



OECD Journal on Budgeting

# OECD Journal on Budgeting, Volume 2022 Issue 2





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# Foreword

The *OECD Journal on Budgeting* is a unique resource for policy makers, officials and researchers in public sector budgeting. Drawing on the best of the recent work of the Committee of Senior Budget Officials (SBO), as well as special contributions from finance ministries of member countries and from other practitioners, the Journal provides insights on leading-edge institutional arrangements, systems and instruments for the effective and efficient allocation and management of resources in the public sector.

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# Evaluation Framework and Practices: A comparative analysis of five OECD countries

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This article provides a detailed analysis of policy evaluation frameworks in five OECD countries (Canada, Germany, the Netherlands, the United Kingdom and the United States), with a focus on the institutionalisation, the quality and the use of evaluation across government. It discusses how the evaluation function is regulated and organised in these countries. In addition, the article provides insights on the relevant conditions to set up and develop a sound evaluation system, through capacity building activities, quality assurance and control mechanisms, data availability and the use of evaluations.

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## Introduction and key findings

The analysis of a policy evaluation framework requires a systemic view that takes into consideration the institutionalisation, quality and use of this practice. Policy evaluations are not a standalone process: they are – or should be – integrated within the whole policy cycle to pursue different objectives, such as management and policy improvements, greater accountability and evidence-informed decision making.

This article summarises the findings from five case studies of countries with policy evaluation systems that follow good practices in the design, conduct and use of policy evaluations: Canada, Germany, the Netherlands, the United Kingdom and the United States. Although the case studies covered a very broad range of evaluation activities (*ex ante*, performance monitoring, spending reviews and *ex post* evaluations), this synthesis note focuses on *ex post* evaluations.<sup>1</sup>

This benchmark exercise builds on previous OECD work, mainly the publication “Improving Governance with Policy Evaluation, Lessons from country experiences” (OECD, 2020<sup>[1]</sup>) which offers a cross-cutting contribution to the global policy debate on evaluation and evidence-informed policy making, relying on a survey of 42 OECD and non-OECD countries.

The comparison of the policy evaluation framework and practices in Canada, Germany, the Netherlands, United Kingdom and the United States, show that there is no one-size-fits-all approach to set up an evaluation framework. Based on the experience of these five countries, it appears that building an evaluation culture requires a whole-of-government approach that needs to take into account the local political and institutional context. The culture and practices of a country can in fact determine key governance choices around a policy evaluation system, for instance whether to establish a framework in the legislation or keep it rather informal, or whether to allocate evaluation responsibilities to the centre of government or grant more discretion to the line ministries. Each option has its advantages and may have its drawbacks, but ultimately depends on the prevailing traditions in a given public administration, which explain the diversity of approaches to policy evaluation among OECD countries, and, in particular, among the countries selected in this study.

Despite the heterogeneity of how the policy evaluation function is organised across countries, several conditions can be identified for the development of a robust evaluation system. First, building capacity to carry out evaluations at the ministry level is essential to conduct good quality analysis and also to avoid outsourcing all evaluations to external actors, which however can still be useful to guarantee independence and perform a quality check. In-house capability and knowledge should be leveraged to generate relevant outcomes from evaluation, which will be useful for internal learning purposes. Secondly, to be effective, a sound framework should be supported by the regular use of policy evaluation results, including their integration into the budget or having clear guidance on the follow-up of evaluations. Promoting public availability and accessibility of evaluations not only ensures transparency but also stimulates the use of evaluation findings, both by the executive and by the Parliament. The latter can in fact play a major role to make the policy evaluation system responsive and impactful, in that it can initiate, demand, commission, use or even produce evaluations.

Finally, creating a proper eco-system in which the policy evaluation apparatus can flourish is key to its successful implementation and continuous improvement. This can translate in the production of evaluation guidelines and standards, the involvement of relevant stakeholders, and the availability of high-quality data, which is of utmost importance for conducting evaluation activities but still represents a challenge in several countries.

This article is divided into four sections:

1. The first section (1.2) provides the definition of policy evaluation developed both by the OECD and the countries under study.
2. The second section (1.3) elaborates on crucial elements of policy evaluation systems (focusing on governance) and answers key questions such as: What does a sound policy framework look like? Is a legal basis necessary and what should it cover? Which institutions develop and adjust the framework and provide oversight, co-ordination and guidance? What policies to evaluate and when? What is the role of parliament and supreme audit institutions?
3. The third section (1.4) discusses specific questions around the policy evaluation process: How to conduct evaluations? Who conducts the evaluations? How to create transparency and involve stakeholders?
4. The fourth section (1.5) dives into the conditions to develop a robust policy evaluation culture: How to build capacity? How to ensure quality? How to increase data and information availability? How to promote use of evaluations?

## On the definition of policy evaluation

### *Definition of policy evaluation as part of the policy framework*

The OECD uses the following working definition of policy evaluation: "the structured and evidence-based assessment of the design, implementation or impacts of a planned, ongoing or completed public intervention" (OECD, forthcoming<sup>[2]</sup>). This definition takes a broad view on the type of evaluations and points to the usefulness of this tool in supporting evidence-informed policies.

The main features of the OECD definition can be found in national definitions, but there are some differences in how countries phrase it:

- In Canada, policy evaluation is defined as the systematic and neutral collection and analysis of evidence to judge merit, worth or value, which typically focus on programmes, policies and priorities and examine questions related to relevance, effectiveness and efficiency. The purpose is to inform decision making, improvements, innovation and accountability (Treasury Board Canada, 2016<sup>[3]</sup>).
- In Germany, policy evaluation is defined as a procedure that compares the originally formulated expectations regarding objectives, benefit and costs with the actual effects, unintended consequences and costs. It is based on a systematic methodology, a process that can easily be understood by third parties, and precise empirical data sets (NKR, 2018<sup>[4]</sup>).
- In the Netherlands, policy evaluations are examinations of the effectiveness and efficiency of policies (art. 4.1 of the Accountability Act).
- In the United Kingdom, policy evaluation is defined as a systematic assessment of an intervention's design, implementation and outcomes, where an intervention could be either a policy, a programme or any other government activity meant to obtain a change (UK HM Treasury, 2018<sup>[5]</sup>).
- In the United States, evaluation is an individual, systematic assessment of one or more programmes, policies and organisations, using systematic data collection and analysis and intended to assess their effectiveness and efficacy. Evaluations may address questions related to the implementation of a programme, the effectiveness of programme strategies, or factors that relate to variability in effectiveness of the programme or strategies (OMB, 2020<sup>[6]</sup>).

All the definitions in the benchmark countries are broad, but the analytical aspect is included explicitly in most of them. As for the objective of policy evaluation, this is defined in a non-specific way in the case of the Netherlands (only referring to efficiency and effectiveness), while the other benchmark countries are

more specific, always including the aspect of efficiency and effectiveness. Both Canada and Germany refer explicitly to the policy cycle and the fact that evaluations are linked to the decision-making process and thus policy recommendations.

### ***Complementary instruments and practices***

The focus of this paper is on *ex post* policy evaluation. There are similarities between *ex post* policy evaluation and other instruments that can support a wider evaluation framework, for example:

- *Spending reviews* are tools for developing, assessing, recommending and adopting policy options by analysing the government's existing expenditure, and linking them to the budget process. The purposes of spending reviews can be to enable the government to manage the aggregate level of expenditures, to align expenditures according to the priorities of the government or also to improve the effectiveness within programmes and policies (OECD, forthcoming<sup>[7]</sup>). Evaluations are an important part of spending reviews and the budget process as they contribute to the assessment of expenditure.
- *Performance monitoring* aims to facilitate planning and decision making by providing evidence to measure performance and help raise specific questions to identify implementation delays and bottlenecks. It can also strengthen accountability and public information, as information regarding the use of resources, efficiency of internal processes and outputs of policy initiatives is measured and publicised. Unlike evaluation, monitoring is driven by routines and ongoing process of data collections (OECD, 2021<sup>[8]</sup>). Thus, performance monitoring provides information about the current status of a programme or policy and the results of monitoring can inform the topics that are selected for evaluations.
- *Audits* determine whether the information collected or actual conditions correspond to established criteria, including compliance with financial or legal rules. Auditing helps to ensure that public-sector entities and public servants perform their functions effectively, efficiently, ethically and in accordance with the applicable laws and regulations (International Organisation of Supreme Audit Institutions, 2019<sup>[9]</sup>).

## **Governance matters**

### ***Legal bases of public policy evaluation frameworks***

A policy framework is generally a document or a set of documents that provide strategic direction, guiding principles and courses of action to the government for a specific sector or thematic area. Many countries have specific policy frameworks to allocate institutional responsibilities for evaluation of public policies. These frameworks are often translated in a legal text.

A legal basis to undertake policy evaluations can be helpful, but is not necessary nor sufficient to ensure the quality of the findings and the effective use of evaluation results. The existence of a sound legal framework can be important to promote policy evaluation and clarify institutional responsibilities from a legal perspective (OECD, 2020<sup>[1]</sup>). As for the level at which policy evaluation is legally embedded, some benchmark countries have specific stipulations in the constitution. This is the case in Germany, where Article 104b states the necessity to conduct evaluations of financial assistance grants on a regular basis. Canada, the Netherlands and the United States define their evaluation framework in primary and/or secondary legislation and complement this legislation with guidelines, which provide more detailed requirements on evaluation annual plans, timing, selection criteria, etc. In these countries, primary legislation is used mainly to state the principles and importance of evaluations.

On the other hand, the United Kingdom has no legal framework for policy evaluation. The absence of legislation has not per definition proven to be detrimental for the conduct of evaluation in this country and in other countries with no legal framework. Hence, having a legal framework guiding policy evaluation across government is not a condition for success. The context and culture embedded in the administration play a considerable role. The risk when there is no legal framework supporting public policy evaluation, is that initiatives may be discontinued and the implementation and use of evaluations depend on the importance given by the current leadership. A key challenge in such non-institutionalised frameworks is to ensure the continuity of the evaluation framework across different governments, to avoid that the efforts to build an evaluation culture are reverted.

The legal framework balances between clarity and flexibility. The experience in the 5 benchmark countries suggests that existing regulatory/legal frameworks only define the basic evaluation obligations of government departments and agencies, and are complemented by more detailed guidelines and planning requirements.

Besides the existence of a legal framework, an important question is whether there is a policy framework in place. Policy frameworks can include different legislative acts, such as in the Netherlands and in the United States (OECD, 2020<sup>[1]</sup>). This is not necessarily the case, however, and some countries adopt evaluation policies in the form of guidelines without specific legislation.

- In Canada the policy evaluation framework is part of the Policy on Results, issued by the Treasury Board Secretariat pursuant to the Financial Administration Act (art. 2.1. Policy on Results). Although there is a clear foundation for the evaluation framework, it is not part of the Act itself. Paragraph 42.1 (1) of the Financial Administration act requires to evaluate grants and contributions programmes every five years on a rolling basis (Government of Canada, 1985<sup>[10]</sup>).
- The United States constitutes an interesting example. The Foundations for Evidence-Based Policymaking Act of 2018 mandates evidence-building activities across agencies and open government data, with the Office of Management and Budget (OMB) mandated to develop guidance and advice on policy evaluation. Although the Evidence Act elevates programme evaluation as a key agency function and gives guidance on the requirements for each entity, it also allows for tailor-made solutions within the different departments.

### ***Organising the policy evaluation function across government***

There is no single recipe for institutionalising policy evaluation across government. Some countries have centralised systems with one (or several) government department/agency co-ordinating evaluation activities across government, while other countries have more decentralised approaches. Factors such as the political system, public administration cultures and the rationale for evaluation shape the development and characteristics of the evaluation function and consequently how this is organised across government (OECD, 2020<sup>[1]</sup>).

A centralised system is more likely to result in a common evaluation approach promoted across government, where different ministries adopt similar practices with regard to the planning, implementation and use of evaluations. A degree of centralised co-ordination is also a prerequisite for a strategic approach to evaluation, which entails the ability to look across a number of evaluations that cover different aspects of the same policy area to draw overall conclusions and identify common learning points.

A more decentralised approach to organising the evaluation function makes it easier for individual ministries to customise evaluation methods and practices to their own specific requirements. The drawback is that evaluation may be neglected or undertaken in a way that does not benefit from the sharing of experience and know-how. Such a fragmented approach may also make it more difficult to adopt a strategic perspective to evaluation or to aggregate evaluation results across different parts of government that share common policy objectives.

All the five selected countries have established a hybrid system, which combines central steering with some degree of autonomy to organise the evaluation function within the line ministries/departments, both regarding the institutional set-up and the way evaluations are conducted.

### *Central steering vs. autonomy of line ministries*

The balance between central steering and autonomy for the ministries/agencies varies a lot between the five countries. An overview of how evaluation is organised in the countries under study in terms of centralised and decentralised approaches is provided below. Rather than using the alphabetical order, the countries are listed according to their degree of centralisation, from highest to lowest.

#### **United States**

The Evidence Act in the United States is an example of central steering since it streamlines the evaluation system in the different departments (US Congress, 2019<sup>[11]</sup>). Pursuant to the Act, agencies are required to:

- Submit an evidence-building plan (referred to as Learning Agenda), included in the departmental or agency strategic plan to identify and address policy questions relevant to programmes and policies.
- Prepare an annual Evaluation Plan that describes the key evaluation activities that the department or agency plans to conduct in the next fiscal year.
- Appoint an Evaluation Officer to oversee evaluations and related activities and implement the agency evaluation policy; this Officer represents a clear point of contact for OMB and plays a clear role regarding the performance of the evaluation system in a federal department or agency.

#### **Canada**

The Canadian system has also a relatively strong co-ordinated overall framework. The President of the Treasury Board of Canada has been given a mandate to instil a culture of evaluation, measurement and evidence-informed decisions in programme and policy design and delivery. The Policy and Directive on Results (both of 2016) outline requirements for the departments such as the identification of roles and responsibilities for federal departmental officials. Every department must have a Head of Evaluation and a Performance Measurement and Evaluation Committee (PMEC), and larger departments must prepare a formal evaluation plan or conduct an evaluation planning exercise to identify the evaluation needs. Accountability for the quality of policy evaluation rests with the departments and the Treasury Board is not mandated to directly challenge the evaluations done within the departments. Departments are given flexibility in the design of their evaluations, but are also subject to central guidance under the Standard on Evaluation (Directive on Results, Appendix C) that, among other things, requires that evaluations are planned taking into account: the risks and complexity associated with the policy, programme, priority, unit or theme being evaluated; consideration of using relevance, effectiveness and efficiency as primary evaluation issues, where relevant to the goals of the evaluation; and government-wide policy considerations where relevant, such as gender-based and diversity analysis and official languages.

