and increase their impact. • The new initiative <i>FRAUEN unternehmen</i> provides an opportunity to increase promotion of entrepreneurship among women. It could also be used to promote growth-oriented entrepreneurship for women. 	<ul style="list-style-type: none"> • Women are under-represented in the financing industry itself, as, for example, venture capitalists and business angels. This hinders access to finance for women entrepreneurs. • Tax policy contributes to reinforcing traditional gender roles and undermines many of the positive family policies. • German society continues to ascribe housebound and family-related roles to women, thus implicitly rendering entrepreneurship as a less desirable career choice for women. • The increased attention paid to women's entrepreneurship in recent years in the federal government has led to increased actions. Improving coordination will ensure that policy actions are consistent and reinforce each other.

Entrepreneurship support for women entrepreneurs in Germany is strong overall. There are, however, opportunities to make improvements to the support system, especially in the areas of promoting women's entrepreneurship to improve its image in society and to encourage more women to pursue growth-oriented entrepreneurship.

Expanding and strengthening entrepreneurship education at the primary and secondary levels will introduce a broad base of students to entrepreneurship. This should help develop an awareness of the entrepreneurship and develop an interest in pursuing it in some students. This will clearly reach a large number of young women and would be expected to stimulate an interest in entrepreneurship as a possible career. Strengthening formal entrepreneurship education should also have a positive influence

on social attitudes towards entrepreneurship, and the acceptance of women entrepreneurs more specifically. It will be important to use entrepreneurship education to promote an inclusive view of entrepreneurship so that no population group (e.g. women, youth, seniors, people with disabilities) feels excluded. This can be accomplished through the use of examples, case studies and role models in the classroom that demonstrate that all groups can be successful in entrepreneurship.

To complement this, the ESF could be used to organise an annual, national event to promote women's entrepreneurship through a conference, role models and success stories and a media campaign. The goal would be to reach a large audience, much like the example in Ireland (see Box 9). Such an event would also help the many smaller initiatives deliver a common message about women's entrepreneurship, increasing its impact. It could also be an effective cross-promotional tool for the many training and mentoring activities, i.e. the support activities promote the national event and the national event would promote and showcase the support initiatives.

Finally, the new initiative *FRAUEN unternehmen*, is building a network of women entrepreneurs that can be deployed across the country to promote entrepreneurship to women. This is an effective approach that has been used in many countries, notably the "Ambassadors for Women's Entrepreneurship" in Sweden (see OECD/EC, 2014 for more information). Now that this programme is established, it could be leveraged to encourage women entrepreneurs (and potential entrepreneurs) to pursue growth-oriented businesses. The initiative could be expanded to include small, group mentoring sessions that are targeted at women entrepreneurs who are interested in pursuing growth. The Going for Growth model from Ireland could serve as inspiration (see Box 7). Alternatively, the *FRAUEN unternehmen* could increase its linkages with higher education institutions to promote women's entrepreneurship through on-campus business incubators and to women students in STEM fields.

REFERENCES

- Acs, Z., L. Szerb and E. Autio (2015), "The Global Entrepreneurship Index 2015", The Global Entrepreneurship and Development Institute.
- Allmendinger, J. and T. Hinz (2000), "Die Integration von Frauen in Organisationen im zeitlichen Verlauf. Zusammenfassung von Ergebnissen", Ludwig-Maximilian-Universität München.
- Bach, S., J. Greyer, P. Haan and K. Wrohlich (2011), "Reform des Ehegattensplittings: Nur eine reine Individualbesteuerung erhöht die Erwerbsanreize deutlich", DIW Wochenbericht No 41/2011, pp. 13-19.
- Beicht, U. and G. Walden (2014), "Berufswahl junger Frauen und Männer: Übergangschancen in betriebliche Ausbildung und erreichtes Berufsprestige", Forschungs- und Arbeitsergebnisse aus dem Bundesinstitut für Berufsbildung.
- bga: Bundesgründerinnenagentur (2015a), "Gründerinnen und Unternehmerinnen in Deutschland - Daten und Fakten IV", bga No 39, Berlin.

