



## Female leaders and gender gaps within the firm:

#### Evidence From Three Sub-Saharan African Countries

Alban AHOURE (Université Félix Houphouët-Boigny and CAPEC)
Assi J.C. KIMOU (Université Félix Houphouët-Boigny and CAPEC)
Giulia LA MATTINA (University of South Florida),
Gabriel PICONE (University of South Florida)

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## PLAN DE LA PRESENTATION

- Introduction
- Research Objectives
- Significance of the paper
- Literature review
- Empirical strategy
- Data and summary statistics
- Results
- Conclusion

## INTRODUCTION (1/4)

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- Women's education and labour force participation have increased globally in recent decades
- However, there are still gender differences in women's earnings in the labour market
- In SSA countries (Ñopo et al. 2011; WB 2012),
  - women's labour force participation rate is above 60 per cent.
- But women earn between 6% and 30% less than men

## INTRODUCTION (2/4)

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- Gender differences in the labour market may extend beyond earnings (Clark 1997; Kunze and Miller 2014).
- □ in SSA:
  - In manufacture sector: Only14% of highest-ranking manager are women (WB, 2016)
  - Formal sector : +50% of workers have a college degree and about 30% of the labour force are women.
  - On average women work fewer hours and earn lower monthly income than men, but women and men receive similar wages
  - female employees are more satisfied with their job and salary than men

## INTRODUCTION (3/4)

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- However, the observed gender parity in wages may mask differences in the relative performance of male and female employees across firms (Hodson 1989; Mason 1995; Clark 1997).
- Understanding the sources of gender differences in the labour market is necessary to improve women's access to income

Main Question: Do Women Managers encourage the reduction of gender gaps in the labor market?

## INTRODUCTION (4/4)

□ we posit that:

- Role models and mentors may be a factor affecting women's progress in the labour market
- The gender of the highest-ranking manager (chief executive officer or CEO) is correlated with gender gaps within the firm.

## RESEARCH OBJECTIVES (1/1)

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#### Main objective:

Analyze the relationship between Manager's gender and gender gaps within the firm.

#### Specific objectives

- Document gender differences in wages, hours, and job satisfaction using employer - employee data from three SSA Francophone countries.
- Show how role models and mentors affect women's progress in the labor market.
- Test whether the gender of the highest-ranking manager (CEO) is correlated with the gender gaps within the firm company

# SIGNIFICANCE OF THE PAPER (1/1)

- Our paper focus on the role of firm characteristics
  - Previous studies:
    - used household and labour force surveys (Appleton et al. 1999; Nordman and Roubaud 2009; Nordman et al. 2011)
    - used linked employer—employee data sets from developing countries focused on the role of workers' sorting across jobs and firms, cognitive skills, and personality traits, but did not look at the role of female managers
  - Our results provide a different picture
    - Previous findings: mixed but tend to point towards a positive association

## LITERATURE REVIEW (1/2)

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- The literature has explored sources of gender gap in developed countries and identified occupational segregation, differences in human capital, discrimination and social norms as potential factors (Blau and Kahn, 2000).
- In terms of the gender wage gap in sub-Saharan Africa,
   Appleton et al. (1999) found that women in Côte d'Ivoire,
   Ethiopia and Uganda were more likely to work in the public sector (better paid), thus narrowing the gender gap in earnings.
- Fafchamps et al. (2009) showed that women tended to sort jobs and low-wage businesses.

### LITERATURE REVIEW

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- Nordier and Roubaud (2009) have shown the importance of measuring the actual experience of women in estimating the share of the gender pay gap that is explained by observable characteristics.
- Hirsch (2013), using data from Germany, showed that a higher proportion of women in first- and second-level management is associated with a reduction in wage parity among employees.
- Cardoso and Winter-Ebmer (2010) found that the wages of employed women are higher in women-run enterprises than in menheaded enterprises in Portugal. They define female leadership on the basis of the proportion of women among owners and managers.
- Our study explores the association between Manager's gender and gender disparities in 3 developing countries in SSA: Cameroon, Côte d'Ivoire and Senegal.

## **Empirical strategy**

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challenges causal estimates: unobserved variables and reverse causality (Flabbi et al. (2014)

 $y_{ij} = \beta_0 + \beta_1 fem_i + \beta_2 fem_man_j + \beta_3 fem_i \times fem_man_j + \beta_4 X_i + \beta_5 Z_j + u_{ij}$ (1)

- Gender gap: difference in outcome between male and female employees
- coefficient of interestβ<sub>3</sub>: measures the additional effect of having a female CEO on female workers' outcomes relative to male workers' outcomes (the gender gap).

