

# THE ROLE OF GENDER IN ENTREPRENEURIAL FINANCE

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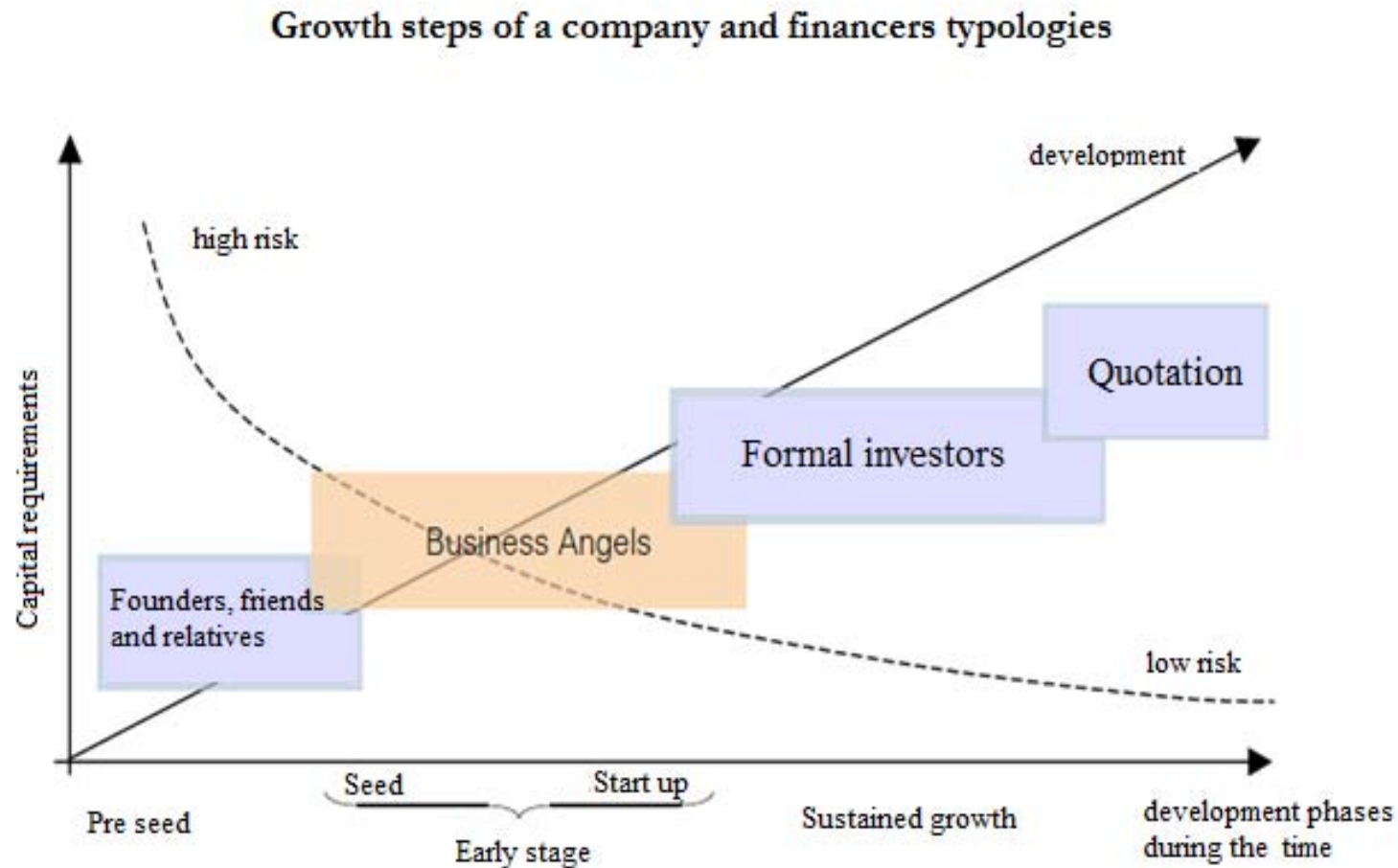
# AGENDA

