LEGAL, SOCIAL AND PUBLIC POLICY INTERVENTIONS FOR DIVERSITY + INCLUSION IN TECH INVESTING

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THE FUTURE OF JOBS IS RADICALLY DIFFERENT - WOMEN CONTINUE TO BE AT A GREATER RISK FOR JOB LOSS

Women hold nearly 60% of jobs facing very high risk of computerization

WHILE THE TECHNOLOGY INDUSTRY WILL CONTINUE TO SEE RELATIVELY HIGH GROWTH, WOMEN ARE LESS ADVANTAGED IN THE TECHNOLOGY INDUSTRY

Despite the high growth and future potential of STEM careers...
- Women are projected to gain ONLY 1 STEM job for every twenty (20) lost jobs.
- In comparison, men stand to gain 1 STEM job for every four (4) lost jobs.

<table>
<thead>
<tr>
<th>Technology job families</th>
<th>Expected growth, 2015-2020</th>
<th>Current share of female workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and Mathematical</td>
<td>1.74%</td>
<td>20%</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>2.14%</td>
<td>44%</td>
</tr>
<tr>
<td>Installation and Maintenance</td>
<td>-1.19%</td>
<td>9%</td>
</tr>
<tr>
<td>Installation and Maintenance</td>
<td>4.12%</td>
<td>7%</td>
</tr>
</tbody>
</table>

WOMEN CONTINUE TO BE UNDERREPRESENTED AT ALL LEVELS OF THE CORPORATE PIPELINE

Women in Technology\(^1\) statistics are worse than the overall benchmark

<table>
<thead>
<tr>
<th>Technology pipeline</th>
<th>Entry level</th>
<th>Manager</th>
<th>Director / Sr manager</th>
<th>VP</th>
<th>SVP</th>
<th>C-suite</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>64%</td>
<td>69%</td>
<td>72%</td>
<td>76%</td>
<td>83%</td>
<td>81%</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>36%</td>
<td>31%</td>
<td>28%</td>
<td>24%</td>
<td>17%</td>
<td>19%</td>
</tr>
</tbody>
</table>

**Benchmark**

| % of women in pipeline (all industries) | 46% | 37% | 33% | 29% | 24% | 19% |

1 Hardware, software, and IT services

QUIT RATES OF WOMEN IN TECHNOLOGY ARE NEAR 50% - WOMEN WHO QUIT HAVE NO OPTIONS IN THE ENTREPRENEURIAL ECOSYSTEM EITHER

RETENTION RATES FOR WOMEN IN TECH (CORPORATE)

- Quit
- Stay

50% Quit
50% Stay

TECHNOLOGY AS A% VC INVESTMENT

- Technology
- Non-Technology

23% Technology
77% Non-Technology

% OF WOMEN-ENTREPRENEURS FUNDED BY VC

- Women Not Funded
- Women Funded by VC

2% Women Not Funded
98% Women Funded by VC

BIG DISPROPORTIONALITY IN GENDER DIVERSITY & PARTICIPATION IN PRIVATE CAPITAL ECOSYSTEM

CEOS WITH VC FUNDING

- Men: 3%
- Women: 97%

More than 97% of venture-funded businesses have male CEOs

Only 6% of VC investment professionals are women, a decline from 10% in 1999

90% of portfolio investments have 0% women in leadership

LEADERSHIP COMPOSITION

- Men Only: 10%
- Women + Men: 90%

SEED FUNDING

- Men: 67%
- Women: 33%

WOMEN IN VC

- Men: 10%
- Women: 6%

90% of portfolio investments have 0% women in leadership

Women with seed investment have stagnated around 4% of total applications for a decade; despite a dramatic 6x increase in women seed stage investors

Concentration: 77% of VC/Entrepreneurial investment is in Technology

WOMEN ENTREPRENEURS HAVE LESS LIKELIHOOD OF GETTING FUNDED

Comparing How Male and Female Entrepreneurs Are Described by Venture Capitalists

These gendered personas are illustrated with quotes from Swedish government VCs who were observed discussing a total of 125 applications for funding between 2009 and 2010.

