

*The 18th International Conference of  
the Japan Economic Policy Association (JEPA)*

**SOCIAL NORMS, FINANCIAL PENALTIES AND  
DISCRIMINATORY BEHAVIOR:  
A QUESTIONNAIRE-EXPERIMENTAL EVIDENCE**

Tokyo, 16<sup>th</sup> and 17<sup>th</sup> November 2019

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# OUTLINE

**Motivations of the paper**

**Methodological issues**

**Results**

**Conclusion and political implications**

## Motivations

### ① Better understanding of a paradoxical fact

Evidences of discriminations

Most people disagree with discrimination from a moral point of view in survey

=> Are direct opinion expressed in survey useless ?

# A Better understanding of a paradoxical fact

## Evidences of discriminations

### Housing market

Carlsson et al. (2014) (testing USA),  
Oh and Yinger (2015) (literature survey),  
Flage (2018) (meta-analysis)

### Labour market

Wage gaps (Oaxaca and Binder, 1978)  
job trajectories (Meurs, 2019)  
job accessibility (Newmark, 2018 JEL)

### Others markets

credit (Ross and Yinger, 2003),  
second-hand cars (Ayres and Siegelman, 1995, Zussman, 2013),  
tourism accommodation (Bunel et al., 2018),

## Overwhelming normative condemnation...

**95% (92%)** of respondents believe that refusing to hire a Black person (a person of North African origin) who is qualified for a position is 'serious'

**94% (89%)** of the respondents believe that reducing to rent a dwelling to a Black person (a person of North African origin) who meets all the financial conditions is 'serious'

*Human Rights National Consultative Commission Report (2016)*

**85%** respondents declare that an unequal allocation between groups is "inappropriate",  
lab experiment Barr et al., 2018 EER)

# Are direct opinion expressed in survey useless ?

*Pager and Quillian (2005)*

Direct questions such as *Do you like members of group X* are flawed

## Sensible issues

Discrimination is illegal: respondents may be reluctant to answer truthfully about such a sensitive issue

## Social desirability bias

Respondents tend to choose the answer they believe is expected from the interviewer

## Context matters

It is difficult to fully describe a real situation using simple, standard survey questions

## Multidimensional morality

In reality, moral decisions mean balancing at once multiple normative principles.

**Animosity** is not the only source of discriminaton

## Motivations

### ① Better understanding of a paradoxical fact

**=> Are direct opinion expressed in survey useless ?**

### ② Increase the connexion between opinion survey and theories

Review of standard theoretical explanations

Two normative trade-offs exist

**=> Little has been documented about the trade-off  
between morality and profit**

## ② Increase the connexion between opinion survey and theories

### Theoretical explanations

#### Inefficient prejudice (Becker, 1957)

Employers **with xenophobic preferences** discriminate even if it is **costly**

Trade-off between Prejudice / cost

Discrimination is rooted in individual preferences

Discrimination is inefficient in a competitive market

#### A rational profit / morality trade-off

Employers **without xenophobic preferences** discriminate because it is **costless**

#### *Preferences*

**Customers taste-based** Becker (1971)

**Employee taste-based,** Welsh (1967)

#### *Imperfect information*

**screening:** employer is not familiar with the target group

*Pinkston 2009, Feld et al. 2016, Lesner 2018*

**statistical:** general prejudices against the target group

*Arrow 1972, Phelps 1972*

## Empirical results

### Trade-off between prejudice/animosity and profit

Tyran and Hedegaard, (AER 2018)  
Zussman (EJ 2013)

experiment using Danish students  
Israeli second hand car market

### Trade-off between morality and profit

=> Lack of information on this trade\_off

Difficult to measure / identify profitable discriminatory behaviors

Only one study:

Dickinson et al (EER 2018)

lab experiment sanction in-group favoritism



## Motivations

① Better understanding of a paradoxical fact

=> Are direct opinion expressed in survey useless ?

② Increase the connexion between opinion survey and theories

=> Little has been documented about the trade-off between morality and profit

③ Propose an experimental way to analyse this trade-off and the factors that affect the normative acceptability of discrimination

Q1: Do we observe such trade-off ?

