

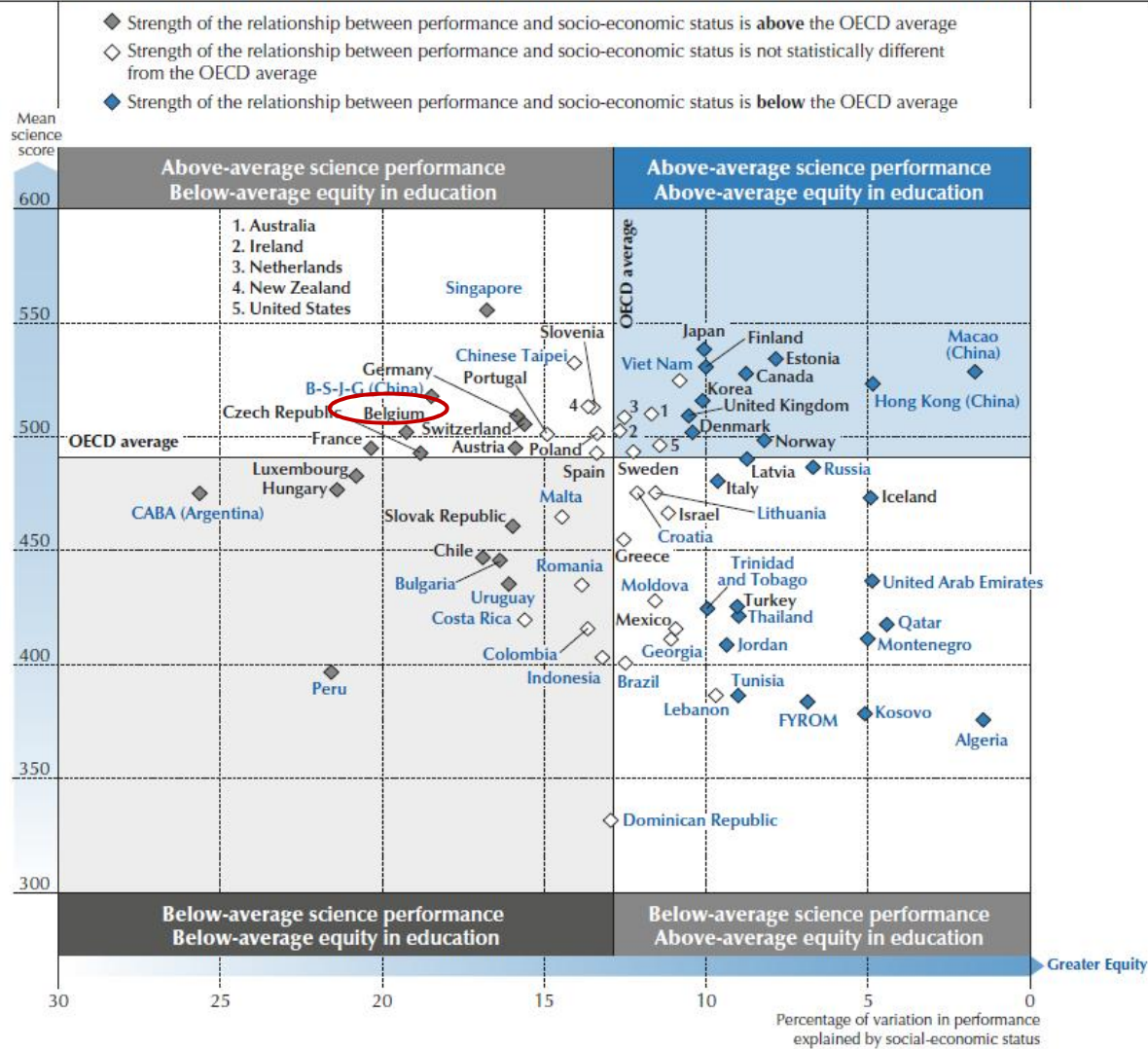


# Trends in social and ethnic inequity in the three Belgian Communities

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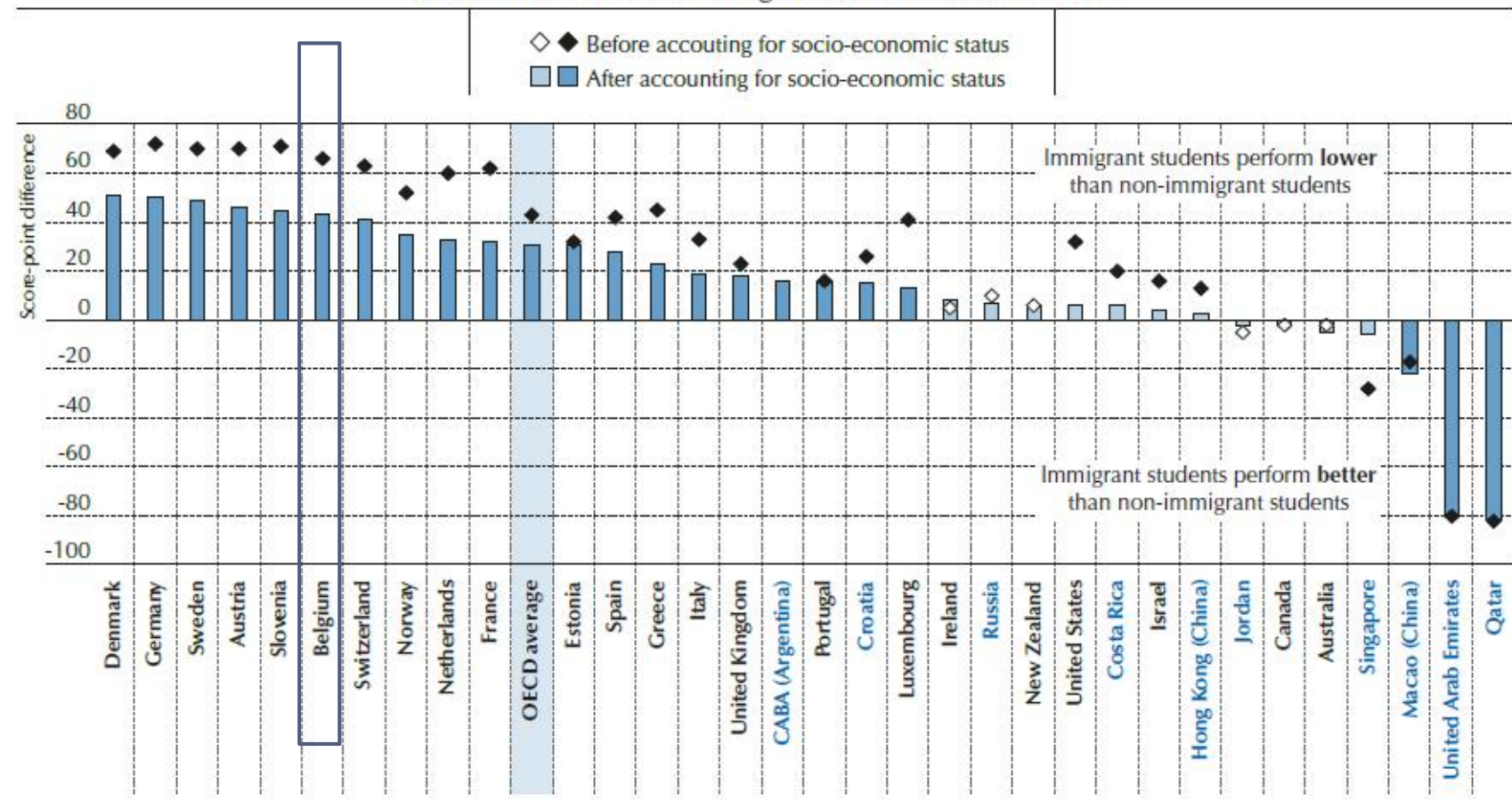
# Belgium is among the OECD countries with a low equity