## **Empirical strategy**

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- we include firm fixed effects to control for all firms' characteristics that are correlated with both the probability of hiring a female CEO and gender gaps within the firm and are common to all employees within a firm.
- we estimate the regressions with and without occupation fixed effects
- We calculate the fraction of workers in senior and middle management and estimate the correlation between women's representation in these two categories and the performance of female technicians/supervisors, workers/apprentices, and other occupations.

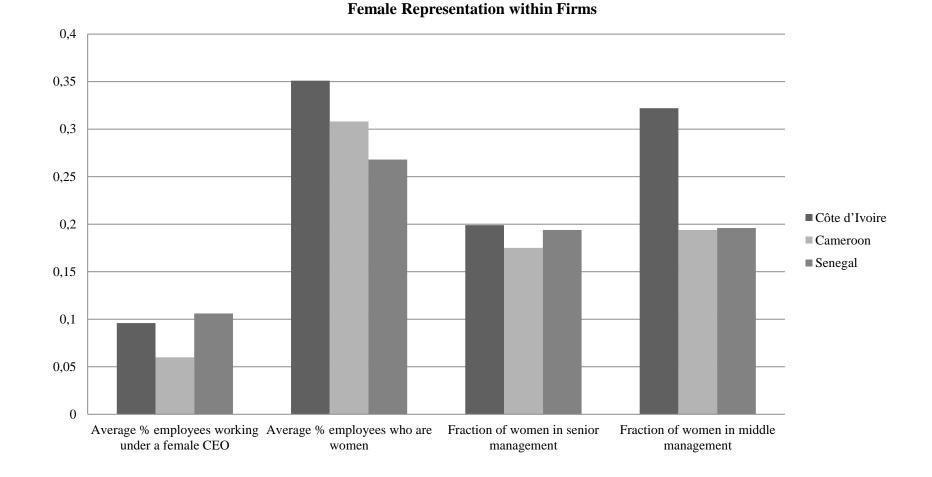
- Data from the 'Les Déterminants de la Performance des Entreprises en Afrique Subsaharienne Francophone' survey, conducted between November 2013 and March 2014 in Côte d'Ivoire, Cameroon, and Senegal.
- □ funded by (IDRC)
- implemented by: CEREG in Cameroon, CAPEC in Côte d'Ivoire, et LAREM in Senegal.
- final sample includes: 450 workers and 165 firms in Côte d'Ivoire, 750 workers and 130 firms in Cameroon, and 750 workers and 260 firms in Senegal.
- Detailed information on CEOs, employees, and the production process, collected using three separate questionnaires

## **RESULTS:** Descriptive statistics

	Côte	Côte d'Ivoire		neroon	Senegal	
	Mean	SD	Mean	SD	Mean	SD
Dependent variables						
Wage ('000)	2.343	7.074	1.57	2.72	n.a.	n.a.
Monthly income ('000)	374.2	1,173.2	236.4	290.9	n.a.	n.a.
Hours worked	44.15	12.10	46.34	12.41	46.28	14.51
Job satisfaction	0.831	0.376	0.608	0.489	0.818	0.386
Salary is good	0.304	0.460	0.217	0.413	0.464	0.499
Explanatory variables						
CEO's characteristics						
Female	0.096	0.296	0.060	0.238	0.106	0.308
Age (years)	47.08	10.12	49.30	9.17	43.17	20.02
Tenure (months)	86.61	85.70	125.3	90.87	132.66	110.21
Has secondary education	0.768	0.423	0.767	0.423	0.653	0.476
Has college education	0.649	0.478	0.687	0.463	0.543	0.498
ls owner	0.677	0.467	0.553	0.497	0.550	0.498
Senior and middle management						
Fraction of women in senior management	0.199	0.273	0.175	0.242	0.194	0.201
Fraction of women in middle management	0.322	0.314	0.194	0.209	0.196	0.238
Employee's characteristics						
Female	0.351	0.478	0.308	0.462	0.268	0.443
Age (years)	36.07	8.28	36.08	8.70	37.30	10.39
Married	0.301	0.450	0.527	0.500	0.677	0.468
Tenure (months)	68.97	83.06	92.21	127.92	93.60	80.44
Has secondary education	0.422	0.494	0.582	0.494	0.375	0.484
Has college education	0.197	0.399	0.036	0.187	0.262	0.440
Occupation: senior manager	0.125	0.331	0.137	0.344	0.121	0.327
Occupation: middle manager	0.235	0.424	0.220	0.414	0.226	0.418
Occupation: technician/supervisor	0.325	0.469	0.315	0.465	0.306	0.461
Occupation: worker/apprentice	0.232	0.423	0.304	0.460	0.338	0.473
Occupation: in other occupations	0.083	0.276	0.024	0.153	0.009	0.094
Firm						
0–-5 years old	0.265	0.441	0.061	0.239	0.053	0.230
6—10 years old	0.290	0.454	0.213	0.410	0.309	0.556
11 or more years old	0.445	0.498	0.726	0.446	0.638	0.799
Observations	405		700		705	