#### **The Netherlands**

The Dutch system is less centralised. The organisation of the policy evaluation function within Ministries is left to the responsible Minister. The Regulation for Periodic Evaluation stipulates that every policy must be evaluated on a regular basis (7 years) to examine its effectiveness and efficiency. Each ministry has to establish a directorate for Financial and Economic Matters (FEZ) to co-ordinate and supervise the evaluation on effectiveness and efficiency of policies, among other tasks. Although the FEZ do not conduct evaluations themselves, they are a focal point for the evaluations within the line ministry. Within this

framework it is up to each Minister to comply and organise the evaluation function as they see fit. The Regulation does not impose a specific organisation in charge of carrying out the evaluations, and thus can be considered slightly more decentralised than the Canadian and US examples. The recent evolutions indicate that there is a tendency for more central guidance as a result of the operation Insight in Quality, which introduces new instruments such as the Strategic Evaluation Agenda and the Public Value Scan.

### **United Kingdom**

A similar approach is implemented in the United Kingdom. Each department is expected to follow the central guidelines but has the flexibility to adapt them to its specific needs as long as they comply with basic principles. Within the overall framework, each department is responsible for developing its own policy evaluation strategy and evaluating its own policies.

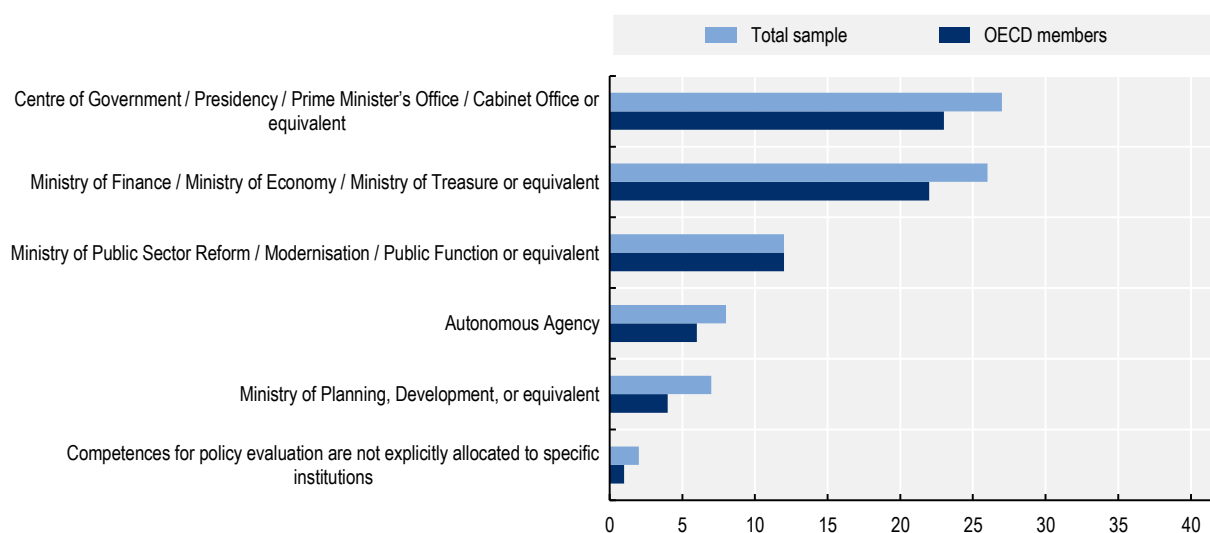
### **Germany**

The most decentralised system can be found in Germany. Due to the so-called ‘department principle’, which states that each federal minister manages its area of competence independently and under its own responsibility, there is no uniform approach to evaluations and the internal organisation of the evaluation function varies widely among ministries. An example of the diversity is that some have their own specialised research institutions. This is the case for the Federal Office for Economic Affairs and Export Control, which has had an evaluation unit since 2008, and the three federal ministries for Economic Affairs and Energy, of Family, Senior Citizens, Women and Youth and of Education and Research.

The German case seems to illustrate that the absence of central oversight implies some challenges. The Court of Auditors, which verifies that evaluations conducted by federal ministries are appropriate and comply with section 7 of the Federal Budget Code, regularly signals gaps in terms of methodology, competences and resources for evaluation. The National Regulatory Control Council (NKR) highlighted that evaluations carried out in 2017-18 did not use clear evaluation criteria nor empirical analysis, and did not provide concrete recommendations (NKR, 2018<sup>[4]</sup>). Recent evolutions have shown that there was a need for a certain degree of central steering. In 2013, a systemic framework for *ex post* evaluation was established for important legislative initiatives. This framework introduced a threshold to decide whether an evaluation should be conducted, but did not include requirements that evaluation should be conducted. The 2013 concept for evaluation was updated in 2019, when a decision of Secretaries of State clarified additional aspects to be included in the draft bills that would facilitate the conduct and improve the quality of *ex post* evaluations. When presenting a draft bill, the objectives of the bill and the criteria for achieving the objectives have to be stated, as well as the steps and methods of evaluation that will be used. Furthermore, the Federal Government is developing a guidance document outlining the steps and methods of an evaluation (BPA, 2019<sup>[12]</sup>).

*Allocation of responsibilities for developing the framework and providing oversight, co-ordination and guidance*

Evidence from OECD countries shows that usually there are several institutions with competences for policy evaluation across government, which co-operate or have separate competences in the field.

**Figure 1. Institutions with competences related to policy evaluation across government**

Note: n=42 (35 OECD member countries). Answer option "other" is not displayed.

Source: OECD (2020) Improving Governance with Policy Evaluation.

As highlighted in the previous section and shown in Figure 1, most countries have chosen some form of central steering. Governments have established dedicated units and/or given the competency to a ministry to champion an evidence/evaluation agenda across government. They issue guidelines, stimulate capacity building, ensure quality of evaluations and manage an evaluation calendar. The central institution (or oftentimes a combination of institutions) has a key role in managing the evaluation eco-system, making sure that they can take place at the right time and in the right place and feed into decision making. In addition, these central units usually have the political leverage to ensure that the findings of evaluations are subsequently used. Therefore, allocating this central steering role to an institution close to political power can be interpreted as a sign of political commitment.

In each of the selected countries, with the exception of Germany, there is at least one central actor responsible for organising and co-ordinating the evaluation system. Table 1 lists the main institutions responsible for developing the policy evaluation framework and providing central steering and guidance. These entities do not conduct policy evaluations themselves, as this responsibility lies within the line ministries/departments.

**Table 1. Main actors responsible for the evaluation framework in selected countries**

| Benchmark country | CoG | MoF | Other | Roles of the main responsible actors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|-----|-----|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| United States     | ✓   |     | ✓     | The Office of Management and Budget, within the Executive Office of the President is the main actor. Additional competences for evaluation across government reside in the Office of Evaluation Sciences within the General Services Administration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| The Netherlands   | ✓   | ✓   |       | The Ministry of Finance has the main responsibilities for the evaluation framework but all ministries are responsible for conducting the evaluation of the policies in their field. <ul style="list-style-type: none"> <li>Treasury Board Secretariat (TBS): the TBS-led process tracks permanent results and reports to support accountability and effectiveness in the medium term. This process aims to clarify the financial aspects and the resources that went into programmes and what was achieved.</li> <li>Privy Council Office (PCO): The Results and Delivery process in the PCO focuses on shorter-term political mandates.</li> </ul>                                                                           |
| Canada            | ✓   | ✓   |       | The fact that there are two central entities involved creates the need for co-operate. First, under the guidance of the PCO, a new governance body called "Central Agencies and Justice" has been created. This body consists of the Ministry of Finance, the Ministry of Justice (in charge of reviewing the legal aspects of new legal proposals), the PCO, and the TBS. The objective of this new governance body is to share agendas and discuss priorities, establishing a starting point for high-level co-ordination. Secondly, the PCO and TBS are working to identify how the tools elaborated by the PCO could be leveraged by the TBS as conditions for funding to departments.                                    |
| United Kingdom    | ✓   | ✓   | ✓     | Her Majesty's Treasury (HMT) plays an important role through the spending review process. The evaluation task force, a joint Cabinet Office-HMT unit, supports and challenges departments on their use of evaluation evidence, prioritisation and evaluation design. It also provides departments with access to external advice and evaluation support via the Trial Advice Panel and the What Works Network. The Cross-Government Evaluation Group (CGEG) aims to improve the supply of, stimulate demand for, and encourage the use of, good quality evaluation to inform the policy development process in order to achieve better outcomes for the public. They also produced the Magenta Book (guidance on evaluation). |
| Germany           | ✓   | ✓   | ✓     | Actors with some responsibilities regarding <i>ex post</i> evaluations are present both within the Ministry of Finance and other central agencies. In the Centre of Government, the Federal government is the co-ordinator for better regulation; the National Regulatory Control Council (NKR) is an independent body at arm's length.                                                                                                                                                                                                                                                                                                                                                                                       |

Note: CoG = Centre of Government; MoF = Ministry of Finance.

Source: Authors and (OECD, 2020<sup>[1]</sup>).

### ***Setting the policy evaluation agenda: Periodicity and scope***

Evaluations are time consuming and costly. In the OECD the majority of countries developed a selection process or criteria for determining when and what type of evaluation is needed (OECD, 2020<sup>[1]</sup>). Three practices seem to emerge:

- Establishing formal rules for periodic evaluations or for evaluation of certain policies (including supranational requirements such as EU requirements for evaluation of structural funds).
- Setting threshold and proportionality criteria.
- Installing a planning process to define and translate ambitions into strategic and operational evaluation plans or agendas.

The two main elements to determine are periodicity and scope (including the planning process), and the selected countries have taken different decisions on how to organise them.

#### *Canada*

The framework of the Policy on Results foresees a comprehensive coverage of all programme spending, which should be evaluated approximatively every five years, but the Policy on Results allows in reality for flexibility in conducting evaluations and their scope. The Directive on Results states that in the large departments a five-year evaluation plan has to be submitted prioritising the evaluations based on

programme risks, governmental and departmental priorities and the information needs of major stakeholders. In addition, the Financial Administration Act stipulates the requirement to evaluate grants and contributions programmes every five years on a rolling basis (Government of Canada, 1985<sup>[10]</sup>). In order to organise the programme of evaluation, the evaluation directorates identify the mandatory requirements for evaluation and then add the needs identified by the managers. Given the costs of evaluation, it is also important to identify what can be done by the programme managers and front-line units in terms of “light analysis”, while formal evaluations are subject to a thorough process and inclusion in the 5-year rolling plan. The agenda is set internally in each department but every fall there are consultations with both the officers and team members of large departments and the TBS. The TBS suggests aspects to be looked at, and these consultations have an impact on the final choice.

### Germany

Since 2013 there is an objective selection criterion stipulating that policies that have a considerable financial impact for citizens or the economy have to be evaluated every 3 to 5 years. *Ex post* evaluations are mandatory for ‘major’ regulatory projects, namely when *ex ante* estimates predict at least EUR 1 million of compliance costs for the economy and businesses or 100.000 hours of compliance time for citizens. Besides this mandatory evaluation, it is up to the ministries to decide on the evaluations they want to conduct, for example considering high total financial costs, particular political significance or great uncertainty on the proposal’s effects (State Secretaries Committee on Bureaucracy Reduction, 2013<sup>[13]</sup>).

### The Netherlands

Mandatory evaluation is prescribed for all policies over a period of 7 years, or 5 years for subsidies. The operation Insight in Quality has revealed that mandatory evaluation of each policy is not necessarily the best solution. A mandatory evaluation within a clear timeline does not per definition provide the information that is needed by policy makers and the timing is not necessarily co-ordinated with the political agenda. Therefore, the Netherlands has introduced the Strategical Evaluation Agenda (SEA) with the aim to generate more relevant insights at the right moment. The SEA offers the opportunity for line ministries to organise the evaluation framework on a broad thematic basis (not necessarily limited to a specific policy) and to consider when it is strategically useful to plan an evaluation (Ministerie van Financiën, 2021<sup>[14]</sup>). The departmental SEA are sent to the Parliament annually and look 3-4 years forward. They give an overview of the key policy themes and prioritised evaluations (*ex post* as well as *ex ante* and *durante*). This allows the Parliament to have a better overview of the evaluations that will be conducted. There are benefits in reviewing policies as a group, rather than in a piecemeal fashion, where they are interactive or operate jointly to achieve related policy objectives. This implies some form of co-ordination and consultation.

### United Kingdom

In the United Kingdom the resources and effort employed in monitoring and evaluation should be related to the scale of the proposals under consideration according to the guidelines of the Treasury (UK HM Treasury, 2018<sup>[5]</sup>). Thus, in practice, not all policies are evaluated. Government departments prioritise which policies to evaluate, including: policies that have formal requirements to be evaluated (i.e. evaluation clause introduced in the law), policies considered financially important or particularly emblematic of the government’s political line, and policies with potential learning benefits. In other cases, the evaluation of some policies and programmes is prompted by the National Audit Office or Parliamentary reports and recommendations.

### United States

In the United States, departments determine the scope and periodicity of evaluations when preparing their evaluations plans. In some cases, Congress mandates that a particular evaluation occur for a certain

programme within a certain timeframe. The Evidence Act introduced some innovations, such as the Learning Agenda to identify and address priority questions relevant to programmes and policies of a department or agency. However, such innovations do not require legislation on scope or timing, as these are decided by departments and agencies.

### ***Learning and accountability***

Policy evaluation serves not only accountability and better decision making at the central level, but should also have a positive impact on the quality of decision making in the long run, and allow for opportunities to improve the internal processes which can be complicated by focusing solely on accountability. The institutional framework for evaluation can include some elements that stimulate the learning aspect. For instance, the location of the central entity responsible for evaluations within the government can have an impact on this balance. In the Netherlands, the fact that all regulation and guidelines emanate from the Ministry of Finance implies that there is (at least organisationally) a link with the budget process. This institutional set-up may, at times, tilt the balance in favour of conducting evaluations for accountability rather than learning. This is something that the Ministry of Finance has identified and is seeking to remedy.