Figure I.6.6 ■ Mean performance in science and strength of the socio-economic gradient



# In Belgium, large differences in performance between immigrant and non-immigrant students

Figure I.7.5 ■ **Differences in science performance, by immigrant background**  
*Score-point difference in science between immigrant and non-immigrant students, before and after accounting for socio-economic status*



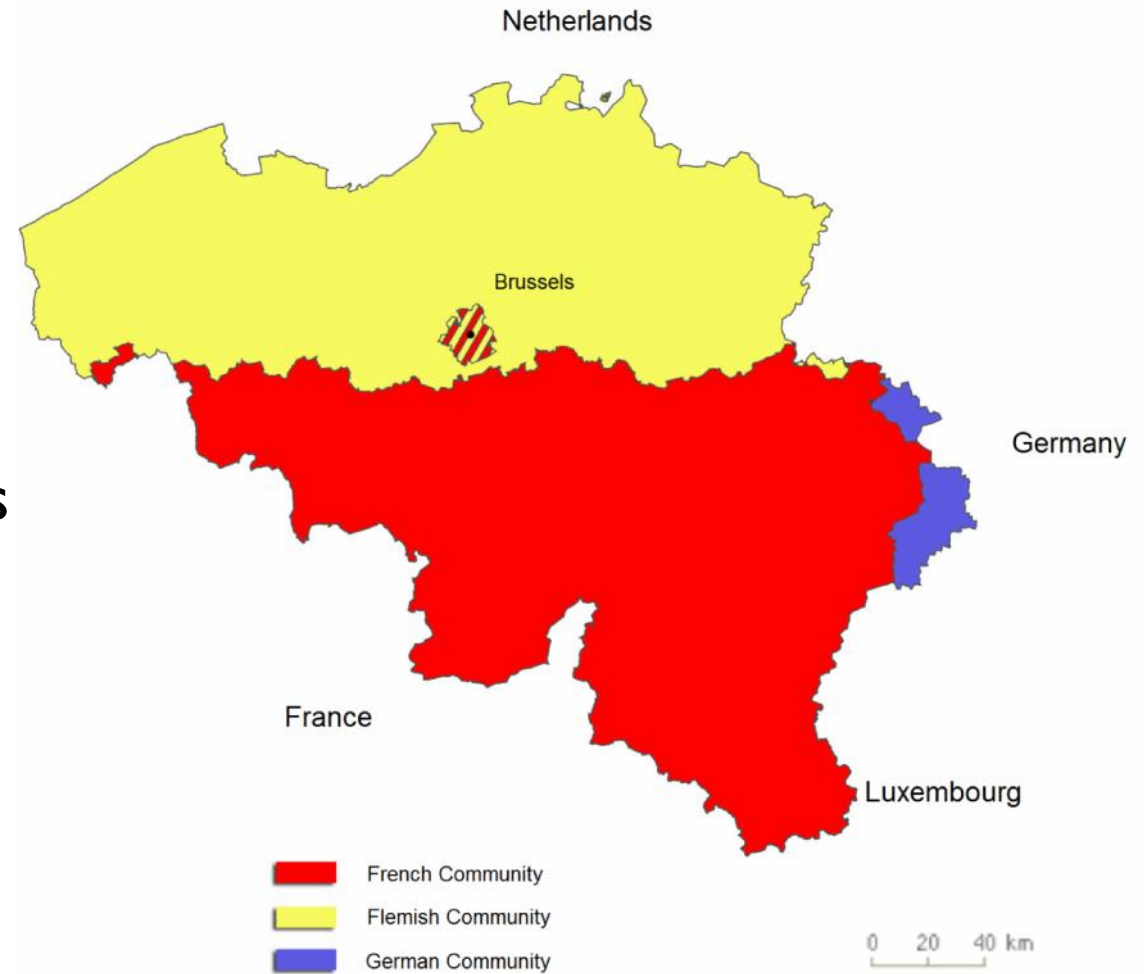
Source: OECD report – PISA 2015

# Belgium, a small country with different contexts and educational systems

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Three communities:

- ▶ 3 cultural contexts
- ▶ 3 educational systems



# Social Equity

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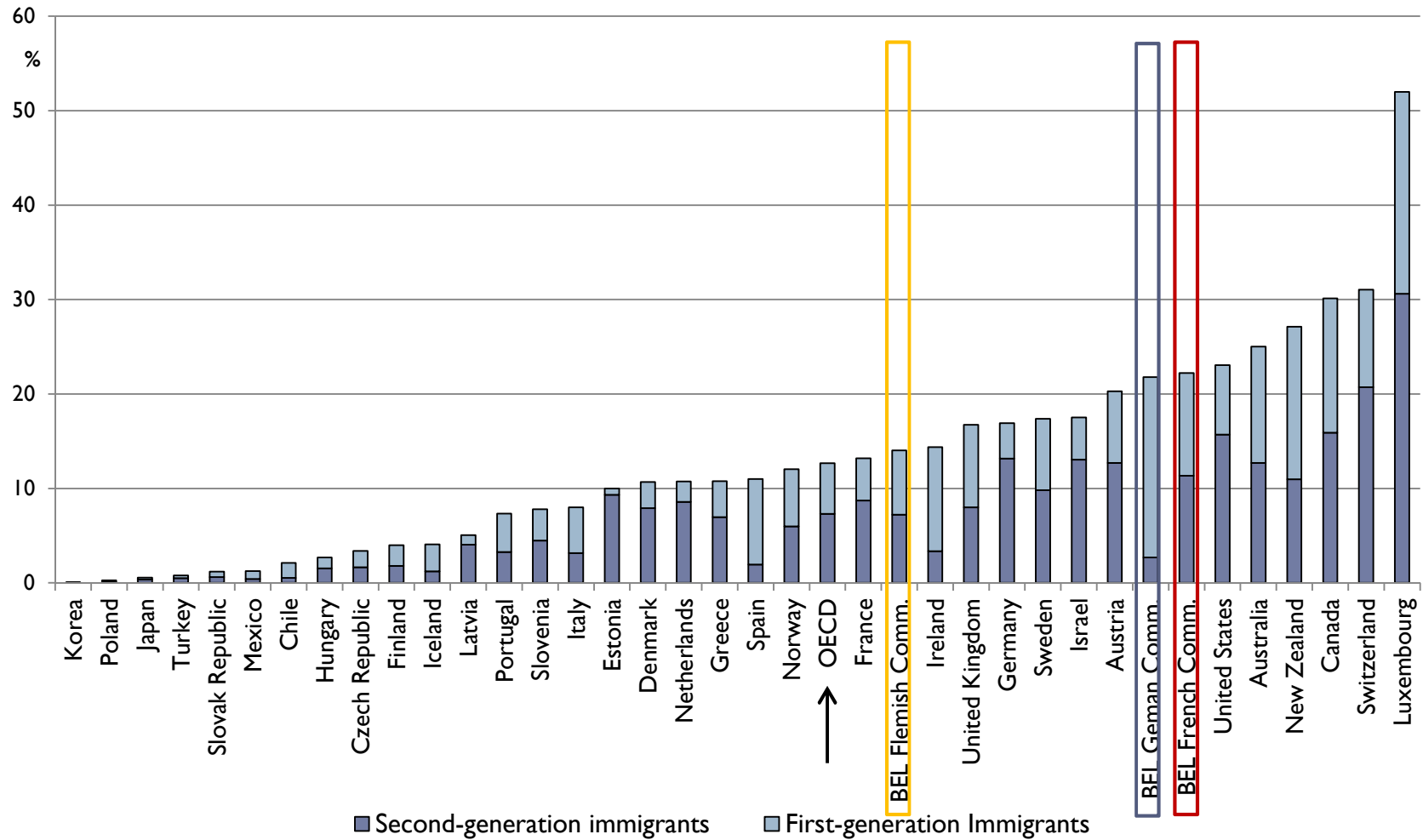
- ▶ The social determinism is the strength of the relationship between the student performance and their socioeconomic background

## I. Linear regression

	Scie score adjusted by ESCS	Scie score diff. for one-unit increase of ESCS	% variance in Scie perf. explained by ESCS
French-sp. Com.	484	46	20%
Flemish Com.	505	48	18%
German-sp. Com.	500	25	6%
OECD	494	38	13%

Source: PISA 2015

# Immigrant population - PISA 2015



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Social and ethnic (in)equity in the whole country

*versus*

Social and ethnic (in)equity in the different communities

# Interests of the study

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- ▶ International level:

A case study that illustrates the importance to consider the different national contexts in the analyses

- ▶ National level:

Apprehend the scholar inequalities that affect the students with an immigrant background in the different contexts of the communities.





# Theoretical framework

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Two mechanisms act together to produce inequalities between native and immigrant students (Felouzis and al., 2015) :

- ❑ Cultural discontinuity: cultural background of immigrant families that is distant from the school expectations
- ❑ Systemic discrimination: grouping students according to their abilities tend to segregate students with immigrant background → composition effect that impacts the quality of teaching and learning

All the authors recognize the impact of both sources but disagree regarding the magnitude of each of them.



## Theoretical framework (II)

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- ▶ In the OECD reports, Belgium is often grouped with France as countries where immigrant students are highly discriminated.
  - ▶ In France, the cultural discontinuity has for a long time been given as the main factor explaining the low performances of students with immigrant background (Bourdieu and Passeron, 1964; Lahire, 2008)
  - ▶ But in 2015, Felouzis *and al* hypothesized that the cultural gap is not able to explain the increase of ethnic inequities this last ten years.
- ▶ In Belgium - as a whole - Monseur and Baye (2016) showed that the influence of socio-economic status on performance is not equivalent for students with and without immigrant background



# Research questions

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How are acting the social and ethnic discriminations in the different contexts of the Belgian Communities ?

1. What are the characteristics of the immigrant population and what changes are observed over time?
2. What's the impact of the cross-border students on the reported performances of immigrant students?
3. To what extent is changing over years the gap of achievement between the native and non-native students?
4. What are the impacts of the immigrant background and the social status on the students' achievement?
5. To what extent do the ethnic inequalities result from systemic discrimination or cultural discontinuities?

