



PRELIMINARY REMARKS ABOUT SCIENCE, TECHNOLOGY AND INNOVATION POLICY EVALUATION IN LATIN AMERICA



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INTRODUCTION

The focus of this work is to present an on-going experience of collecting, coding and analyzing Science, Technology and Innovation (STI) Policy Evaluations in Latin America (LA), with emphasis in the evaluation design and methods. The research is part of a broader initiative named Science and Innovation Policy Evaluations Repository (SIPER), coordinated by Manchester Institute of Innovation Research (MIoIR). SIPER is a central source of knowledge on science and innovation policy evaluations. Its aim is twofold: (i) to provide on-line access to a unique collection of policy evaluations, located at a single location; and (ii) to allow policy learning by providing an informed analysis of the database contents that is both searchable by policy makers and other stakeholders and which provides the basis for additional academic analysis.

METHODOLOGY

The research follows a three-phase methodology: collect, code and analyze. Collection phase refers to identifying evaluation studies of STI policies in LA countries. As defined by SIPER project methodology, qualified evaluations to be included in the study are those: (i) on science and innovation policy; (ii) evaluating a clearly identifiable, specific program or group of programs; (iii) having a distinguishable methodology; and (iv) providing some sort of evidence.

Coding phase was dedicated to characterization of collected documents following SIPER requirements based on a survey, which includes: (1) Related policy measure characteristics; (2) Evaluation characteristics: (2.1) Basic; (2.2) Topics covered; (2.3) Design; (2.4) Data collection methods; (2.5) Data analysis methods; (2.6) Quality Issues; and (3) Document properties. Finally, the last phase comprehends the use of codified information in order to discuss state-of-art of STI evaluation practice in LA.

Table 1 – Evaluations collected and inserted on SIPER

Country	Collected	Characterized
Argentina	26	24
Brazil	33	17
Chile	35	20
Colombia	18	16
Mexico	18	18
Uruguay	16	16
Total	146	111

RESULTS (1)

Preliminary results show that STI policy evaluation activity in LA is recent and heterogeneous across countries. In general, the purposes of these evaluations are both formative and summative (62 documents), followed by those that are only summative (36) and only formative (13) evaluations.