- Setting the ground
  - Intermediated and disintermediated entrepreneurial finance
- The role of gender
  - Bank lending
  - Venture capital financing
  - Business angels financing
  - Crowdfunding

# SETTING THE GROUND: ENTREPRENEURIAL FINANCE

- What are the sources of finance for an entrepreneur willing to establish a new business?
- Capital is one of the key ingredients enabling small businesses to innovate, grow, and create jobs
- Four main sources:
  - Personal savings (e.g. founders, family and friends)
  - Bank lending
  - Business angels
  - Venture capital
  - Crowdfunding

# START-UP FINANCING CYCLE



# INTERMEDIATION AND DISINTERMEDIATION

- Disintermediated financing
  - an investor (i.e., the individual who is actually investing the money) is responsible for
    - selecting the companies
    - performing the due diligence
    - structuring the deal
    - supporting the company during the investment phase
    - managing the exit from the investment (if any)
- Fully intermediated financing: all steps are delegated to a specialized intermediary
- Clearly, intermediation can also be partial or distributed across different intermediaries

# GENDER AND ENTREPRENEURIAL FINANCE

- Less than 30% of business owners in the US are women (U.S. Census Bureau, 2010).
- Difficulty in gaining access to capital for women-led businesses and limited number of women as active investors:
  - Women make up less than 15% of angel investors and less than 10% of venture capitalist (Coleman and Robb, 2012).
  - In 1998 women-led businesses received only 2.4% of all equity investments and 4.1% of venture capital (Greene et al., 2001).
  - Only 17% of 235 American women business owners had secured external equity to finance their businesses (Carter et al., 2003). Similar findings have been reported in other countries (Industry Canada, 2005; Verheul and Thurik, 2001).

# GENDER AND ENTREPRENEURIAL FINANCE

- The ability of women-owned businesses to access financing has been considerably researched and debated over the past 15 years (Buttner and Rosen, 1992; Coleman, 2000; Fabowale et al., 1995; Verhuel and Thurik, 2001 among others)
- Empirical evidence on the link between gender, enterprise, and funding constraints offers conflicting evidence:
  - several studies “report discrimination . . . It seems to be related to structural factors rather than gender per se” (Ahl, 2004, p. 99).
  - difficulty to isolate exogenous variables which intrude into the association between gender disadvantage and funding (Carter et al., 2001)

# GENDER AND ENTREPRENEURIAL FINANCE

- Two questions are unanswered in unequivocal terms:
  - Is there a real shortage of capital for women entrepreneurs (the funding gap)?
  - To what extent are the constraints faced by women entrepreneurs due to the “general business environment, a lack of information, firm characteristics, gender-based discrimination or other factors?” (Koreen, 2000).



# GENDER AND ENTREPRENEURIAL FINANCE

- Why should women entrepreneurs be underrepresented as active investors and have more difficulties than men in accessing external financing?
- Three domain of explanations:
  - DISCRIMINATION
  - ABILITIES AND PREFERENCES
  - COMPETITION

# DISCRIMINATION

- Grounded in the liberal feminism tradition:
  - differential treatment of women and men with otherwise equal abilities (Fischer et al., 1993; Liou and Aldrich, 1995; Brush, 1997; Greer and Greene, 2003)
  - observed differences in business preferences or success are grounded in the unequal access to essential opportunities (e.g. education, employment opportunities, social networks)
- Evidence that structural issues (education, age and type of business) are relatively more important than gender issues (Coleman, 2000; Fabowale et al., 1995; Read, 1998).

# ABILITIES AND PREFERENCES

- Grounded in the social feminism tradition:
  - women and men are fundamentally different, yet with equally valid self-perceptions, motivations, and belief structures.
  - observed differences are the result of dissimilar experiences or socialization (Fischer et al., 1993; Acker, 1978; Smith, 1988)
  - men are socialized into entrepreneurship to a higher degree than women are (Scherer et al., 1990).
  - women's lower stock of resources (both human and financial capital), women's lower levels of meaningful business experience, family background and social roles, and women's different intentions in establishing a business (Goffee and Scase, 1983).

