

Knowledge Teams, Careers, and Gender

Çağatay Bircan (EBRD)
Guido Friebel (Goethe University, CEPR, IZA)
Tristan Stahl (Goethe University)

NBER Organizational Economics Meeting
12 November 2021

Motivation

- Women face a well documented pay gap and different careers [Details](#)
- Promotions are the main driver of the high-skill gender wage gap [Details](#)
- Teamwork is crucial for careers in knowledge work [Details](#)
- Do women receive credit for team performance ([Sarsons, 2017](#); [Sarsons et al., 2021](#))?
- Which roles do women get assigned in teams?
- How do these roles and team performance translate into promotions and careers?

Research question in a picture: the ECB board in 2019



A deep look into teams and long-term gendered careers

- 1 Are there gender promotion gaps?
- 2 If yes, at which career steps are gaps opening (or closing)?
- 3 How important is a child penalty?
- 4 How does team performance translate into promotion (gaps)?
- 5 Do women get differential rewards for team performance?
- 6 How important are assignments to team leadership roles for promotions?
- 7 What determines assignment to team roles?
- 8 Do men and women enter, move through or leave the organization differently?

A deep look into teams and long-term gendered careers II

- ① There is a gender gap in promotions
- ② Primarily at the junior level
 - This gap is **30pp** vs. baseline promotion rate of **1.03%**
- ③ No effect of paid parental leave but negative effect of unpaid leave
- ④ Performance of the team is important, however, only if employee is visible
- ⑤ Some evidence for differential performance evaluation
- ⑥ Women do not have equal opportunities for **visibility** in assignments
 - They are team leaders less often than men are
- ⑦ Past performance and boss effects matter for the assignment to roles
- ⑧ Women have different careers than men do
 - Women with good track records move internally, while men exit at higher rates
 - Women enter more frequently at lower levels

A large financial institution

- The organization:
 - main business is to finance private companies + PPP
 - 35+ countries, many sectors
 - seeks profitability & social impact subject to risk and strategy
- Personnel records linked with project tracking database
 - full monthly panel 2000-2018
 - 3,000+ employees across 10 job bands
 - Over 10,000 projects



Knowledge
workers



Project data,
finished and
unfinished
projects,
assignment and
output



Hard
performance
data



Hard career data



Long-term,
allowing to follow
individual
careers over the
lifecycle in the
organization



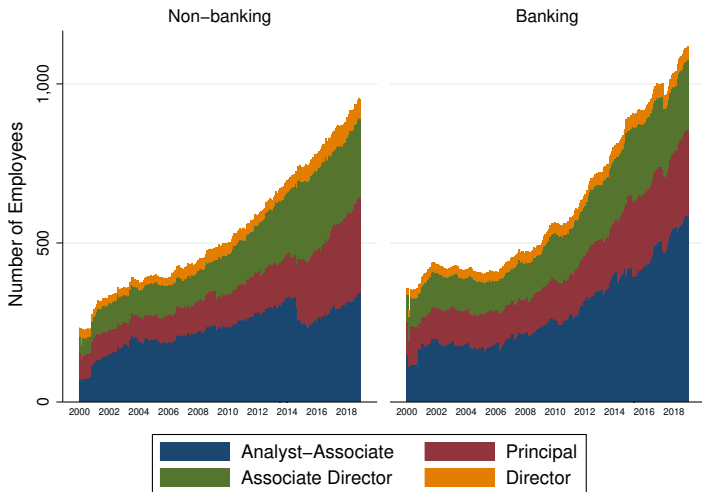
Identify micro
mechanisms

Strategy: finance profitable and impactful projects



- Main business is to finance private companies + PPP
- Seeks profitability & social impact subject to risk and strategy
- Different sectors (finance, industry, agriculture, tourism, etc.)
- 35+ countries
- Project evaluation involves assessment of profitability, development impact, environment, inclusion, financial risk

We focus on 1,400+ bankers across job bands 5-8 (generating P&L)



Promotion rates differ clearly in job band 5

	All	Men	Women
Monthly observations	95,112	53,903	41,209
Workers	1,488	872	617
Promoted	556	324	232
Job band 5 (Analyst/Associate)			
Monthly observations	41,101	20,912	20,189
Workers	1,060	574	486
Promoted	419	239	180
Job band 6 (Principal)			
Monthly observations	24,650	14,371	10,279
Workers	671	202	268
Promoted	247	138	109
Job band 7 (Associate Director)			
Monthly observations	23,658	14,485	9,173
Workers	416	267	149
Promoted	55	33	22
Job band 8 (Director)			
Monthly observations	5,703	4,135	1,568
Workers	99	67	32

	All	Men	Women
Within sample	0.0356	0.0368	0.0342
Monthly hazard	0.0078	0.0078	0.0077
Job band 5 (Analyst/Associate)			
Within sample	0.0441	0.0499	0.0383
Monthly hazard	0.0103	0.0114	0.0091
Job band 6 (Principal)			
Within sample	0.0475	0.0461	0.0495
Monthly hazard	0.0101	0.0097	0.0107
Job band 7 (Associate Director)			
Within sample	0.0099	0.0099	0.0098
Monthly hazard	0.0024	0.0023	0.0024

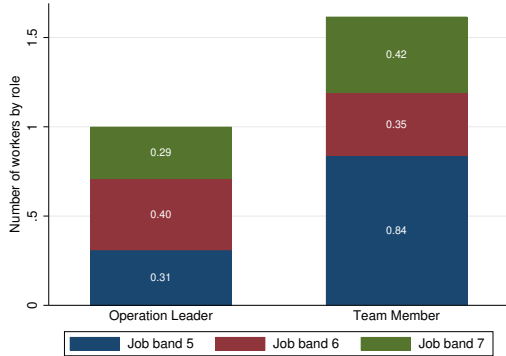
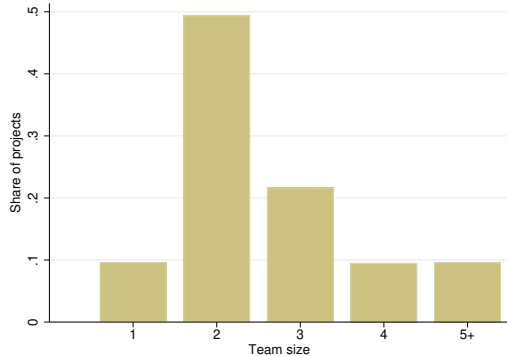
Background: roles in teams and their significance for career achievements

- **Teamwork** in screening of projects and preparing deals
 - One Operation Leader (OL) + 1-3 Team Members (TMs)
 - Track assignment, role in team, peers in team, and outcome of projects
- Structured promotion practices (based on informal interviews)
 - Sign projects / premium for “prestigious” projects
 - Be visible / present at investment committee / build network
 - Important to be an OL