Q2: Which factors affect this relation ?

Tested factors : cost / source / social suassion

# Methodological issues

## Vignette

Question  
 choice 1  
 choice 2

A simple short realistic story

Where a character must make a decision

A moral dilemma

Choices presented to the respondent prioritize alternative normative principles

Main advantage

Reduces the **cognitive effort** of understanding the normative dilemma at play, and allows respondents to give their opinion without having to provide complex, overly long explanations

Vignettes are widely use in social sciences (1970's)

Sociology: determinants of social status (Nosanchuk 1972, Rossi et al. 1974)

Social psychology: determinants of guilt perception (Walster 1966, Jones and Aronson 1973, McGlynn et al. 1976)

Economics : Empirical Social Choice: Yaari and Bar-Hillel (1984, seminal paper), Gaertner and Schokkaert (2012, handbook)

## Our questionnaire-experimental protocol

Imagine a planet, **Planet Neutra**, located far away in a peaceful galaxy. On Neutra, there are Humans and two alien races, the Tenkas and the Tokrins. The same number of humans, of Tenkas and of Tokrins live on Neutra.

**Akri** is the human **manager** of a **restaurant** located on Neutra. For the new season, he **must hire 10 waiters** for his restaurant.

**10 Tenka** aliens and **10 Tokrin** aliens **apply** to the job.

Akri personally **likes both** the Tenkas and the Tokrins. He thinks that they provide **work of equivalent quality**.

Akri knows that **his customers do not like being served by Tenkas**. The restaurant **loses half of its customers** as soon as they see at least one Tenka waiter. The restaurant doesn't lose any customer if there are only Tokrin waiters.

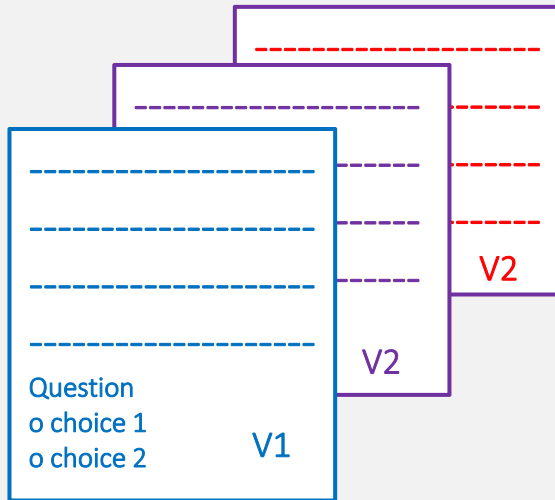
For **Akri**, having **customers** is important because the restaurant is his **only source of income**.

**How many Tenkas do you think it is fair for Akri to hire?**  
(**Your opinion will not impact Akri's actual decision**).

0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10



# Factorial survey



## Portfolio of stories

with parametric variations of a single (various) contextual factor(s)

## Hidden factors

Only one version is presented to each respondent

## Randomly assignment

## Main advantage

The comparison between the answers of the groups of respondents randomly assigned to each version of the survey, provide **causal evidence** on how the contextual factors affect the normative preference of the respondents.

Widely use in

sociology: ([Alexander and Becker, 1978](#) ; [Wallander, 2009](#)).

economics to analysis discrimination

[Finseraas et al. \(2015, Norwegian boot camp\)](#),

[Kübler et al. \(2018, applicant CV appreciation, Germany\)](#)