# COMPETITION

- Women may be less effective than men in competitive environments
- Gneezy et al. (2009) run a series of controlled experiments
  - they find that males perform better in mixed-gender groups with incentive systems that reward only the winner
- Emphasis on women's relationality and connectedness (Gilligan, 1982)

# PERSONAL SAVINGS

# PERSONAL SAVINGS AND GENDER

- Compared to men, women have greater limitations upon access to personal savings (Carter and Kolvereid, 1997; Boden and Nucci, 2000)
  - part-time/lower remunerated working
- A major source of disadvantage to women in self-employment is undercapitalization (Carter and Rosa, 1998)
- Men use three times more start-up capital than women (Carter, 2000)
- However, female owners show a preference for internal versus external equity when compared with male owners (Chaganti et al., 1995; Bennet and Dann, 2000; Haynes and Haynes, 1999)

# INTERMEDIATED FINANCE

# VENTURE CAPITAL FINANCING



# INDEPENDENT VC

- Venture capital (VC) is the most common type of fully intermediated finance for innovative startups (Sahlman, 1990)
- The most common type of VC is the independent VC, which is structured in funds characterized by:
  - Limited Partners (LPs): ultimate investors
  - General Partners (GPs): responsible for all investment activities and paid a management + incentive fee (carried interest)
- VC investment is:
  - staged: money is invested gradually and only if results come
  - temporary and exit is typically after 4-6 years

