

### Three originalities:

- Small island characterized by multi-ethnicity and pronounced socio-economic residential segregation between Kanak and non-Kanak inhabitants.
- Exhaustive administrative data on students' characteristics, classroom and school characteristics.
- GS2SLS procedure (Kelejian and Prucha, 1998, 1999) to identify peer effects and distinguish between *endogenous*, *exogenous* and *correlated* effects (Manski, 1993).

### Data:

- Exhaustive data set of students enrolled in 9<sup>th</sup> grade in New Caledonia in 2018
  - 4 198 students in a public or private school.
- For each student, we are able to determine :
  - His classroom.
  - His middle school (French "college").
  - Information on socio-demographic characteristics: place of birth, age, gender, occupational status of the household head etc.

### Estimation strategy:

We estimate the following model:

$$y_r = \alpha_r + \gamma x_r + \beta W y_r + \delta W x_r + \varepsilon_r$$

- Where each element  $w_{ij}$  of matrix  $W$  is defined as follows:
 
$$w_{ij} = \begin{cases} 1 & \text{if student } j \text{ belongs to the classroom of student } i \\ 0 & \text{otherwise} \end{cases}$$
- To eliminate *correlated effects*, we pre-multiply Equation (1) by  $(I-W)$  and we estimate it by using a GS2SLS procedure proposed by Kelejian and Prucha (1998, 1999, 2010).

### Results by Province:

	School achievement		
	North	South	Loyalty Islands
Wy	0.618	0.541***	-0.205
	Vocational training		
	North	South	Loyalty Islands
Wy	0.735***	0.785***	0.804***
<b>Observations</b>	<b>736</b>	<b>2,953</b>	<b>387</b>



### Manski's typology (1993, 2000):

- *Endogenous effects*: when a student's behavior is influenced by the behavior of his bets, resulting from interactions between peers.
- *Exogenous effects*: when a student's behavior is influenced by the characteristics of his peers, such as social or ethnic origin.
- *Correlated effects*: variables that affect both group and student's behaviors at the same time.

### Variables:

#### Dependent variables:

1. Dichotomous variable indicating **whether or not the student has obtained the GCSE with the highest honors** (average score above 16/20).
2. Dichotomous variable indicating **whether he makes the choice of a professional training for the next year**

#### Independent variables:

- **Individual socio-economic characteristics**: Gender; age; country of birth; occupational status of the household head.
- **Class level**: % of "highest honors" successes in the GCSE ; % of students born elsewhere (Metropolitan France, Wallis and Futuna, Vanuatu, French Polynesia etc.)
- **School level**: Private vs public.

### Results on the whole population:

Variables	School achievement		Vocational training	
	x	Wx	x	Wx
Constant	1.271***		-1.559***	
Boy	-0.0792***		0.0776***	
Age (in years)	-0.0705***		0.102***	
<i>Country of birth (ref. France)</i>				
New Caledonia	-0.134***		0.0622***	
Wallis and Futuna	-0.207***		0.0019	
Vanuatu	-0.204**		-0.0073	
Polynesia	-0.150**		0.0637	
Other	-0.116***		0.0777**	
<i>Household head occup. status (Ref. Int. Prof.)</i>				
Farmer	-0.0538	0.0436	0.0376	0.0590
Artisan, Business owner	-0.0287	0.0621	-0.0157	0.0152
Executive	0.0665***	0.135	-0.0269	0.0605
Employee	-0.0675***	0.0420	0.0129	0.0409
Blue-collar	-0.112***	0.0082	0.0575***	-0.0006
Retired	-0.0688**	-0.0545	0.0046	0.0076
Inactive	-0.0925***	0.0014	0.0912***	-0.0477
Undetermined	-0.0830***	-0.114	0.0831***	-0.0405
School fixed effects				
	Yes		Yes	
Wy	0.304		0.748***	
<b>Observations</b>	<b>4,076</b>		<b>4 076</b>	

Source: Vice-Rectorate of New Caledonia (2018).

Notes: In this table, only the results for model 4 are shown. \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.