



The 37th Meeting of the Voorburg Group on Service Statistics

Session: Industry presentations

Education (ISIC 85)

turnover / output statistics



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1. Description and characteristics of

THE INDUSTRY



The Educational Services comprises establishments that provide **instruction and training** in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as **schools, colleges, universities, and training centers**. These establishments may be **privately owned** and operated for profit or not for profit, or they may be **publicly owned** and operated.

According to **the North American Industrial Classification System, NAICS Mexico 2013**, the Sector is structured according to **level and type** of educational services.

Educational Services coverage by category and Equivalence between NAICS Mexico 2013 and ISIC Rev. 4



NAICS Mexico 2013		ISIC Rev. 4	
Code	Description	Code	Description
61	Educational Services (the Sector as a Whole)	85	Education
611111	Pre-primary Education Schools, private sector	8510	Pre-primary and primary education
611121	Primary Education Schools, private sector		
611131	General Secondary Education Schools, private sector	8521	General secondary education
611151	Terminal Technical Middle Education Schools, private sector	8522	Technical and vocational secondary education
611161	Higher Middle Education Schools, private sector		
611211	Higher Technical Education Schools, private sector	8530	Higher education
6113	Higher Education Schools		
6114	Business, Computer and Management Training Schools	8549	Other education n.e.c.
6115	Trade Schools		
611171	Schools that combine multiple education levels, private sector		
6116	Other Educational Services	8542	Cultural education

