

Comparing 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data

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At a Glance



THE ISSUE

This brief compares 15-year-old students who reported career expectations in finance in 13 education systems that participated in the financial literacy assessment of the 2015 Program for International Student Assessment (PISA). It explores selected demographic characteristics of these students and the association between students' finance career expectations and their financial literacy performance.



THE FINDINGS

Across the participating education systems, 3% of the 15-year-old students expected to work in finance as adults, and 13% have at least one parent working in finance. In some education systems, the results also identify differences in the percentage of students who expected to work in finance by gender or socioeconomic status.



THE IMPLICATIONS

The findings provide a cross-national picture of students' finance career expectations. They contribute to the existing literature by using data from the PISA (2015) financial literacy assessment.



THE ISSUE

This brief compares 15-year-old students who reported career expectations in finance in 13 education systems.

Students' career expectations have been found to be highly predictive of students' actual career choices and outcomes later in life. Moreover, research shows that students' career expectations are to some extent based on the resources available to them, as socioeconomic background—including parental occupation—is associated with career expectations. Other factors such as gender have been linked with students' career expectations.

The financial sector's significance in the global economy is unquestionable. An increase in financial literacy skills can improve financial decision making and positively impact individuals and households. With the increasing significance of the financial sector and the recognition of financial literacy as an essential life skill, it is important to compare—in a global context—students' career expectations in finance and explore their association with students' financial literacy.

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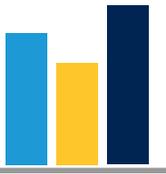
The research, data, figures, and findings in this summary publication are based exclusively on *A Comparative Profile of 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data*.

Liao, Y. (2020). *A Comparative Profile of 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data (Rep.)*. Washington, DC: American Institutes for Research.



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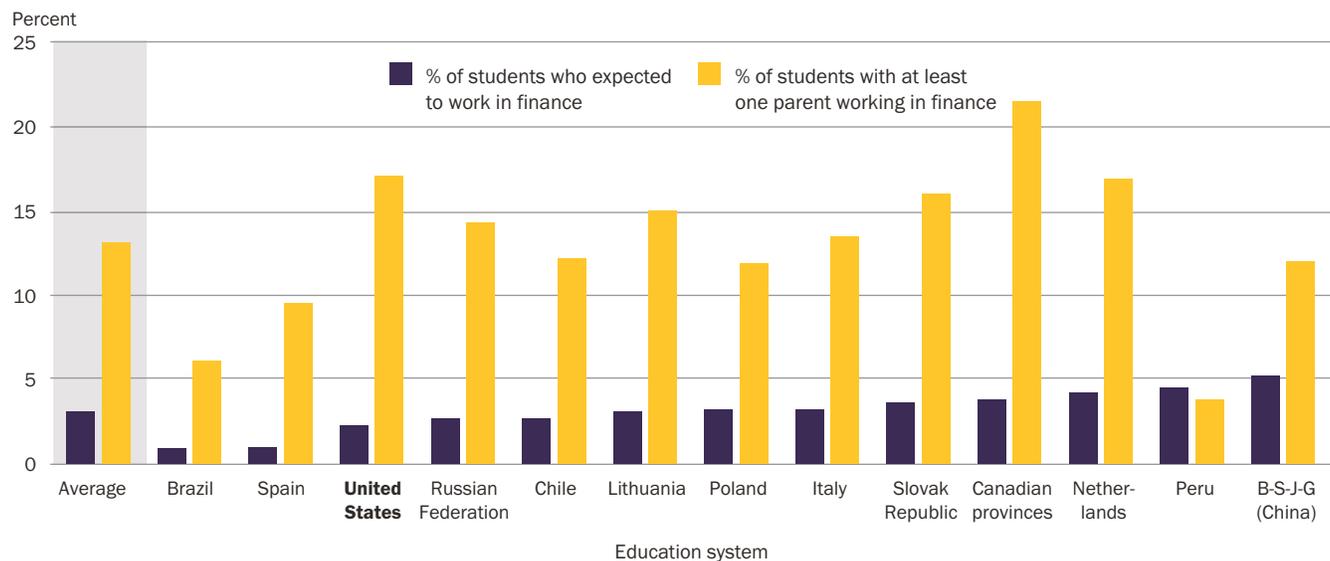
THE FINDINGS

Across the 13 participating education systems, 3% of the 15-year-old students expected to work in finance as adults. This percentage seems low given that 13% of the 15-year-old students had at least one parent working in finance.