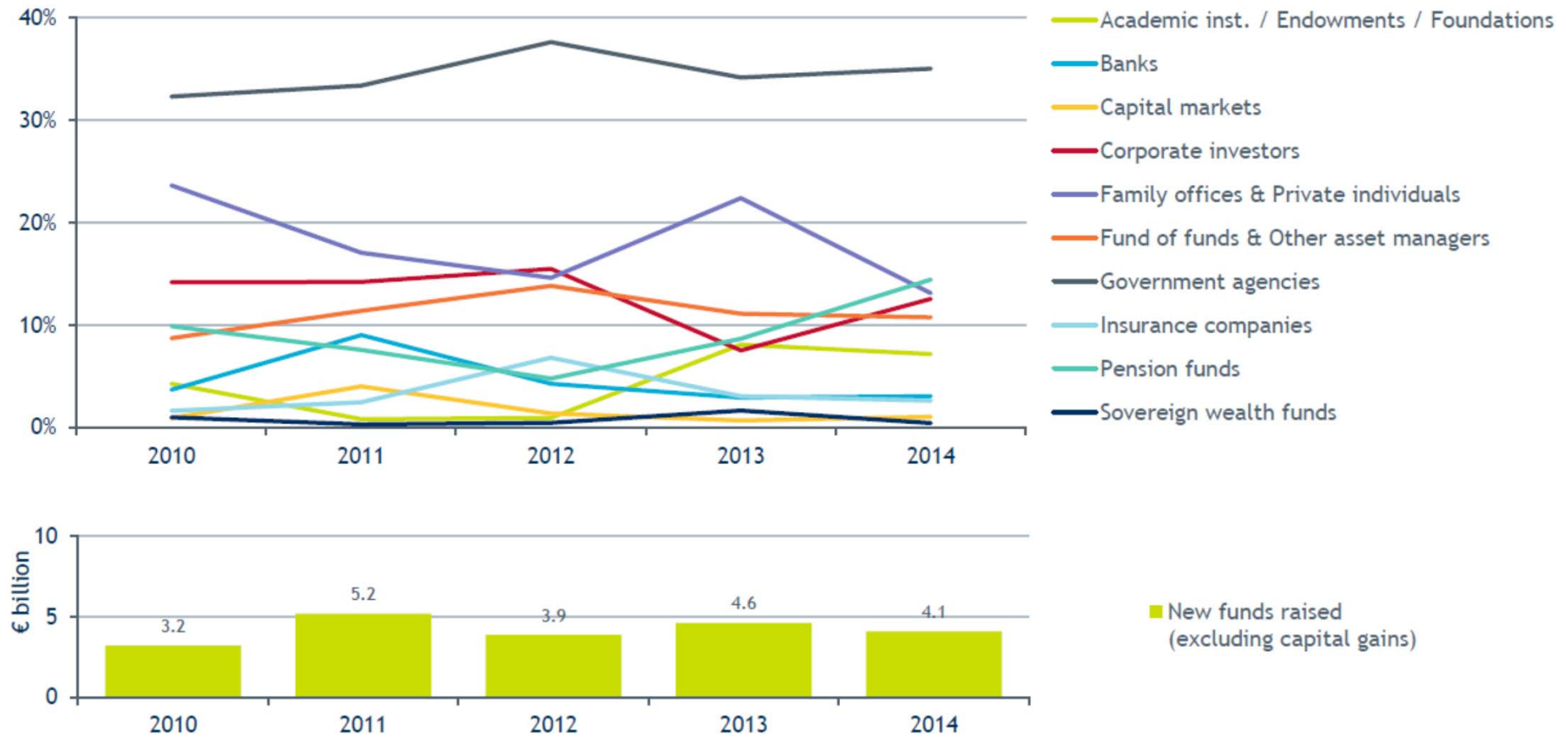
# CAPTIVE VC

- A captive VC resembles an independent VC in terms of investment practices and general structure but...
  - The distinction between the provider of capital and the fund is not complete
- Captive VC funds are set up by:
  - Banks → Bank-affiliated VC (BVC)
  - Non-financial companies → corporate VC (CVC)
  - Government-related entities → government VC (GVC)
- The fund provider has an influence on the investment decisions of the captive fund

# SCREENING VS VALUE ADDING

- VC uses its unique abilities to generate profits
- VC typically requires 15-30% return with a 20-75% ownership stake (Bygrave, 1992)
- VC abilities:
  - Screening (i.e., picking winners)
  - value-enhancing skills (i.e., building winners)
- Mechanisms VCs use to manage the relationship with the entrepreneur (e.g. stage financing, board seats..)

# SOURCE OF VC AND PE FUNDS IN EUROPE



Source: EVCA / PEREP\_Analytics

# VENTURE CAPITAL AND GENDER

- Only 2% of the \$33 billion invested by VCs in US between 1991 and 1996 was available to self-employed women (Stout, 1997)
- Very few women involved in making investments as VC fund managers
- Diana Project (launched in 1999 to study women's entrepreneurship in the US):
  - women are impeded by myths associated with their gender regarding their inability to generate businesses of interest to VCs (Brush et al., 2001)
  - women are less likely than men to own high-technology businesses (Greene et al., 2001)

# VENTURE CAPITAL AND GENDER

- What are the barriers to women when accessing VC funds (Greene et al., 2000)?
  - Structural constraints (e.g. gender homophily in social networks)
  - Human capital constraints (e.g. professional management histories, prior visibility in senior positions)
  - Strategic choice (e.g. women value most the retention of control above growth, risk aversion)

# VENTURE CAPITAL AND GENDER

- Few studies integrate gender and negotiation processes in seeking private equity financing (Amatucci et al., 2008, 2011)
- Organizational behavior and conflict management disciplines suggest a “gender divide” on negotiation styles:
  - Men view negotiation as a zero sum game, while women as a more collaborative, win-win undertaking (Babcock and Laschever 2003, 2008)
- Women differ from men in actual business practices: more values-based, collaborative, participative management approach.