Two country examples stand out because of the importance attached to internal learning from evaluations and evidence-informed policy making in general:

- The operation Insight in Quality in the Netherlands intended to bring about a shift of attention from accountability towards a learning-oriented perspective. The introduction, inspired by the UK experiences, of a Public Value Scan, is a good example in this respect. Rather than trying to find an answer to the question of whether a policy has been efficient and effective, it focuses on whether everything is done to maximise the expected added value of the policy under the current circumstances, with input from various experts, relevant stakeholders and the policy officers within the ministry. The focus is not primarily on the results and outcomes achieved (product evaluation), but rather on the activities undertaken and efforts made (process evaluation). Furthermore, the emphasis is on the current policy rather than on an *ex post* justification of the policy pursued up to that point. This means that the Public Value Scan can be considered as a form of *durante* evaluation. This instrument is very new (only one pilot has been conducted for the moment) and its relation with the other existing tools, such as the policy reviews,<sup>2</sup> has still to be determined. The innovations introduced by the Operation Insight in Quality go beyond the Public Value Scan. The so-called “Improvement paragraph” in Policy Reviews requires ministries to include a paragraph where they explain what they will do to fill the information gaps and thus gain a better understanding of the efficiency and effectiveness of policies for future reviews. Similarly, the Strategic Evaluation Agenda aims to gather more relevant insights in due time, but also to facilitate learning, as the planning and preparation of evaluations increase the programme managers’ understanding of their programmes. Noteworthy in this respect is a 2018 initiative of the Ministry of Finance that started awarding the prize for ‘Best grant evaluation’. The prize is intended to draw attention to the quality of these evaluations, to highlight the positive points and provide tips to improve the quality. The jury includes representatives of the Court of Audit, the Netherlands Bureau for Economic Policy Analysis, the Bureau for Statistical Analysis and the Ministry of Finance.
- In the United States, the OMB oversees the implementation of the Evidence Act. The Act requires that evaluation is integrated into the existing strategic planning processes of a department and within its existing organisational structures. An important element is that the evaluation work should be embedded in the administrative procedures. The Evidence Act requires agencies to submit a capacity assessment, which is to provide a comprehensive view of evaluation and research capacity. The capacity assessment is expected to provide a baseline against which agencies can measure improvements of the effectiveness, quality and methods of evaluation and research. The aim is to improve agency’s ability to co-ordinate and increase technical expertise for evaluations,

consequently increasing quality and use. The Evidence Act has also introduced Learning Agendas to reinforce the learning aspect within departments and agencies. These are evidence-building plans to be included in the agency strategic plan, which identify and address priority questions relevant for programmes and policies, with strategies, data and methods to develop evidence. Finally, agencies conduct annual Strategic Objective Reviews to identify areas where additional evaluation, analyses, skills or other capacity are needed, and to develop a culture focused on learning and performance.

### ***Role of the Parliament and Supreme Audit Institution***

Governments are not able to bind the actions of their successors. For this reason, external institutional actors are important to support the evaluation policy of governments. Both Parliament and the Supreme Audit Office have a role to play to nurture and maintain a good evaluation system.

Parliaments can have an impact on the evaluation system in different ways.

#### *Parliament as initiator of evaluations (in co-operation with Supreme Audit Office)*

Parliaments sometimes initiate or produce evaluations. In many countries, parliaments co-operate with supreme audit institutions. Parliament also sometimes commissions evaluations to government, for instance by introducing evaluation clauses into laws.

- In Germany, the Bundestag (the lower House of Parliament) requires approximately 80 reports annually from the Federal Government regarding the evaluation of policies and measures of administrative action of the government. In some cases, Parliament organises evaluations, often through hearings resulting in parliamentary resolutions.
- In the United States, the Government Accountability Office (GAO) produces recommendations to Congress focused on how to improve the efficiency, effectiveness and responsibility of government operations and to use taxpayers' money appropriately. The majority of GAO's work consists of performance audits; it prepares some 600 – 700 reports each year and makes the information available publicly on its website. GAO's audits are initiated upon request by public congressional committees, on the independent initiative of the Comptroller General, and/or as prescribed by law. Also at the service of the Congress, the Congressional Research Service provides objective and confidential legislative analysis of current policies and the impact of proposed policy alternatives.
- In Canada, the Parliamentary Budget Office (PBO)'s mandate is to provide independent analysis to Parliament on the budget, as well as matters of particular significance relating to the nation's finances or economy; and at the request of a committee or a parliamentarian, to estimate the financial cost of any proposal that relates to matters over which Parliament has jurisdiction. By providing independent and non-partisan financial and economic analysis, the PBO supports Parliament with the goal of raising the quality of parliamentary debate on questions of public money and promoting greater budget transparency and accountability. However, the Canadian PBO has no specific mandate in terms of evaluation.

#### *Parliament as user and demander of policy evaluations*

Parliaments are major users of policy evaluations and have been instrumental in increasing evaluation use by promoting the importance of evaluative evidence in the budgetary cycle and by requesting more performance data on government spending. This is done through public hearings and instruments for parliamentary scrutiny of the executive. Moreover, the direct institutional relationship in many countries with Supreme Audit Institutions (SAI) allows the Parliament to receive the SAI's self-initiated evaluations in addition to performance audits, to be used in the political debate. The Parliamentary Office Bodies often facilitate the work of the Parliament by commenting in a structured way evaluations that are produced by

the ministries/departments or by scrutinising the information delivered by the government (OECD, 2020<sup>[1]</sup>). Parliaments can be informed of evaluation activities and involved in scrutinising evaluation results:

- In Canada, the parliamentary committees may use the evaluation reports, now called Departmental Results Reports – which are accessible on the internet - to accomplish their mission of making government accountable for its activities. The Parliament is also the recipient of all programme evaluations produced by departments as well as the departmental results reports.
- In Germany, the Parliament's interest in evaluation has grown over time: committees frequently ask for scientific reports and can request impact assessments of draft bills. The Bundestag can also decide autonomously to introduce the obligation for the federal government to carry out an *ex post* evaluation and present the findings to Parliament. Similar to what happens in the United Kingdom, Members of the German Parliament can question the ministers' and the government's work, asking information on projects' performance and evaluations.
- In the Netherlands, the legislation stipulates that the government must inform the Parliament on both planned and executed evaluations and spending reviews, and has to provide performance monitoring information that allows the Parliament to exercise the control over the Ministers. A policy review is always sent to the House of Representatives, not only when finalised, but also in its design phase to validate the concept. Law proposals put forward by government for deliberation in parliament have to be accompanied by an explanation of the objectives, efficiency and effectiveness of the proposal.
- In the United Kingdom, the Parliament has an important role in the field of evaluations, as it has oversight of the operations of government through its various parliamentary committees. In particular, through the Public Accounts Committee, the Parliament uses the National Audit Office's Value for Money reports to call on government officials to answer questions regarding the implementation of policies and programmes and the efficiency of public spending. These sessions are publicly broadcasted and receive media coverage. Other commissions of parliament can also use the NAO reports for accountability purposes.
- In the United States, over time, Congress has requested an increasing volume of evaluation and performance information. Departments have responded by making more information available online, to prevent material to Congress becoming overwhelming and to make it available in a timely manner. Congress can then use performance information when taking decisions on authorising or re-authorising federal programmes.

### *Parliament as gatekeeper for a qualitative evaluation system*

As Parliaments contribute to ensure accountability, they can play an important role in promoting a structured or systematic approach to conducting evaluations. Some Parliaments demand governments to submit a report, each year, on the policy evaluations carried out and how the results of these evaluations were reflected in policy. These reports may be either standalone documents or integrated in the budget documents. In the Netherlands for example, the parliament has been an important driver for the government's efforts to continuously improve the evaluation framework. In particular, the recent budget framework reform, the introduction of the *ex ante* evaluation, and the operation Insight in Quality (IIK) to improve the quality of the evaluation system, were all instigated by the Parliament. Similarly, the comprehensive framework for evaluations and evidence-informed performance information has been built mostly through the legislation enacted by Congress in the United States.

Over the last decade, the Supreme Audit Institutions of several countries have also conducted a systematic audit of the executive's evaluation system (Germany, United Kingdom and United States), which have identified the main gaps or weaknesses and triggered improvements.

An innovative example of how Parliament can contribute to quality and use of evaluations, is a pilot initiative started by the Parliament in the Netherlands to co-operate with academic researchers. At the request of the Parliament (Lower House), academics support the members of Parliament in assessing the way article 3.1 of the Accountability Act is applied to new policy proposals. The pilot was conducted for three legislative proposals. For each, academics were asked to assess whether the information provided by the government according to article 3.1 of the Accountability Act was sufficient to allow the Parliament to assess whether the policy goals were sound and measurable and whether there is enough room for learning and improvement, based on a well-designed mid-term evaluation (Tweede Kamer, 2019<sup>[15]</sup>).

### *How to facilitate an increased role by Parliament*

Despite the fact that the Parliament can play an important role in this field, as some country examples show, in general the evidence from the five countries in the sample suggests that discussion of evaluation findings in Parliament generates less interest than could be expected.

The countries in this study have found several ways to increase the interest and impact of Parliament:

- In Canada, the Parliamentary Budget Office (PBO) does not have a specific mandate for policy evaluation. Nevertheless, it provides independent and non-partisan financial and economic analysis, which supports Parliament in raising the quality of parliamentary debates on questions about the use of public funds and promoting greater budget transparency and accountability.
- In the Netherlands, the government must inform the Parliament on both the planned and executed evaluations and spending reviews, and has to provide performance monitoring information that allows the Parliament to exercise control over the ministers.
- In the United Kingdom, the Scrutiny Unit is part of the Committee Office in the House of Commons and provides support and advice to select committees to enable them to better interpret, analyse and scrutinise financial information delivered or published by the government.
- In the United States, the Congress is supported by the Congressional Budget Office (CBO) and the Congressional Research Service.

Another response can be to provide training and expertise for elected representatives on policy evaluation, or the instalment of a specific committee for policy evaluation oversight, such as the Public Accounts Committee in the United Kingdom. This provides a platform to discuss work on policy evaluation, following the theme of evaluation and the planning that was agreed upon.

### ***What interactions between central and subnational governments on policy evaluation?***

In the benchmark countries, it seems that there is not much formalised interaction between the central and subnational governments on the subject of policy evaluation. In most cases, subnational governments define when and how to carry out evaluation. Each subnational government is responsible for its own approach and prioritisation of the use of evidence, policy evaluation and performance information. Even when the federal government transfers funds to the provinces or regions, which are then responsible for the implementation of the policies, there are generally some reporting or evaluation requirements to the central government or oversight. For instance, in Canada, transfer payments are based on respect for the accountability mechanism of each order of government to citizens.

In several countries, national government uses soft tools to interact with subnational governments instead of formal co-ordination mechanisms. For example, in Canada the federal-provincial relationship is a negotiated model that relies on co-operation. The Federal government organises policy tables with the provinces to discuss the delivery issues that fall within provincial responsibility. Issues pertaining to evaluations are not discussed at the policy table but separately as part of a professional practice. Specific frameworks for discussing evaluations are well developed in some areas, for example concerning labour

market issues. In the specific area of the labour market transfer agreements, federal/provincial/territorial evaluation committees have been established to jointly develop and carry out evaluation activities. These committees represent a venue where networks of evaluators can share best practices, common knowledge and evaluation results. These committees ensure that evaluations are of high quality and satisfy the requirements set out in the bilateral agreements. As part of the bilateral agreements, information and data sharing arrangements also enable the conduct of state of the art impact analysis. Both federal and provincial actors benefit from this synergy. The goal is to enable a dialogue based on expertise. This model to evaluation represents a good example of different levels of government working collaboratively to inform improvements in programmes for the citizens.

In the Netherlands, since 2006, every municipality is required to install either a local policy evaluation function or commission (*rekenkamerfunctie*) or an independent local audit office (*rekenkamer*). The implementation is left to municipalities. Municipalities may also set up a joint audit office with one or several other municipalities. These local audit offices determine their own agenda and carry out investigations into the effectiveness, effectiveness and legality of local policies. This research can be *ex post* and/or *ex ante*. Often, an external research partner conducts the evaluations. The research reports (including the findings, conclusions and recommendations contained therein) are made public. Reviews of the system showed that in many municipalities, thorough research is absent and the importance of evaluations is not recognised. Small municipalities with smaller budgets to spend on research regularly use light methods (quick scans, roundtables with citizens, etc.) that can also be useful. The central government's subsequent attempts to encourage municipalities to make improvements have had little effect. The Dutch government therefore decided in 2019 to require an independent audit office and thus to diminish the autonomy of municipalities in this field. In addition, some investigatory powers were extended and the possibility of councillors acting as advisory members of an audit office was added to increase the involvement of the city council in the audit office. More investment is also being made in training for court researchers, and in improving co-operation and knowledge sharing between court auditors. The government is also promoting the creation of a common audit office for smaller municipalities to pool their budgets, support, knowledge and expertise.

Sometimes, for example in the United Kingdom and the Netherlands, there is some level of co-ordination between the National Audit Office (NAO) and the audit offices of the devolved administrations, which allows them to exchange good practices and keep regular communication, but the NAO cannot carry out value for money evaluations of programmes and policies implemented in the devolved administrations.

Co-operation is more developed or is being developed on the subject of collection of data and access to data, reflecting a will or need to gather 'whole of government' data, from Federal as well as subnational governments (United States, Netherlands). But overall, data sharing between central and regional governments is a challenge, as shown again by the COVID-19 crisis.

Co-operation is also present in the form of consultations on federal evaluations (priorities), where requirements of agencies to consult stakeholders include States or local governments (e.g. United States, on the preparation of Learning Agendas).

## The evaluation process

The evaluation process is an important element of an evaluation system. Among other mechanisms, guidelines play an important role in providing answers to the questions on how to conduct evaluations, who conducts evaluations, how to involve stakeholders and how to create transparency (OECD, 2020<sup>[1]</sup>).

### *How to conduct policy evaluations?*

#### *Evaluation guidelines*

Guidelines, toolkits and other supporting documents on evaluation can assist policy makers in conducting policy evaluation successfully. All the benchmark countries have (or are developing) guidelines to support the implementation of policy evaluation across government. Such guidelines generally aim to better plan, commission and manage evaluations.

Evaluation guidelines usually focus on the identification and design of evaluation approaches, the design of data collection methods, stakeholder engagement in the evaluation process, the quality standards and independence of evaluations, reporting of evaluation results, and use of evaluation evidence.

- Canada has published a significant number of guidelines for the implementation and evaluation of policies. These guidelines are designed to support programme managers and evaluation managers in activities on the development of performance measurement (Guide to Developing Performance Measurements Strategies (Government of Canada, 2010<sup>[16]</sup>) or the Rapid Impact Evaluation (Government of Canada, 2017<sup>[17]</sup>), but can also be more conceptual (Theory-Based Approaches to Evaluation: Concepts and Practices (Government of Canada, 2017<sup>[18]</sup>) or Integrating Gender-Based Analysis Plus into Evaluation: A Primer (Treasury Board Canada, 2019<sup>[19]</sup>).
- Germany does not currently have general guidelines at the federal level on how to conduct *ex post* evaluations or monitor the effectiveness of programmes, but they are being developed. Paragraph 7 of the General administrative regulation for the Federal Budget Code (VV-BHO) contains some elements of guidance, but these are relatively limited. Some ministries have published internal guidance documents. The National Regulatory Control Council (NKR), as an independent advisory body, has developed an evaluation model for an evaluation procedure which can be used as a possible basis for evaluation standards by the federal ministries (NKR, 2017<sup>[20]</sup>).
- In the Netherlands, the guidelines on Policy Reviews (Ministerie van Financiën, n.d.<sup>[21]</sup>) present the different steps to follow for conducting a policy review. These guidelines are complemented with additional information on thematic aspects and background information (Ministerie van Financiën<sup>[21]</sup>). In 2021, the Ministry of Finance also made available a toolbox<sup>3</sup> which provides information on methods and techniques for evaluation (Rijksoverheid<sup>[22]</sup>).
- In the United Kingdom, the Magenta Book provides guidance on policy evaluation: its scoping, design, management, use and dissemination (UK HM Treasury, 2020<sup>[23]</sup>). The Green Book is rather focused on the *ex ante* appraisal of expenditure and presents an overview on what expenditure appraisal and evaluation is, and how it fits within the government decision-making processes (UK HM Treasury, 2020<sup>[24]</sup>). It also provides guidance on the design and use of monitoring and evaluation before, during and after the implementation of policy interventions, and on the presentation of results. Both guidebooks are complemented with other manuals. These manuals are not mechanical or deterministic decision-making devices: they provide thinking models and methods to support officials conducting appraisals and evaluation. These documents also provide information on practical matters such as public procurement procedures for selecting evaluators or the use of evaluation results by policy makers.