▶ Data sources : PISA 2003 to 2015 databases



# French-speaking Community: overview

	Native students			Students with an immigrant background		
	2003	2009	2015	2003	2009	2015
Part in total population	81.7%	77.9%	77.8%	18.3%	22.1%	22.2%
Have repeated a grade	34.6%	42.3%	42.7%	54.6%	56.8%	55.8%
Vocational program	39.1%	34.0%	27.9%	52.1%	41.9%	20.8%
Social status of parents (zHISEI)	0.02	0.03	0.02	-0.10	-0.09	-0.08
Education level of parents: ISCED 5	64.4%	69.9%	72.1%	44.7%	53.2%	59.1%



# Flemish Community: overview

	Native students			Students with an immigrant background		
	2003	2009	2015	2003	2009	2015
Part in total population	93.2%	91.0%	86.0%	6.8%	9.0%	14.0%
Have repeated a grade	22.0%	23.1%	20.5%	49.7%	54.5%	45.3%
Vocational program	49.6%	56.0%	51.3%	59.6%	59.5%	58.1%
Social status of parents (zHISEI)	0.01	0.01	0.02	-0.15	-0.13	-0.12
Education level of parents: ISCED 5	55.9%	58.8%	68.6%	36.7%	46.5%	55.4%



# German-speaking Community: overview

	Native students			Students with immigrant background		
	2003	2009	2015	2003	2009	2015
Part in total population	82.3%	79.0%	78.2%	17.7%	21.0%	21.8%
Have repeated a grade	27.8%	29.2%	27.7%	47.9%	49.9%	40.7%
Vocational program	41.2%	30.7%	36.5%	47.6%	36.9%	23.3%
Social status of parents (zHISEI)	0.02	0.01	-0.01	-0.06	-0.03	0.06
Education level of parents: ISCED 5	49.9%	54.8%	60.2%	56.7%	63.5%	76.7%



# Ethnic segregation in schools

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- ▶ **Index of ethnic segregation** (Monseur and Baye, 2016) :

Percentage of students - with and without an immigrant background - that should be moved to reach the balance in the distribution of immigrant students in each school

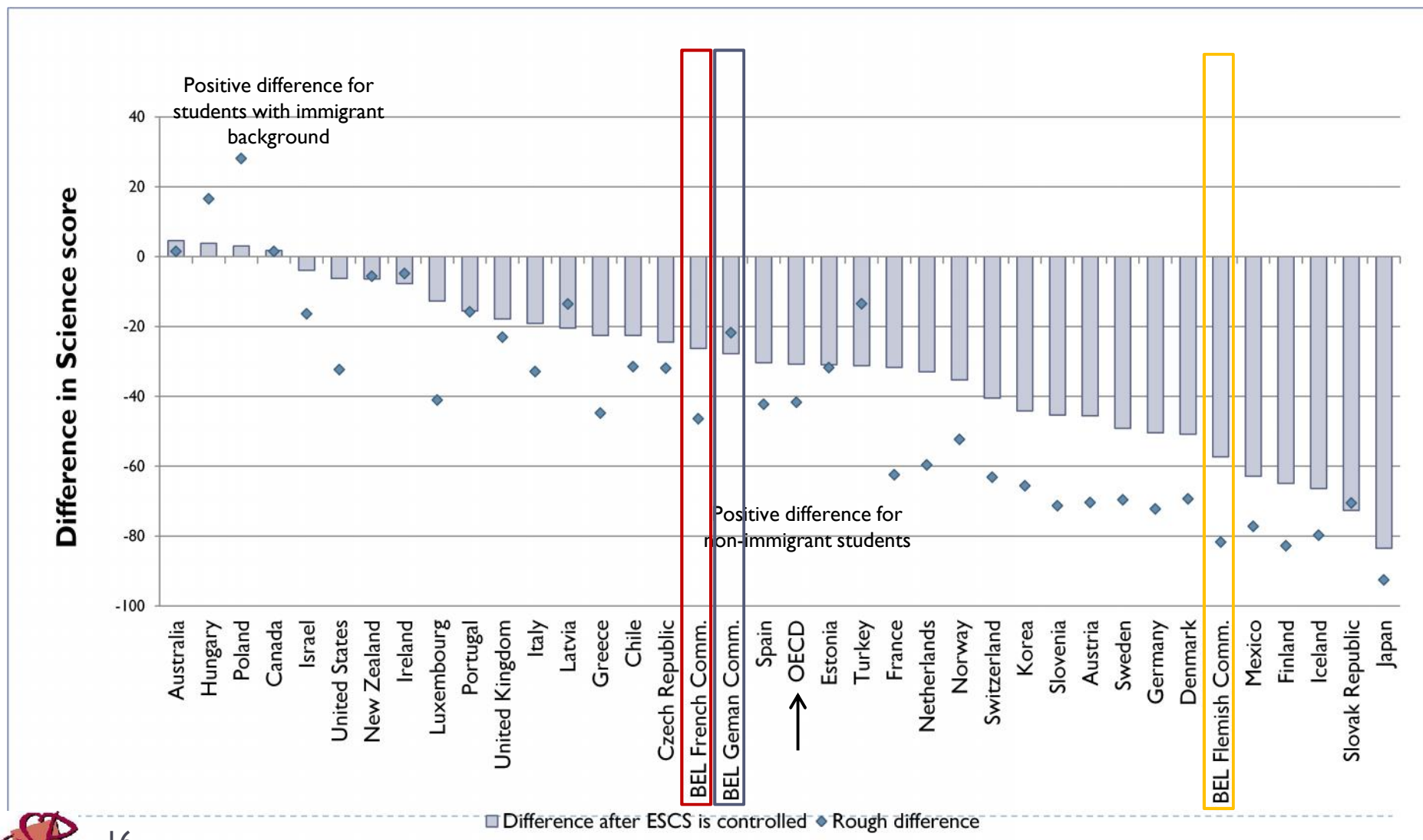
	<b>French-sp Community</b>	<b>Flemish Community</b>	<b>German-sp Community</b>
2003	14%	7%	/ *
2009	16%	10%	/
2015	16%	13%	/