Market conditions and constrains

Key indicators of Educational Services



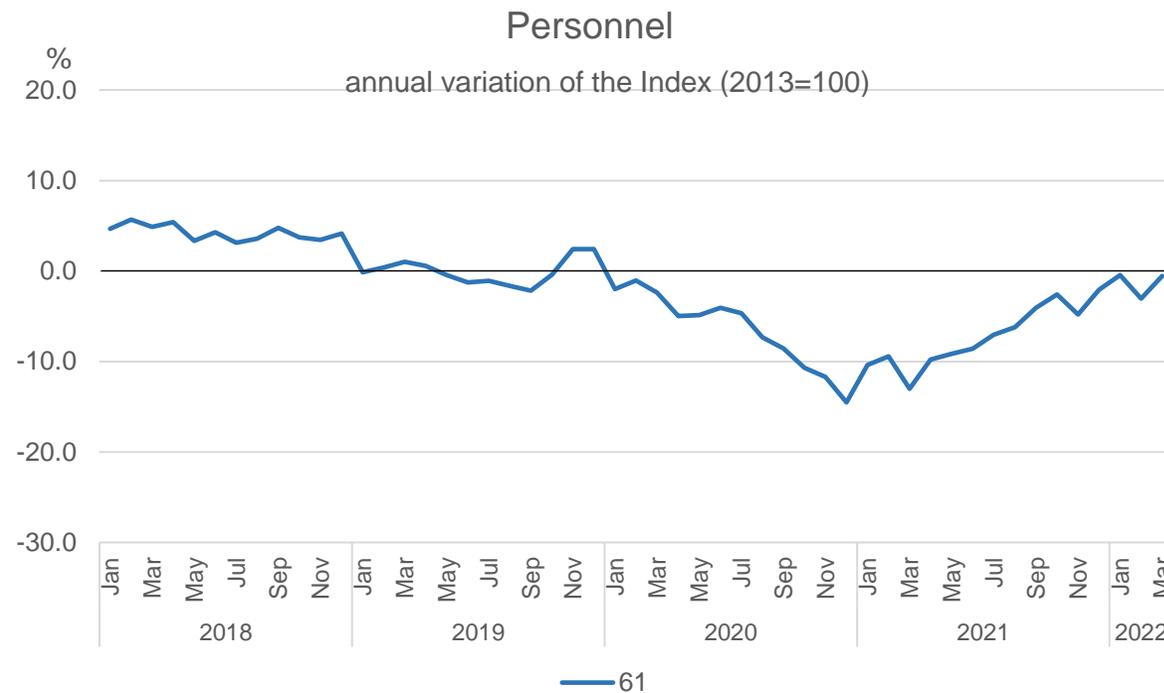
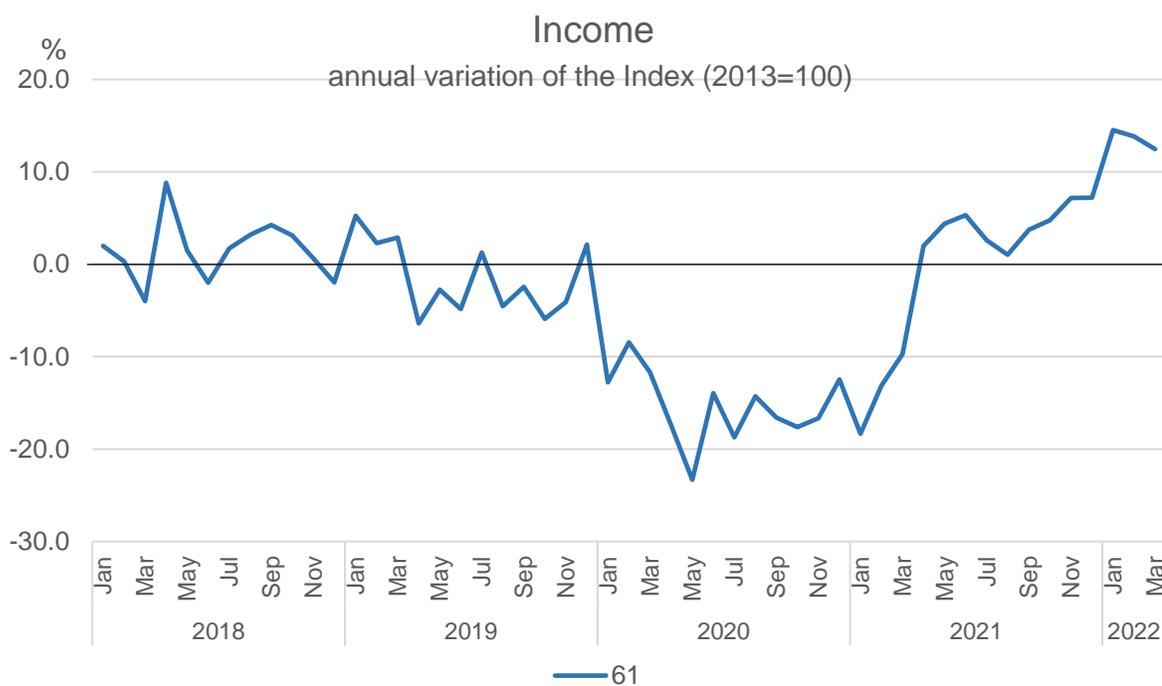
NAICS Mexico 2018 code	Description	Five-year variation 2013/2018 (%)		
		Establishments	Personnel	Income
61	Educational Services (the Sector as a Whole)	14.2	7.6	43.9
611111	Pre-primary Education Schools, private sector	4.4	13.0	58.7
611121	Primary Education Schools, private sector	-7.9	-18.2	17.4
611131	General Secondary Education Schools, private sector	-11.5	-9.3	33.1
611151	Terminal Technical Middle Education Schools, private sector	88.6	14.8	61.0
611161	Higher Middle Education Schools, private sector	-9.7	-18.8	21.2
611171	Schools that combine multiple education levels, private sector	25.9	21.6	62.6
611211	Higher Technical Education Schools, private sector	25.2	53.3	137.2
6113	Higher Education Schools	29.3	6.1	39.0
6114	Business, Computer and Management Training Schools	-29.4	-27.9	-24.3
6115	Trade Schools	5.7	-0.1	51.7
6116	Other Educational Services	29.5	19.7	63.0

Monthly Services Survey (MSS)

Recent indicators that measure the evolution of activity in the short term, through the Monthly Services Survey