Chart 1 – Types of policy

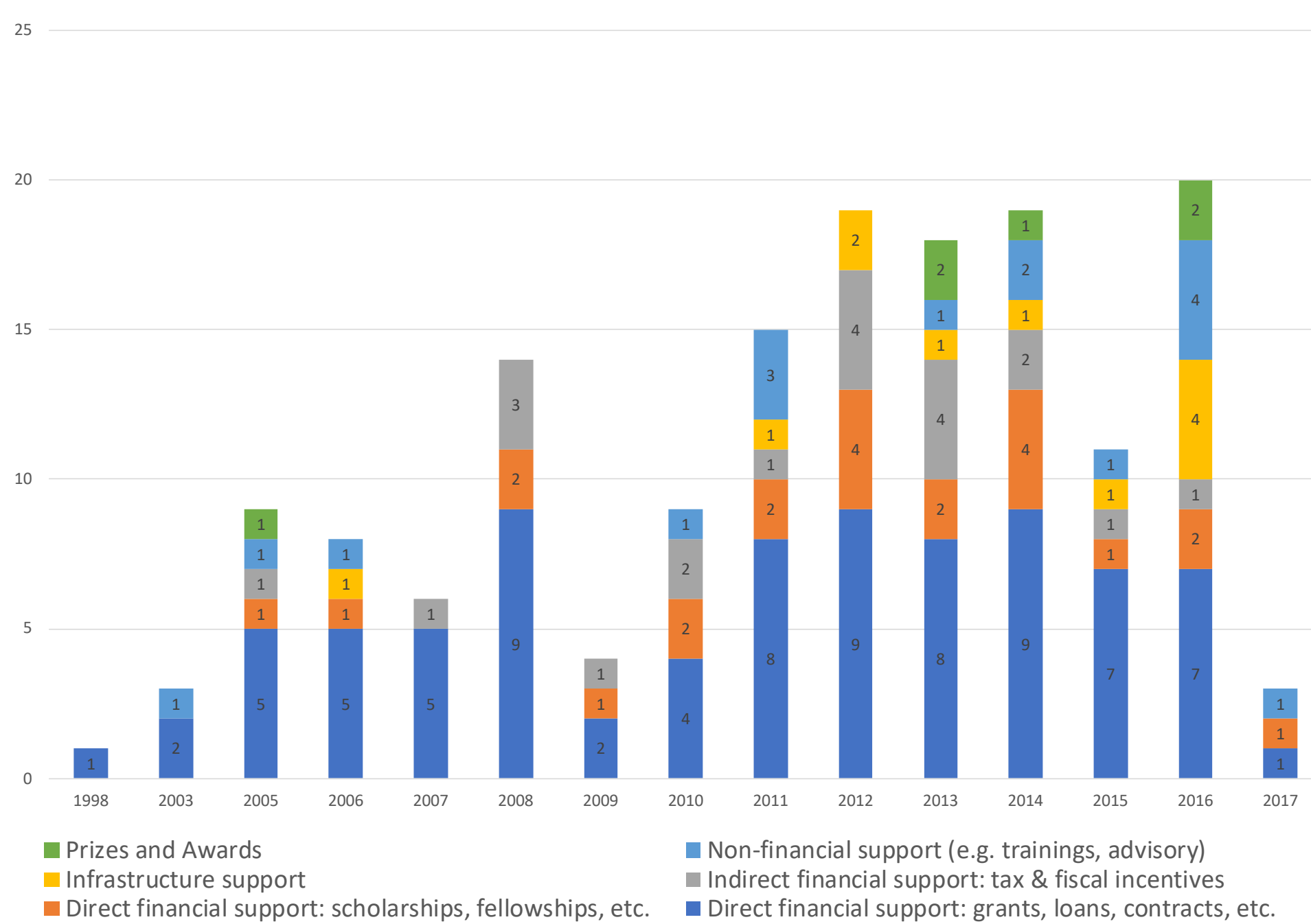


Table 2 – Who conducted

Who	Total
External (independent)	66,7%
Internal	24,3%
External (independent) and internal	4,5%
External (within government)	3,6%
External (within government) and External (independent)	0,9%