\*Too few schools

- ▶ Ethnic segregation is more important in the French-speaking Community but is rather stable over years
- ▶ In the Flemish Community, the ethnic segregation is greatly growing



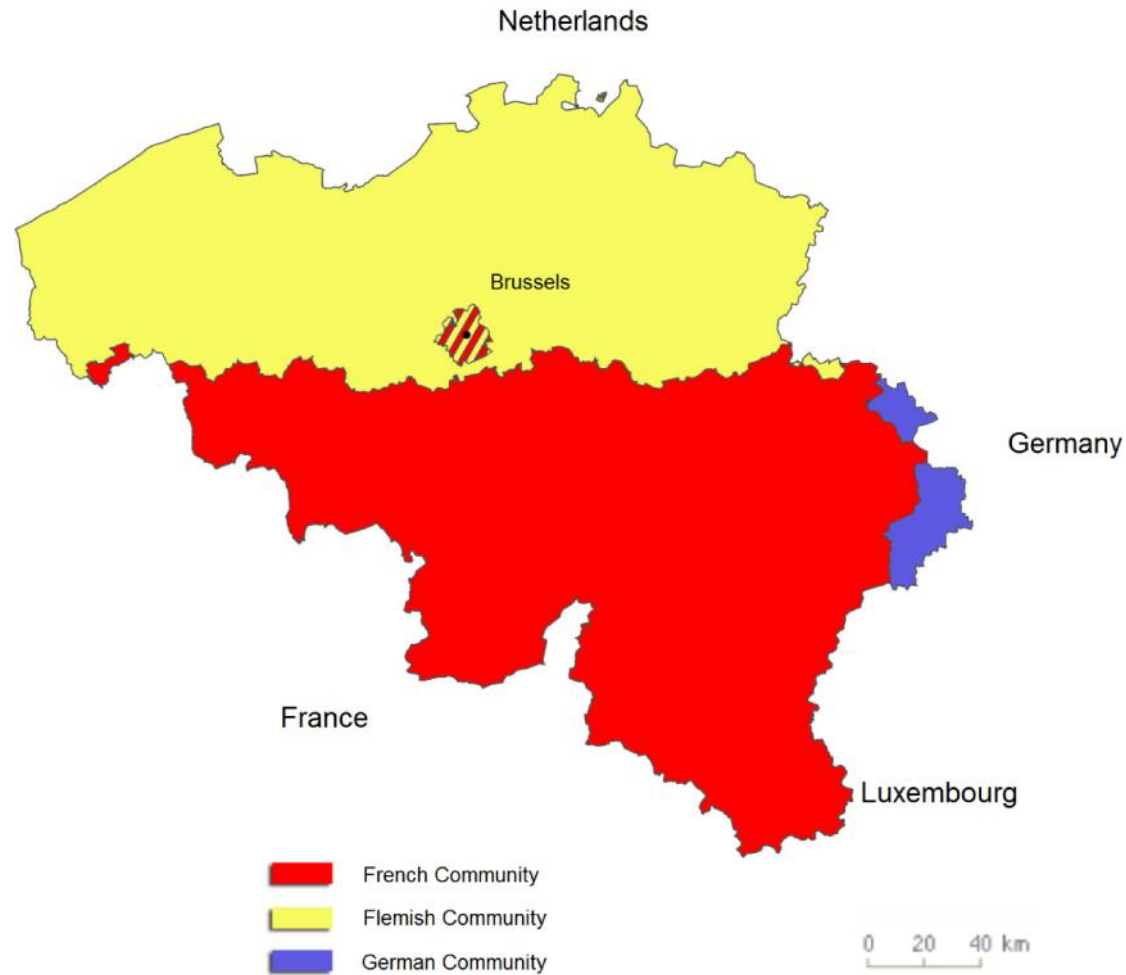
# Differences between immigrant and non-immigrant students in science performance – PISA 2015