## Three main tested factors

### **Source of discrimination**

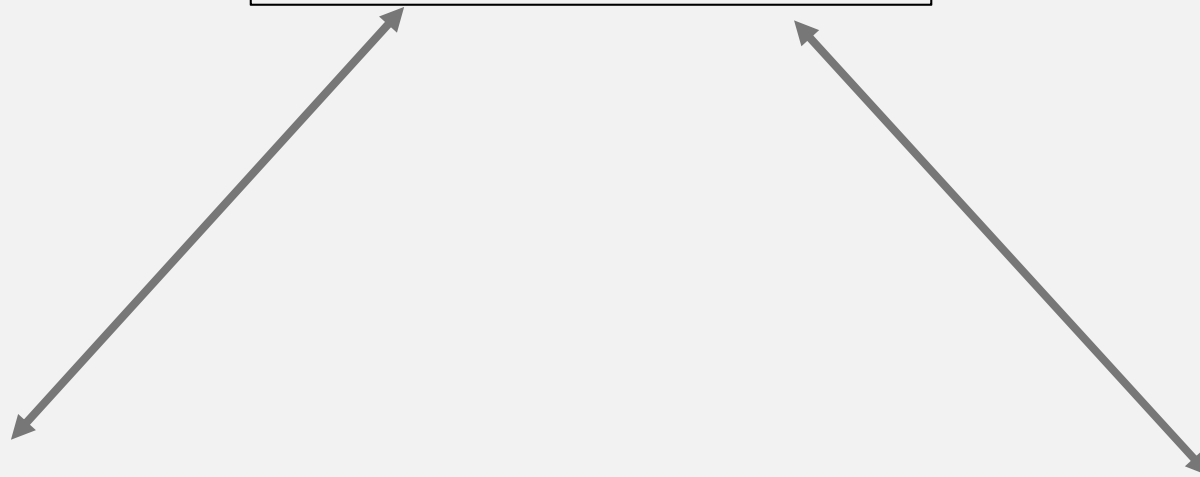
*Taste-based (customers)*  
*Screening*  
*Statistical*

### **Social norms**

None  
Equalitarian  
Affirmative action

### **Cost of non-discrimination**

loss of 25%  
loss of 50%  
loss of 75%



## Three main tested factors

### **Source of discrimination**

*Taste-based (customers)*  
*Screening*  
*Statistical*

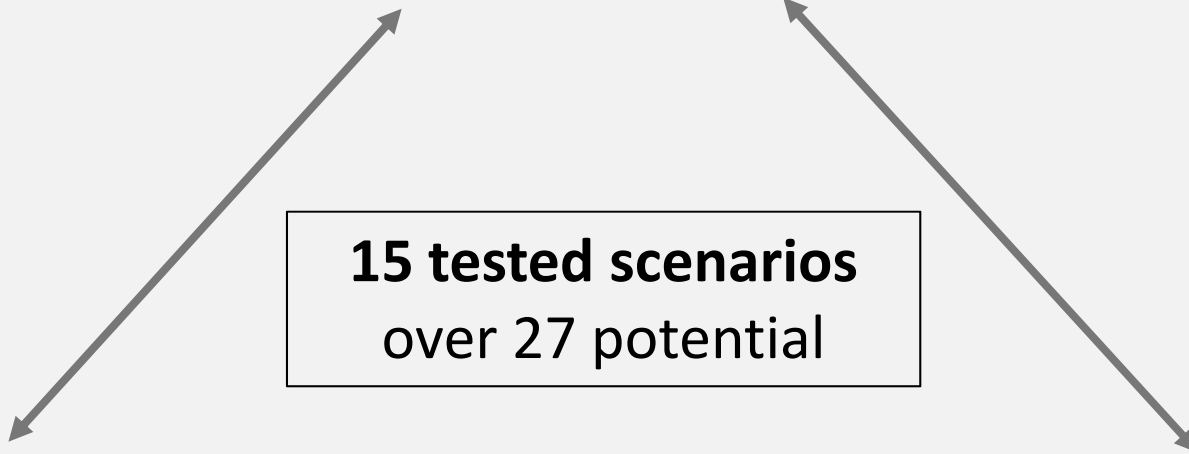
**15 tested scenarios**  
over 27 potential

### **Social norms**

None  
Equalitarian  
Affirmative action

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loss of 25%  
loss of 50%  
loss of 75%



# DATA

## **Administration of the questionnaire**

August 2018 - January 2019

Pen and paper survey, face-to-face during lectures

Voluntary, anonymous, no payment

Random assignment

## **Sample size**

915 students + specific control (185)

## **Sample main characteristics**

25% New Caledonia University - 75% Paris Nanterre University

Law (48%) - Economics (42%) - Sciences (10%)

Freshmen (90%) - Second and third year (10%)

Males (37%) - Females (67%)