The figure below provides a comparison of the percentage of 15-year-old students who expected to work in finance as adults compared with the percentage who had at least one parent working in finance across the 13 education systems that participated in the PISA 2015 financial literacy assessment. On average, 3.1% of these students reported that they expected to work in finance. Some variation was found across the 13 education systems, with the percentages ranging from 0.9% in Brazil to 5.2% in B-S-J-G (China) (which represents the four PISA participating Chinese provinces of Beijing, Shanghai, Jiangsu, and Guangdong). In the United States, 2.3% of students expected to work in finance careers.

In addition, on average, 13.1% of participating 15-year-old students had at least one parent working in finance. Peru had the lowest percentage (3.8%), making it the only education system with a higher percentage of students expecting to work in finance (4.5%) than having at least one parent working in finance. The Canadian provinces—the seven provinces that participated in the financial literacy assessment (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, and Prince Edward Island)—had the highest percentage of students who had at least one parent working in finance (21.5%), followed by the United States (17.1%).

Percentage of 15-year-old students who expected to work in finance as adults and percentage of students who had at least one parent working in finance, by education system: 2015



Adapted from *A Comparative Profile of 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data*

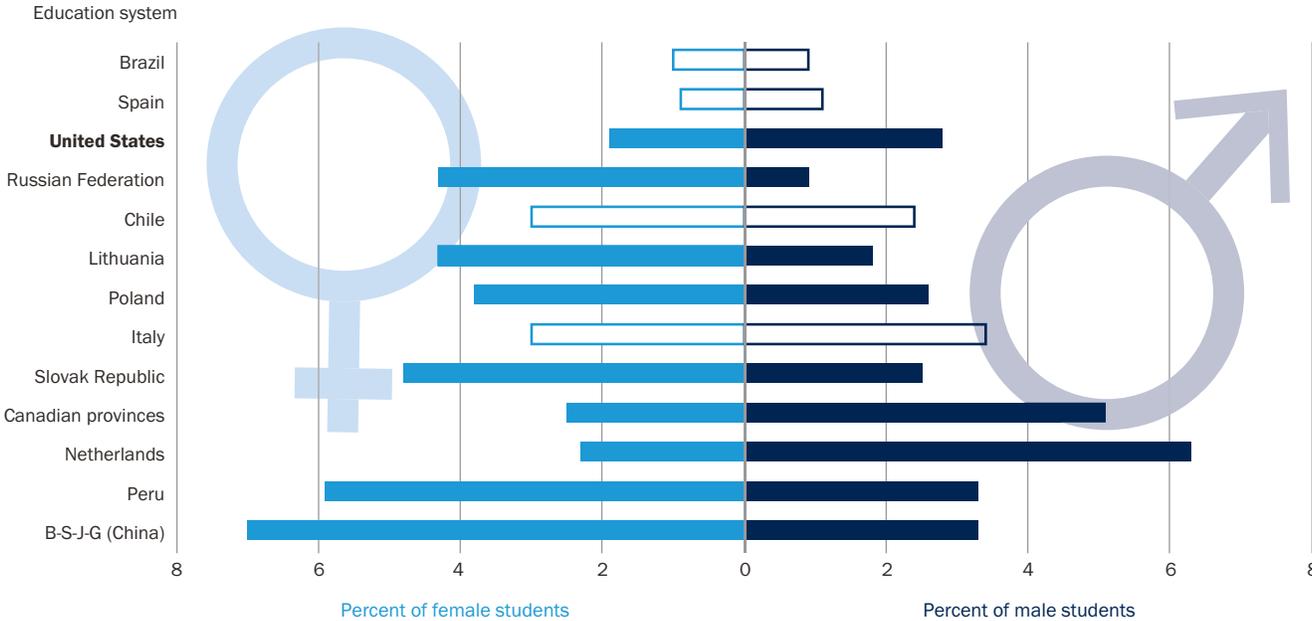
In 9 of the 13 education systems, there was a gender difference in the percentage of students' reported career expectations in finance.