- In the United States, the guidelines are mainly focused on how to organise the evaluation activities. The OMB publishes guidance material on the various phases of the implementation of the Evidence Act, and thus on Learning Agendas, programme evaluation, etc.

Guidelines have to simultaneously respect the desired methodological consistency and allow for the necessary tailor-made approach within each individual evaluation. They have to be systematically updated to integrate experience and new developments. The Green Book in the United Kingdom for instance has been updated regularly since its inception (the last update was end 2020).

### *Evaluation standards*

Evaluation standards on the quality of the evaluation process can be part of the evaluation guidelines, but can also exist separately. Evaluation standards set out more general ethical principles applying to evaluation activities but can also include methodological guidance. Evaluation standards can also be produced by evaluation professionals themselves, targeting not only officials conducting evaluations but all evaluation activities.

- The Canadian Evaluation Society (CES) has adopted programme evaluation standards and uses them to give trainings. Five standards for a good evaluation plan are identified: utility, feasibility, propriety, accuracy and accountability, and thus are not an ethical guide.
- The German Evaluation Society has also established similar standards (utility, feasibility, propriety and accountability).
- The American Evaluation Association has published the Guiding Principles for Evaluators (AEA, 2018<sup>[25]</sup>). These standards reflect the core values of the Association and are intended as a guide to describe the professional ethical conduct of evaluations.

The standards set by professional organisation can be complemented with standards established by the government. In the United States, the OMB published the Program Evaluation Standards and Practices (OMB, 2020<sup>[26]</sup>) to guide agencies in developing and implementing evaluation activities and in hiring and retaining qualified staff. These standards are related to relevance, utility, rigor, independence and objectivity, transparency and ethics. In Canada, the Treasury Board maintains a Standard on Evaluation (Directive on Results, Appendix C) that requires departments to consider factors such as risk, relevance, effectiveness, efficiency, and government-wide policy considerations (e.g., gender-based analysis, official languages) when conducting evaluations.

## **Who conducts the policy evaluations?**

### *Internal or external evaluations?*

As described in the previous chapter, line ministries are responsible for conducting evaluations in the selected countries. However, this does not necessarily imply that officials within the ministries undertake all evaluations themselves. An important choice to be made is about “who” carries out an evaluation: external or internal evaluators? (OECD, 2020<sup>[1]</sup>)

- **External** evaluations are conducted outside of the institution in charge of the public policy, that is, either by another government institution or by an institution outside of the government. This type of evaluation could be considered more independent, it can look more critically at the policy being studied and its results can be potentially more trusted. However, it can be limited by the knowledge of the evaluator about the context and political process, as well as access to relevant data.
- **Internal** evaluation refers to an evaluation conducted by the institution in charge of the public policy that is being evaluated. Internal evaluators may have more knowledge about public policies, provide a more accurate assessment and have easier access to inside data, but they can also

have mixed incentives when it comes to assessing and reporting on how well a policy has performed. In the process of conducting an evaluation, internal evaluators can be under political pressure and time constraints, which can affect the validity of the findings of the evaluation and its public deliberation.

The decision in the benchmark countries about whether to do policy analysis in house or externally involves a range of considerations including: the skills and expertise available in-house, the scale of the project, the timeframe for completion and any budgetary constraints. There is no one-size-fits-all solution and there is a range of risks and issues with conducting work in house and contracting it out.

- In Canada, evaluation activities are both internally conducted and outsourced to external experts. The choice between the two is *ad hoc* and is decided by the line ministry (due to complexity, limited internal capacity, etc.).
- In Germany, there is a common sense and usual practice that evaluations are outsourced to external stakeholders in order to ensure objectivity. Usually, these comprise scientists from universities and research institutes.
- In the Netherlands, the majority of evaluations are conducted by external parties, partly because of the lack of internal capacity in most line ministries and partly to increase their objectivity.
- In the United States, some agencies conduct evaluations in-house while others rely on independent external evaluators, and some do both. Agencies generally outsource evaluation activities depending on the subject matter and the capacity needed to conduct a specific analysis, as well as whether the agency desires an objective external assessment.

In practice, differences between internal and external evaluations are often blurred because of hybrid approaches, mixing internal and external evaluations for specific or more technical aspects of a given policy. Moreover, a government can commission the evaluation to an external organisation, while still ensuring that civil servants control the research questions addressed by the evaluation, or help with the gathering of data. Similarly, an internal evaluation can be accompanied by oversight or a steering group of 'outside' stakeholders and experts (OECD, 2020<sup>[1]</sup>).

In the Netherlands, the guidelines on Policy Reviews recommend to include an independent evaluator in the process (Ministerie van Financiën<sup>[2]</sup>). There are several possibilities to include this independent input in the evaluation exercise, for instance by involving this person in advisory meetings or in the actual evaluation exercise. It is also mandatory that, after the evaluation has been concluded, an independent opinion of the policy review is made and sent to the House of Representatives. This can be done by the same person who was involved in the evaluation or by another person.

An important issue is to have in-house capability for evaluations, both to conduct them internally as well as to oversee those commissioned externally. Consultants can usefully supplement the expertise available within government, but how they may best contribute to specific cases needs careful consideration, and they should not be over utilised to the detriment of internal capability.

Just as for in-house evaluations, it is important to guarantee the quality of outsourced evaluations. In some countries, every policy analysis project that is commissioned must go through the specialised unit for checks and approval. An example of this can be found in the US Department of Justice, which observed that the use of third parties to conduct evaluations or review performance does not necessarily ensure independence or neutrality. As such, the integrity and control processes for evaluations in the department apply to outsourced evaluations as well as evaluations that are completed using in-house resources.

Finally, it should be mentioned that in some countries advisory councils, independent research institutes and universities play a significant role as suppliers of policy evaluations, often at their own initiative.

### *Capacity building*

Capacity building and embedding learning in the organisational culture is crucial. The knowledge, skills and abilities required to conduct policy evaluation have to be available at the right moment and in the right place. In the benchmark countries a variety of practices are implemented, focusing on capacities and skills.

A first question about capacity is where it needs to be developed, namely at the centre of government level but also within the line ministries, where this can be done within a dedicated unit or throughout different entities within the ministry.

Based on the case studies, it appears that all countries with the exception of Germany put a strong emphasis on the availability of capacity at the centre of government. This allows the central level to prepare central guiding and to be involved in the evaluation work done by line ministries (as a peer reviewer or in a quality control role).

- In Canada, there are 50 analysts working in the TBS Results Unit and they are encouraged to participate in training as well as on-the-job learning. The TBS focuses on capacity building both at the central level of the departments as at the lower level. Within line ministries, the Policy on Results gives to TBS the responsibility to establish, amend or rescind competencies for heads of performance measurement, heads of evaluation and evaluation specialists across departments, guaranteeing the capacity at the top of the departments and making them responsible for the capacity within the departments. It is important to note that departments can also develop very significant evaluation programmes, with for example over 70 staff at employment Canada above. So, the total number of staffs and resources engaged in this agenda at the federal level can be very significant.
- The Netherlands has a similar system. Each ministry has to establish a directorate for Financial and Economic Matters (FEZ) to supervise evaluations of the effectivity and efficiency of policies, among other tasks. The way the FEZ are organised is not prescribed, nor does the Ministry of Finance provide guidelines for it. In general, these units are relatively limited in size and capacity and the way the FEZ are involved in capacity building activities towards the officials within their ministries depends on their own initiatives. In some ministries, there is a separate unit responsible for evaluations, while in others programme managers are responsible for evaluations.
- In the United States, the Evidence Act requires agencies to carry out a capacity assessment led by the Evaluation Officer. The assessment is intended to improve agencies' ability to co-ordinate and increase technical expertise for evaluations, thus focusing on capacity building throughout departments and agencies. Within the Department of Health and Human Services for instance there is a specific unit responsible for organising seminars and training sessions to enhance the evaluation capacity within the department.
- Germany is the exception, in the sense that there is no obligation to create specific units in line ministries for the evaluation function, leaving it in the hands of the line ministries to organise themselves and take care of the capacity building.

### *Evaluation profession*

In Canada and the United States, legislation mandates specific functions linked to the evaluation process and describes the responsibilities attached to this position. The Netherlands and United Kingdom have a different approach.

- In Canada, the Treasury Board Secretariat has published a document listing the competencies for the Heads of Evaluation. Moreover, the Canadian Evaluation Society has been committed, since 2009, to the implementation of the title of accredited evaluator. This professional title programme is built on three pillars: a code of ethics, professional standards and a set of 36 theoretical and

practical skills (knowledge of basic concepts of assessment, mastery of data collection and processing methods, project management skills, interpersonal skills, etc.).

- Although in the Netherlands there is no specific legislation for the evaluation profession, some departments have appointed Chief Science Officers. This is a scientist who provides support and direction to (evaluation) research, and can also build a bridge between academic researchers and the ministry, aiming at more evidence-informed policy development and policy-relevant research.
- Although this is not a common practice, in the United Kingdom, evaluation work is mainly done by two specific professions specialised in evaluation activities within the civil service: the government economic service and the government social research profession. For these, profession standards have been elaborated (such as the Policy Profession Standards) describing the skills and knowledge required by policy professionals at all stages of their career and provide a framework for professional development. Moreover, NESTA with the Alliance for Useful Evidence has created 'Evidence Masterclasses', providing "an immersive learning experience" for senior decision makers who want to become more skilled and confident users of research.
- In the United States, the Evidence Act requires that federal departments designate an Evaluation Officer, Chief Data Office and a Statistical Official, each with well-described tasks.

### ***How to create transparency and involve stakeholders?***

Transparency of the evaluation system, the involvement of stakeholders throughout the evaluation process and public accessibility of evaluations are key elements to ensure quality, gain support to establish and maintain a sound evaluation system and strengthen trust in government and its delivery of evidence-informed policies.

#### *Tools and practices to promote transparency*

- **Publicly available evaluation agendas** are a standard procedure in the Netherlands. The agenda for the planned Policy Reviews is transmitted to the Parliament. For the newly created Strategic Evaluation Agenda, a similar procedure will be developed, allowing the Parliament and the public to know the plans in advance, in order to comment on them. In addition, the Netherlands has also a repository of all planned Policy Reviews that can be consulted on the web. In the US, the Program Evaluation Standards and Practices stipulates that Federal evaluations must be transparent in their planning, implementation and reporting phase, and the Foundations for Evidence-Based Policymaking Act includes a provision that requires agencies to submit and publish annual evaluation plans. In Canada, approved evaluation reports and summaries, including complete management responses and actions plans, are released on web platforms.
- **Publishing evaluation results.** This is a common practice in the Netherlands. In Canada, departments have to make all their evaluations public, whether or not they are produced internally or externally. In the United Kingdom, the Magenta Book on evaluations states that evaluation findings and materials should be public by default. In practice, the publication of evaluations depends on the level of importance. In Germany, evaluations that are conducted by external actors are published, but internal evaluations are not necessarily so.
- **Presenting the results of evaluations to the Parliament as well as how the results will be used.** Government feedback is included in the Policy Reviews that are presented to the Parliament in the Netherlands.
- **Developing communication strategies and using tools such as social media.** In Canada, departments are diffusing evaluation findings beyond departmental websites via such platforms as Twitter and LinkedIn. Evaluations are also published on the federal government website.

- **Creating databases for evaluations accessible on the internet.** In the five benchmark countries there is no evaluation database that gives an overview of all the evaluations that have been conducted, contrary to information on performance monitoring where several countries have portal sites containing references to this information in a consolidated matter. In the Netherlands, the Ministry of Finance keeps track of all Policy Reviews on a website, but there is no database containing evaluations.
- **Keeping track of the implementation of evaluations' recommendations.** Periodic publication of a report on the status of policy evaluation and how the results have been reflected in the policy-making process can be a stimulus to improve the quality. In November 2017, a report commissioned by HM Treasury and led by Sir Michel Barber, "Delivering better outcomes for citizens: practical steps for unlocking public value" ("Public Value Report"), triggered a renewed attention on outcomes and results (Barber, 2017<sup>[27]</sup>). In the Netherlands, the Operation Insight in Quality that has been conducted the past years was the result of an external report on the quality of budget expenditures.

## Conditions for robust evaluation systems

The governance of policy evaluation as well as the process, including the aspects of capacity, clearly have an impact on the robustness of a policy evaluation system. In this section the focus will be on another aspect, namely how the benchmark countries try to guarantee the quality of policy evaluations (fostering the necessary skills as well as providing peer reviews and control mechanisms), cope with the difficulty of data availability and how they promote the use of evaluations.

### *How to ensure quality?*

The quality of evaluations is essential to ensure impact on policy making, and thus that evaluations actually serve as tools for learning, accountability and better decision making. Bad quality evaluations can lead to poor evidence, which can be costly and misleading, and threatens political support to invest resources for policy evaluation (OECD, 2020<sup>[1]</sup>). Both legislation and capacity building in all their aspects aim to improve the quality of the evaluations, but this may not be enough.

A variety of mechanisms for quality control of evaluations and quality assurance can be put in place to foster evaluations that are technically and methodologically sound and well-governed (OECD, 2020<sup>[1]</sup>). These mechanisms can be organised from the main actors in charge of evaluation across government or created at the level of individual ministries/departments.

#### *Internal co-ordination and learning mechanisms*

Some countries have developed co-ordination bodies or mechanisms to allow evaluators to share good practices.

- In Canada, co-ordination and feedback mechanisms between branches of government take place through both formal and informal structures. The Results Division has recently created two steering committees, one for evaluation and the other for performance measurement. The goal is to discuss challenges and develop concrete actions to address them. There are regular meetings (about 2-3 per year) where all the Heads of Evaluation and Heads of Performance Measurement are invited. With the creation of the new steering committees, the approach is evolving. There is a sense that working with a smaller group of Heads on specific issues and then validating the approach with the broader group, will be more effective in working collaboratively on specific files and implementing concrete actions (e.g., promoting the value of the functions, improving data quality and availability, sharing best practices, recruitment of staff, professional development, etc.).