- bga: Bundesgründerinnenagentur (2015b), "Gründungen von Frauen im Wachstumsmarkt Kreativwirtschaft III", bga No 36, Berlin.
- Bijedić, T., F. Maaß, C. Schröder and A. Werner (2014), "Der Einfluss institutioneller Rahmenbedingungen auf die Gründungsneigung von Wissenschaftlern an deutschen Hochschulen", IfM-Materialien No 233, Bonn.
- Bourne, K. (2010), The paradox of gender equality: an entrepreneurial case study from Sweden. *International Journal of Gender and Entrepreneurship*, No. 2(1), pp. 10-26.
- Brink, S., S. Kriwoluzky, T. Bijedić, K. Ettl and F. Welter (2014), Gender, Innovation und Unternehmensentwicklung, in: Institut für Mittelstandsforchung Bonn (Ed.): IfM-Materialien No 228, Bonn.
- Carter, S., E. Shaw, F. Wilson and W. Lam (2006), "Gender, entrepreneurship, and business finance: investigating the relationship between banks and entrepreneurs in the UK", in Brush, C. et al. (Eds.), *Growth-oriented women entrepreneurs and their businesses*, pp. 373-392.
- Creditreform (2014), Mittelständisches Unternehmertum. Kennzeichen und Unterschiede, Goeppingen, available at: <http://www.creditreform-goeppingen.de/nc/news/news/news-list/details/news-detail/mittelstaendische-unternehmertum-in-deutschland-2014-kennzeichen-und-unterschiede.html> (accessed 6 August 2015).
- Dehoff-Zuch (2012), Deutsches Gründerinnen Forum e.V. (DGF): Gründerinnen und Mikrokredite – ein Ländervergleich Polen, Italien-Deutschland Studie im Rahmen des Programms CoPIE – Community of practice on inclusive entrepreneurship, Berlin, available at: <http://www.mikrofinanz.net/copie-projekt/transfer-projekte.html>, (accessed 9 July 2015).
- Ettl, K., and F. Welter (2015), Das 21. Jahrhundert ist weiblich – Unternehmerinnen in der deutschen Presse, IfM-Materialien, Bonn.
- European Commission (Directorate General for Enterprise) and Austrian Institute for Small Business Research (2002), *Good Practices in the Promotion of Female Entrepreneurship: Examples from Europe and other OECD Countries*, Vienna.
- European Microfinance Network (2015), "Crowdfunding and P2P lending: which opportunities for Microfinance?", EMN Magazine, May 2015, available at: http://www.european-microfinance.org/docs/emn_publications/emn_magazines/magazine_crowdfunding_7.pdf (accessed 11 November 2015).
- Eurostat (2015), Employment growth and activity branches – annual averages. Self-employed in % of total employment, available at: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do?switchdimensions=true> (accessed 9 July 2015).
- Grindel, S. and S. Lässig (2007), Unternehmer und Staat in europäischen Schulbüchern. Deutschland, England und Schweden im Vergleich, Braunschweig, available at: <http://www.gei.de/fileadmin/gei.de/pdf/presse/Unternehmer-Staat-Studie.pdf> (accessed 11 November 2015).