# Cross-border students in Belgium

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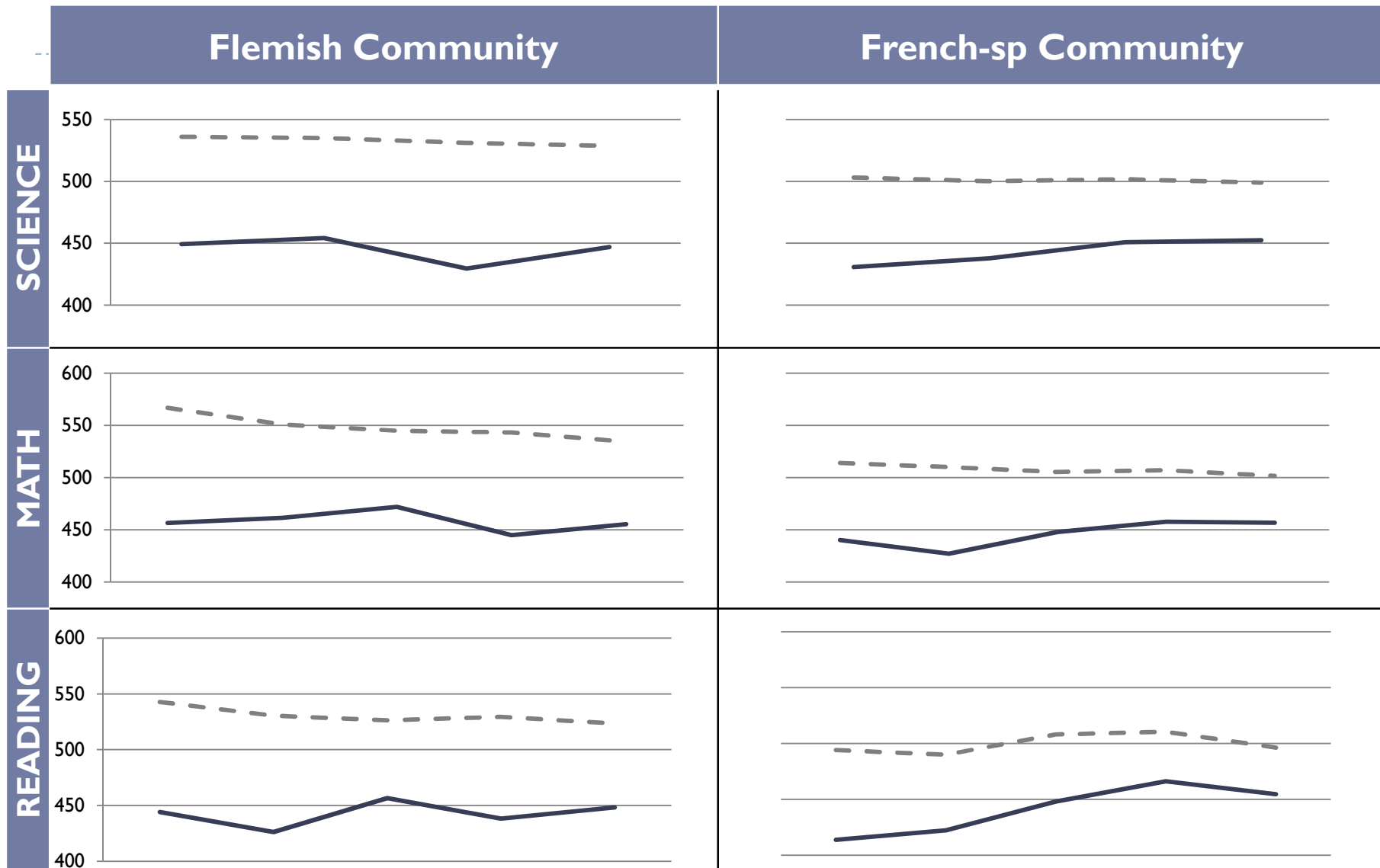
# Cross-border students in Belgium – PISA 2015

	French-sp Com.	Flemish Com.	German-sp Com.
<b>Cross-border students</b>	2.1% <small>(0.73)</small>	2.0 % <small>(0.48)</small>	10.0 % <small>(1.60)</small>
<b>« Real » first generation immigrants</b>	8.8% <small>(0.99)</small>	4.8 % <small>(0.45)</small>	9.1% <small>(1.44)</small>
<b>Second Generation Immigrants</b>	11.3% <small>(0.95)</small>	7.2 % <small>(0.74)</small>	2.7 % <small>(0.94)</small>
<b>Native Students</b>	77.8% <small>(1.72)</small>	86.0 % <small>(0.99)</small>	78.2% <small>(2.06)</small>

- ▶ In the German speaking Community, more than 50% of the first-generation immigrant students - as defined in PISA - are students who cross the frontier each day.
- ▶ They are 30% of the first-generation in the Flemish part and 20% in the French part



# Trends on differences



# Social Determinism and immigration background

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1. Analyses of means: linear regressions and socio-economic gradient
2. Analyses of variance



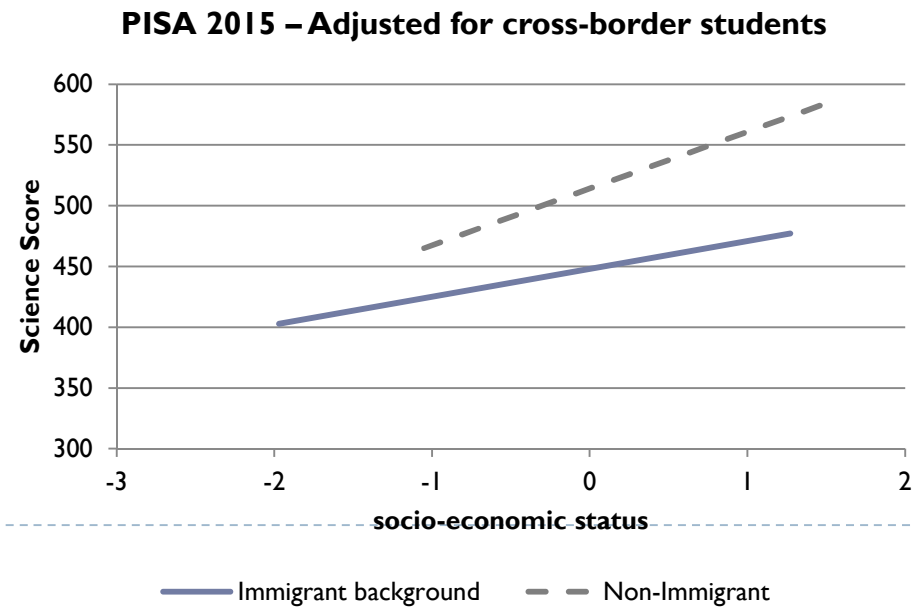
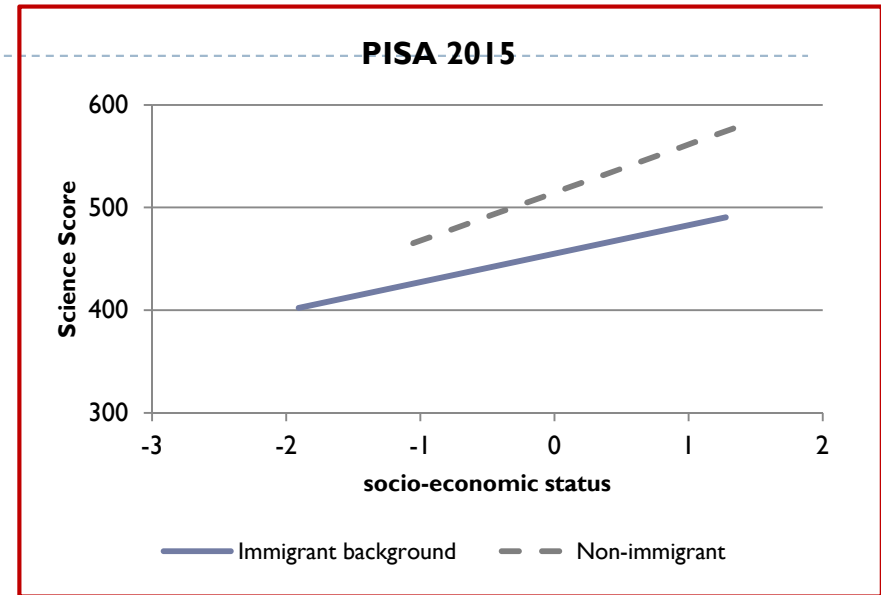
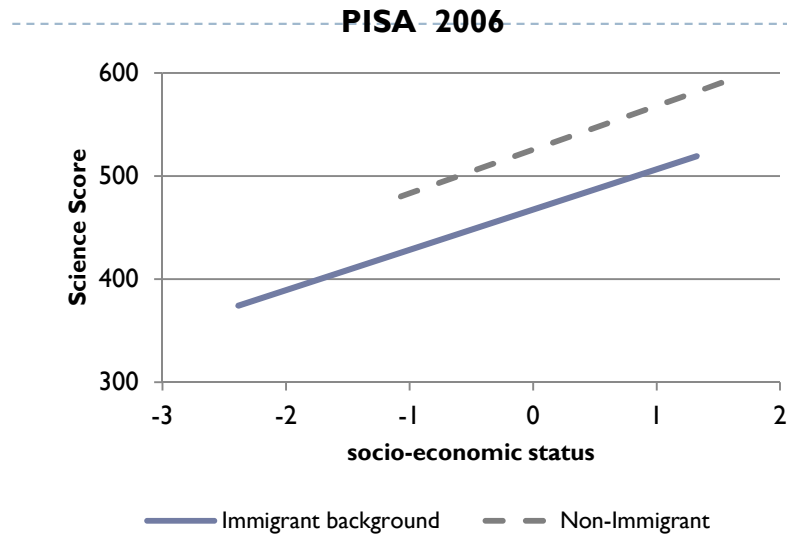
Interaction between socio-economic status and immigrant background – *Linear regression*