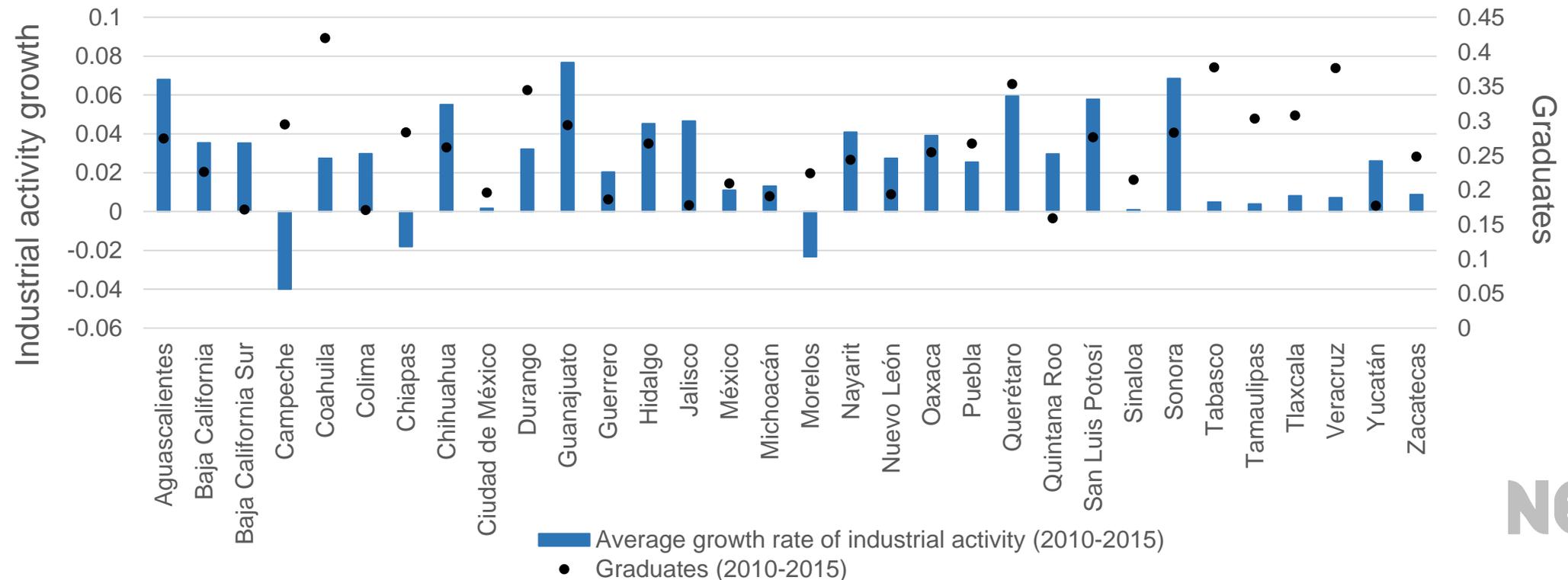
Income and Personnel trend for Educational Services (61)



Specific characteristics of the industry



According to the National Association of Universities and Professional Schools of Mexico, the impact of higher education in economic growth has not managed to have the expected positive effects on Mexico's economic growth, because the productivity structure has been concentrated in service Sectors, which do not generate economic push forces.