- Gustafsson, S. (1995), "Public Policies and Women's Labor Force Participation: A Comparison of Sweden, West Germany and the Netherlands", in P. Schultz (ed.), *Investment in Women's Human Capital*, Chicago und London, pp. 91-112.
- Harrisson, R. and C. Mason (2007), "Does Gender Matter? Women Business Angels and the Supply of Entrepreneurial Finance", *Entrepreneurship Theory and Practice*, No. 31/3, pp. 445-472.
- Holst, E. (2001), Institutionelle Determinanten der Erwerbsarbeit. Zur Notwendigkeit einer Gender-Perspektive in den Wirtschaftswissenschaften, DIW Working Paper Series, Berlin.
- IfM Statistic Mittelstand, Gesellschaft, Staat (2015), Dauer der Gründungsverfahren 2014, available at [http://www.ifm-bonn.org/studien/mittelstand-gesellschaft-und-staat/studie-detail/?tx_ifmstudies_detail\[study\]=15&cHash=929d1f7d18275f4a418a2bafb967d013](http://www.ifm-bonn.org/studien/mittelstand-gesellschaft-und-staat/studie-detail/?tx_ifmstudies_detail[study]=15&cHash=929d1f7d18275f4a418a2bafb967d013) (accessed 30 September 2015).
- IWD (2015), Es ist, wie es ist, in: Institut der deutschen Wirtschaft Köln, Ausgabe 31, Jahrgang 41, pp. 1-2.
- Kay, R., S. Schneck and O Suprinović (2014), Erwerbsbiografische Einflüsse auf das Gründungsverhalten von Frauen, in: Institut für Mittelstandsforschung Bonn (Hrsg.): IfM-Materialien No 230, Bonn.
- Kehlbeck, H. and U. Schneider (1999), Frauen als Zielgruppe von Existenzgründungen unter besonderer Berücksichtigung der Finanzierungsaspekte. Eine Untersuchung im Auftrag des Senatsamtes für die Gleichstellung, Hamburg.
- KfW (2014a), KfW-Gründungsmonitor 2014 – Gründungstätigkeit wiederbelebt – Impuls aus dem Nebenerwerb, available at: <https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Doku-mente-Gr%C3%BCndungsmonitor/KfWGr%C3%BCndungsmonitor-2014.pdf> (accessed 27 July 2015).
- KfW (2014b), Mittelstandspanel 2014, available at: https://www.google.de/?gws_rd=ssl#q=kfw+mittelstandspanel+2014 (accessed 27 July 2015).
- KfW (2011), Gründungsmonitor 2011 – Dynamisches Gründungsgeschehen im Konjunkturaufschwung, available at: <https://www.kfw.de/Download-Center/Konzernthemen/Research/PDFDokumente-Gr%C3%BCndungsmonitor/Gr%C3%BCndungsmonitor-2011-Lang.pdf> (accessed 27 July 2015).
- Klyver, K. (2011), "Gender differences in entrepreneurial networks: Adding an alter perspective", *Gender in Management: An International Journal*, Vol. 26 (5), pp. 332-350.
- Leicht, R. and F. Welter (2009), Selbständig integriert? Studie zum Gründungsverhalten von Frauen mit Zuwanderungsgeschichte in Nordrhein-Westfalen. Ministerium für Generationen, Familie, Frauen und Integration des Landes Nordrhein-Westfalen (ed.), No 1101, Düsseldorf.
- Lindquist, M., J. Sol, M. Van Praag (2012), "Why Do Entrepreneurial Parents Have Entrepreneurial Children?", IZA Discussion Paper No. 6740, July 2012, available at: <http://ftp.iza.org/dp6740.pdf> (accessed 31 January 2016).

- Marom, D. A. Robb and O. Sade (2015), "Gender Dynamics in Crowdfunding (Kickstarter): Evidence on Entrepreneurs, Investors, Deals and Taste Based Discrimination", available at SSRN: <http://dx.doi.org/10.2139/ssrn.2442954> (accessed 31 January 2016).
- Mason, C. and T. Botelho (2014), "The 2014 survey of business angel investing in the UK: a changing market place", University of Glasgow.
- Nanda, R. and J. Sørensen (2010), "Workplace Peers and Entrepreneurship", *Management Science*, No. 7, pp. 1116-1126.
- Neuffer, S. (2015), Unternehmerische Selbstständigkeit als Karriereoption für Frauen, *Statistisches Monatsheft*, Baden-Württemberg 3/2015, pp. 23-28.
- OECD (2015), "Case Study on Crowdfunding", Working Party on SMEs and Entrepreneurship, available at: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=CFE/SME\(2013\)7/ANN1/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=CFE/SME(2013)7/ANN1/FINAL&docLanguage=En) (accessed 11, November 2015).
- OECD/European Commission (2015), Policy brief on expanding networks for inclusive entrepreneurship, OECD publishing, Paris, available at: <http://dx.doi.org/10.1787/5jrtbz29mjh-en>
- OECD/European Commission (2014), *The Missing Entrepreneurs 2014: Policies for Inclusive Entrepreneurship in Europe*, OECD Publishing, Paris, available at: <http://dx.doi.org/10.1787/9789264213593-en>
- OECD/European Commission (2013), *The Missing Entrepreneurs: Policies for Inclusive Entrepreneurship in Europe*, OECD Publishing, Paris, available at: <http://dx.doi.org/10.1787/9789264188167-en>
- Parker, S.C. (2004), *The Economics of Self-Employment and Entrepreneurship*, Cambridge.
- Pfau-Effinger, B. and M. Smidt (2011), "Differences in women's employment patterns and family policies: Eastern and Western Germany", *Community, Work & Family*, No 14(2), pp. 217-232.
- Schulte, R. (2012), "Entrepreneurship-Education: Grundsätzliche Überlegungen aus fachwissenschaftlicher Sicht", in Retzmann, T. (ed.): *Entrepreneurship und Arbeitnehmerorientierung. Leitbilder und Konzepte für die ökonomische Bildung in der Schule*, Schwalbach/Ts., pp. 197-209.
- Sjöberg, O. (2004), "The Role of Family Policy Institutions in Explaining Gender-Role Attitudes: A Comparative Multilevel Analysis of Thirteen Industrialized Countries", *Journal of European Social Policy*, No 14(2), pp. 107-123.
- Statistisches Bundesamt (2014a), Mikrozensus 2013 – Bevölkerung und Erwerbstätigkeit. Stand und Entwicklung der Erwerbstätigkeit in Deutschland, available at: <https://www.destatis.de/DE/Publikationen/Thematisch/Arbeitsmarkt/Erwerbsttaetige/StadEntwicklungErwerbststaetigkeit2010411137004.pdf?blob=publicationFile> (accessed 24 July 2015).