- In the Netherlands, within the Ministry of Finance, the Bureau for Strategic Analysis (BSA) has created an evaluation community (Interdepartmental Supervisory Committee on Performance and Evaluation or IBP), mainly consisting of people working in FEZ. They meet regularly (monthly or bimonthly) to exchange good practices and discuss relevant approaches for evaluations and policy reviews.
- In the United Kingdom, there are also several bodies which support and facilitate the development of guidance and the sharing of practices related to policy evaluation. For instance, the Government Economic and Social Research Team is a professional unit based in HM Treasury that provides support across government departments, co-ordinates learning and development activities, develops profession standards, and provides mechanisms for developing standards for evaluation of policy and social research. This team also co-ordinates the Cross-Government Evaluation Group, the network of evaluators where good practices and common challenges are shared. The Group is cross-departmental and cross-disciplinary, made up of analysts and evaluation managers from government bodies, and works to improve the supply of, stimulate the demand for, and encourage the use of good quality evaluation evidence in government decision making.
- In the United States, an interagency council has been set up, bringing together Evaluation Officers and serving as a forum for exchanging information and advising OMB on issues affecting the evaluation functions, such as the evaluator competencies, best practices for programme evaluation, and evaluation capacity building.

### *In-house training*

In-house training by government is common, but can also be provided by the departments or the Ministries themselves. This can be included as an obligation in the evaluation framework, or conducted at their own initiatives.

- In Canada, policy evaluation capacity is developed and improved mainly through training. The Results Division organises information and learning sessions (called Drop-in Sessions) based on different results-related subjects of interest to the evaluation and performance measurement communities, and has recently started to record and post these sessions on an unlisted Results Division YouTube channel for their communities to view. Presentations of other departments' and non-governmental organisations' workshops are also shared via the Results Portal when relevant to the evaluation and performance measurement communities. Guidelines are not just uploaded on the website: the TBS delivers presentations, newsletters, etc., to communicate to people and disseminate knowledge. The line departments, particularly those with the largest capacity for evaluation, also develop evaluation capacity through workshops, learning series and individual training tailored to evaluators needs.
- In the United Kingdom, the central government supports capacity development of its evaluators in various ways, such as through the establishment and support of a network of evaluators to share good practices and common challenges (Cross-Government Evaluation Group), and advisory panels for evaluations (Cross-Government Trial Advice Panel). Moreover, government departments also carry out internal training programmes, such as the Ministry of Business, Innovation and Skills which annually offers technical training on scientific assessment methods.
- In the United States, the OMB established an inter-departmental council of evaluation officers in 2019 to support capacity building on evaluation as a cross-governmental function. Other capacity-building activities undertaken by OMB include technical assistance through workshops and seminars to support the implementation of its guidance memoranda, as well as resources and other materials posted on central websites. At the agency level, the Department of Health and Human Services has also organised seminars and training sessions to explain the purposes of the Evidence Act and how it applies to the department.

### *Evaluation societies*

Evaluation societies sometimes offer training courses and workshops on evaluation and thus play a significant role in some countries in this respect.

- The Canadian Evaluation Society (CES) brings together nearly 2000 practitioners from different backgrounds (administrations, universities, or private consulting firms). It promotes leadership, knowledge, advocacy, and professional development and offers dedicated training. The training, which is not compulsory and is separate from the accreditation procedure, offers awareness-raising actions at the margins of civil servants who are not members of ministerial assessment units.
- The German Evaluation Society (DeGEval) is the main entity focused on the professionalisation of evaluators and the development of a theoretical framework. It has published the Standards for Evaluation, the Guidelines for implementation of the Standards in the Field of Self-Evaluation, the Recommendations on Education and Training in Evaluation (which define the requirement profiles of evaluators) and the Recommendations for Clients of Evaluation. DeGEval has also established working groups to serve as a platform for specific dialogue in various fields of application and are involved in annual conferences and meetings, which ministries also regularly participate in.
- Also in the United States, evaluation is recognised as a profession and is represented and supported by the American Evaluation Association.

### *Peer Review*

During an evaluation, public consultation, advisory panels and committees can be used to promote the quality of evaluations. Their main aim is to provide comments and feedback throughout the different phases of the evaluation (design, data collection, synthesis, etc.). These advisory panels and committees may be composed of policy practitioners, evaluations experts and stakeholders, and may be established on an ad hoc basis or systematically.

Peer review is a mechanism that is used by several countries to guarantee and improve the quality of evaluations. In Canada, the Treasury Board Secretariat encourages peer review. These also represent a widespread practice in Germany, particularly in the field of development co-operation.

In the Netherlands, it is recommended to include an independent evaluator in the process. There are several possibilities to include this independent input in the evaluation exercise, for instance through an advisory body or by involving this person in the actual evaluation process. It is also mandatory that, after the evaluation exercise has been concluded, an independent opinion of the policy review is provided and sent to the House of Representatives. This can be done by the same person who was involved in the evaluation or by another person.

### *Control and oversight mechanisms*

An important way to guarantee and improve quality is to set-up of a control mechanism. Control mechanisms are rare, and exist mainly for *ex ante* regulatory impact assessments.

In the countries under study, there is no strong centralised control on the quality of the (*ex post*) evaluations done within line ministries. Some countries have organised an internal control mechanism at the level of the line ministries. External oversight by, for example, the Supreme Audit Office is also important as a quality control mechanism.

- In Canada, there is a control entity in larger departments. According to the Policy on Results, the Performance Measurement and Evaluation Committee within the larger departments reviews evaluation reports. There is no institutionalised control mechanism at the central level (TBS).

- In Germany, the Federal Court of Auditors (Bundesrechnungshof) follows a comprehensive auditing approach: its work cover aspects of financial compliance and performance audits, either separately or in combination. Performance audits study the criteria of economy, effectiveness and efficiency to ensure that value for money is obtained according to Section 7 of the Federal Budget Code. Despite not having an evaluation mandate, the Federal Court of Auditors may be seen as assuring quality when performing its audits, as it also checks the adherence to existing evaluation requirements. Moreover, the 2019 decision to update the concept of *ex post* evaluation establishes that each evaluation report will be subject to a quality control before publication, by an entity to be chosen by ministries (BPA, 2019<sup>[12]</sup>).
- In the Netherlands, there is no obligation to create an evaluation committee such as in Canada. Some ministries have created voluntarily an evaluation committee, although there are no standard guidelines for this, and every minister is free to organise it according to its own insights. Typically, this committee consists of senior officials responsible for a directorate, external expert(s) and a delegation of the FEZ. This committee can discuss the planning and implementation of the evaluation activities in the ministry, and can also discuss some major evaluation exercises.

### **Data and information availability?**

The quality and availability of non-evaluation specific data (big data, open data, statistical data, administrative data, etc.) in a format that can be readily used is also a factor that influences how easily a policy can be evaluated.

A good evaluation system relies on comprehensive, quality data. The full implementation of an evidence-based agenda implies leveraging the data that are available for analytical purposes. As such, a high quality national statistics system is an integral part of any evaluation strategy, as well as up-to-date databases and registers that mutually communicate and disaggregate data at the desired level.

Important data sources for policy evaluation are (OECD, 2020<sup>[1]</sup>):

- Statistical data: commonly used in research, it corresponds to census data or more generally to information on a given population collected through national or international surveys.
- Administrative data: this data is generally collected through administrative systems managed by government departments or ministries, and usually concerns whole sets of individuals, communities and businesses that are concerned by a particular policy. For instance, it includes housing data and tax records.
- Big data: mainly drawn from a variety of sources such as citizen inputs and the private sector, big data is most often digital and continuously generated. It has the advantage of coming in greater volume and variety.
- Evaluation data: this data is collected for the purpose of the evaluation. It can take the form of qualitative questionnaires, on-site observations, focus groups, or experimental data. See further down for a description of impact evaluation methods to collect and analyse data.

Often, the limited availability and quality of data across government agencies and departments is a major challenge for evaluation practices. In many countries, there is no integrated data infrastructure and access to data across departments remains difficult. The architecture often does not guarantee data interoperability. Data siloes remain within the government itself, as departments operate in similar sectors but cannot (or refuse to) share data. Problems remain with obtaining linked files where there is a low coverage of common identifiers to merge datasets. In some cases, the challenge is to understand what data and data sets currently exist within departments, and how departments could use the data for policy analysis.

Apart from technical problems, enabling the strategic use and quality of data requires human capabilities, especially the willingness of public entities and civil servants to share use data, and investment in databases, data linkages and analytical tools. Political reluctance towards sharing evidence on policy impact and effectiveness may also be another barrier in accessing data.

In several cases, for instance in co-operation between national and subnational governments, data sharing and availability has proven to be a topic for improvement, notably with regard to access to information and data. Access to data is complicated as they are gathered by different entities and there is no obligation to share data with the federal level or vice versa. Often, subnational Governments enjoy full autonomy in some specific matters and this issue has become as a challenge during the COVID-19 pandemic (for example, in Canada and Germany).

In recognition of the limitations in infrastructure to support the use of evidence, some jurisdictions have launched initiatives to try to maximise the use of government's existing assets for evidence-informed policy making. These include measures to avoid fragmentation and duplication of efforts (e.g. in developing separate data sharing infrastructures) and to promote public sector integration and cohesion, library facilities, data portals and clearinghouses as well as data sharing software such as the use of APIs and open data and other methods of maximising government's data assets.

Fostering a Data Driven Public Sector culture can be a very effective way to enhance the quality of ongoing evaluations through the application of relevant data (OECD, 2019<sup>[28]</sup>). Data-Driven Public Sector initiatives generate an environment in which data about policy interventions is available in real time to avoid waiting for monthly or quarterly updates across a wide range of policy areas because the data they need is more frequently available and accessible.

- In Canada, the Data Strategy Roadmap for the Public Service is intended to support a more strategic use of data while protecting citizens' privacy. While not all data have privacy implications, when they do, departments and agencies should incorporate privacy by design and engage early with the Office of the Privacy Commissioner (OPC). Co-location of TBS and Statistics Canada staff was a success factor with combined teams jointly working on validation of results. Another success factor was the engagement of several actors involved in evaluations, i.e. departments and agencies, as well as the research community. The Canadian government has also worked to support the "demand side" of open data and information, identifying and collaborating with stakeholders in organisations and companies that leverage open government data and information.
- In the United States, the Foundations for Evidence-Based Policymaking Act was designed in part to ensure that the necessary data quality and review structures were in place to support the use of administrative data in evaluations. The Evidence Act incorporates the Open Government Data Act, which requires agencies to publish information online as open data, using standardised and machine-readable data formats. The Act emphasises co-ordination to advance agencies' data management and data access functions by mandating an open government approach to data. The website Data.gov, launched in 2009 and managed by the US General Services Administration (GSA), provides access to government datasets on a wide range of topics. The GSA has to maintain a 'Federal Data Catalogue' as an online point of entry dedicated to sharing agency data assets with the public. Guidance is being prepared by OMB for Open data access and management and for Data access for statistical purposes. Agencies are also required to designate a Statistical Official, to advise on statistical policy, techniques and procedures. The Statistical Official collaborates and consults regularly with the Chief Data Officer (CDO) and Evaluation Officer. Finally, agencies develop and maintain a comprehensive data inventory that accounts for all data assets created and collected by the agency. The OMB has established an Advisory Committee on Data for Evidence Building at the federal level, to review, analyse and make recommendations on how to promote the use of federal data for evidence building and how to facilitate data sharing and data linkage.

However, challenges remain, including finding and accessing the right data, having common data definitions and terminologies, overcoming privacy-related issues, and mobilising resources to make the kind of longer-term investments required to develop new data linkages of good quality.

- In Germany, the Federal Statistical Office is the leading provider of statistical information required for developing informed opinions and decision-making processes. The Federal Statistical Office conducts the nationwide statistics in close co-operation with the statistical offices of the *Länder*.
- In the Netherlands, Policy Reviews should be a synthesis of existing information, but it appears that in most policy areas there is not enough evaluation information available to base the policy review solely on these previous evaluations. Therefore, the questions have been updated recently to include an improvement paragraph, that answers the following question: are there gaps in the available information to make a relevant evaluation of the effectiveness and efficiency of the policy and how can these gaps be filled?
- The What Works Centres in the United Kingdom are institutions that provide independent, evidence-based, and practical advice in their policy area. Most of the What Works Centres were founded in the 2010s, although some of these centres existed before. In 2013, the Cabinet Office and HM Treasury launched the What Works Initiative with the objective of improving the supply of high-quality evidence, creating incentives to use evidence in policy decisions and practice, and building capability across government to improve the use of evidence for policy making. The What Works Initiative established the What Works Network, a network where all What Works Centres are gathered. All What Works Centres are engaged to generate evidence on what works in a defined policy area, translate evidence for specific user groups in a friendly-format, and encourage the adoption and use of evidence in decision making. To integrate the What Works Network, a What Works Centre should fulfil some criteria: it must commit to the principles of the Network, share learning across the Network, engage with national and local exercises, and participate on the decisions regarding prospective new members joining the Network (Cabinet Office, 2018<sup>[29]</sup>).

Finally, in order to have the relevant data for *ex post* evaluations, it is important to think about it from the start of a policy.

- Germany has recently introduced a provision along this line. The 2013 concept for evaluation was updated in 2019, when a decision of Secretaries of State clarified additional aspects to be included in the draft bills that would facilitate and improve quality of *ex post* evaluations. When presenting a draft bill, its objectives and the criteria for achieving the objectives have to be stated, as well as the steps and methods of evaluation that will be used. Furthermore, the Federal government is developing a guidance document outlining the steps and methods of an evaluation.
- This issue has also clearly been stated in the Netherlands, where in 2018 the Accountability act was amended to make sure that when preparing new policies, the goals have to be established clearly from the start as well as an indication how the proposal will be evaluated after implementation (evaluation paragraph). This is one of the outcomes of the discussion as part of the operation Insight in Quality, on the link between *ex ante* and *ex post* evaluation. An important role of the FEZ is to stimulate the programme officers to start thinking about the policy reviews far ahead of the time at which the policy review has to be conducted, making sure that the necessary data are available when the policy review starts.
- In the United Kingdom, policy proposals are required to envisage monitoring activities and indicators, so that corrective actions can be taken during policy implementation. For instance, single departmental plans include indicators that can be used to monitor performance on each objective. After policy implementation, government departments are expected to conduct *ex post* evaluations, including project implementation review and post-evaluation review. *Ex ante* and *ex post* evaluations should be linked, as the policy design should identify the relevant indicators to be monitored and evaluated, and ensure that the information is collected during the policy process.

## ***How to promote use of evaluations?***

A sound framework and correct implementation of evaluations is no guarantee for successful use of evaluations in the policy process. Therefore, uptake of policy evaluations results should be enhanced. A strong demand from Parliament and external stakeholders is a key driver for an increased use of evaluation information, although the combination of a well working evaluation framework and the incentives to use the resulting evaluation information is still no guarantee for an optimal use.