Turnover/output measurement



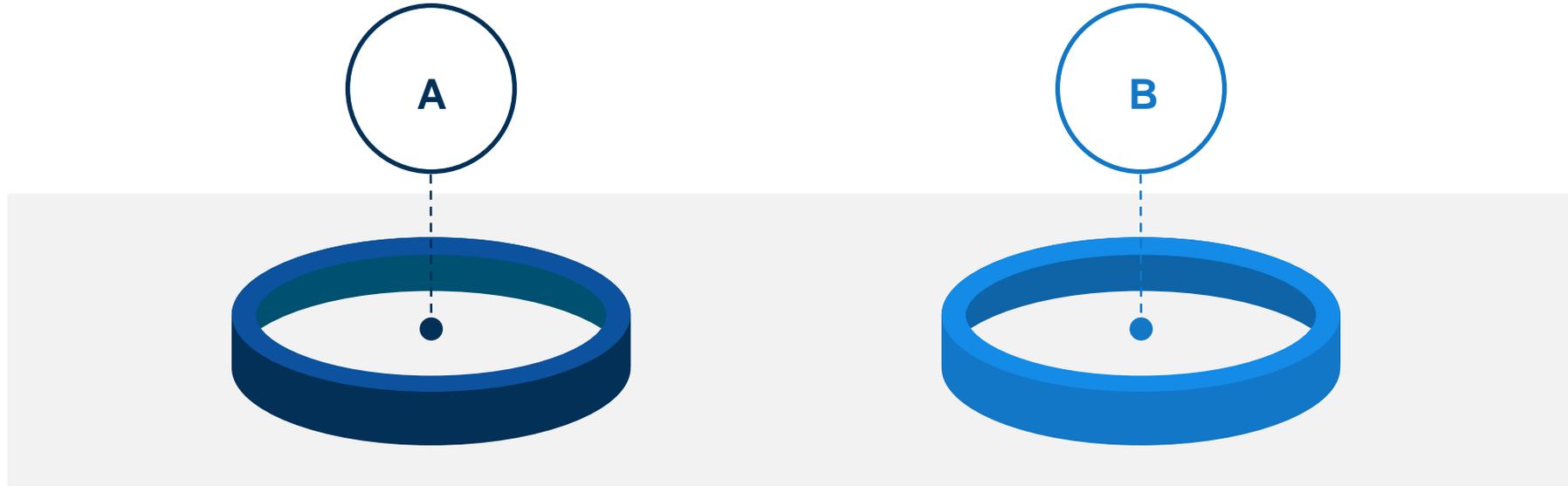
General framework

The general framework is integrated by the Statistical **Business Register of Mexico** (RENEM by its acronym in Spanish)