Statistisches Bundesamt (2014b), Mikrozensus, Fachserie 1, Reihe 4.1.1, 2.4. Erwerbstätige nach Wirtschaftsunterbereichen und Stellung im Beruf und ältere Ausgaben des Mikrozensus.

Steinbeis-Europa-Zentrum (ed.) (2007), *Unterstützung von Gründerinnen – Gute Praktiken in Europa*, Stuttgart.

Strohmeyer, R., V. Tonoyan and R. Leicht (2006), “Part-time self-employment and the reconciliation of family and work: Do institutions matter? 19-country study (summary)”, *Frontiers of Entrepreneurship Research*, Vol. 26 (11), Article 5.

Stuart, T. E. and W. W. Ding (2006), “The Social Structural Determinants of Academic Entrepreneurship: an Analysis of University Scientists’ Participation in Commercial Ventures”, *American Journal of Sociology*, No. 1, pp. 97-144.

Terjesen, S. and A. Lloyd (2015), “The 2015 Female Entrepreneurship Index”, The Global Entrepreneurship and Development Institute.

Von Lang, T. (2003), Der Unternehmer. Arbeits- und organisationspsychologische Grundlagen, Berlin.

Welter, F. (2015), Die Stärke der Frauen, in: Süddeutsche Zeitung, 1 June 2015, p. 18.

Welter, F. (2006), “Women’s entrepreneurship in Germany: Progress in a still Traditional Environment”, in Brush, C. G., N. Carter, E. J. Gatewood, P. G. Greene and M. Hart (eds.), *Growth Oriented Women Entrepreneurs and Their Businesses: A Global Research Perspective*. Cheltenham, pp. 128-153.

Welter, F. (2004), Institutionelle Einflüsse auf Gründerinnen und Unternehmerinnen. In: Tchouvakhina, M. (Hrsg.): Chefinnensache, Heidelberg, pp. 33-69.

Welter, F., and L. Trettin (2006), “The spatial embeddedness of networks for women entrepreneurs”, in Fritsch, M. and J. Schmude (Eds.), *Entrepreneurship in the Region*, New York, pp. 35-59.

Western Economic Diversification Canada (2014), “Evaluation of the Women’s Enterprise Initiative, Alberta”, available at: <http://www.wd-deo.gc.ca/images/cont/18267a-eng.pdf> (accessed 16 August 2015).

Website references

Aktionsprogramm Zukunft Mittelstand, available at:

<http://www.bmwi.de/DE/Themen/Mittelstand/Mittelstandspolitik/politik-fuer-den-mittelstand,did=725530.html> and <http://www.bmwi.de/BMWi/Redaktion/PDF/XYZ/zukunft-mittelstand-gemeinsame-erklaerung,property=pdf,bereich=bmwi2012,sprache=de,rwb=true.pdf> (accessed 23 September 2015).

AWE: Alberta Women Entrepreneurs, available at: <http://www.awebusiness.com/> (accessed 11 August 2015).

Grow to Greatness™ Excelerator Programme, available at:

<http://www.awebusiness.com/programs/mentorship/excelerator-program-foundation-history/> (accessed 11 August 2015).

Berufsorientierung, available at: <http://www.berufsorientierungsprogramm.de/html/de/index.php> (accessed 30 September 2015).

Berufs- und Studienorientierung, available at: <http://www.berufsorientierung-nrw.de/start/> (accessed 30 September 2015).

bga: Bundesgründerinnenagentur, available at:

http://www.existenzgruenderinnen.de/DE/Home/home_node.html (accessed 11 August 2015).

Beratungseinrichtungen, available at:

http://www.existenzgruenderinnen.de/DE/Beratung/Beratungseinrichtungen/beratungeinrichtungen_node.html (accessed 11 August 2015).

eTraining, available at: http://www.existenzgruenderinnen.de/DE/Mediathek/eTraining-Gruenderinnen/eTraining-Gruenderinnen_node.html (accessed 11 August 2015).