Assignments over Career

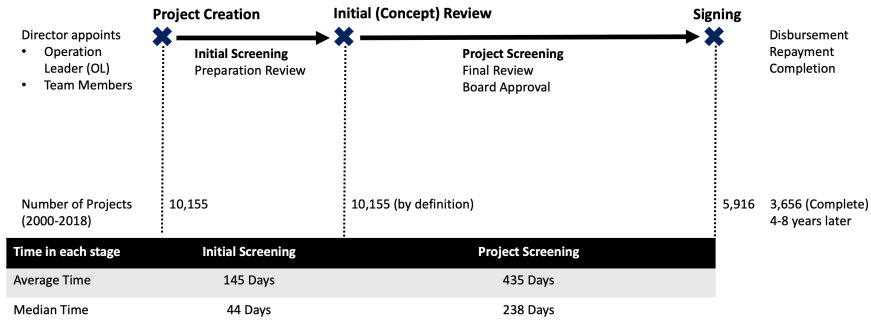
Signed Projects over Career

Bankers work on multiple projects in teams either as OL or TM

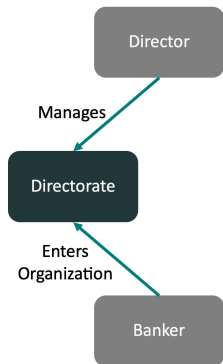


Two-Person Teams

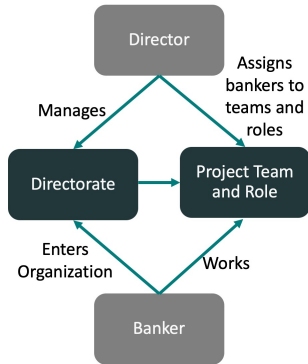
Each project is complex, long-lasting, and goes through multiple reviews



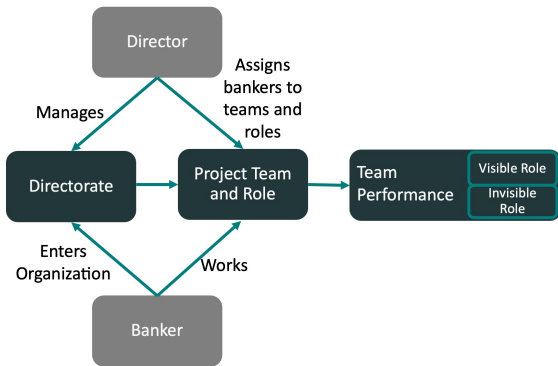
Promotion gap can arise / accumulate at multiple levels



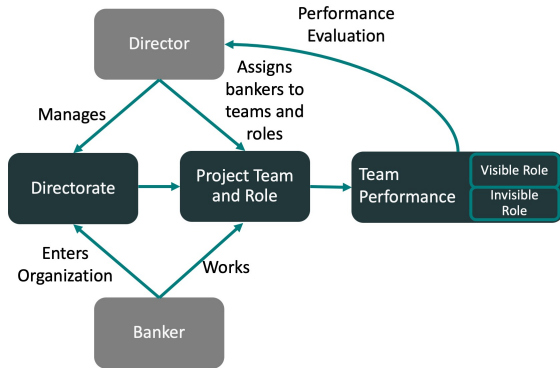
Promotion gap can arise / accumulate at multiple levels



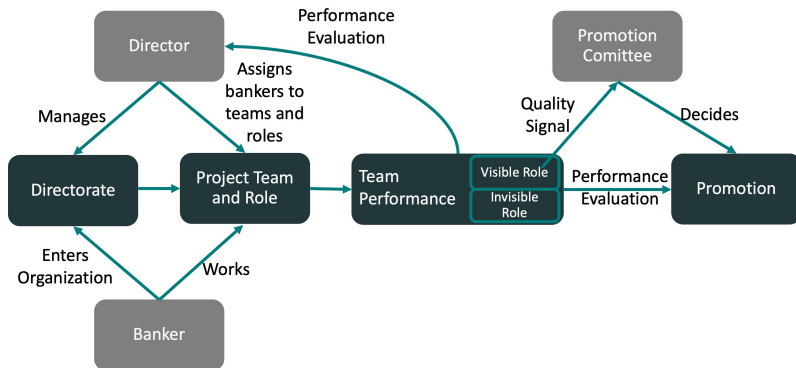
Promotion gap can arise / accumulate at multiple levels



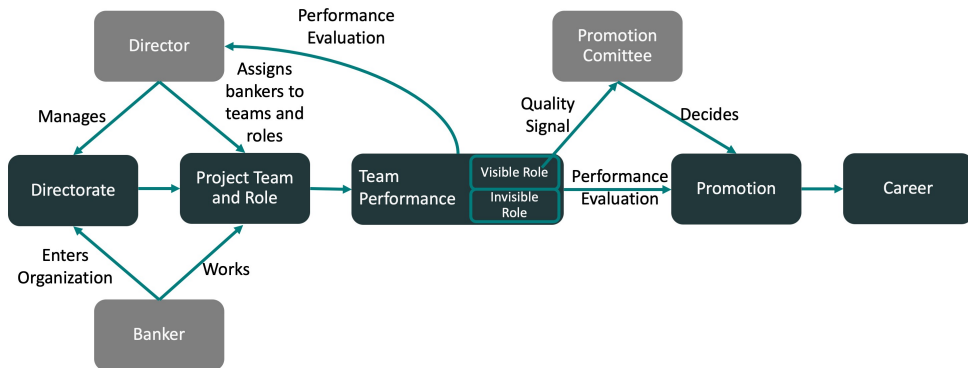
Promotion gap can arise / accumulate at multiple levels



Promotion gap can arise / accumulate at multiple levels



Promotion gap can arise / accumulate at multiple levels



Promotion gap can arise / accumulate at multiple levels

- We look at determinants of promotion
- Performance: The number of signed projects and their amount is important (as OL)
- Performance evaluation: Some evidence for differential performance evaluation (Sarsons, 2017; Sarsons et al., 2021)
- Women and men perform equally well conditional on assignment (*not today*)
- Assignments to visible roles (OL) is important: Women play these less often
- Assignment to projects likely determined by both:
 - *demand*: are women bankers less willing to lead? (Azmat and Ferrer, 2017; Azmat et al., 2020; Hospido et al., 2020)
 - *supply*: bosses may assign work differentially, for instance due to different preferences in homophily (Cullen and Perez-Truglia, 2019; Benson et al. 2021)
- Some evidence that bosses undersupply OL positions to women

Explaining the gender promotion gaps by job band

$$Promotion_{idjt} = \alpha_1 Woman_{idjt} + \alpha_2 X_{idjt} + \alpha_3 Y_{idjt} + \delta_d + \delta_j + \delta_t + \varepsilon_{idjt}$$

- *Promotion* (0/1) indicates if a banker is promoted next month
- Baseline controls (X) include marital status, child, leave, entry characteristics
 - Unless explicitly reported, included in each regression
- Performance controls (Y) capture project signings by role in team
- Fixed effects for age, tenure on the job band, department, and time
- Methodology of [Benson et al. \(2019\)](#): regressions on bankers not yet promoted in current job band as of month t , in which at least one banker is promoted
- Standard errors clustered on the banker level