The average **MALE** entrepreneur is described with attributes such as:

- “Young and promising”
- “Arrogant, but very impressive competence”
- “Aggressive, but a really good entrepreneur”
- “Experienced and knowledgeable”
- “Very competent innovator and already has money to play with”
- “Cautious, sensible, and level-headed”
- “Extremely capable and very driven”
- “Educated engineer at a prestigious university and has run businesses before”

The average **FEMALE** entrepreneur is described with attributes such as:

- “Young, but inexperienced”
- “Lacks network contacts and in need of help to develop her business concept”
- “Enthusiastic, but weak”
- “Experienced, but worried”
- “Good-looking and careless with money”
- “Too cautious and does not dare”
- “Lacks ability for venturing and growth”
- “Visionary, but with no knowledge of the market”

* $p = .024$

- Research shows that on a scale 1-7, where 1 is very unlikely
  - Women rank just over 4
  - Men rank at over 5
- Women are also more judged by their appearance

Source: Brooks, Huang, Kearney, Murray, “Investors prefer entrepreneurial ventures pitched by attractive men”, *PNAs Early Edition*, 2014,
EVEN THE REGULATORY FRAMEWORK HAS LIMITED PROTECTIONS TODAY

• Today sexual harassment regulation in US (50 states) and 180 Global Nations do NOT cover venture capitalists and other private investors.

• 2017 California proposal to modify Unruh Civil Rights Act, to clarify that it covers sexual harassment in relationships between entrepreneurs and potential investors.

• Current law specifies doctor-patient and attorney-client relationships, but does not entrepreneurs and potential investors.
THERE IS NO SHORTAGE OF WOMEN AVAILABLE TO INVEST IN AND THEY DELIVER COMPELLING BUSINESS PERFORMANCE

NEW BUSINESS CREATION

Women form more than half of new businesses and are nearly 2/3rds of entrepreneurial owners.

Capital Efficiency

High Growth Biz

Women entrepreneurs have 2x the capital efficiency with more high growth potential

GENDER DIVERSITY IS GOOD FOR BUSINESS: MORE DIVERSE TEAMS ARE MORE ENGAGED, AMBITIOUS AND RESILIENT

- +53% return on equity
  53% increase in return on equity in Fortune 500 companies with at least 3 female directors
  - Catalyst

- +19% more innovation revenue
  Companies with above-average diversity on their leadership teams are 19% more innovative
  - BCG

- +6% net profit margin
  6% added to Net Profit Margin if a company has >30% of its leadership roles filled by women
  - Peterson Institute
# METOO HIGHLIGHTS THE PROBLEM IN CURRENT SOCIAL NORMS

**Performance (TVPI) v. PB Index**

**TVPI v. Sexual Harassment**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Predatory Score</th>
<th>Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>90th Percentile</td>
<td>0.80</td>
<td>1.17</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>0.20</td>
<td>1.17</td>
</tr>
<tr>
<td>Median</td>
<td>0.00</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Regression coefficient: -0.373
Intercept: 1.077
R-square: 0.0745
P-value: 0.0148
Lower 95%: -1.3807
Upper 95%: 0.1538
Number of observations: 79

**Performance vs. Predatory Behavior Index (PBI)**

<table>
<thead>
<tr>
<th></th>
<th>TVPI vs. PBI</th>
<th>DVPI vs. PBI</th>
<th>IRR vs. PBI (annualized)</th>
<th>TVPI vs. Sexual Harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>-0.31</td>
<td>-0.26</td>
<td>-0.029</td>
<td>-0.76</td>
</tr>
<tr>
<td>Performance Decline due to PB</td>
<td>-47%</td>
<td>-34%</td>
<td>-22%</td>
<td>-47%</td>
</tr>
</tbody>
</table>

Despite the results, 89% of LP’s do not diligence predatory behavior prior to investment

Predatory Behavior Index (PBI): A composite of sexual harassment, discrimination, violence, inappropriate relationships, assault & intimidation