Stakeholder engagement is an important way to ensure that evaluation improves policy making. First, and most obviously, stakeholders (namely ministries and agencies but also the public) can improve the quality of evaluations by providing information on the impacts of a policy, as well as providing feedback on preliminary analysis and findings from evaluations. Second, engaging stakeholders early in the evaluation process can help identify which policy areas need evaluation the most. Third, giving the public the opportunity to express views and make an input during evaluation procedures can build trust in the evaluation process and even a sense of ‘ownership’ of the outcomes, making the implementation of any changes politically easier to manage (OECD, 2020<sup>[1]</sup>).

In Canada, stakeholders are not consulted in the planning stages of evaluations, but can be engaged in the implementation phase, as part of participatory processes. According to the Directive on Results, the head of evaluations has to consider the information needs of the major stakeholders when identifying the department's five-year evaluation coverage needs. In the Netherlands, the newly created Public Value Scan requires ministries to consider civil society, by indicating the value added for society and the support for the policy within target groups and stakeholders, therefore encouraging them to interact with civil society on these questions. In the US, OMB guidance mandates stakeholder involvement in developing learning agendas and planning for evaluation within agencies. Moreover, one of the tasks of the Chief Data Officer Council, composed of each agency Chief Data Officer, is to consult with the public and engage with stakeholders on how to improve access to data assets, which are relevant for evaluations and evidence-informed activities.

Some other mechanisms to promote the use of evaluations include:

- Conducting user-focused or utilisation-focused evaluative processes. The Public Value framework in the United Kingdom is very focused on optimising the process of turning funding into policy outcomes for citizens. The newly introduced Public Value Scan in the Netherlands requests each minister to indicate what value the pursued policies add to society when evaluating a policy.
- In order to match evidence with demand of policy makers and users’ needs in terms of timing and priorities, evaluation agendas have recently been introduced in the Netherlands (Strategical Evaluation Agenda) and in the United States (Learning Agenda).
- The Evaluation Task Force that was created in the United Kingdom in 2020 aims to ensure that evaluation and evidence are an integral part of spending and operational decisions, by incorporating them into HM Treasury spending processes, and supporting government departments to generate evidence in priority areas with evidence gaps.
- Evidence synthesis, using standardised formats, meta-analysis and systematic reviews, etc. In Germany, the IZA World of Labour, an academic-supported online platform, publishes a comprehensive set of understandable, non-technical summaries of policy relevant research on labour market themes. The summaries (‘one-pager’) always have the same structure and there is a link to a more extensive article of 10 pages.
- Embedding use in the institutional set-up, within and outside of the executive:
  - The policy on Results in Canada supports the inclusion of evaluation and evidence in the budget process through the Treasury Board Submissions (a key financial decision stage for the Cabinet). Furthermore, the Treasury Board is working with the Privy Council Office to

identify how tools developed within the PCO for a more outcome-focused approach to some policies can be leveraged by the TBS as conditions for the funding of departments.

- In the Netherlands, the policy reviews are sent to the House of Representatives with a cabinet response indicating how the governments intends to act on the results of the evaluations. The fact that the central steering of the evaluation framework in the Netherlands is embedded in the Ministry of Finance, implies that the evaluation framework is linked with the budget process.
- The policy profession standards require British civil servants who belong to the policy profession (i.e. the civil servants who are involved in the design of public policies) to use scientific data in their work. This means that they are required to base their public policy recommendations on evaluation results.
- Promoting communication, availability and accessibility of evaluations. Transparency and public availability of data and evaluation results can stimulate the use of evaluation findings and encourage ministries and stakeholders to make use of the results, as in the United States where Congress has requested an increasing volume of evaluation and performance information.
- Organising interaction between analysts and policy makers. In Germany, the Evaluation Society (DeGEval) brings together academics and officials and has also established working groups to serve as a platform for specific dialogue in various fields, bridging both worlds.

Moving from knowledge management to knowledge brokerage, acknowledging the fact that the worlds of policy making and research are very different. In several countries there are specific institutions within the Parliament that are tasked to translate technical evaluation reports into more user-friendly reports that focus on the needs of the Parliaments in order to increase the use of evaluation in Parliamentary work. The Analysis and Research Department in the Netherlands and the Scrutiny Unit in the United Kingdom are two examples.

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## Notes

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<sup>2</sup> Policy reviews provide a synthesis of individual evaluations that have been carried out over the previous years within a policy area, examining the effectiveness and efficiency of the policies. They are mandated by law at least once every 7 years.

<sup>3</sup> <https://www.toolboxbeleidsevaluaties.nl/>

# Health budgeting and governance responses to COVID-19 in Latin America and the Caribbean: Lessons for improving health systems' resilience

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This paper analyses the budgetary and health governance responses to the COVID-19 pandemic in Latin American and Caribbean (LAC) countries during 2020 and 2021 to identify good practices which could support countries improve the resilience of their health financing systems for future crises.

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**Keywords:** COVID-19, Health financing and governance, Latin America and Caribbean

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## Abbreviations and acronyms

|          |                                                         |
|----------|---------------------------------------------------------|
| COVAX    | COVID-19 Vaccines Global Access                         |
| COVID-19 | Coronavirus                                             |
| ECLAC    | Economic Commission for Latin America and the Caribbean |
| GDP      | Gross Domestic Product                                  |
| LAC      | Latin America and the Caribbean                         |
| OECD     | Organisation of Economic Co-operation and Development   |
| PPE      | Personal Protective Equipment                           |
| PFM      | Public Finance Management                               |
| WHO      | World Health Organization                               |

## Introduction and main findings

Latin America and the Caribbean (LAC) is one of the regions hardest hit by the COVID-19 pandemic, with substantial adverse economic and social effects across the different countries. As of 15 December 2021, the region had over 45 million confirmed cases (around 17% of cases worldwide) and over 1.5 million deaths (around 29% of deaths worldwide). Moreover, the pandemic triggered a deep economic crisis that caused LAC's economic growth to shrink in 2020 by almost 6.8%, the largest contraction since 1900 (IMF, 2021<sup>[1]</sup>). Despite recent progress in vaccination coverage in LAC, the arrival of the Omicron variant in early 2022 is triggering new records of daily cases, and is thus putting new strains on the health systems of LAC countries.

This study shows that effective implementation of health measures to respond to COVID-19 depended among other factors on the quality of the budgetary institutions and the health financing systems in place, as well as on the existing governance mechanisms to co-ordinate the work between the budget and health institutions, and across levels of government. In this sense, the high fragmentation of health financing systems in the LAC region, both in terms of service delivery and financing, created challenges to co-ordinate and monitor the responses to the pandemic in the health sector, hindering efforts to combat COVID-19.

This unprecedented crisis had enormous budgetary consequences, as countries implemented measures to quickly strengthen their health care systems while limiting the adverse economic and social effects of the infection control measures to contain the spread of the virus. This study shows that as of the end of June 2021, central governments of LAC countries had committed on average USD 60 per person to COVID-19 in the health sector and a further USD 231 per person in other sectors, to finance actions that include strengthening the social and economic safety nets for households and businesses.

In the case of the health sector, countries have implemented budgetary measures to help ensure that their health care systems have sufficient resources to respond to the pandemic, and that resources are disbursed rapidly and spent in an effective manner. Measures implemented in the health sector include hiring additional workforce, increasing testing and hospital capacities, and purchasing of personal protective equipment (PPE) and medical supplies. This paper analyses the health responses taken and the link between the challenges for implementing the necessary health responses and the budgetary processes.

The *Health Financing and Governance Responses to COVID-19 in Latin America and the Caribbean Countries* is a study carried out by the OECD Joint Network of Senior Budget and Health Officials (Box 1), and funded by the Global Fund to fight AIDS, Tuberculosis and Malaria. The purpose of this study is to identify strengths and weaknesses of the existing health financing and governance frameworks across Latin America and Caribbean countries (LAC) for ensuring the resilience of health systems, when confronted with a major crisis such as the COVID-19 pandemic.

### Box 1. The OECD Joint Network of Senior Budget and Health Officials

The OECD Joint Network of Senior Budget and Health Officials was created in 2011, joining efforts of the Health and Budgeting divisions of the OECD. Its objective is to help policymakers share experiences, address challenges and discuss solutions for the fiscal sustainability of health systems, and to identify and disseminate best practices in managing health budgets.

Through regular meetings, participation in surveys and detailed case studies on health budgeting practices, the OECD Joint Network provides a space for dialogue and mutual understanding between representatives from the ministries of health and finance responsible for health financing.

Further details on the activities carried out by the OECD Joint Network, including recent publications, are available here: <http://www.oecd.org/els/health-systems/sbo-health.htm>.

This paper presents the conclusions of a study carried out in 2021 by the OECD Joint Network on Fiscal Sustainability of Health Systems on the health financing and budgetary governance responses to COVID-19 in Latin American and Caribbean (LAC) countries. This study is based on several sources of information, including interviews with health and finance officials, an international webinar and a survey. The survey *Health Financing and Governance Responses to COVID-19*, was designed specifically for the LAC region. It targeted senior budget directors and officials working in the budget offices who focus on health issues. Collaboration from health ministries and social security institutions was also provided for some questions. The survey was answered by officials from 11 Latin American countries (Argentina, Brazil, Costa Rica, Colombia, El Salvador, Guatemala, Honduras, Peru, Paraguay, Dominican Republic, and Uruguay) and 2 Caribbean countries (Haiti and Jamaica) between June and September 2021.

Individual meetings were held with respondents from the Ministry of Finance (Budget Office) and representatives from the Ministry of Health during the same period, in order to validate the answers to the survey, and to further discuss the challenges faced and actions implemented. Additionally, a webinar *Impact of COVID-19 on the National Budget and Health Expenditure in Latin American countries* was organised on the 8 July 2021 to share experiences between health and finance officials of the LAC region.

### Overview of key health financing and governance challenges and policy responses to COVID-19

This study shows that, during the two first years of the pandemic (2020 and 2021), the major challenges faced by LAC countries to implementing a health system response to COVID-19 were (Figure 2; Annex Table 1.B.18 in Annex 1.B):

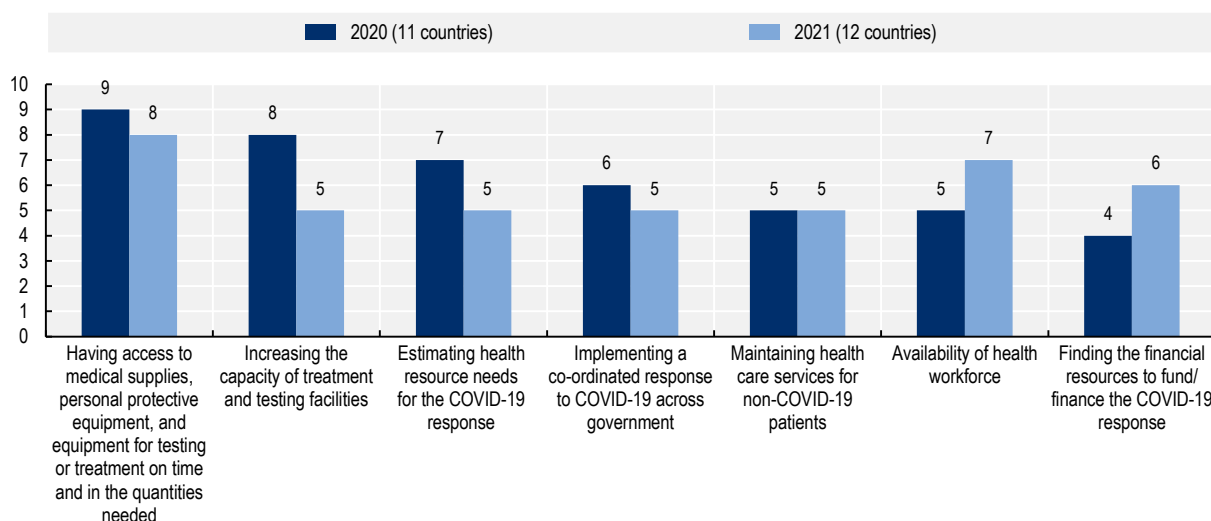
- **Overcoming international shortages of medical supplies, PPE and equipment for testing or treatment.** Despite having quickly mobilised additional resources to combat COVID-19, LAC countries were confronted both in 2020 and, to a lesser extent, in early 2021 with challenges arising from the limited availability of medical supplies and equipment needed to diagnose and treat patients. Excess of demand and stock and productive capacity limitations and bottlenecks worldwide increased competition for supplies and equipment between countries at an international level. Additionally, when a centralised purchasing policy was not implemented, central governments were in competition with other domestic actors such as subnational governments and/or hospitals (and vice versa) for supplies and equipment at a national level. In many cases, competition also resulted in suppliers inflating prices and countries having to pay higher prices for essential medical elements such as masks.

- **Estimating health resource needs for the COVID-19 response.** The uncertainty of the impact and duration of the pandemic forced countries to continuously revise their assumptions and estimates, and work under various scenarios based on different mortality and contagion rates.
- **Increasing the capacity of treatment and testing facilities.** The need to increase capacity to treat COVID-19 patients and test population was extremely severe, especially during the first few months of the pandemic.
- **Implementing a co-ordinated response to COVID-19 across government.** While this was also a challenge in OECD countries, the fragmentation of health systems in LAC countries and extensive decentralisation exacerbated this challenge for countries in the region.

In 2021, the implementation of the COVID-19 vaccination campaign intensified a number of challenges that were not major concerns during 2020:

- **Finding financial resources to purchase COVID-19 vaccines** became a new budgetary challenge in 2021, with most of LAC countries' health COVID-19 spending increases allocated to the purchase of vaccines.
- **Availability of health workforce** became more challenging in 2021, given additional staffing needs for vaccination campaigns.

**Figure 2. Main challenges to implement health responses to COVID-19 across surveyed LAC countries**



Note: No information available for Guatemala for 2020 and 2021, and for Jamaica for 2020. Countries could select more than one answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Notwithstanding these challenges, this study found that LAC countries were able to enact rapid policy responses to the pandemic. In particular:

- **Additional public resources were allocated to the health sector to respond to the COVID-19 pandemic both in 2020 and 2021.** In 2020, the three main sources of funds for health responses to COVID-19 were: reallocating funding from an existing health budget and/or from other sectors of government, and loans and grants from international organisations/countries. In 2021, the three main sources of funds for the health responses to COVID-19 were: reprioritising funding from existing health budget, loans from international institutions, and reprioritising funding from other sectors.