Women face a promotion gap

	(1)	(2)	(3)	(4)	(5)
Woman	-0.0059** (0.0026)	-0.0055** (0.0026)	-0.0040 (0.0026)	-0.0037 (0.0027)	-0.0064* (0.0033)
Married		0.0030 (0.0033)	0.0034 (0.0033)	0.0025 (0.0034)	0.0026 (0.0034)
Child		0.0027 (0.0034)	0.0042 (0.0035)	0.0048 (0.0036)	0.0021 (0.0042)
Paid leave			0.0009 (0.0013)	0.0010 (0.0014)	0.0005 (0.0014)
Unpaid leave			-0.0038*** (0.0014)	-0.0038*** (0.0014)	-0.0039*** (0.0014)
Non-banking experience			0.0039 (0.0046)	0.0028 (0.0048)	0.0027 (0.0048)
Entry: pre-2000				0.0170** (0.0085)	0.0165* (0.0085)
Entry: < job band 5				-0.0131*** (0.0042)	-0.0133*** (0.0042)
Entry: sector				-0.0007 (0.0037)	-0.0006 (0.0036)
Entry: banking				-0.0030 (0.0078)	-0.0032 (0.0077)
Woman * Child					0.0068 (0.0053)
Controls & FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.079	0.080	0.080	0.081	0.081
N	20,477	20,477	20,477	20,477	20,477

Notes: Includes all bankers in job bands 5-7. Age and tenure FE include fixed effects for ten bins of worker age and five bins of tenure on the job band. SE are clustered at the banker level.
 ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

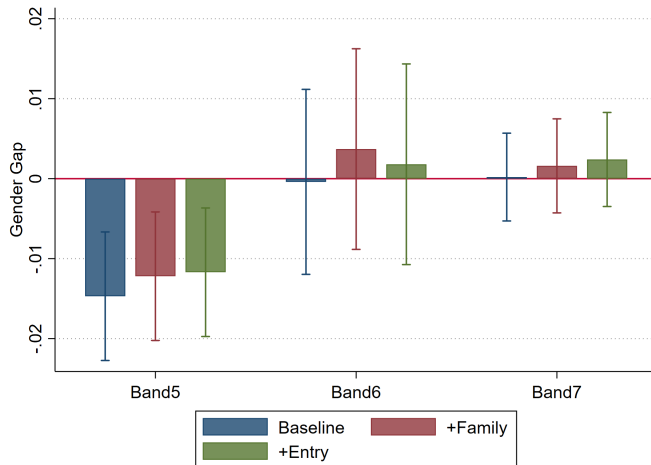
But only at the junior level

	Job band 5			Job band 6			Job band 7		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Woman	-0.0147*** (0.0041)	-0.0122*** (0.0041)	-0.0117*** (0.0041)	-0.0004 (0.0059)	0.0037 (0.0064)	0.0018 (0.0064)	0.0002 (0.0028)	0.0016 (0.0030)	0.0024 (0.0030)
Controls & FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.100	0.102	0.103	0.089	0.090	0.091	0.010	0.011	0.013
N	9,577	9,577	9,577	5,239	5,239	5,239	5,661	5,661	5,661

Notes: Replicates regression specifications 1,3 and 4 from previous slide for each job band individually. SE are clustered at the banker level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Selection at Entry?

But only at the junior level



Visibility as the secret of (my) success



Gender | To Succeed in Tech, Women Need More Visibility

INSIGHT CENTER

Developing Tomorrow's Leaders

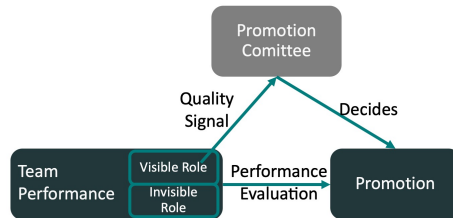
How talent management is changing.

Earlier this year we led a thought exercise for 240 senior leaders of a Silicon Valley technology company. We asked them to identify the most-critical factors for success at their level. The group agreed on track record and skills-based factors: a history of delivering results, technical depth of expertise, and the ability to manage a technical team.

We then asked them to name the most-critical factors for promotion to their level. A new top criterion emerged, eclipsing all others: visibility. More than technical competence, business results, or team leadership ability — these leaders agreed — visibility is the most important factor for advancement.

- Visibility and promotions in the literature ([Waldman, 1984](#); [Milgrom and Oster, 1987](#))

Visibility as the secret of (my) success



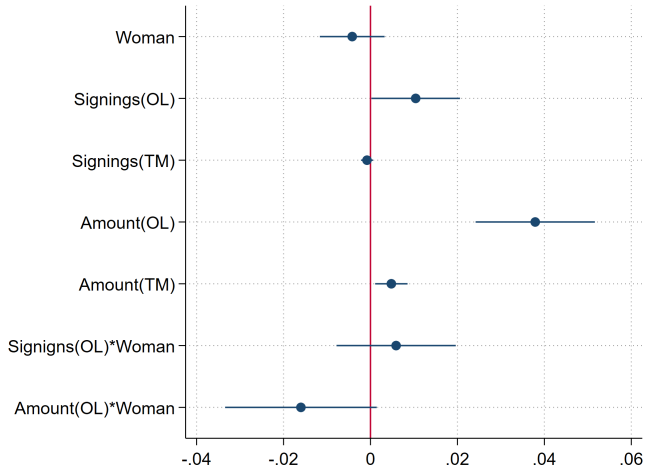
Performance as OL & differential evaluation affect promotion rates

	(1)	(2)	(3)	(4)	(5)	(6)
Woman	-0.0117***	-0.0118***	-0.0087**	-0.0076*	-0.0042	-0.0049
	(0.0041)	(0.0041)	(0.0044)	(0.0043)	(0.0038)	(0.0038)
Signings		0.0023 (0.0016)				
Avg. amount		0.0089*** (0.0018)				
Signings as OL			0.0133***	0.0168***	0.0104**	0.0144**
			(0.0035)	(0.0040)	(0.0052)	(0.0057)
Signings as TM			-0.0008 (0.0007)	-0.0011* (0.0006)	-0.0008 (0.0007)	-0.0011* (0.0006)
Avg. amount as OL			0.0296***		0.0379***	
			(0.0043)		(0.0070)	
Avg. amount as TM			0.0047** (0.0019)	0.0065*** (0.0019)	0.0048*** (0.0019)	0.0067*** (0.0018)
Avg. team size as OL				0.0096*** (0.0031)		0.0137*** (0.0050)
NP amount as OL				0.0166 (0.0122)		0.0164 (0.0122)
Woman * Signings as OL					0.0059	0.0050
					(0.0070)	(0.0081)
Woman * Avg. amount as OL					-0.0160*	
					(0.0089)	
Woman * Avg. team size as OL						-0.0082
						(0.0061)
Controls & FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.103	0.108	0.137	0.128	0.138	0.128
N	9,577	9,577	9,577	9,577	9,577	9,577

Note: For bankers in job band 5. Controls include Married, Child, Paid leave, Unpaid leave, Non-banking experience, Entry: pre-2000, Entry: < job band 5, Entry: sector, and Entry: banking. Age and tenure FE include fixed effects for ten bins of worker age and five bins of tenure on the job band. SE are clustered at the banker level.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Visualizing regression 5