Motive of discrimination	Moral injunction	Cost of non-discrimination (% of the employer's earnings)		
		25%	50%	75%
Customer taste	None	Scenario 1 N: 60	Scenario 2 N: 61	Scenario 3 N: 76
	Equal treatment		Scenario 4 N: 93	
	Positive discrimination		Scenario 5 N: 55	
Screening	None	Scenario 6 N: 70	Scenario 7 N: 53	Scenario 8 N: 59
	Equal treatment		Scenario 9 N: 55	
	Positive discrimination		Scenario 10 N: 68	
Statistical	None	Scenario 11 N: 57	Scenario 12 N: 53	Scenario 13 N: 67
	Equal treatment		Scenario 14 N: 41	
	Positive discrimination		Scenario 15 N: 47	
		<i>Scenarios without moral suasion, used to study motive and cost effects</i>		
		<i>Scenarios used to study moral suasion effects.</i>		

N = 556

N = 526

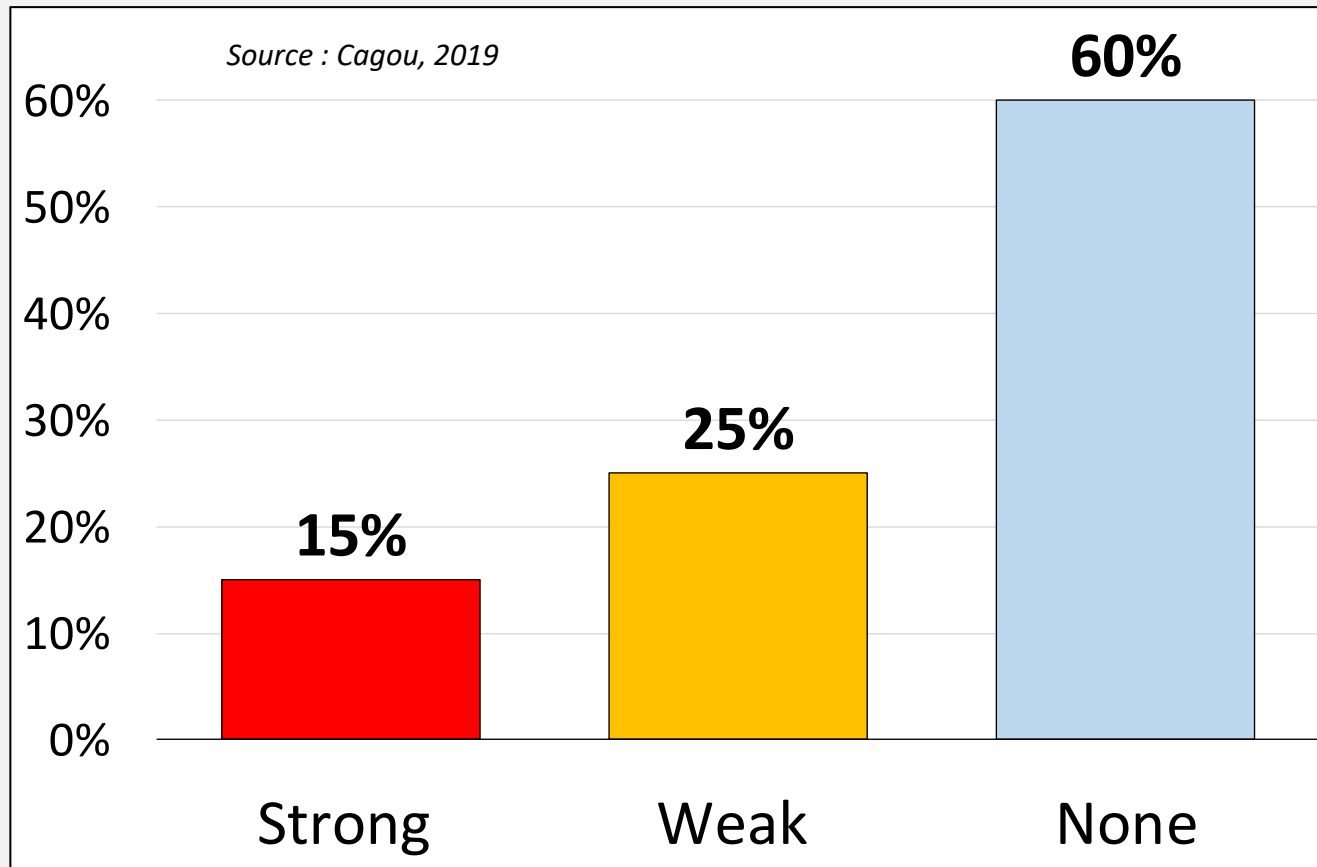


# Results

- ① Gross results
- ② Robustness check

**2 respondents over 5 choose discrimination ...**  
when they faced with a trade-off between morality and profit

**Figure 1: Support of labor market discrimination**  
(With neutral social norm)



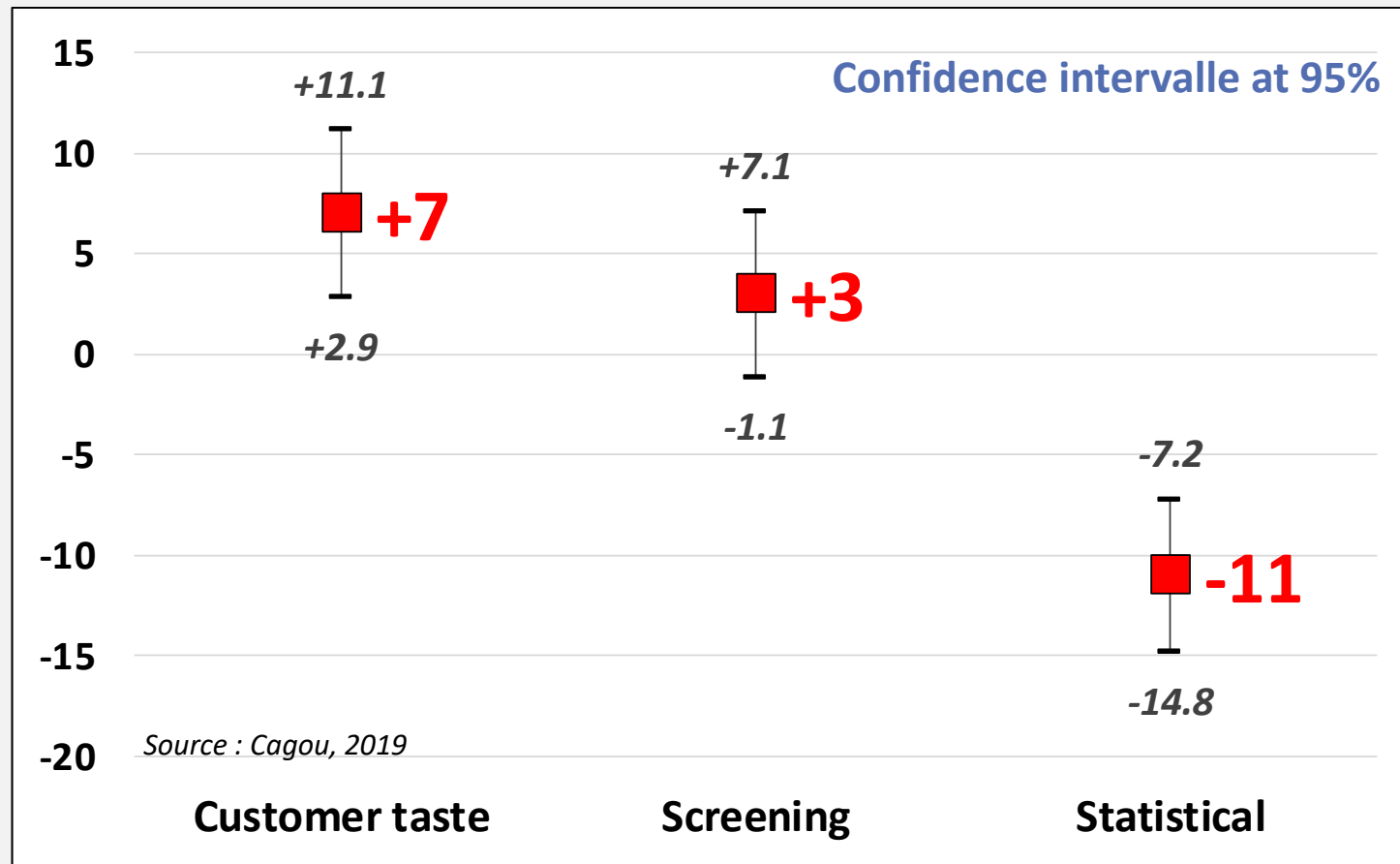
15% strongly discriminate (0 to 1 Tenka waiter hired)  
25% weakly discriminate (2 to 3 Tenka waiters hired)  
60% do not discriminate (4 Tenkas hired or more)