- **Countries quickly identified additional sources of funding and access to financial resources was not the main obstacle for implementing the early response to the COVID-19 pandemic.** The main challenges were accessing medical supplies and equipment in the time and quantities needed, and estimating health resource needs for the COVID-19 response.
- **Budget and procurement processes were adapted to allow for rapid responses to the pandemic.**
- **Budget execution of COVID-19 resources was often low in early 2020,** due to difficulties to access medical supplies and equipment.
- **Staff capacity in the health sector was increased to face the pandemic.** Most of the measures implemented were temporary and short term, including awarding bonus and/or overtime payments to health professionals, adapting roles of existing health staff and increasing the health workforce in the short-term.
- **Supply capacity in the health sector was increased to face the pandemic.** However again, most of the measures implemented correspond to temporary and short term measures including repurposing non-medical space, transferring patients to localities with spare capacity, re-specifying hospital discharge criteria and boosting alternative delivery modalities, such as telemedicine.
- **Special tracking and reporting processes were developed for COVID-19 health expenditure,** making public reports on COVID-19 measures and expenditures available in dedicated websites or in specific sections of the website of the Ministry of Finance.
- **In 2021, most health sector resources for the COVID-19 response were used to finance COVID-19 vaccination campaigns.**
- **Vaccination campaigns relied on different financing and implementation mechanisms,** such as the COVAX facility, agreements between pharmaceutical companies and countries, as well as donations from countries and the private sector. Indeed, the COVAX facility allowed to accelerate the development, production and equitable access to COVID-19 test, vaccines and treatment, benefiting most of the countries in LAC.

### ***Facilitating factors and good practices identified***

The study also identifies facilitating factors and good practices for the health financing and governance responses to COVID-19:

- **Pre-existing emergency frameworks and contingency funds.** Countries with existing framework to deal with emergencies, which could be used as soon as the national emergency was declared, were able to respond faster to the specific challenges of COVID-19 than countries which had to pass laws and regulations to increase flexibility for reallocating funds and procuring medical supplies and equipment. Counting on existing contingency funds which could be allocated to COVID-19 responses was also a clear advantage.
- **Strong and flexible budgetary and public financial management frameworks.** Flexible budgeting systems are helpful to allow transfers between fiscal years, or reallocating funds from lower to higher priorities. Strong public financial management (PFM) systems and capacity are crucial, for example for estimating health expenditure needs and linking these estimations to budget allocations.
- **Effective vertical and horizontal co-ordination mechanisms.** Co-ordination is essential to avoid duplication of efforts or internal competition for scarce resources. These should include Centre of Government (Prime Minister of President's office), Ministry of Finance, Ministry of Health, private and public Health Insurance Funds and sub-national governments.

- **Centralising purchases of key supplies and medical equipment.** Centralising national purchases of medical equipment and supplies is helpful to avoid internal competition and allow actors to compete on more favourable terms in the domestic and international market.
- **Ensuring strong expenditure monitoring and reporting.** Given the size of the expenditure, and the speed with which it had to be implemented, some countries had or built ad hoc monitoring and reporting mechanisms to allow for ex-post control and evaluation of the expenditures on the COVID-19 response.

### ***Looking to the future***

This crisis highlights the importance of strong and flexible budgetary frameworks and public financial management systems for effectively implementing the health response to the COVID-19 pandemic. Strong budgeting and PFM systems ensure that financial resources are available when and where they are needed, and allow to track and evaluate all expenditures, including those carried out following fast track procedures to allow for a timely response to the crisis. This calls for further investment and improvement in budgeting and PFM systems in LAC countries to be prepared for the future crises.

Regarding health policy responses, many of the measures implemented to face the pandemic were of a short-term nature. These included repurposing non-medical space, transferring patients to localities with spare capacity or re-specifying hospital discharge criteria. It is expected that as the health workforce goes back to pre-pandemic conditions, the health sector will be left unprepared to face new emergency measures such as the COVID-19 pandemic. In this sense, it is important to overcome chronic health workforce shortages and agree on sustainable workforce planning for the medium-term, with the purpose of building resilience towards future health crisis events.

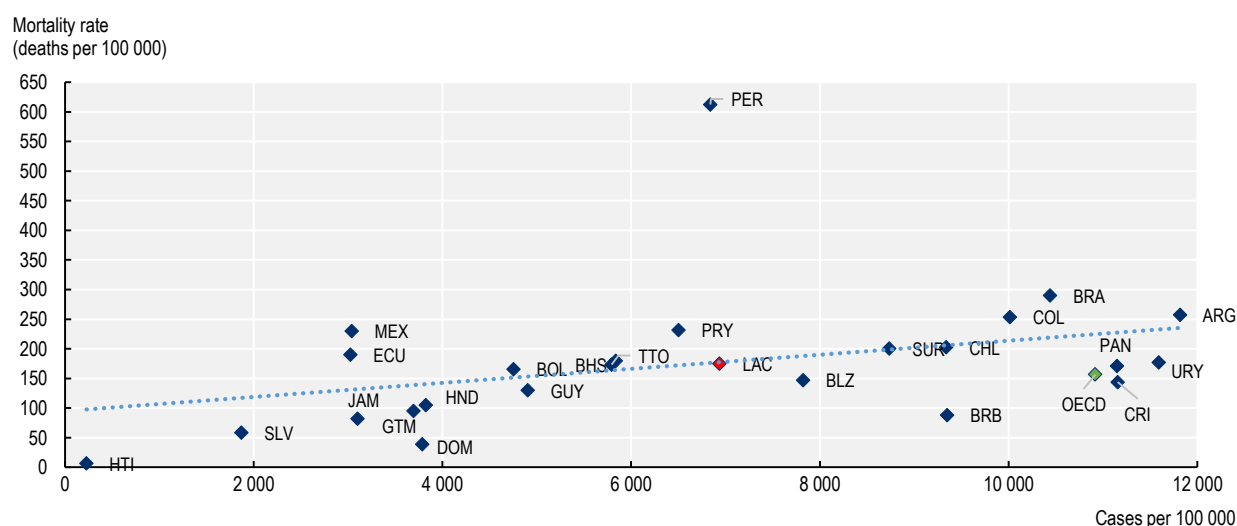
## **Main impacts of COVID-19 in Latin America and the Caribbean**

### ***COVID-19 had major health, social and economic impacts in LAC countries***

The Latin America and Caribbean (LAC) region is one of the most affected regions in the world by the COVID-19 pandemic, both in terms of cases and death and in terms of social and economic effects. While the average incidence rate<sup>1</sup> is higher in OECD countries than in LAC countries, the number of deaths per 100 000 inhabitants is larger in the LAC region (Figure 3; Annex Table 1.A.1 in Annex 1.A).

Within the LAC region, Latin American countries have been the hardest hit by the pandemic when compared to Caribbean countries in terms of number of cases and deaths per 100 000 inhabitants. Indeed, Argentina, Brazil, Costa Rica, Panama and Uruguay have the highest incidence rate in the LAC region, and Argentina, Brazil, Colombia, Paraguay and Peru have the highest number of deaths per 100 000 inhabitants in the LAC region (Figure 3; Annex Table 1.A.1 in Annex 1.A). Despite having a high incidence rate, Costa Rica has registered fewer deaths per 100 000 inhabitants than both LAC and OECD averages.

**Figure 3. COVID-19 cases and deaths per 100 000 inhabitants in LAC countries, 2020 and 2021**



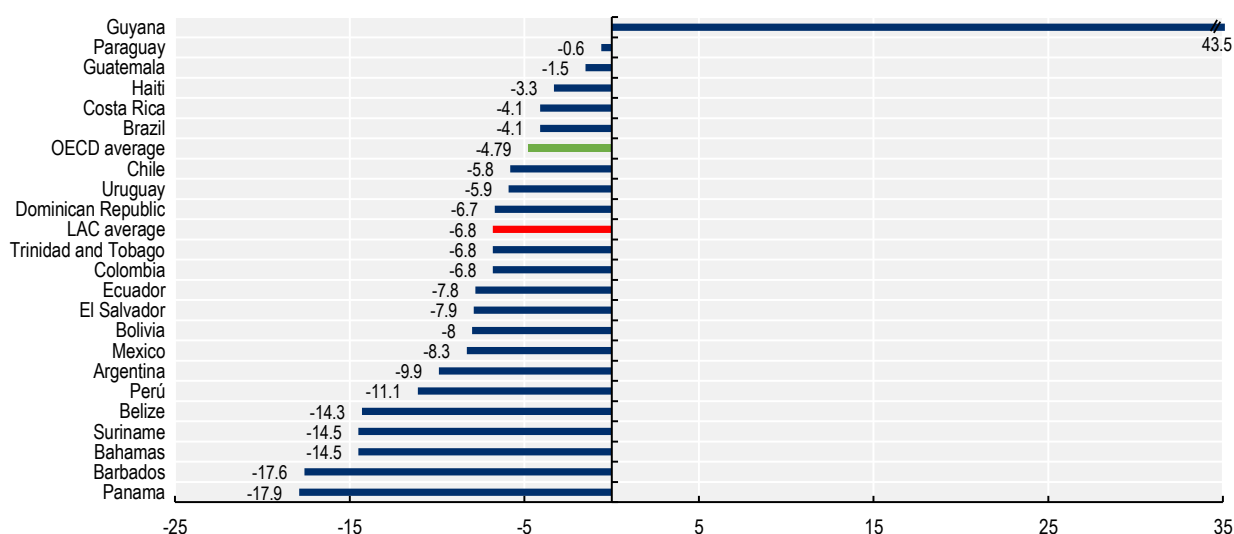
Note: Data as of 15 December 2021.

Source: Authors, based on (WHO, 2021<sup>[2]</sup>; The World Bank, 2020<sup>[3]</sup>).

Additionally, the health crisis has led to the worst economic and social crisis the region has experienced in the last 120 years. During 2020, Gross Domestic Product (GDP) fell in nearly all LAC countries (Figure 4), leading to a regional average contraction of 6.8% (ECLAC, 2021<sup>[4]</sup>). A notable exception is Guyana, which began producing oil at the end of 2019, modifying their economic outlook. The reduction in economic activity:

- Increased the unemployment rate to 10.6%, representing a reduction of around 2 percentage points compared 2019. This decline means that the number of people employed decreased by nearly 24 million between 2019 and 2020 (ECLAC, 2021<sup>[4]</sup>). By the end of 2020, the region's average employment rate fell from 57.4% in 2019 to 51.4, a historical minimum value which reflects the difficulties that the labour market experienced.
- Increased poverty and exacerbated income inequality in the LAC region. The pandemic pushed 4.7 million people out of the middle class and into vulnerability or poverty: In 2020, the number of people living in vulnerability (USD 5.50 to USD 13 per day) rose to 38.5% compared to 22.4% in 2019, and the number of people living in poverty (below the USD 5.50 per day) increased to 21.8% in comparison to 9.7% in 2019 (The World Bank, 2021<sup>[5]</sup>).

Figure 4. GDP growth in Latin America and the Caribbean, 2020



Note: LAC average corresponds to the average GDP growth of the 22 LAC countries included in the figure.

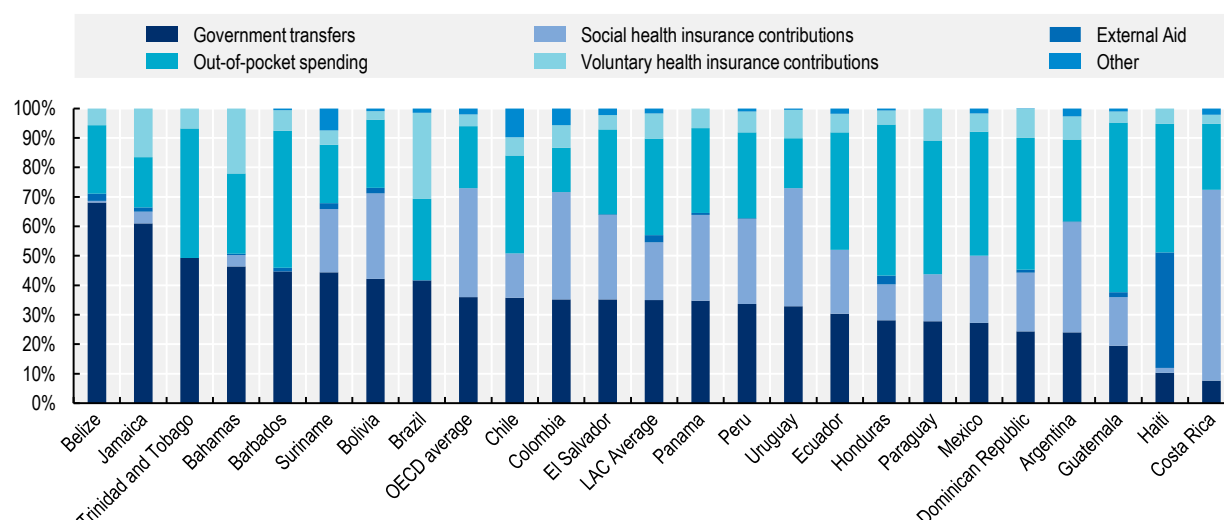
Guyana began producing oil at the end of 2019 modifying their economic performance and expecting a GDP growth in 2020 of 86%. However, the variation in oil prices caused by the pandemic impacted negatively on the country's revenue and GDP growth (Beuermann et al., 2020<sup>[6]</sup>).

Source: Authors, based on (ECLAC, 2021<sup>[4]</sup>) and (OECD, 2021<sup>[7]</sup>).

The economic slowdown derived from the COVID-19 pandemic also affected government's revenues negatively. In all LAC countries, both general tax revenues and health tax revenues (e.g. taxes on alcohol, sugar, tobacco, etc.) decreased in 2020 compared to 2019 (except in Argentina and Haiti for health taxes).

### ***Most LAC countries have dual health systems: A social health insurance for formal workers, and a subsidised system for vulnerable population***

LAC countries tend to have weak and fragmented health systems, which increases co-ordination and monitoring challenges, and creates difficulties to enhance efficiencies and ensure fiscal sustainability in the longer term. In a context of economic contraction, high unemployment rates and declining tax revenues, such a fragmentation exacerbates challenges to respond to the COVID-19 pandemic. The high fragmentation of LAC health systems is evidenced by the existence of multiple sources of financing. Most countries in the LAC region have at least three and up to six different types of financing arrangements for their health systems (Figure 5). Many LAC countries also have a dual health system, with services provided by social security institutions for insured workers and their dependants and by the Ministry of Health for the vulnerable and uninsured population. Finally, in several countries, sub-national governments (SNGs) play an important role in the health financing system and delivery, further increasing the fragmentation of the system.

**Figure 5. Sources of Health Expenditure by country, 2018**

Note: LAC average corresponds to the average value of the 22 LAC countries included in the figure.

Source: Authors, based on (WHO, 2018<sup>[8]</sup>) and (OECD, 2019<sup>[9]</sup>).