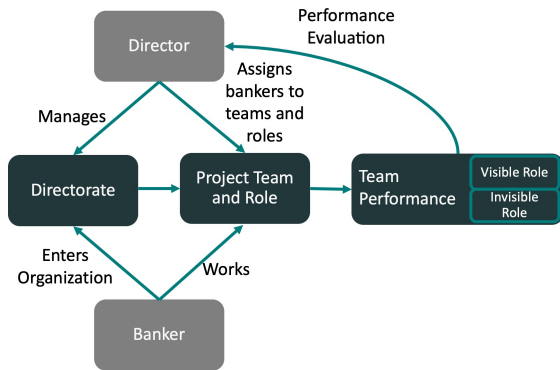
Explaining the assignment gap in leadership roles

$$Assignment_{idjt} = \alpha_1 Woman_{idjt} + \alpha_2 X_{idjt} + \alpha_3 Y_{idjt} + \delta_d + \delta_j + \delta_t + \varepsilon_{idjt}$$

- *Assignment* (0/1) indicates whether a banker starts working on a new project as OL or TM next month
 - Only OL results shown on the next slides
 - No effect for team member roles
- Controls as before
- Run regressions on full time panel, i.e. with data from each month
- Standard errors clustered on the banker level

In any given month, do women face a lower probability of starting a project as OL/TM than men do?

Explaining the assignment gap in leadership roles



Junior women are less likely to start a project as OL

	Role: OL				
	(1)	(2)	(3)	(4)	(5)
Woman	-0.0123** (0.0051)	-0.0108** (0.0045)	-0.0092** (0.0045)	-0.0081* (0.0043)	-0.0075* (0.0043)
Signings as OL		0.0160*** (0.0019)	0.0135*** (0.0021)	0.0141*** (0.0025)	0.0117*** (0.0026)
Signings as TM		0.0021*** (0.0007)	0.0019*** (0.0007)	0.0021*** (0.0007)	0.0018** (0.0007)
Avg. amount as OL		0.0151*** (0.0028)		0.0201*** (0.0040)	
Avg. amount as TM		0.0024 (0.0018)	0.0029 (0.0018)	0.0025 (0.0017)	0.0030* (0.0018)
Avg. team size as OL			0.0143*** (0.0023)		0.0170*** (0.0030)
NP amount as OL			-0.0004 (0.0052)		-0.0005 (0.0053)
Woman * Signings as OL				0.0037 (0.0039)	0.0040 (0.0042)
Woman * Avg. amount as OL				-0.0098* (0.0057)	
Woman * Avg. team size as OL					-0.0061 (0.0044)
Controls & FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.093	0.104	0.104	0.104	0.105
N	41,101	41,101	41,101	41,101	41,101

Notes: The sample includes the full banker-year-month level panel of bankers in job band 5.

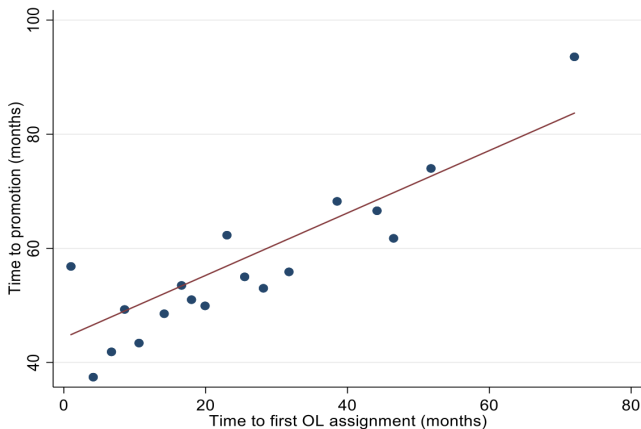
Controls include Married, Child, Paid leave, Unpaid leave, Non-banking experience, Entry: pre-2000,

Entry: < job band 5, Entry: sector, and Entry: banking. Age and tenure FE include fixed effects for ten

bins of worker age and five bins of tenure on the job band. SE are clustered at the banker level.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Strong association between time to first OL assignment and promotions



The promotion and assignment gaps are robust to several checks

- Child penalty: Dropping bankers with children
- Entry characteristics: Dropping bankers who joined at job bands 1-4
- Alternative measures of project performance (e.g. prep time)
- Alternative set of baseline controls (e.g. nationality, contract type)
- Alternative specifications for career disruption, internal networks, fixed effects

Assignment gap is robust phenomenon; ultimately, we are interested in an equilibrium story

- Hence, we are exploring different explanations
- ① Selection at entry to the organization: “overhiring” women ([Lehmann, 2013](#))
- ② Selection into first project assignment to OL
- ③ Supply of OL positions: Director effects
- ④ Demand of OL positions: Women’s willingness to lead and gender composition of teams Two-Person Teams

1. & 2. Selection?

- ① Selection at entry to the organization
 - Firm may be “overhiring” women because it aims at gender parity
 - If fewer qualified women applied, managers may correct this at later stages by differential assignment
 - In applicant pool, less women than men apply (approx. 33%)
 - However, recent evidence about women searching for jobs more and applying less ([Hensvik et al., 2021](#); [Fluchtman et al., 2021](#))
- ② Selection to projects
 - Women wait longer to become OL for the first time
 - Some evidence of women sorting into projects, e.g. small business, environment, repeat clients, less equity
 - However adding team and time FE, most differences disappear
 - After adding these FE, women seem to do slightly larger projects

[Applications Table](#)[Selection to Projects Table](#)

3. The role of the Director for the assignment gap

- Directors have formal discretion about assignment to team roles
- Kunze and Miller (2017), Yu (2021), Cullen and Perez-Truglia (2019) & Drechsel-Grau and Holub (2020) find evidence for manager-gender effects
- We expand this to other manager (here: Director) characteristics

Two methods to look at Director's characteristics

- 1 Regression on the monthly panel of bankers in job band 5:

$$\begin{aligned} NewProject_{imdt} = & \alpha_1 Woman_{imdt} + \\ & \alpha_2 DirectorCharacteristics_{imdt} * Woman_{imdt} \\ & + \alpha_3 X_{idjt} + \delta_i + \delta_m + \delta_t + \varepsilon_{imdt} \end{aligned}$$

- 2 Estimating a Director specific assignment gap:
 - 1 Instead of Director characteristics in the interaction effect, make use of a Director FE
 - 2 Extracting the effects as a measure of the Director specific assignment gap
 - 3 Weighting them with their inverse standard error
 - 4 Relating them to Director-characteristics in a cross-section
- Results reported separately for the whole data and post 2014 data [Data Note](#)

Do Director's characteristics matter for assignment?

- Director-characteristics significantly reduce the assignment gap
- No clear picture on Director-gender and age
- Directors who have children are more favorable towards women
- Director FE: men directors show more variability than women

⇨ Need to dig deeper into style (persistency of roles, work experience, gender composition of teams, ...)