**Flemish Community**

Cycle	Domain	ESCS		Non-Immigrant		Interaction	
		Value	Std	Value	Std	Value	Std
2003	Reading	35.4	6.25	66.1	8.40	10.2	6.93
	Math	37.8	5.16	75.7	7.34	<b>12.1</b>	5.68
	Science	38.8	4.92	71.1	7.96	8.3	5.51
2006	Reading	43.9	5.86	73.4	9.20	-1.3	5.87
	Math	33.1	4.87	63.2	8.57	<b>10.6</b>	5.25
	Science	39.0	4.46	58.1	7.87	3.4	4.91
2009	Reading	19.0	5.24	50.1	6.70	<b>22.3</b>	5.78
	Math	25.8	6.03	49.8	7.32	<b>20.1</b>	6.78
	Science	27.6	6.21	57.1	8.02	<b>16.7</b>	6.86
2012	Reading	21.5	6.3	69.8	6.93	<b>20.1</b>	6.29
	Math	24.2	6.41	74.0	5.61	<b>23.5</b>	6.26
	Science	26.0	5.69	76.8	6.49	<b>19.0</b>	5.88
2015	Reading	25.5	4.84	54.5	6.29	<b>18.1</b>	4.91
	Math	20.5	5.20	59.2	6.19	<b>23.6</b>	5.27
	Science	27.7	4.79	59.4	5.33	<b>19.2</b>	4.89