## **RESULTS:** Descriptive statistics

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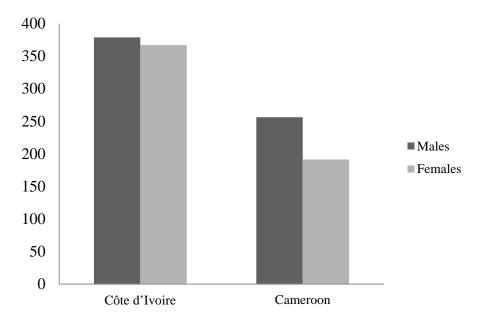


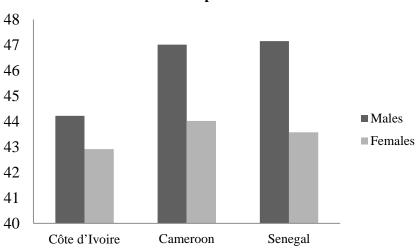
#### **RESULTS:** Descriptive statistics

#### DESCRIPTIVE

## Hourly wage ( <sup>'</sup>000)

Monthly Income ('000)





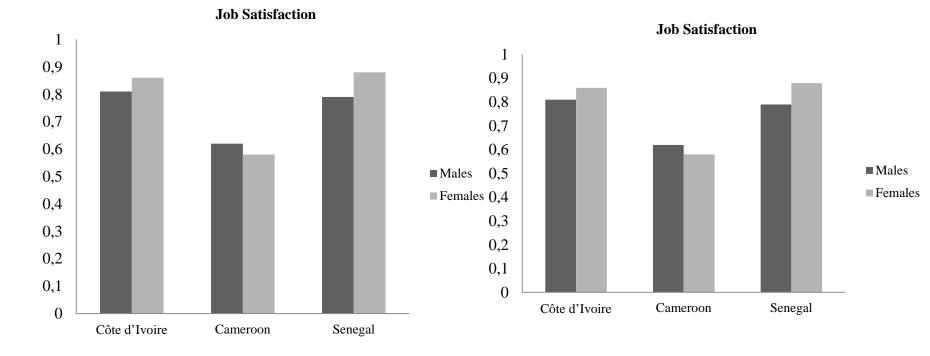
Hours per week

Hours per week

#### **RESULTATS: Summary statistics**

#### Job Satisfaction

#### Salary satisfcation





(3/4)

#### Working Hours

	Côte d'Ivoire		Came	eroon	Senegal	
	OLS	FE	OLS	FE	OLS	FE
Female employee	-2.2239	-4.3738**	- 2.7746***	-2.8772**	- 3.1735***	- 2.7090**
	(1.5025)	(1.9045)	(1.0235)	(1.1714)	(1.2120)	(1.3720)
Female CEO	-3.8954		2.1082		-1.3316	
	(3.6531)		(2.1791)		(2.8720)	
Female employee ×	12.16***	9.74**	-0.249	1.28	6.68**	2.78
Female CEO	(2.8757)	(4.3981)	(2.3497)	(2.5069)	(3.1555)	(3.6177)



### Wage

	Côte d'	lvoire	Cameroon		
	OLS	FE	OLS	FE	
Female employee	-0.0073	0.0140	-0.159**	-0.158**	
	(0.1010)	(0.1003)	(0.0633)	(0.0637)	
Female CEO	-0.2367		0.3195*		
	(0.1666)		(0.1925)		
Female employee × Female CEO	-0.0993	-0.0699	-0.4445*	-0.2809	
	(0.2579)	(0.3230)	(0.2495)	(0.2067)	

## CONCLUSION ET RECOMMANDATIONS (1/2)

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  - Low negative correlation between a female manager and the relative labor performance of employed women. Compatible with the "queen bee" syndrome and contrast with recent evidence from developed countries that female managers improve outcomes for employed women (Cardoso and Winter-Ebmer 2010, Kunze and Miller 2014, Tate and Yang 2015).
  - In men-dominated fields, women in high positions may be more difficult to oppose other women and engage in male traits to align with their male counterparts and legitimize their rights over their positions. Another possibility is that "queen bees" can impede the advancement of women in lower positions in order to reduce the number of competitors and facilitate their own career advancement (Johnson and Mathur-Helm 2011).

## CONCLUSION (2/2)

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  - However, looking at heterogeneity by CEO's characteristics gives a more nuanced picture. Our results indicate that the 'queen bee' syndrome on wages is driven by female CEOs who are not owners of the firm, and female employees in firms where the female CEO is also the owner are paid similarly to their male colleagues. This result suggests that female CEOs who are not owners may not have enough power to improve the relative wages of female employees.
- "queen bee" syndrome effect of female CEOs on the gender wage gap is driven by female CEOs who do not own the firm.

## Thank you for your attention