Frauen Unternehmen, available at: http://www.existenzgruenderinnen.de/DE/Vernetzung/Frauen-unternehmen/frauen-unternehmen_node.html (accessed 11 August 2015).

Gründerinnengalerie, available at:

http://www.existenzgruenderinnen.de/DE/Mediathek/Gruenderinnen-Galerie/gruenderinnen-galerie_node.html (accessed 11 August 2015).

Gründerinnen-/ Unternehmerinnen-Barometer, available at:

http://www.existenzgruenderinnen.de/DE/bga-Service/weitere-Schwerpunkte/Barometer/Unternehmerinnen-Barometer_node.html (accessed 24 July 2015).

Regionalverantwortliche, available at: http://www.existenzgruenderinnen.de/DE/Vernetzung/Regionalverantwortliche/Regionalverantwortliche_node.html;jsessionid=3331D7BAFC43C4535C158AB7E2A422B3 (accessed 11 August 2015).

TWIN, available at: http://www.existenzgruenderinnen.de/DE/Vernetzung/Mentoring/mentoring_node.html (accessed 11 August 2015).

BMFSFJ. Bundesministerium für Familie, Senioren, Frauen und Jugend, available at:

<http://www.bmfsfj.de/BMFSFJ/Kinder-und-Jugend/kinderbetreuung.html> (accessed 28 August 2015).

Digital Gründerinnen, available at: <https://www.whatchado.com/de/channels/junge-digitale-wirtschaft> (accessed 23 September 2015).

ERP: Enterprise resource planning. Gründerkredit, available at:

https://www.kfw.de/inlandsfoerderung/Unternehmen/Gr%C3%BCnden-Erweitern/Finanzierungsangebote/ERP-Gr%C3%BCnderkredit-Universell-%28073_074_07_076%29/ (accessed 23 August 2015).

Startfonds, available at: <https://www.kfw.de/inlandsfoerderung/Unternehmen/Gr%C3%BCnden-Erweitern/Finanzierungsangebote/ERP-Startfonds-%28136%29/> (accessed 23 August 2015).

Startgeld, available at: <https://www.kfw.de/inlandsfoerderung/Privatpersonen/Gr%C3%BCnden-Erweitern/F%C3%B6rderprodukte/ERP-Gr%C3%BCnderkredit-Startgeld-%28067%29/> (accessed 23 August 2015).

EXIST: Existenzgründungen aus der Wissenschaft, available at:
<http://www.exist.de/DE/Programm/Ueber-Exist/inhalt.html> (accessed 23 August 2015).

Gründerstipendium, available at: <http://www.exist.de/DE/Programm/Exist-Gruenderstipendium/inhalt.html> (accessed 23 August 2015).

Frauen gründen, available at: <http://www.bmwi.de/BMWi/Redaktion/PDF/F/frauen-gruenden-gruenderinnen-und-unternehmerinnen-in-deutschland-staerken.property=pdf,bereich=bmwi2012,sprache=de,rwb=true.pdf> (accessed 23 September 2015).

Girls' Day, available at: <http://www.girls-day.de/> (accessed 30 September 2015).

Goldrausch, available at: <http://www.goldrausch-ev.de/wir-ueber-uns/> (accessed 16 August 2015).

HVB: HypoVereinsbank, available at: <https://www.hypovereinsbank.de> (accessed 23 August 2015).

Branchen, available at: <https://www.hypovereinsbank.de/portal?view=/de/unternehmer/branchen/heilberufe.jsp#> (accessed 23 August 2015).

Förderprogramme, available at: <http://foerderprogramm.hypovereinsbank.de/#2> (accessed 23 August 2015).

Frauenbeirat, available at: http://about.hypovereinsbank.de/export/shared/de/assets/functional/ueber-uns/downloads/hvb-frauenbeirat/idee_inspiration_initiative.pdf (accessed 23 September 2015).

Gruenderinnen Mentoring, available at:
<https://about.hypovereinsbank.de/de/frauenbeirat/gruenderinnen-mentoring/> (accessed 23 August 2015).

High-Tech-Strategie, available at: <http://www.hightech-strategie.de/de/Beteiligte-Ressorts-257.php> (accessed 30 September 2015).

JUNIOR, available at: <http://www.junior-programme.de/de/startseite/> (accessed 16 August 2015).