Measurement issues

Information sources



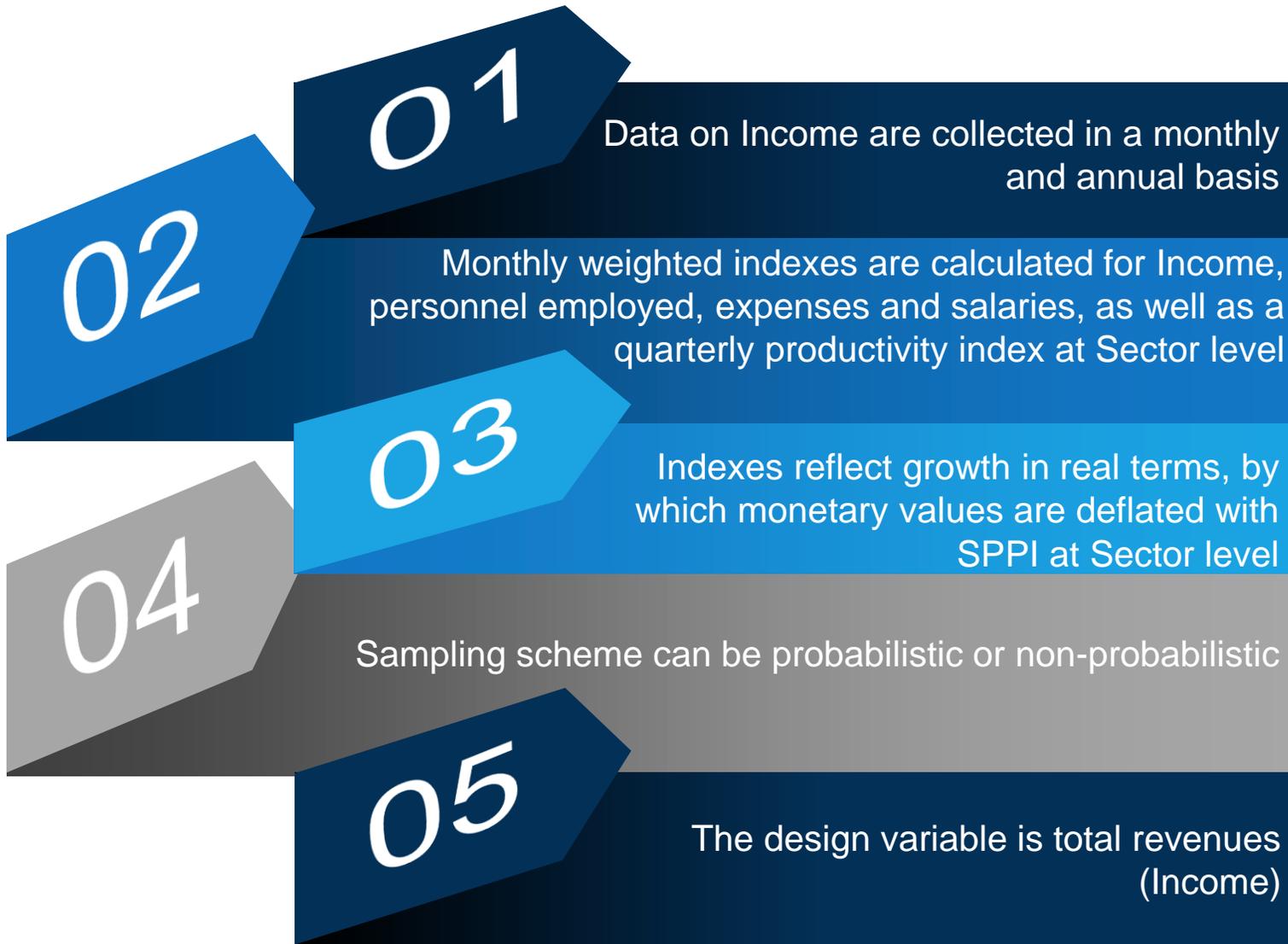
Economic Census
every 5 years



National Economic Surveys
monthly and annually



Description of methods for measurement



Particularly for Educational Services activities

Sample framework: **50 803 Establishments**

Sample size: **4 279 Establishments.**

Sample design: **Probabilistic and Non-probabilistic.**

Coverage for non-probabilistic design: **Design variable (Income)**

3. Evaluation of the measurement



Sampling Scheme

Due to the very particular characteristics of each domain, there are different criteria for defining the sampling scheme, forming 5 groups, 3 of them with a non-Probabilistic design and 2 with a Probabilistic design.