[Results 1](#)[Results 2 \(FE\)](#)[Density Plots](#)

Promotions shape careers

- How does the promotion gap on the junior level affect men's and women's long-term career outcomes?
- Do men and women enter and exit the organization differentially?
- Bridge a classical literature on ILM ([Baker et al., 1994](#); [Waldman, 2012](#)) and a new literature on promotions ([Benson et al., 2019](#)) by zooming in on
 - differences between men and women in promotions and long-term careers
 - the specificities of team production

Career mobility of women and men

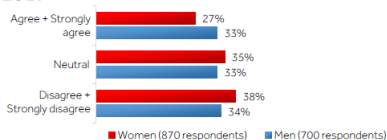
- Women have lower promotion rates from band 5 to 6 Transition Matrix 1
- At more senior levels, if anything women have higher promotion rates Transition Matrix 1
- Women tend to enter the organization at lower levels than men Transition Matrix 2
- Women have lower exit rates than men at levels 5, 6, 7 Transition Matrix 3
- Successful women tend to move internally, successful men leave the organization

Regression

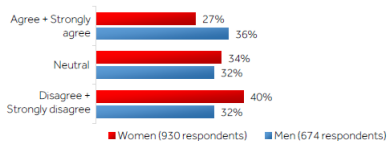
Interval surveys corroborate the econometric evidence

I am given fair opportunities to be promoted in this organization

2017

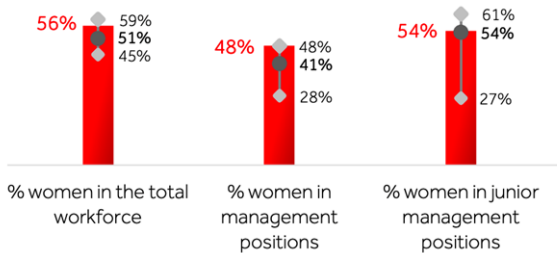


2019



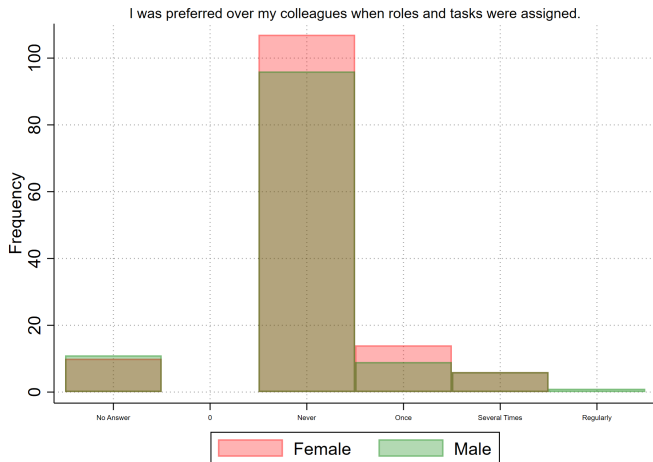
- *“Female employees at Job Band 5-6 display the most pessimistic perceptions across most survey questions.”*

FI is EDGE certified & compares favorably

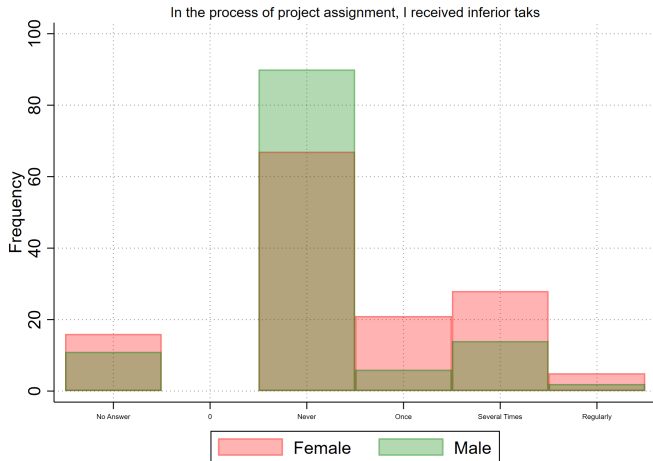


- ...to others located in the same country and similar institutions globally
- Corporate gender culture which is firm-specific plays an important role ([Adams et al., 2021](#))
- Team leadership assignment is very subtle

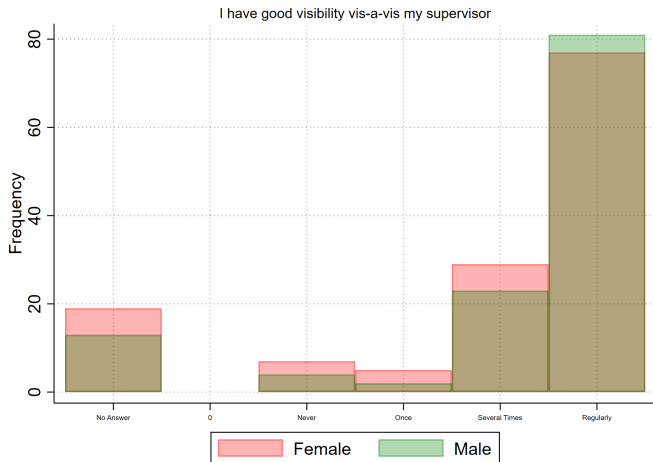
External validity? Survey in another bank



External validity? Survey in another bank



External validity? Survey in another bank



Women face a well documented pay gap and different careers

- Blau and Kahn (2017) & Altonji and Blank (1999) provide overviews

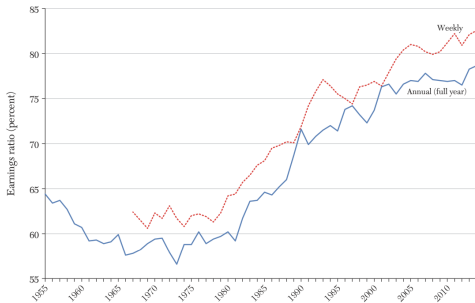


Figure 1. Female-to-Male Earnings Ratios of Full-Time Workers 1955–2014

Employee Group	Gross Hourly Earnings (EUR)			Gender Wage Gap (%)
	Total	Women	Men	
Managerial Employees	39.38	32.96	42.82	23
Senior Employees	27.62	25.05	29.38	15
Skilled Employees	18.24	27.27	19.14	10
Semi-Skilled Employees	14.23	13.23	15.05	12
Unskilled Employees	12.10	11.93	12.49	4
Total	19.66	17.33	21.70	20

Destatis (2018): Gender Pay Gap in Germany by Job Characteristics

(Blau and Kahn, 2017): PSID Data (USA)

back

Teamwork is crucial for careers in knowledge work

- High-skilled work is usually done in teams
 - Tacit interactions for 45% of overall workforce in UK ([Beardsley et al., 2006](#))
 - 80% of research in science & engineering in teams ([Wuchty et al., 2007](#))
 - Teams outperform individuals ([Patel and Sarkissian, 2017](#); [Singh and Fleming, 2010](#); [Wuchty et al., 2007](#))
- This makes it difficult to draw inferences about performance and promotion determinants ([Alchian and Demsetz, 1972](#); [Itoh, 1991](#))
- Possibility that this leads to differential rewards to team performance
- [Sarsons \(2017\)](#) & [Sarsons et al. \(2021\)](#) show that women receive less credit for work in teams