To examine how gender plays a role in 15-year-old students' career expectations in finance, the following figure displays percentages by gender for each education system: to the left is the percentage of female students who expected to work in finance and to the right is the percentage of male students. For each education system, the shaded bar indicates that there was a measurable difference between the percentage of female students and male students who expected to work in finance.

For example, the figure below shows that 7.0% of female students in B-S-J-G (China) expected to work in finance, compared with only 3.3% of male students.

In six education systems—B-S-J-G (China), Peru, the Slovak Republic, Lithuania, the Russian Federation, and Poland—a higher percentage of female students than male students expected to work in finance. However, in three education systems—the Netherlands, the Canadian provinces, and the United States—a higher percentage of male students than female students expected to work in finance. In the remaining education systems (represented by the unshaded bars), the percentage of female students and male students who expected to work in finance were not measurably different.

Percentage of 15-year-old students who expected to work in finance as adults, by gender and education system: 2015



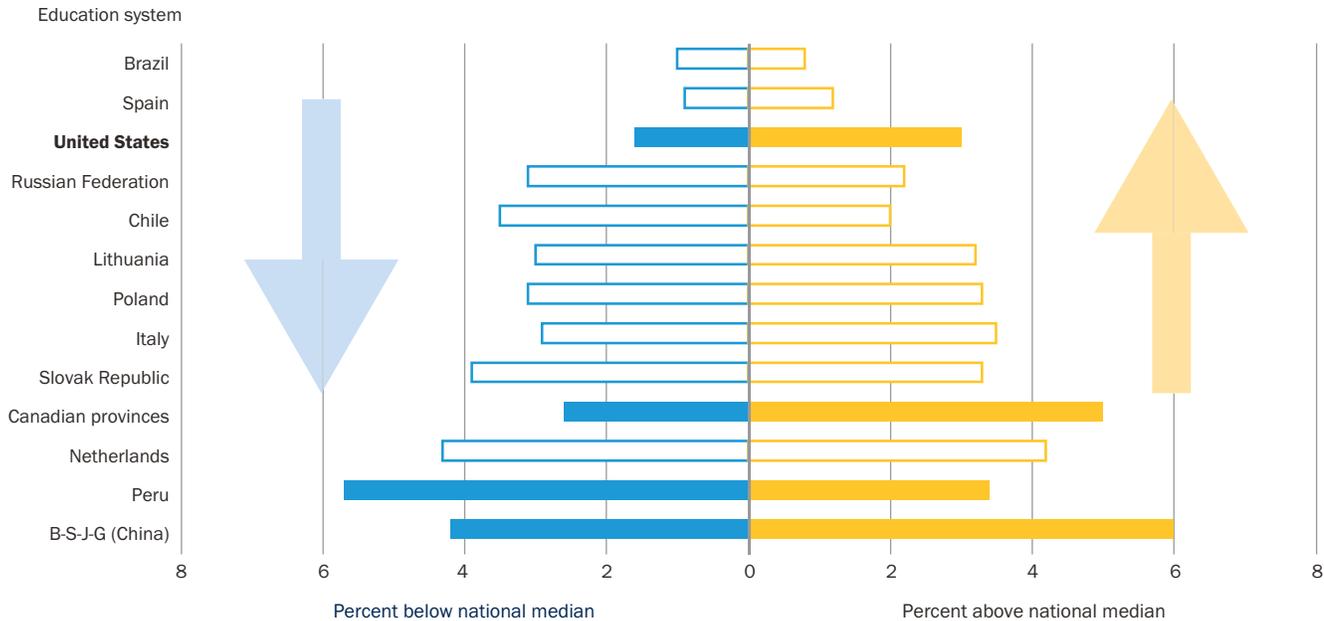
Adapted from *A Comparative Profile of 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data*

In 9 of the 13 education systems, there was no measurable difference in the percentage of 15-year-old students' finance career expectations by their socioeconomic status. In the remaining education systems, including the United States, students with higher socioeconomic statuses were more likely to expect careers in finance.