Contrasts with Barr,  
Lane and Nosenzo  
(2018)

Support of discrimination is **weaker** when discrimination is **statistical**

Figure 2: Support (strong and weak) gap of labor market discrimination according its source in points of percentage

*(With neutral social norm)*



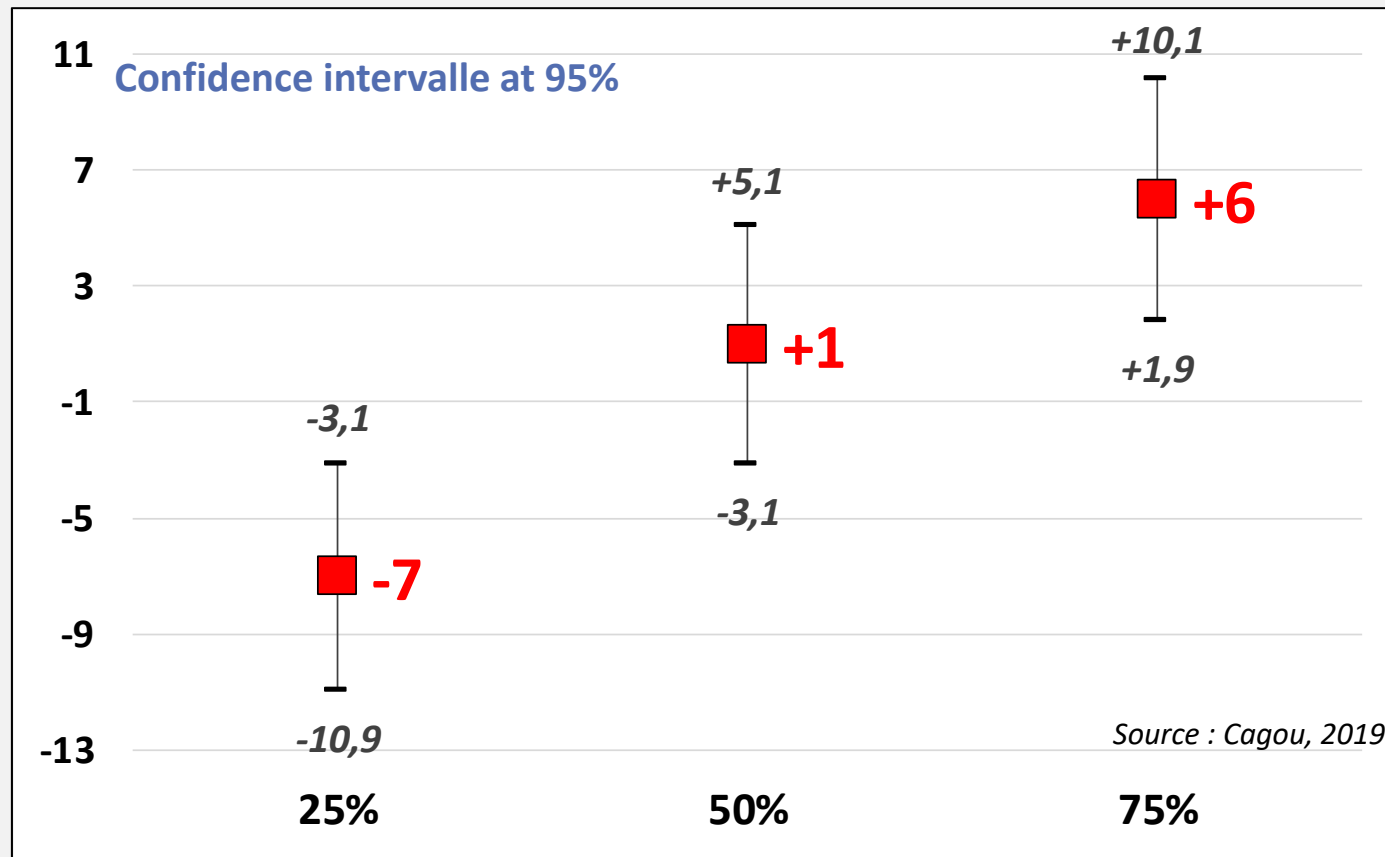
Kruskal – Wallis test (p-value)