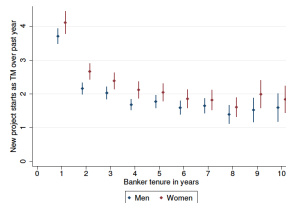
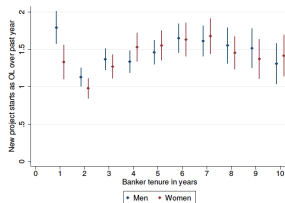
back

Pre and post 2014 data

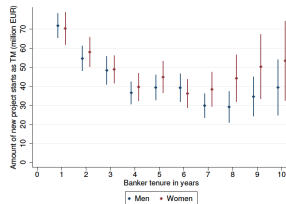
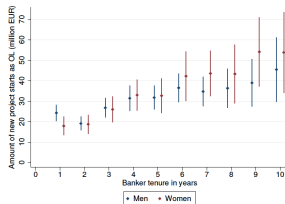
- We observe immediate line managers only after January 2014
- Line managers
 - are Directors in around 50% of cases,
 - but they are Associate Directors in around 40% of cases,
 - and some bankers report directly to a Managing Director in around 10% of cases.
- To use Director FE in earlier years, we use organizational units to match directors and their teams
- This induces some noise

back

Project assignments over career

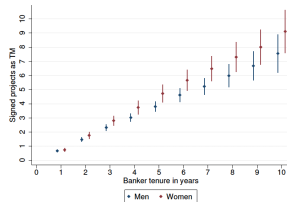
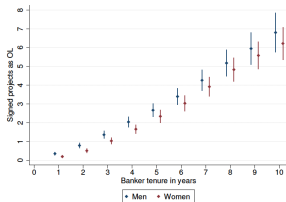


(a) Number of newly assigned projects over past 12 months

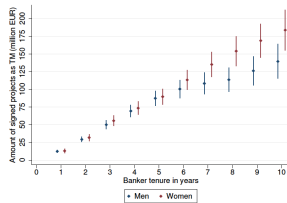
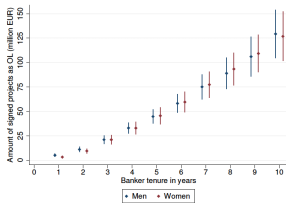


(b) Amount of newly assigned projects over past 12 months (in millions of EUR)

Projects signed over career



(a) Cumulative number of signed projects



(b) Cumulative amount of signed projects (in millions of EUR)

Gender composition of two-person teams

	Reviewed	% of total	Signed	% of reviewed
OL=Man / TM=Man	1 287	36%	537	42%
OL=Man / TM=Woman	862	24%	423	49%
OL=Woman / TM=Man	754	21%	373	49%
OL=Woman / TM=Woman	677	19%	359	53%
Total	3 580		1 692	47%

We have a total of 3,580 projects taken to Concept Review (initial investment review) stage that consist of one OL and one TM.

[back \(to team characteristics\)](#)[back \(to exploring explanations\)](#)

Selection at entry?

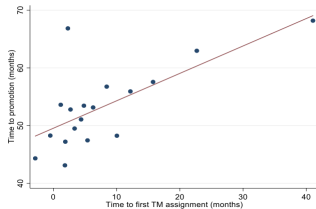
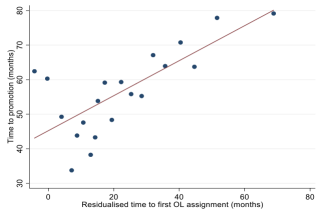
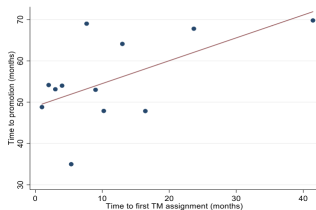
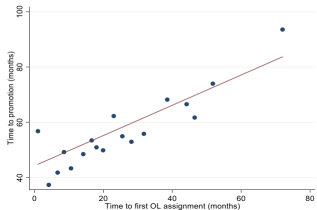
	All	Men	Women	Women vs. Men		
				Dif.	s.e.	p-value
Age	28.28	28.51	28.02	-0.49	0.28	0.07
Married	0.26	0.28	0.23	-0.05	0.03	0.09
Child	0.14	0.16	0.10	-0.06	0.02	0.01
EU nationality	0.40	0.41	0.37	-0.04	0.03	0.24
Sector directorate	0.45	0.45	0.46	0.01	0.03	0.76
Banking division	0.95	0.94	0.95	0.00	0.02	0.80
Job band < 5	0.20	0.15	0.26	0.11	0.03	0.00
Job band = 5	0.78	0.83	0.72	-0.11	0.03	0.00
N	873	467	406			

[back](#)

First time assignment and promotions

Figure: Time to promotion and time to first assignment for junior bankers

These figures show bincscatter plots of a banker's time to promotion (in months) against his/her time to first project assignment as OL (on the left hand side) or TM (on the right hand side). The bottom panel first residualises values by directorates. The sample includes all junior bankers for whom we observe a promotion and an assignment to a project as OL or TM.



Applications to the bank

Job Band	Hire Gender	Applications to Banking					Applications to Non-Banking				
		Woman	Man	N/a	Total	% Woman	Woman	Man	N/a	Total	% Woman
1-4	Woman	5 180	3 509	569	9 258	56%	4 137	2 662	996	7 795	53%
	Man	697	1 421	153	2 271	31%	696	734	318	1 748	40%
	Total	5 877	4 930	722	11 529	51%	4 833	3 396	1 314	9 543	51%
5	Woman	8 904	15 760	1 150	25 814	34%	6 001	7 464	1 704	15 169	40%
	Man	9 007	18 746	1 490	29 243	31%	4 098	5 724	1 460	11 282	36%
	Total	17 911	34 506	2 640	55 057	33%	10 099	13 188	3 164	26 451	38%
6	Woman	928	2 109	311	3 348	28%	2 393	3 250	632	6 275	38%
	Man	1 409	3 861	230	5 500	26%	1 292	2 851	604	4 747	27%
	Total	2 337	5 970	541	8 848	26%	3 685	6 101	1 236	11 022	33%
7	Woman	150	544	163	857	18%	422	881	219	1 522	28%
	Man	548	1 788	289	2 625	21%	461	1 528	247	2 236	21%
	Total	698	2 332	452	3 482	20%	883	2 409	466	3 758	23%
8	Woman	115	395	119	629	18%	191	582	88	861	22%
	Man	144	468	97	709	20%	262	828	111	1 201	22%
	Total	259	863	216	1 338	19%	453	1 410	199	2 062	22%

This table reports summary statistics on the gender breakdown of applications by division, job band, and gender of hired person.

The sample covers all applications to the organization from January 2017 to June 2021.

"N/a" refers to number of applicants who preferred not to state their gender in the initial application process.