Using a PISA-constructed socioeconomic index for each student, the figure below shows the percentage of 15-year-old students who expected to work in finance broken down into two groups (students who were below and students who were above the national median) within each education system.

In most participating education systems, there was no measurable difference between these two groups of students, as indicated by the unshaded bars. However, in three education systems—the United States, the Canadian provinces, and B-S-J-G (China)—a higher percentage of students with socioeconomic statuses above the national median expected careers in finance than did students with socioeconomic statuses below the national median. In contrast, in Peru, a higher percentage of students with socioeconomic statuses below the national median expected careers in finance than did students with socioeconomic statuses above the national median.

Percentage of 15-year-old students who expected to work in finance as adults, by students' socioeconomic status and education system: 2015



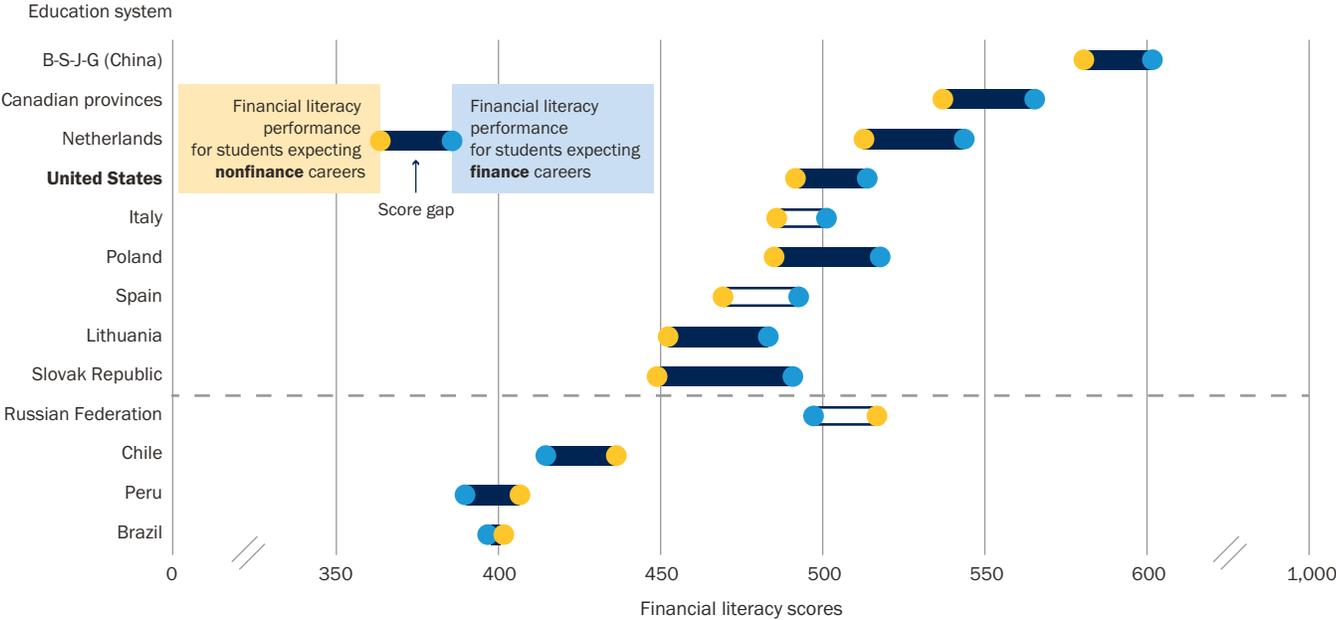
Adapted from *A Comparative Profile of 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data*

In 7 of the 13 education systems, 15-year-old students who expected to work in finance scored higher on the PISA 2015 financial literacy assessment than their peers who expected to work in other fields.