# BANK LENDING



# BANK LENDING

- Small firms face significant financial constraints (Berger and Udell, 1995; Petersen and Rajan, 1994)
- Banks are a major source of external capital for small firms
- 48 % of small businesses used some form of bank credit (National Foundation of Women Business Owners, 1996)

# BANK LENDING AND GENDER

- Women-led business access to debt capital has been inadequate when compared to men (Buttner and Rosen, 1992; Orser and Foster, 1994; Coleman, 2002).
- There is no discrimination in terms of approval/turndown rates but women are charged a higher interest rate on their loans or have greater collateral requirements compared to men (Riding and Swift, 1990; Fabowale et al., 1995; Coleman, 2000, 2004).
- However, few women apply for debt capital (Cavalluzzo et al., 2002; Fielden et al., 2003; Orser and Connell, 2005)

# BANK LENDING AND GENDER

- Three different explanations to discuss why women entrepreneurs may have greater difficulty obtaining debt capital than men:
  - adverse discrimination in the lending process (Brophy 1989; Brush 1992; Neider 1987; Riding and Swift 1990; Scherr et al., 1993)
  - women are more risk averse than men and thus less likely to take on debt (Brown and Segal 1989; Olsen and Currie, 1992; Scherr et al., 1993)
  - women-owned firms tend to be smaller and more heavily concentrated in service lines of business (Chaganti 1986; Kallenberg and Leicht, 1991)

# DISINTERMEDIATED FINANCE

# BUSINESS ANGELS

# BUSINESS ANGELS

- High net worth individuals who invest directly in startups (€25,000 to €500,000) → no intermediation
- Typically they have industry expertise and invest in a professional manner
- Often invest alongside VC seed funds and are organized into groups to reduce deal-specific risk, transaction and search costs (Sohl et al., 2000)
- Main difference with VC and bank intermediated investment:
  - Use of own experience to:
    - evaluate the project
    - support the company
  - Direct involvement in the company
  - No pressure to exit after pre-specified period