13.9\*\*\*(0.001)

Support of discrimination is **stronger** when the **cost of non discrimination is higher**

Figure 3: Support (strong and weak) gap of labor market discrimination according its cost in points of percentage

*(With neutral social norm)*

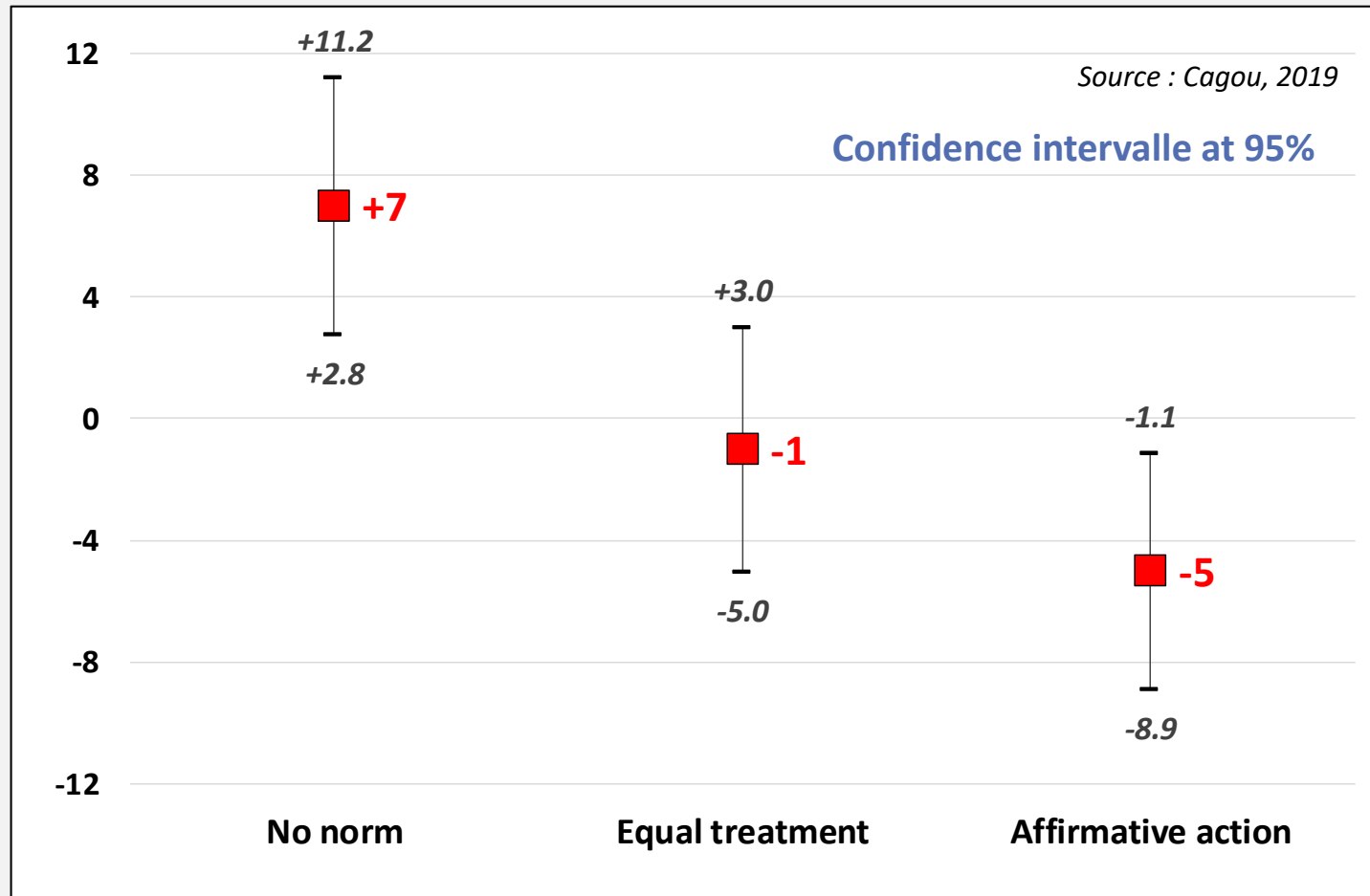


Jonckheere-Terpstra  
test P-value

38,664.5\*\*(0.016)

**Support** of discrimination is **weaker** in presence of equalitarian and affirmative action **social norms**

**Figure 4: Support (strong and weak) gap of labor market discrimination with social norm in points of percentage**



Kruskal – Wallis test (p-value)

6.37\* (0.041)

# ROBUSTNESS CHECK

=> Location and gender affect normative opinion

**Table 1: Individual characteristics impact on attitudinal acceptability of discrimination**

	Major		Localisation		Gender	
	Law	Other	Paris	Nouméa	Male	Female
Strong	14%	17%	19%	8%	19%	13%
Weak	25%	24%	24%	27%	26%	24%
None	61%	59%	58%	65%	55%	63%
% in population	48%	52%	70%	30%	36%	64%
Kruskal-Wallis test	0.43 (0,51)		5.43** (0,02)		3.75* (0,05)	

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Econometric estimation : **Ordered probit model**

Output : Intensity of the support of discrimination (strong, weak, none)

Covariates : Treatments + control variables (location, gender, college major)

**Table 2: Marginal effects of the treatments**

*Ordered probit regression*

		Strong	Weak	Strong or Weak
Cost of morality	25% vs 50%	NS	NS	NS
	25% vs 75%	+6.9** [+1.4; +12.3]	+4.8** [+0.9; +8.7]	+11.7** [+2.5 ;+20.9]
Motive of discrimination	Statistical vs taste-based	+6.1** [+11.2; +0.9]	+5.1** [+9.5; +0.7]	+11.2** [+1.8; +20.6]