Selection on first project as OL

	Women as OL		Men as OL		Difference		Difference		Difference	
	mean	s.d.	mean	s.d.	coef.	p-value	coef.	p-value	coef.	p-value
Banker characteristics										
Age	31.14	3.79	30.97	3.69	0.17	0.63	0.10	0.81	0.41	0.43
Length of service	3.05	2.25	2.47	1.68	0.59	0.00	0.70	0.00	0.80	0.00
Time in banking	3.00	2.25	2.42	1.65	0.58	0.00	0.70	0.00	0.81	0.00
Married	0.38	0.49	0.46	0.50	-0.08	0.10	-0.05	0.35	-0.10	0.14
Children	0.33	0.62	0.42	0.73	-0.09	0.15	-0.02	0.77	0.09	0.34
Sector directorate	0.50	0.50	0.51	0.50	-0.00	0.92	-0.02	0.66	-0.10	0.10
Entry: job band 5	0.77	0.42	0.83	0.37	-0.07	0.07	-0.05	0.27	-0.03	0.62
Project characteristics										
Signed	0.58	0.49	0.56	0.50	0.02	0.64	-0.04	0.51	-0.00	0.99
Team size	2.64	1.68	2.53	1.37	0.11	0.43	0.03	0.86	-0.10	0.65
Log amount	2.36	1.07	2.22	1.11	0.14	0.17	0.20	0.07	0.27	0.03
Credit rating	6.15	0.89	6.25	0.74	-0.09	0.26	-0.09	0.35	-0.08	0.53
Creation to first review	137.69	220.60	105.24	167.84	32.44	0.10	28.13	0.25	9.35	0.76
Environment flag	0.23	0.42	0.17	0.37	0.07	0.07	0.06	0.12	0.08	0.15
Small business flag	0.33	0.47	0.22	0.42	0.11	0.01	0.04	0.38	0.02	0.67
Repeat client	0.45	0.50	0.32	0.47	0.13	0.00	0.04	0.44	0.02	0.75
Equity	0.12	0.33	0.20	0.40	-0.09	0.01	-0.06	0.14	-0.03	0.60
Stand-alone	0.44	0.50	0.43	0.50	0.01	0.75	0.06	0.24	0.05	0.43
Observations	202		265							
Group-year FE							Yes			
Region-year FE							Yes		Yes	
Sector team-year FE									Yes	

This table reports summary statistics by gender for the first ever project assignment of a banker as OL. Only bankers who joined the organization after August 1999, which is when our data begin, and those in job band 5 are included in the sample. Only the first project assignments in a banker's career are included.

Group FE correspond to a Managing Director level split. Sector team corresponds to a directorate level split, however it is not equal to a directorate FE due to temporal inconsistencies and restructuring.

Director characteristics approach 1

	Pooled					Post 2014				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Woman	-0.0104** (0.0050)	-0.0052 (0.0058)	-0.0013 (0.0316)	-0.0057 (0.0084)	-0.0159*** (0.0056)	-0.0149** (0.0073)	-0.0109 (0.0067)	-0.0234 (0.0332)	-0.0076 (0.0121)	-0.0182** (0.0084)
Woman * Director is a woman		-0.0124 (0.0089)					-0.0026 (0.0115)			
Woman * Director age			-0.0002 (0.0007)					0.0002 (0.0007)		
Woman * Director length of service				-0.0003 (0.0008)					-0.0004 (0.0010)	
Woman * Director children					0.0050* (0.0027)					0.0042 (0.0046)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Director FE		Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
R-squared	0.099	0.108	0.107	0.107	0.108	0.191	0.201	0.201	0.201	0.201
N	38603	34922	34922	34922	34922	14009	12622	12622	12622	12622
Number of bankers	1 027	1 005	1 005	1 005	1 005	543	543	543	543	543
Number of directors		107	107	107	107		64	64	64	64

he dependent variable, New Assignment as OL (0/1), indicates whether a banker is assigned at least one new project next month as an OL. The sample includes the full banker-year-month level panel of bankers in job band 5. Controls include Married, Child, Paid leave, Unpaid leave, Non-banking experience, Entry: pre-2000, Entry: < job band 5, Entry: sector, and Entry: banking. Baseline FE include fixed effects for directorates, time (year-month), ten bins of worker age, and five bins of tenure on the job band. Director characteristics are defined as of the first month in which a person is observed at the director level. Standard errors are clustered at the banker and director level and shown in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

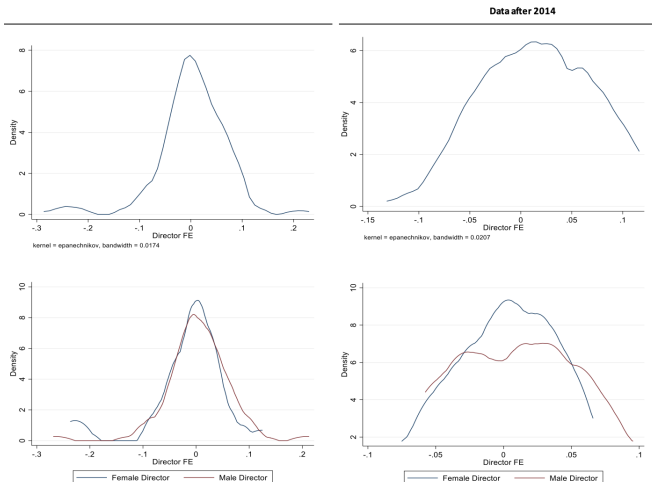
Director characteristics approach 2 (FE)

	Pooled					Post 2014				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Woman	-0.0120 (0.0091)				-0.0091 (0.0094)	-0.0059 (0.0114)				0.0043 (0.0127)
Age		0.0001 (0.0006)			0.0002 (0.0007)		0.0002 (0.0007)			0.0002 (0.0008)
Length of service			-0.0010 (0.0008)		-0.0008 (0.0008)			-0.0013* (0.0008)		-0.0014* (0.0008)
Children				0.0038 (0.0032)	0.0027 (0.0032)				0.0081 (0.0050)	0.0091* (0.0051)
R-squared	0.013	0.000	0.013	0.011	0.029	0.005	0.001	0.049	0.058	0.117
N	92	92	92	92	92	47	47	47	47	47

The dependent variable, director-specific gender gap in assignment, is derived from a banker-month level regression of assignment next month as OL on a set of director fixed effects by gender, including our baseline set of controls and fixed effects (as in column 1 of T2, for instance). The sample includes the cross-section of directors. Standard errors are robust and shown in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

[back](#)

Director characteristics (FE) density plots



Monthly hazard rate of promotion in %

	<i>Support</i>	<i>Analyst-Associate</i>	<i>Principal</i>	<i>Associate Director</i>	<i>Director</i>	<i>Managing Director</i>		
Women	<i>Band 1-4</i>	<i>Band 5</i>	<i>Band 6</i>	<i>Band 7</i>	<i>Band 8</i>	<i>Band 9</i>	<i>Int. move</i>	<i>Exit</i>
<i>Entry</i>	20.55	66.42	9.27	2.76	0.75	0	0.25	0
<i>Band 1-4</i>	97.87	2.07	0.02	0.04	0	0	0	0
<i>Band 5</i>	0	98.35	0.95	0.04	0	0	0.12	0.56
<i>Band 6</i>	0	0	98.09	1.11	0.01	0	0.14	0.64
<i>Band 7</i>	0	0	0	99.13	0.21	0	0.22	0.44
<i>Band 8</i>	0	0	0	0	98.90	0.32	0.13	0.65
<i>Band 9</i>	0	0	0	0	0	98.45	0.52	1.04
Men								
<i>Entry</i>	8.91	66.42	14.66	8.16	1.67	0.19	0	0
<i>Band 1-4</i>	91.03	8.67	0.15	0.15	0	0	0	0
<i>Band 5</i>	0	97.85	1.21	0.02	0	0	0.11	0.81
<i>Band 6</i>	0	0	97.93	1.03	0	0	0.12	0.91
<i>Band 7</i>	0	0	0	98.78	0.24	0.01	0.21	0.76
<i>Band 8</i>	0	0	0	0	99.05	0.15	0.19	0.61
<i>Band 9</i>	0	0	0	0	0	99.26	0.19	0.56

Note: This table presents transition probabilities between job bands at the FI for banking staff only.