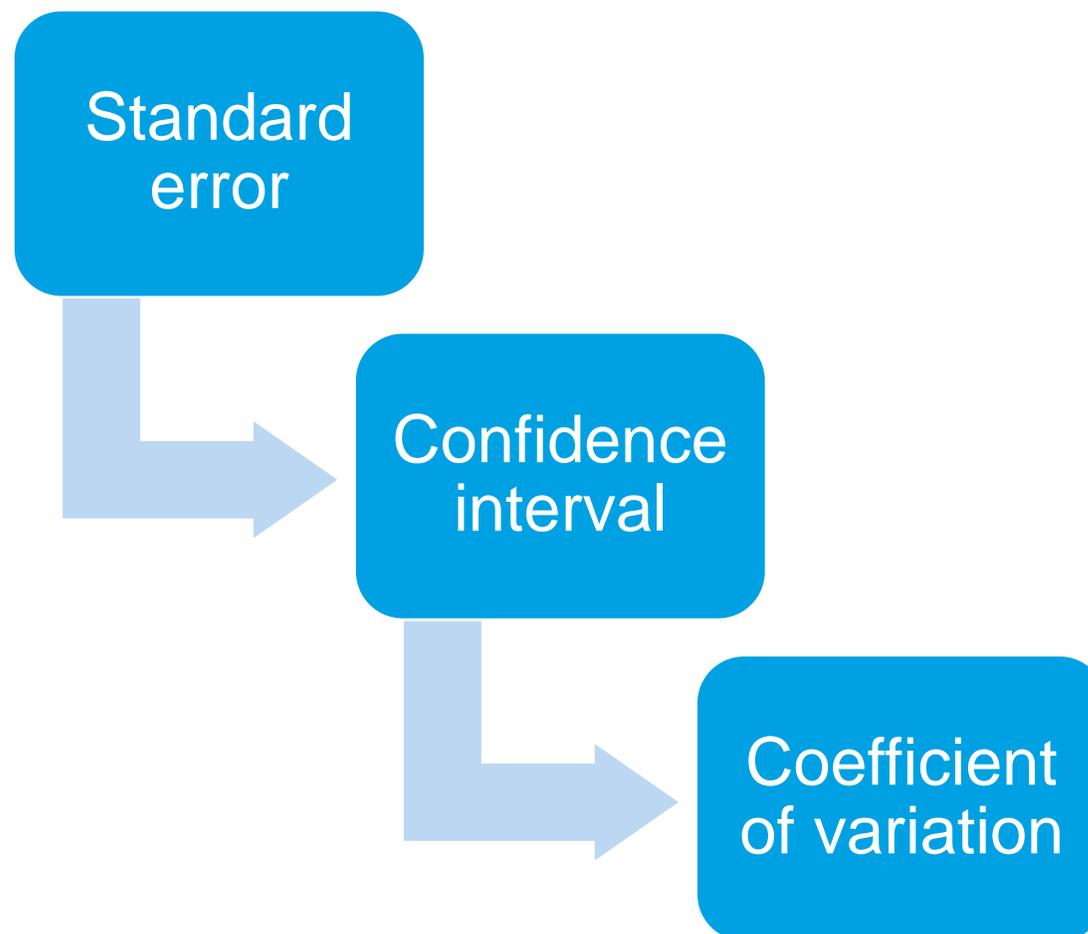
- **The Non-Probabilistic** design procedure consists in ordering all the units from the highest to lowest of the total income variable, within each domain and then, those with the highest percentage participation were selected up to reach the coverage established for each domain.
 1. **Group 1. High coverage.** Corresponding to domains with a coverage higher or equal to 80%.
 2. **Group 2. Moderate coverage.** Corresponding to domains with a coverage between 60% and 80%.
- **The Probabilistic** design have a known probability and they group together to form strata; **10 probabilistic** domains are under this design.

Non-Probabilistic domains	Coverage (Group 1. High coverage)
Higher Education Schools 6113	85.4% (Income design variable. Mar-2022)

Probabilistic domains	Description
611111	Pre-primary Education Schools, private sector
611121	Primary Education Schools, private sector
611131	General Secondary Education Schools, private sector
611151	Terminal Technical Middle Education Schools, private sector
611161	Higher Middle Education Schools, private sector
611171	Schools that combine multiple education levels, private sector
611211	Higher Technical Education Schools, private sector
6114	Business, Computer and Management Training Schools
6115	Trade Schools
6116	Other Educational Services

Statistical Precision Indicators

Statistics instruments that allows to determine the levels of reliability of statistics generated from surveys with a probabilistic design.



An example of the SPI estimate

Probabilistic design Domain	Statistical Precision Indicators	As March 2022
Pre-primary Education Schools, private sector 611111	Estimate	70.9
	Coefficient of Variation (%)	10.7
	Standard Error	7.6
	Lower range limit	56.1
	Upper range limit	85.8

- Up to 20% = High degree of reliability
- 20% to 30% = Moderate
- Higher than 30% = Low precision

4. Conclusions

- With data from the Ministry of Public Education, 88.6% of the school population attends public schools, while 11.4% corresponds to the private sector.
- Private institutions of basic to higher education reported that derived from the COVID-19 pandemic and online courses, just over 10 percent of enrollment, equivalent to 398 thousand students, left their studies unfinished or did not enroll.
- The above is just one example of the importance of having statistical information that allows for a correct decision-making in terms of evaluation or implementation of public policies, in that sense, it is relevant to integrate into the design of surveys new methods for the compilation of data, such as the exploitation of administrative records and / or agreements with associations of educational institutions, likewise, continue updating the frameworks and samples, since the private education sector in Mexico is very dynamic.

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Thank you!



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INEGI Informa

For more information about Educational Services in Mexico please visit:

<https://www.inegi.org.mx/programas/ems/2013/>