# ANGEL ACTIVITY IN EUROPE

**7,5 b€**  
 European Early  
 Stage Investment

**5,5b€**  
 Business Angels

**2b€**  
 Early Stage VCs

**80 m€**  
 Equity  
 Crowdfunding

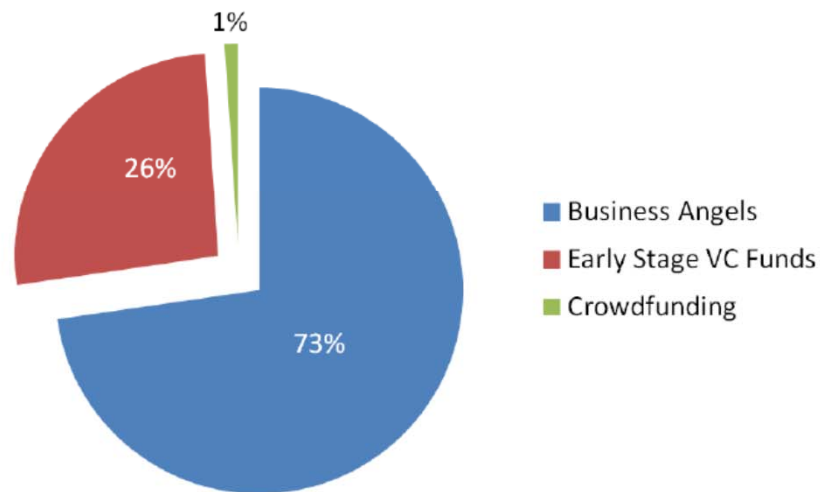
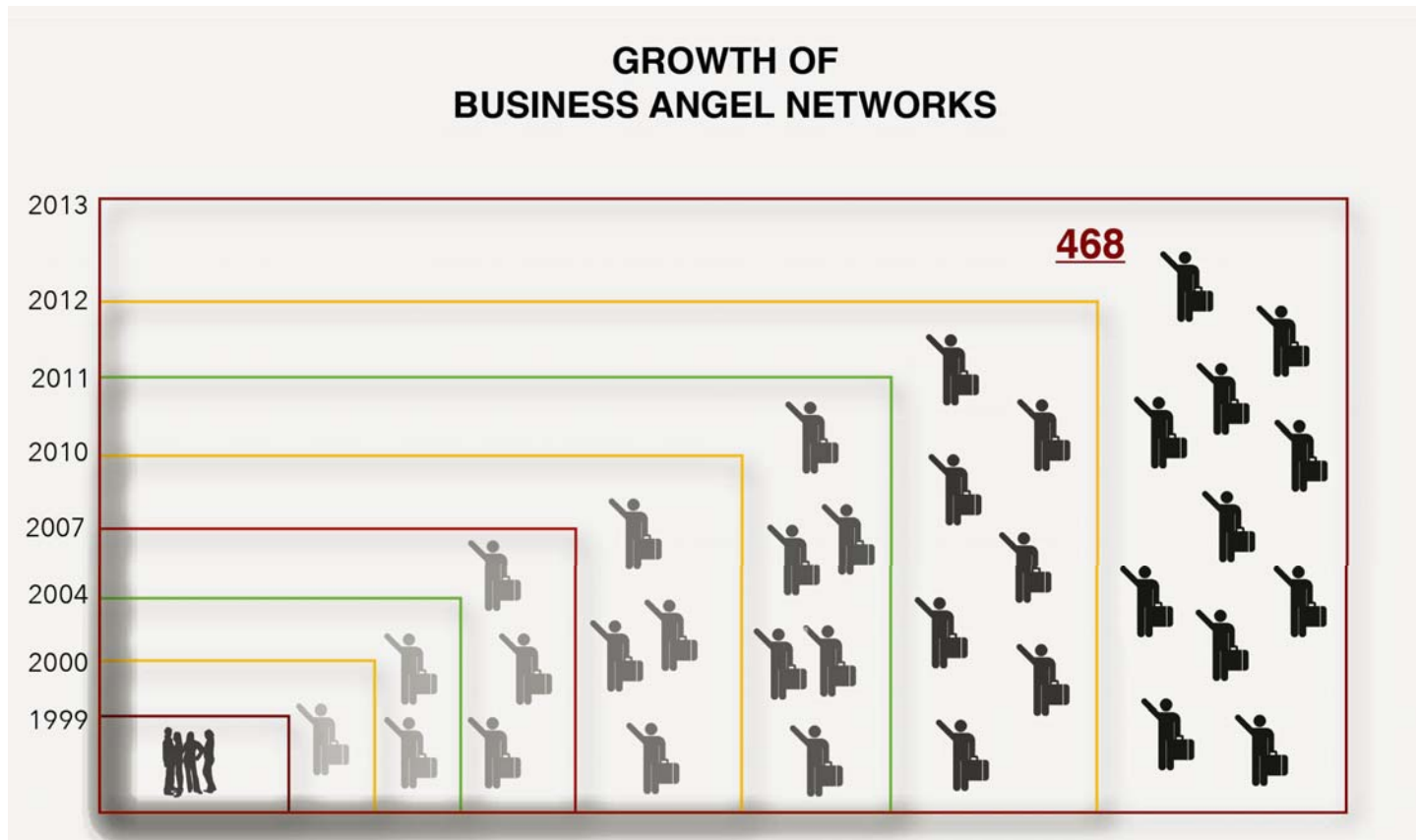


Fig. 1 - The three main areas of early stage investment in Europe. Figures in M€.

Source: EBAN Statistics (2014)

# ANGEL NETWORKS IN EUROPE



Source: EBAN Statistics (2014)



# WOMEN BUSINESS ANGELS

## Proportion of Women Business Angels: International Comparisons

% of women business angels in sample	Country	Source
0	Australia	Hindle and Wenban (1999)
0	Japan	Tashiro (1999)
0–1	Denmark	Vækstfonden (2002); Neergaard, Nielsen, and Kjeldsen (2006)
1	U.K.	Mason and Harrison (1994)
2	Canada	Riding, Dal Cin, Duxbury, Haines, and Safrata (1993)
2	United States—East Coast	Haar, Starr, and MacMillan (1988)
3	Norway	Reitan and Sørheim (2000)
4	United States	Gaston (1989)
5	Finland	Lumme et al. (1998)
5	Germany	Stedler and Peters (2003)
5	U.K.	InvestorPulse (2003)
5	New Zealand	Infometrics Ltd (2004)
6–10	United States	Becker-Blease and Sohl (2005)
8	Scotland	Paul, Whittam, and Johnston (2003)
10	Singapore	Hindle and Lee (2002)