Kaete Ahlmann Stiftung, available at: <http://www.kaete-ahlmann-stiftung.de/97.html> (accessed 23 September 2015).

Kompetenzzentrum Technik-Diversity-Chancengleichheit, available at:
<http://www.kompetenzz.de/English-Information> (accessed 23 September 2015).

Kultur-Kreativ-Wirtschaft, available at: <http://www.kultur-kreativ-wirtschaft.de/KuK/Navigation/Finanzierung-Foerderung/mikrokredite,did=336430.html> (accessed 23 August 2015).

Mein Mikrokredit, available at: www.mein-mikrokredit.de (accessed 16 August 2015).

Mikrokreditfonds Deutschland, available at: <http://www.fuer-gruender.de/kapital/fremdkapital/fremdkapitalgeber/mikrokredit/mikrokreditfonds/> (accessed 23 August 2015).

NRW.Bank, available at: <http://www.nrwbank.de/de/index.html> (accessed 23 August 2015).

Gründungskredit, available at: http://www.nrwbank.de/de/foerderlotse-produkte/NRWBANK_Gruendungskredit/15195/nrwbankproduktdetail.html (accessed 23 August 2015).

Kreativkredit, available at: http://www.nrwbank.de/de/themen/kreativwirtschaft/0501_Kreativwirtschaft_NRW_Kreativkredit.html (accessed 23 August 2015).

Mikrokredit, available at: <http://www.nrwbank.de/de/foerderlotse-produkte/NRWEUMikrodarlehen/15262/produktdetail.html> (accessed 23 August 2015).

Seed.Fonds, available at: <http://www.nrwbank.de/de/foerderlotse-produkte/NRWBANKSeed-Fonds/15220/nrwbankproduktdetail.html> (accessed 23 August 2015).

Venture Center, available at:

http://www.nrwbank.de/de/themen/innovation/0536_Innovation_NRWB_Venture_Center.html (accessed 23 August 2015).

OECD Inclusive Entrepreneurship, available at: <http://www.oecd.org/employment/leed/inclusive-entrepreneurship.htm> (accessed 9 July 2015).

Perspektive Wiedereinstieg, available at: http://www.perspektive-wiedereinstieg.de/Navigation/DE/startseite_node.html (accessed 23 September 2015).

Unternehmergeist macht Schule, available at: http://www.unternehmergeist-macht-schule.de/DE/Initiativen/initiativen_node.html;jsessionid=72A7263168F83BA8CE668378F407C294 (accessed 16 August 2015).

Verband deutscher Unternehmerinnen, available at: <http://www.vdu.de/verband> (accessed 28 August 2015).

Women's Enterprise Initiative (Canada), available at: <http://www.wd-deo.gc.ca/eng/256.asp> (accessed 9 July 2015).

Women in Enterprise, available at: <http://wescotland.co.uk/> (accessed 28 August 2015).

WeiberWirtschaft eG, available at: <http://www.weiberwirtschaft.de/informieren/gruenderinnen-und-unternehmerinnenzentrum/gruenderinnenzentren-bundesweit/adressverzeichnis/> (accessed 13 August 2015).

ANNEX A. LIST OF WORKSHOP PARTICIPANTS

Name	Organisation
Dr. Sabine Hepperle	Ministry of Economy and Energy
Frau Tanja Wulf	Ministry of Economy and Energy
Frau Marion Lemgau	Ministry of Economy and Energy
Frau Cornelia Rindt	Ministry of Economy and Energy
Herr Stefan Drews	Ministry of Economy and Energy
Herr Markus Ordich	Ministry of Economy and Energy
Herr David Halabisky	OECD
Prof. Dr. Friederike Welter	Institut für Mittelstandsforschung Bonn
Dr. Teita Bijedic	Institut für Mittelstandsforschung Bonn
Prof. Dr. Martina Schraudner	Fraunhofer CERRI
Frau Andera Gadeib	Junge Digitale Wirtschaft des BMWi
Herr Björn Völkner	Bundesministerium für Familie, Senioren, Frauen und Jugend
Frau Sabine Christen	Bundesministerium für Familie, Senioren, Frauen und Jugend
Frau Alexandra Koch	RKW Kompetenzcentrum
Marion Hüchtermann	Geschäftsführerin IW JUNIOR
Herr Dr. Marc Evers	DIHK
Claudia Große-Leege	Verband deutscher Unternehmerinnen (VdU) e.V.