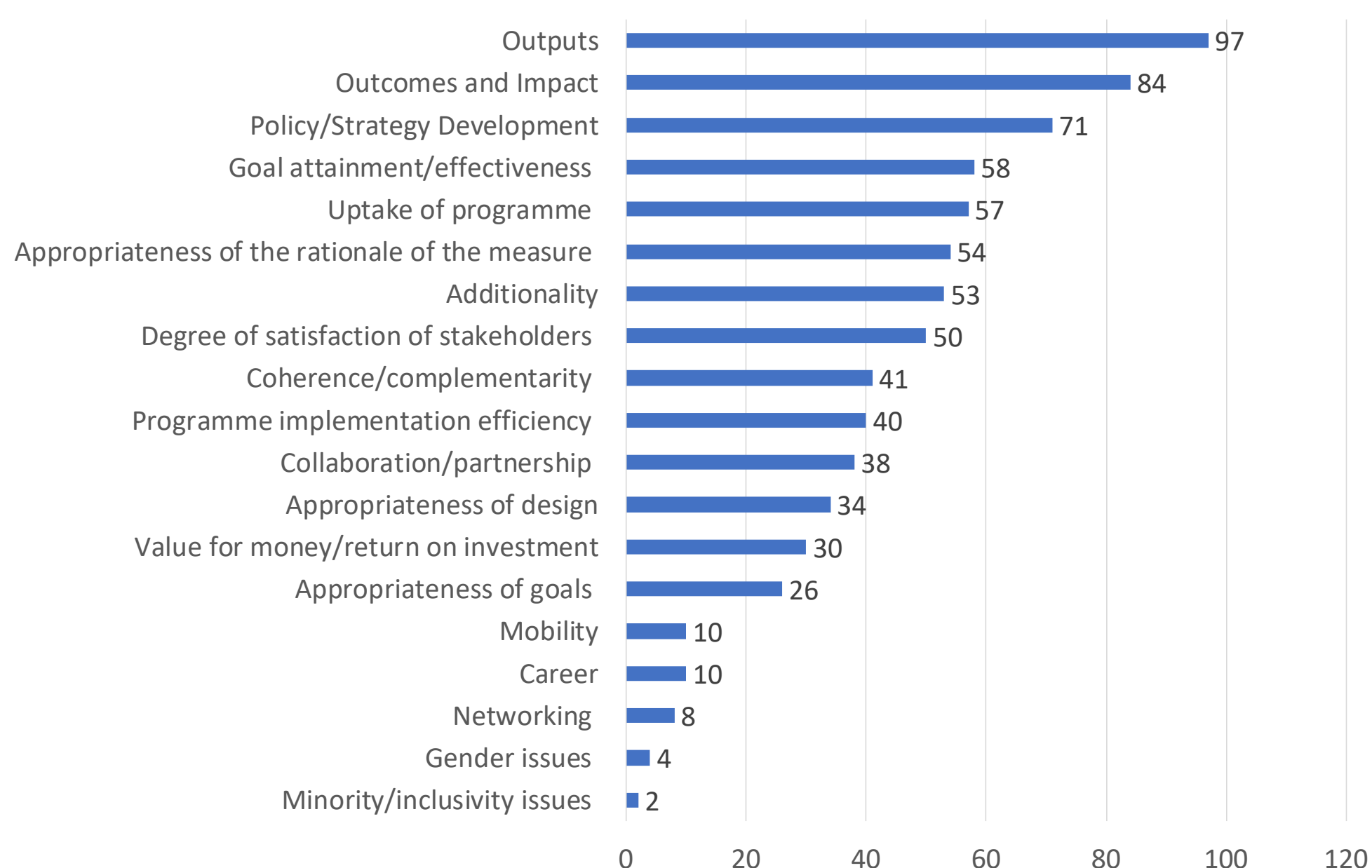
Table 3 – Timing

Timing	Total
Interim	94
Ex-post	11
Ex-ante	6

RESULTS (2)