Source: Harrison and Mason (2007)

# WOMEN BUSINESS ANGELS

- The angel market is predominantly comprised of male investors (Mason and Harrison, 1994; 2005)
  - women are less likely to have prior entrepreneurial or/and managerial experience and to participate in networks with high net worth individuals (Verheul and Thurik, 2001)
- Increase in the number of women angel groups in the USA in the last few years (e.g. 37Angels, Broadway Angels)
- Little research on women's access to angel financing (Amatucci and Sohl, 2004; Becker-Blease and Sohl, 2005)

# WOMEN BUSINESS ANGELS

- Amatuucci and Sohl (2004):
  - many women entrepreneurs who succeeded in obtaining business angel investment underestimated their venture's financial needs and missed some "hidden costs" of the financing process.
  - investor assumptions or stereotyping regarding women owners' management potential, despite their extensive business backgrounds
- Becker-Blease and Sohl (2007):
  - women seek angel financing at rates substantially lower than that of men, but have an equal probability of receiving investment
  - women are more likely to seek, and to a lesser extent receive, financing from women angels

# CROWDFUNDING

- Phenomenon exists ever since (the basement of the Statue of Liberty was crowdfunded), but that has gained enormous popularity thanks to specialized internet platforms
- General idea behind crowdfunding is: get small amount of money from many people in order to realize an idea
- Behind this general concept lie many different “flavors” of crowdfunding
- Generally speaking, crowdfunding tends to:
  - Involve little money: between \$10k and \$100k
  - Be about something more than finance (somewhere between marketing and finance)

# TYPES OF CROWDFUNDING

- Different types of crowdfunding may be identified based on what “investors” get in return for their money (Bradford, 2011):
  - Donation based
  - Reward based
    - Tangible or intangible reward, but without interest or part of the earnings of the business
  - Equity based
    - investors are offered a share of the profits or an equity stake in the business
- crowdfunding has the potential to “democratize” the entrepreneurship and capital markets (means for both women entrepreneurs and women investors to participate more fully)

# CROWDFUNDING AND GENDER

- Does crowdfunding reduce the barriers of female entrepreneurs to raise pre-seed capital?
- Marom et al. (2015):
  - women make up about 35% of the project leaders and 44% of the investors on the Kickstarter platform
  - men seek significantly higher levels of capital than women for their projects, and also raise more funds than women
  - women enjoy higher rates of success in funding their projects
  - only about 23% of projects that men invested in had female project leads. Conversely, more than 40% of projects that women invested in had female project leads.
- Greenberg and Mollick (2014):
  - women are more likely to succeed at a crowdfunding campaign and this effect primarily holds for female founders proposing technological projects.
  - small proportion of female backers disproportionately support women-led projects in areas where women are historically underrepresented

# CONCLUSIONS

- Our knowledge of the link between finance, entrepreneurship and gender is at the same time vast and narrow
  - It's vast because it draws on a well consolidated theoretical background
  - It narrow because the literature examining gender issues is still limited and extremely concentrated on few topics
- This means that there is still room for original and interesting work
- I conclude with a general recipe for a successful paper

# MY RECIPE FOR A SUCCESSFUL PAPER

- In order to brew a successful paper
- First recommendation: parsimony
  - 2, 3 new elements are enough
  - 4+ elements are an overkill
- Second recommendation: get the right mix (new and consolidated aspects)
  - there's a very high chance that some aspects of your research question have already been done
  - If not: maybe nobody cares?
  - If not: there's a very high chance this is not feasible



THANK YOU FOR YOUR  
ATTENTION