The figure below illustrates that, in seven education systems, as represented by the dark blue bars above the dotted line, students who expected to work in finance scored higher on the PISA 2015 financial literacy assessment than their peers who expected to work in other fields. The score gap ranged from 21 points in B-S-J-G (China) to 41 points in the Slovak Republic. In the United States, the gap was 22 points.

In contrast, the figure also shows that, in Peru and Chile, students who expected to work in finance scored lower than their peers who expected to work in other fields, by 16 and 22 points, respectively. In the remaining education systems (represented by the unshaded bars), the score difference was not measurably different from zero.

PISA financial literacy performance, by 15-year-old students' finance career expectations and education system: 2015



Adapted from *A Comparative Profile of 15-Year-Old Students Who Expect to Work in Finance: An Analysis Using PISA 2015 Financial Literacy Data*

The finance career expectations of participating 15-year-old students were not correlated with their financial literacy performance when controlling for parental occupation and students' gender, socioeconomic status, and performance in mathematics and reading.

When the analysis controlled for the parental occupation, gender, and socioeconomic status of these students, the gaps in financial literacy performance were not statistically significant in most education systems (the exceptions being the Slovak Republic, the Netherlands, Poland, and Lithuania). Furthermore, in the last model, which added controls for students' PISA 2015 mathematics and reading performance (to control for their broader knowledge and skills), the gaps in financial literacy performance were not statistically significant in any education system.

Regression results of 15-year-old students' financial literacy performance as predicted by students' finance career expectations and controlling for selected background characteristics, by education system: 2015

$$\text{Financial Literacy Score} = \beta_0 + \beta_1 \text{FinanceCareerExpectations} + \beta_1 \text{Control(s)}_i + \mu$$

Education system	β_1				
	Parental occupation	Student gender	Student socio-economic status	Student math and reading scores	Student socio-economic status
Brazil	-2.869	4.172	3.995	7.473	7.514
Canadian provinces	28.63**	20.90*	20.55*	16.21	4.878
Chile	-21.64*	-28.89**	-28.35**	-16.04	1.962
Italy	14.79	5.219	5.113	4.694	1.517
Lithuania	30.97**	24.20**	19.19*	19.69*	2.793
Netherlands	30.83**	23.92*	24.07*	27.67**	12.72
Peru	-16.37*	-18.65*	-19.55**	-6.347	-2.476
Poland	32.24**	23.95*	23.06*	25.16*	-1.936
Russian Federation	-18.98	-17.83	-18.36	-16.41	-0.423
Slovak Republic	41.41**	37.41**	34.56**	41.29**	17.49
Spain	23.18	16.48	16.83	12.75	5.080
United States	22.04*	6.971	6.080	-1.971	6.566
B-S-J-G (China)	21.29*	17.62	19.99*	15.32	4.922

*** p<0.001, ** p<0.01, * p<0.05



THE IMPLICATIONS

The findings provide a cross-national picture of students' career expectations in finance and explore the association between such expectations and financial literacy.

This analysis contributes to the existing literature by using data from the PISA 2015 financial literacy assessment. Several key implications arise from this study.

- Across the 13 participating education systems, on average, 3 percent of 15-year-old students expected to work in finance as adults. This percentage seems low given that 13 percent of the 15-year-old students had at least one parent working in finance.
- In most participating education systems, a gender difference exists in the percentage of students who reported career expectations in finance. Further research could help better understand this.
- In a majority of participating education systems, students' career expectations in finance are positively correlated with their financial literacy performance. However, when controlling for parental occupation and students' gender, socioeconomic status, and performance in mathematics and reading, this correlation is not statistically significant. Thus, students' career expectations are not a strong predictor of their financial literacy when accounting for these background characteristics.