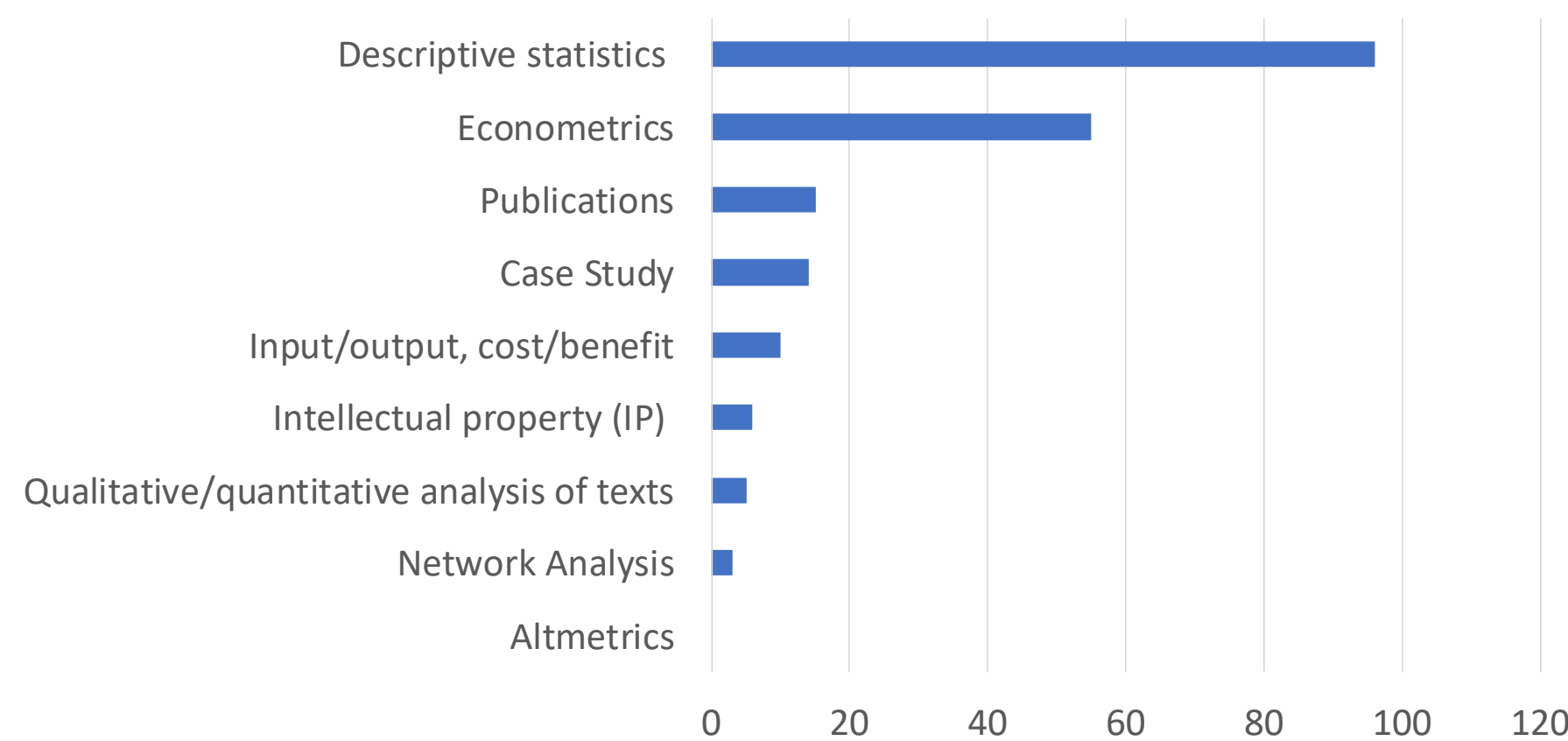
Quasi-experimental and non-experimental designs represent the majority of evaluation reports, corresponding to 52 and 46 evaluations, respectively. 84 evaluations measure the long-term impacts of policy measures, with emphasis on the use of scientific and technological, social and economic indicators. Among the evaluations that measured economic impact, 26 analyzed cost-benefit or returns on investment. A set of 53 evaluations measures additionality, 25 of which analyze only additionality of output, 8 additionality of input and 1 behavioral additionality. There is also a combination of input and output additionality (11 documents) and of the three types (5 documents).

Chart 2 – Aspects of the program examined by the evaluations



Regarding data collection, the use of existing databases (101 evaluations) stands out; 11 evaluations employ surveys and 44 employ interviews; analysis of scientific publications appear in 18 documents and focus group /workshop/meetings in 17.

Chart 3 – Data Analysis



CONCLUSIONS

- The analyzes carried out so far indicate a growing movement towards the institutionalization of STI policy evaluation practices in Latin America, in line with the growing importance of these policies and the perception of their contribution to countries' economic and social development.
- However, there are few variations on the methodological designs and indicators used, evidencing the need for substantive advances in this field.
- Complementary analyzes should be performed after the completion of the collection and characterization phases of the evaluations, seeking to identify the occurrence of a relationship between the variables analyzed, as well as the countries' profile regarding STI policy evaluation.
- Visit the SIPER repository: <http://si-per.eu>

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