# Interaction effect – Flemish Community

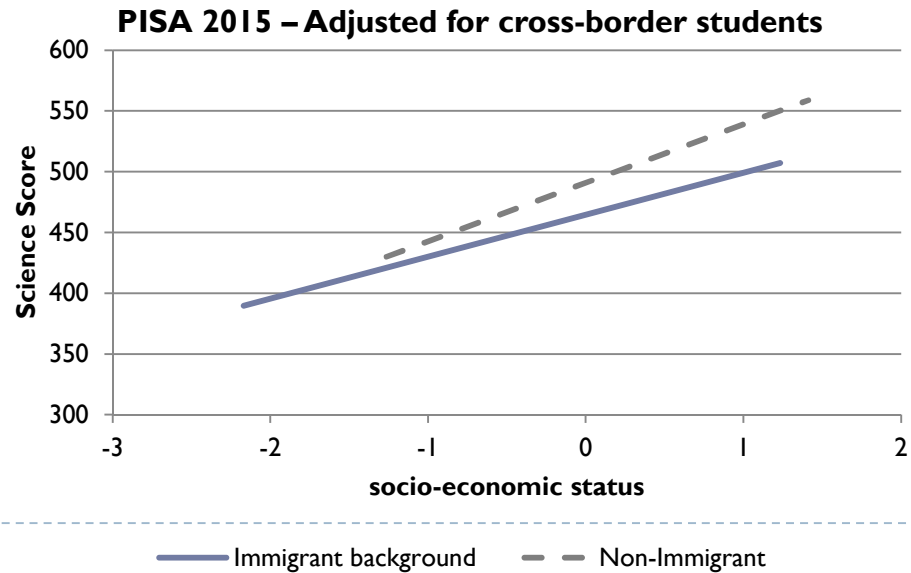
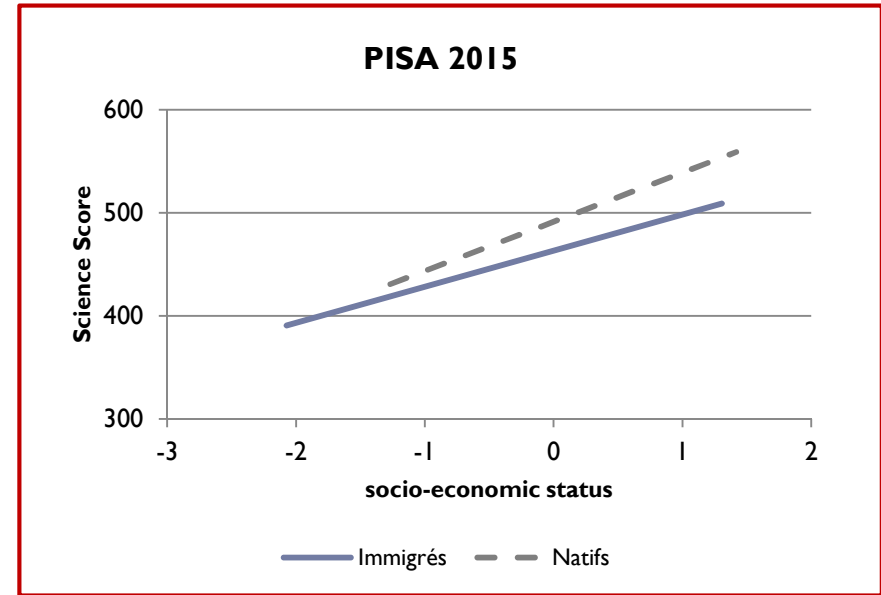
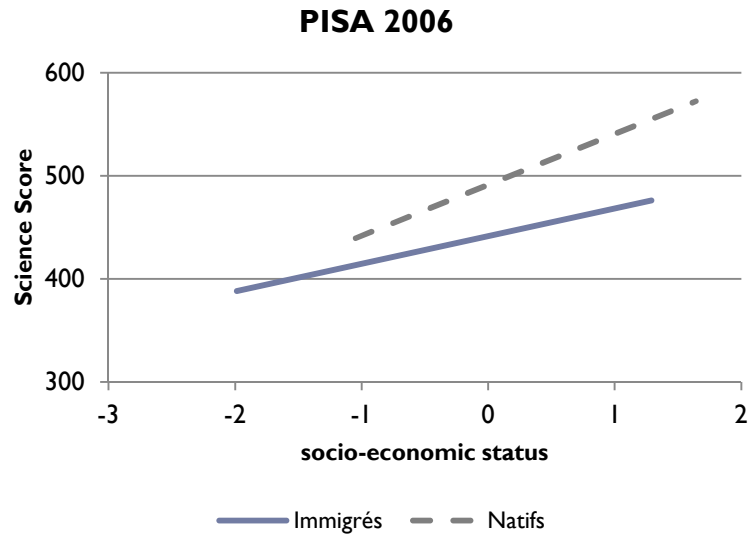


Interaction between socio-economic status and immigrant background – *Linear regression*  
**French-speaking Community**

Cycle	Domain	ESCS		Non-Immigrant		Interaction	
		Value	Std	Value	Std	Value	Std
2003	Reading	22.4	9.26	61.0	8.29	<b>27.2</b>	8.53
	Math	39.1	4.24	39.1	7.95	<b>14.4</b>	4.76
	Science	42.0	4.94	41.5	8.42	<b>14.5</b>	5.29
2006	Reading	22.4	7.60	46.3	8.43	<b>24.9</b>	8.12
	Math	22.4	9.26	61.0	8.29	<b>27.2</b>	8.53
	Science	26.8	5.45	49.7	6.49	<b>22.6</b>	6.34
2009	Reading	39.4	5.29	30.7	8.02	<b>14.7</b>	5.48
	Math	34.8	5.68	29.9	7.61	<b>20.1</b>	5.56
	Science	34.1	5.44	35.0	8.46	<b>20.0</b>	5.73
2012	Reading	42.7	8.28	24.7	7.21	<b>6.2</b>	8.91
	Math	35.0	5.93	31.8	6.23	<b>12.8</b>	7.48
	Science	37.1	6.74	33.5	6.36	<b>8.0</b>	7.14
2015	Reading	31.5	4.61	24.7	6.76	<b>15.0</b>	4.98
	Math	30.2	4.02	28.1	6.01	<b>16.6</b>	4.35
	Science	35.0	4.55	28.1	6.32	<b>12.7</b>	4.72



# Interaction effect – French-sp Community





# Ethnic Determinism?

Percentage of variance explained by ESCS and by immigration

	Unique effect of ESCS	Unique effect of Immigration background	Combined effect of ESCS and Immigration
Flemish Community	14.4%	3.5%	3.2%
French-sp Community	18.0%	1.2%	2.8%

Science – PISA 2015

- ▶ A larger part of variance is explained by the socio-economic status
- ▶ The unique effect of immigration background explains a very low percentage of variation in performance
- ▶ Unique effect of immigration + combined effect is higher in the Flemish Community

→ No Ethnic Determinism



## Discussion: Ethnic inequalities, a result of systemic discrimination or cultural discontinuity “only”?

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*Empirical hypotheses only because of the descriptive nature of the analyzes*

- ▶ In both communities, the education level of parents is increasing in a larger proportion for the students with an immigrant background than for the native students .
  - ▶ If the cultural discontinuity is important for explaining the lower performance of the immigrant students, their achievement should increase. This is observed in the French-speaking Community but not in the Flemish Community.
- ▶ The interactions between the education level of parents and the immigration background has been tested and are mostly non-significant in both communities
  - ▶ The immigrant and native students benefit similarly of a higher inherited cultural capital. This supports the effect of the cultural discontinuity.

## Discussion: Ethnic inequalities, a result of systemic discrimination or cultural discontinuity “only”?

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- ▶ The French-speaking Community has an old experience with leading a large immigrant population of students. The immigrant population is still growing but slowly. The segregation in schools is substantial but stable.
  - ▶ In this “stabilized” context, it seems that the social determinism tends to act in a more similar way for the immigrant students, mainly once the education level of parents is recovered.
- ▶ The Flemish Community is less familiar with the management of schools hosting immigrant students. Moreover, the immigrant families are also “fresh” to decode the school system.
  - ▶ In this “moving” context, systemic discrimination is a better hypothesis to explain why immigrant students do not benefit from their social status to the same extent than native students.



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Thank you for your attention!