	Statistical vs screening	+10.0*** [+15.5; +4.5]	+7.3*** [+11.5; +3.1]	+17.3*** [+8.0; +26.6]
	Taste-based vs screening	NS	NS	NS

\*\*\* Significant at the 1% threshold \*\* significant at the 5% threshold, \*significant at the 10% threshold. NS: not significant.



**Table 2: Marginal effects of the treatments**

*Ordered probit regression*

		Strong	Weak	Strong or Weak
<b>Moral injunction</b>	None vs equality	-6.2** [-11.8; -0.5]	-4.8** [-9.2; -0.4]	-11.0** [-32.7; -6.9]
	None vs affirmative action	-7.6*** [-13.1; -2.1]	-6.3*** [-10.9; -1.8]	-13.9*** [-23.6 ; - 4.2]
	Equality vs affirmative action	ns	ns	ns

\*\*\* Significant at the 1% threshold \*\* significant at the 5% threshold, \*significant at the 10% threshold. NS: not significant.

# Conclusion

- ① Vignette protocol shows strong profit/morality trade-off  
In this context 2 persons over 5 support discrimination : contrasts with [Barr, Lane and Nosenzo JPE 2018](#)) and direct question in survey
- ② Trade-off significantly sensitive to
  - cost of non-discrimination: consistent with [Zussman \(EJ 2013\)](#) and [Tyran et al. \(AER 2018\)](#)
  - source of discrimination: customer (external) taste or screening are more legit than imperfect information consistent with [Baert and De Pauw EcoLetters 2014](#))
- ③ Political implications: to reduce discrimination two instruments are efficient
  - =>Sanction (Becker 1964)
  - => Social norms (nudges [Thaler and Sunstein, 2008](#))

## Limits of our work

Sample of French Students

Link between normative opinion and behavior