Monthly hazard rate of entry rates in %

	<i>Support</i>	<i>Analyst-Associate</i>	<i>Principal</i>	<i>Associate Director</i>	<i>Director</i>	<i>Managing Director</i>		
Women	<i>Band 1-4</i>	<i>Band 5</i>	<i>Band 6</i>	<i>Band 7</i>	<i>Band 8</i>	<i>Band 9</i>	<i>Int. move</i>	<i>Exit</i>
<i>Entry</i>	20.55	66.42	9.27	2.76	0.75	0	0.25	0
<i>Band 1-4</i>	97.87	2.07	0.02	0.04	0	0	0	0
<i>Band 5</i>	0	98.35	0.95	0.04	0	0	0.12	0.56
<i>Band 6</i>	0	0	98.09	1.11	0.01	0	0.14	0.64
<i>Band 7</i>	0	0	0	99.13	0.21	0	0.22	0.44
<i>Band 8</i>	0	0	0	0	98.90	0.32	0.13	0.65
<i>Band 9</i>	0	0	0	0	0	98.45	0.52	1.04
Men								
<i>Entry</i>	8.91	66.42	14.66	8.16	1.67	0.19	0	0
<i>Band 1-4</i>	91.03	8.67	0.15	0.15	0	0	0	0
<i>Band 5</i>	0	97.85	1.21	0.02	0	0	0.11	0.81
<i>Band 6</i>	0	0	97.93	1.03	0	0	0.12	0.91
<i>Band 7</i>	0	0	0	98.78	0.24	0.01	0.21	0.76
<i>Band 8</i>	0	0	0	0	99.05	0.15	0.19	0.61
<i>Band 9</i>	0	0	0	0	0	99.26	0.19	0.56

Note: This table presents transition probabilities between job bands at the FI for banking staff only.

Monthly hazard rate of internal mobility and exit in %

	<i>Support</i>	<i>Analyst-Associate</i>	<i>Principal</i>	<i>Associate Director</i>	<i>Director</i>	<i>Managing Director</i>		
Women	<i>Band 1-4</i>	<i>Band 5</i>	<i>Band 6</i>	<i>Band 7</i>	<i>Band 8</i>	<i>Band 9</i>	<i>Int. move</i>	<i>Exit</i>
<i>Entry</i>	20.55	66.42	9.27	2.76	0.75	0	0.25	0
<i>Band 1-4</i>	97.87	2.07	0.02	0.04	0	0	0	0
<i>Band 5</i>	0	98.35	0.95	0.04	0	0	0.12	0.56
<i>Band 6</i>	0	0	98.09	1.11	0.01	0	0.14	0.64
<i>Band 7</i>	0	0	0	99.13	0.21	0	0.22	0.44
<i>Band 8</i>	0	0	0	0	98.90	0.32	0.13	0.65
<i>Band 9</i>	0	0	0	0	0	98.45	0.52	1.04
Men								
<i>Entry</i>	8.91	66.42	14.66	8.16	1.67	0.19	0	0
<i>Band 1-4</i>	91.03	8.67	0.15	0.15	0	0	0	0
<i>Band 5</i>	0	97.85	1.21	0.02	0	0	0.11	0.81
<i>Band 6</i>	0	0	97.93	1.03	0	0	0.12	0.91
<i>Band 7</i>	0	0	0	98.78	0.24	0.01	0.21	0.76
<i>Band 8</i>	0	0	0	0	99.05	0.15	0.19	0.61
<i>Band 9</i>	0	0	0	0	0	99.26	0.19	0.56

Note: This table presents transition probabilities between job bands at the FI for banking staff only.

Are there differences in career mobility between women and men?

$$Mobility_{idjt} = \alpha_1 Woman_{idjt} + \alpha_2 X_{idjt} + \alpha_3 Y_{idjt} + \delta_d + \delta_j + \delta_t + \varepsilon_{idjt}$$

- *Mobility (0/1)* indicates:
 - either move from banking to non-banking;
 - leave the bank permanently
- Controls as before
- Run regressions on full monthly panel of bankers
- Standard errors clustered on the banker level

[back \(to Main Presentation\)](#)[back \(to Results\)](#)

Successful women tend to move internally, while men are more likely to exit

	Job band 5		Job band 6		Job band 7	
	Move to non-banking	Exit	Move to non-banking	Exit	Move to non-banking	Exit
	(1)	(2)	(3)	(4)	(5)	(6)
Woman	-0.0439 (0.0419)	-0.2658** (0.1068)	-0.1626* (0.0850)	0.0589 (0.2466)	0.1144 (0.1444)	0.2642 (0.2492)
Signings as OL	-0.0209** (0.0085)	0.0224 (0.0643)	-0.0138 (0.0092)	-0.0537** (0.0227)	-0.0067 (0.0053)	0.0031 (0.0130)
Signings as TM	-0.0048 (0.0047)	-0.0186** (0.0094)	0.0040 (0.0035)	0.0171** (0.0076)	-0.0031 (0.0066)	-0.0093 (0.0098)
Avg. amount as OL	-0.0439*** (0.0121)	-0.0684 (0.0769)	-0.0404** (0.0203)	-0.0062 (0.0701)	0.0321 (0.0320)	-0.0100 (0.0646)
Avg. amount as TM	-0.0347** (0.0166)	0.0434 (0.0374)	0.0037 (0.0162)	0.0056 (0.0500)	0.0062 (0.0209)	-0.0115 (0.0501)
Woman * Signings as OL	0.0668* (0.0362)	-0.1192 (0.0744)	-0.0098 (0.0129)	-0.0242 (0.0290)	0.0251* (0.0138)	-0.0365* (0.0187)
Woman * Avg. amount as OL	-0.0007 (0.0328)	0.1607 (0.1061)	0.0743* (0.0385)	-0.1441 (0.0891)	-0.1147** (0.0542)	-0.1551* (0.0886)
Controls & FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.010	0.014	0.017	0.025	0.015	0.021
N	41,101	41,101	24,650	24,650	23,658	23,658

Move to non-banking (0/1) indicates whether a banker permanently moves to a non-banking department next month.

Exit (0/1) indicates whether a banker leaves the bank permanently next month. The sample includes the full

banker-year-month level panel of bankers by job band. Controls include Married, Child, Paid leave, Unpaid leave,

Non-banking experience, Entry: pre-2000, Entry: < job band 5, Entry: sector, and Entry: banking. Age and tenure FE

include fixed effects for ten bins of worker age and five bins of tenure on the job band. SE are clustered at the banker level.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.