**Source:** Smith, Auerswald & Swamy, *Relating Sexually Predatory, Discriminatory Behavior to Private Capital Performance*, Working Paper, 2018
IN FACT EVEN COUNTRIES DO BETTER WHEN FEMALE PARTICIPATION INCREASES

V-Dem Data: Female Legislators vs. Equity Returns

Source: Axelrod & Leitner, Correlation of Democracy Indicators and Markets Returns, 2016
NOW TO ACTION
DIFFERENT TYPES OF INTERVENTIONS HAVE DIFFERENT IMPACTS

<table>
<thead>
<tr>
<th>Type I: Protective covenants and governance clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory &amp; policy actions that are critical in providing much needed boundary conditions</td>
</tr>
<tr>
<td>Dis-incentivizing</td>
</tr>
<tr>
<td>Boundary condition</td>
</tr>
<tr>
<td>Correct bad ways</td>
</tr>
<tr>
<td>Doesn’t create pro-active impetus to transform culture</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Type II: Programmatic incentivizing actions</th>
</tr>
</thead>
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<tr>
<td>Concerted actions to counterbalance existing bias (special programs, structures, incentives)</td>
</tr>
<tr>
<td>Creates special incentives in a small group to behave in good ways</td>
</tr>
<tr>
<td>Doesn’t create broad-based incentives for everyone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type III: Cultural transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions taken to change the existing social norms and culture</td>
</tr>
<tr>
<td>Creates long-term transformations of cultures</td>
</tr>
<tr>
<td>Get ignored in a tactical, short term work</td>
</tr>
</tbody>
</table>

1. Set the boundaries
2. Encourage good behavior
3. Enable values
BOTH CARROTS AND STICKS ARE NECESSARY IN MANAGING PUBLIC GOOD

Over time rewards lose their effectiveness in governance – punishments just have greater effects on contribution.

Source: Miltenburg, Buskens, Barrera, Raub, “Implementing punishment and reward in the public goods game: the effect of individual and collective decision rules”, 2006
TYPE I: PROTECTIVE COVENANTS AND GOVERNANCE CLAUSES

1. Investment diligence criteria
2. Impact requirements
3. Side-bar letters
4. Investment representations
5. Remedies
6. Punitive claw-backs
7. Anti-retaliation regulation
8. Transparency requirements

Tactical v. Principled Question:
What should investors do if a firm refuses to take money from a investors asking for value-based covenants?
TYPE II: PROGRAMMATIC INCENTIVIZING ACTIONS

1. Selection criteria
2. Special incentives
3. Set aside pools of capital
4. Impact bonus
5. Recognition & prizes
6. Nomination committees
7. Diversity in decision-making roles
8. Add contingent liabilities for risk
9. Applicant requirements

Tactical v. Principled Question:
Is a $10 Mil (1/10 avg) set-aside for women really going to rectify capital industry where the average fund is $1000 Mil and women only participate in 2% of $4.5 Trillion in assets?
TYPE III: SOCIAL & CULTURAL TRANSFORMATION

1. Bias & bystander training.
2. Tone at the top
4. Company dialogs
5. Encourage governments to support diverse entrepreneurship.
6. Better prepare women on how to seek funding and how to negotiate.
7. Education, education, education.
8. Build ecosystems to support diverse entrepreneurs.
9. Implement govt policies that will have an enabling effect on women-owned businesses.
10. Address social & cultural “norms”

**Tactical v. Principled Question:**
How should a government representative address sexual harassment legislation that covers ”private investors” like VC’s when the largest lobbying contributions come from these firms?
CONCLUSION: ALL STAKEHOLDERS HAVE A PART TO PLAY TO CLOSE THE GAP

"When a man marries his maid, the GDP falls”
– Paul Samuelson’s comment on Kuznet’s GDP work, 1932

• We as a society define value and reward it
• That’s how social norms get set.
• But we are only as good as this calculus we create.
• So we must continually re-examine and evolve it.

PLEASE SEND YOUR INTERVENTION EXPERIENCES TO US AT EQUALS.
SEND TO GMSWAMY@BERKELEY.EDU