While some countries rely principally on a public system funded through government transfers (e.g. Belize), others depend on social health insurance contributions (e.g. Costa Rica) or even external aid (e.g. Haiti). The situation in terms of health expenditure in the LAC region can be summarised as follows:

- Government transfers<sup>2</sup> are the main source of health expenditure, with representing on average 35% of total health expenditure (this is close to the OECD average of 36%).
- Social health insurance contributions represent on average 19.6% of total health expenditure. Only Brazil and Barbados do not have this source of financing.
- Out-of-pocket expenditure represent on average 32.8% of total health expenditure. Despite some improvements with respect to the 2017 average of 34% (OECD/The World Bank, 2020<sup>[10]</sup>), it remains high when compared to the OECD average of 21%.
- Voluntary health insurance contributions represent 8.5% of total health expenditure on average. Brazil and Bahamas are the two countries with the highest share of the population purchasing supplementary private insurance (29.3% and 22.1%, respectively).
- About half of LAC countries receive external aid to finance their health system. The share of external aid tends to be low, representing less than 2.5% of health spending in all beneficiary countries, except Haiti where it represents almost 40% of total health expenditure.

### ***LAC countries took early emergency measures to respond to COVID-19***

By the end of March 2020, all surveyed LAC countries had implemented different measures to control the spread of the virus and prepare and strengthen the health care system to face the crisis. These included declaring a national state of emergency, adopting containment measures such as curfews, quarantines, closure of public spaces, schools and universities, suspension of non-essential commercial activities, mandatory use of face masks in public spaces, or closure of frontiers and travel restrictions (Table 2).

**Table 2. Selected measures implemented to control the outbreak of COVID-19 in LAC countries**

| Country            | Selected measures to control de outbreak of the virus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Argentina          | <ul style="list-style-type: none"> <li>– 11 March 2020: Declaration of sanitary emergency.</li> <li>– 15 March 2020: In-person classes at all school levels were suspended.</li> <li>– 16 March 2020: Entry to Argentina of non-resident foreigners was banned.</li> <li>– 19 March 2020: Announcement of mandatory quarantine from 20 March 2020.</li> <li>– 20 March 2020: Stores, shopping centres, wholesale and retail establishments, amongst other places with high presence of people, were closed.</li> <li>– March 2020: The National government recommended the use of face mask in public spaces.</li> <li>– April 2020: Provinces started to make mandatory the use of face masks in public closed spaces.</li> </ul> |
| Brazil             | <ul style="list-style-type: none"> <li>– 19 March 2020: Closure of land borders with neighbouring countries.</li> <li>– 20 March 2020: Declaration of national emergency.</li> <li>– As of 20 March 2020: Closure of schools in all 26 states and the federal district.</li> <li>– 27 March 2020: Closure of borders to international air passengers (not Brazilians).</li> <li>– 15 April 2020: the Supreme Court affirmed that states and municipalities have the autonomy to regulate social distancing measures.</li> <li>– 2 July 2020: Mandatory use of face masks in public spaces and public transport.</li> </ul>                                                                                                         |
| Colombia           | <ul style="list-style-type: none"> <li>– 12 March 2020: Declaration of a national health emergency.</li> <li>– 16 March 2020: In-person classes in public schools were suspended.</li> <li>– 17 March 2020: Declaration of state of emergency.</li> <li>– 17 March 2020: Closure of borders and port of entry.</li> <li>– 24 March 2020: Implementation of a national quarantine.</li> <li>– 4 April 2020: Mandatory use of face masks in public transport and areas where there is a massive influx of people and no social distancing is possible.</li> </ul>                                                                                                                                                                    |
| Costa Rica         | <ul style="list-style-type: none"> <li>– 16 March 2020: Declaration of national state of emergency.</li> <li>– 16 March 2020: Costa Ricans and residents who enter the country will be obliged to do a mandatory preventive isolation for 14 days.</li> <li>– 17 March 2020: Public and private schools were closed.</li> <li>– 18 March 2020: Closure of borders to foreigners and non-residents.</li> <li>– 24 March 2020: Implementation of sanitary vehicle restrictions.</li> <li>– 27 June 2020: Mandatory use of face masks for certain closed public spaces (services and businesses).</li> </ul>                                                                                                                          |
| Dominican Republic | <ul style="list-style-type: none"> <li>– 17 March 2020: Public schools and universities closed and suspended in-person classes.</li> <li>– 17 March 2020: All non-essential commercial activities are suspended.</li> <li>– 19 March 2020: Declaration of national state of emergency.</li> <li>– 19 March 2020: Closure of country's borders.</li> <li>– 20 March 2020: Institutionalisation of country's curfews.</li> <li>– 16 April 2020: Mandatory use of face masks in public spaces and working places.</li> </ul>                                                                                                                                                                                                          |
| El Salvador        | <ul style="list-style-type: none"> <li>– 12 March 2020: Implementation of a complete home quarantine in the national territory.</li> <li>– 12 March 2020: Closure of public and private schools.</li> <li>– 12 March 2021: Prohibition of foreign travel into the country.</li> <li>– 14 March 2020: Declaration of both a state of emergency and a state of exception.</li> <li>– 11 April 2020: Mandatory use of face masks in public spaces.</li> </ul>                                                                                                                                                                                                                                                                         |
| Guatemala          | <ul style="list-style-type: none"> <li>– 6 March 2020: Declaration of state of calamity.</li> <li>– 14 March 2020: Announcement that schools would close from 16 March 2020.</li> <li>– 17 March 2020: Closure of shopping centres, bars and nightclubs, and suspension of public transport.</li> <li>– 17 March 2020: Closure of all forms of borders and prohibition of entry by foreigners.</li> <li>– 22 March 2020: Implementation of curfews.</li> <li>– 8 April 2020: Announcement of mandatory use of face masks in public spaces from 13 April 2020.</li> </ul>                                                                                                                                                           |
| Haiti              | <ul style="list-style-type: none"> <li>– 11 May 2020: Mandatory use of face masks in public spaces.</li> <li>– 19 March 2020: Declaration of state of health emergency throughout the country.</li> <li>– 19 March 2020: Implementation of a nationwide curfew.</li> <li>– 19 March 2020: Closure of schools and factories.</li> <li>– 19 March 2020: Closure of airports and ports to all passengers.</li> </ul>                                                                                                                                                                                                                                                                                                                  |
| Honduras           | <ul style="list-style-type: none"> <li>– 10 February 2020: Declaration of the state of health emergency thought the national territory.</li> <li>– 13 March 2020: Closure of public and private schools.</li> <li>– 15 March 2020: Closure of all border, with the exception of Honduran nationals and permanent residents.</li> <li>– 16 March 2020: Implementation of restrictions on the free movement of people, suspension of public transport and face-to-face religious celebrations, prohibition of all types of events and operation of commercial businesses including shopping</li> </ul>                                                                                                                               |

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | centres.<br>– 7 April 2020: Mandatory use of face masks in public spaces.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Jamaica  | – 13 March 2020: Closure of schools (childhood institutions, primary and prep schools, secondary schools, community and teacher's colleges)<br>– 14 March 2020: Declaration of Jamaica as a disaster zone due to COVID-19.<br>– 18 March 2020: Non-essential workers in both the public and private sectors were mandated to work from home.<br>– 18 March 2020: Restriction for public gatherings, closure of bars and nightclubs.<br>– 21 March 2020: Closure of border and ban on incoming passenger flights, including for Jamaican nationals.<br>– 1 April 2020: Implementation of an all-island curfew.<br>– 21 April 2020: Mandatory use of face masks in public spaces. |
| Paraguay | – 10 March 2020: Implementation of quarantine.<br>– 10 March 2020: Closure of schools and universities.<br>– 16 March 2020: Declaration of sanitary emergency.<br>– 24 March 2020: Total closure of borders, including the Friendship Bridge, river and land accesses<br>– 22 December 2020: Mandatory use of face masks in closed spaces and open spaces where no social distancing is possible.                                                                                                                                                                                                                                                                               |
| Peru     | – 15 March 2020: Declaration of national emergency.<br>– 16 March 2020: Closure of borders and prohibition of domestic travel between provinces.<br>– 18 March 2020: Implementation of a nationwide curfew.<br>– 3 April 2020: Mandatory use of face masks in public spaces<br>– Public schools never got to open their doors as all classes went online before the originally scheduled start of the 2020 school year.                                                                                                                                                                                                                                                         |
| Uruguay  | – 13 March 2020: Declaration a health emergency.<br>– 14 March 2020: Suspension of public and private classes, at all levels of education.<br>– 17 March 2020: Partial closure of borders.<br>– 25 March 2020: Total closing of land, sea and air borders.<br>– 24 April 2020: Mandatory use of face masks in banks and other financial entities.<br>– 10 May 2020: Mandatory use of face masks in public transport in Montevideo.<br>– Uruguay never established mandatory quarantine, but enforced a high testing rate.                                                                                                                                                       |

Source: Authors, based on official websites and interviews with representatives from the Ministries of Health and Finance.

## Budgetary responses to COVID-19 in Latin America and the Caribbean

### ***In 2020 and 2021, LAC governments increased the size of budgetary commitments to respond to COVID-19***

The analysis of the survey on *Health Financing and Governance Responses to COVID-19* shows that all LAC countries<sup>3</sup> increased their current health expenditure in 2020 compared to what was initially scheduled to spend (i.e. budgeted in 2019). In 2021, central governments committed on average USD 71<sup>4</sup> per person to COVID-19 in the health sector, ranging from over USD 173 per person in Uruguay, to under USD 36 per person in Peru.

Additionally, the pandemic required increasing budgets in other sectors to reduce the economic and social impact of the restrictions imposed to contain the spread of the virus. Thus, in 2020, surveyed countries increased the size of their expenditure by USD 380 per capita on average, ranging from over USD 900 per capita in Brazil, to under USD 21 per person in Honduras. In June 2021, the amount scheduled to spend by the central government in 2021 on non-health sectors was USD 83 per capita on average. Table 3 shows the total amount spent in the health sector as a response to COVID-19 in 2020 and 2021 as a share of GDP, Annex Table 1.B.20 in Annex 1.B shows the increases in current health expenditure in 2020 compared to what had been initially scheduled to spend (budgeted in 2019).

**Table 3. Total amount spent in the health sector response to COVID-19**

| Country            | Total amount spent in the health sector response to COVID-19<br>(% GDP) |       |
|--------------------|-------------------------------------------------------------------------|-------|
|                    | 2020                                                                    | 2021* |
| Argentina          | 0.1                                                                     | 0.2   |
| Brazil             | 0.6                                                                     | 0.5   |
| Colombia           | N/A                                                                     | 0.7   |
| Dominican Republic | 0.2                                                                     | 0.3   |
| Guatemala          | 0.2                                                                     | 0.4   |
| Honduras           | 1.0                                                                     | 0.7   |
| Jamaica            | 0.4                                                                     | 0.4   |
| Paraguay           | 1.2                                                                     | 0.7   |
| Peru               | 0.4                                                                     | 0.3   |
| Uruguay            | 0.1                                                                     | 0.8   |

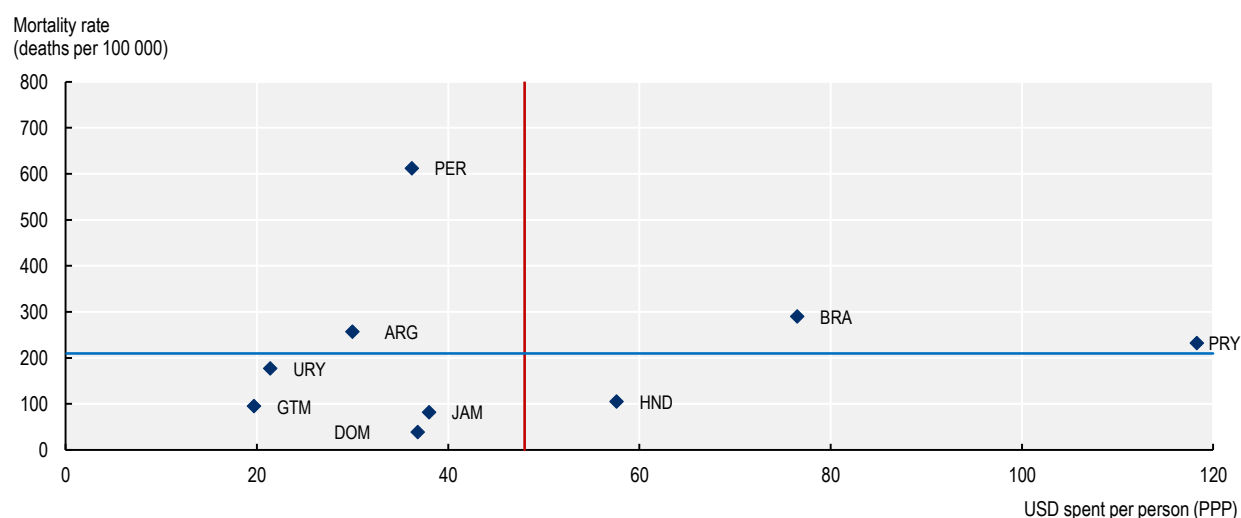
\*GDP projected by IMF (2021).

Source: OECD (2021), OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries; World Bank (2021), World Development Indicators; and IMF (2021), World Economic Outlook.

Figure 6 shows the relation between mortality rates and health expenditure allocated to fighting COVID-19 during 2020. As expected, there is no direct link between spending and mortality rate. However, Figure 6 does show that some countries were more efficient at facing COVID-19, with both lower spending and lower mortality rates (Uruguay, Guatemala, Jamaica and Dominican Republic). Several factors can explain the efficiency of the response, including the effectiveness of PFM systems (which may affect the time needed for allocation and authorisation of COVID-19 response funds); the overall efficiency of the health system; and co-ordination between the different actors, which is especially challenging in decentralised countries, among other.

**Figure 6. Health COVID-19 response vs. Mortality rate, 2020**

USD spent per person



Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021. Deaths, WHO, 2021. Population, World Bank, 2021.

## **Countries mobilised different sources of financing to increase health spending while COVID-19 reduced general government and health revenues**

*All LAC countries quickly identified new sources of revenues to finance the health response to COVID-19*

Health resources to respond to COVID-19 came primarily from reprioritisation within the health budget, and then from increases in the total health expenditure, in particular through international loans and grants. Some countries also used existing emergency reserve funds. In the second year of COVID-19, the health budget was also increased by reprioritising expenditures from other sectors.

Finance officials worked rapidly to identify and assess alternative sources of funding required to respond to COVID-19 in different fronts, including health. In both 2020 and 2021, LAC countries implemented actions to mobilise additional resources aiming at strengthening their health system and mitigating the effects of COVID-19 in their population. Resource mobilisation mechanisms included transfers between fiscal years to reallocate unused funds from previous years (Brazil), use of contingency funds<sup>5</sup> (Costa Rica), and request of loans from international organisation (Guatemala).

Finance ministries were responsible for the identification and mobilisation of the additional resources, while line ministries (including health ministries, in the case of the health sector) carried out rapid needs assessments and contributed with inputs for spending amendments within their own budgets (Box 2).

### **Box 2. Country examples of actions to mobilise resources**

Countries carried out different actions to mobilise additional resources to finance the health response to the COVID-19 pandemic:

- Costa Rica:** The declaration of the state of emergency due to COVID-19 on 16 March 2020 allowed the national government to use a series of existing governance and financial arrangements foreseen in the National Risk Management System. This National Risk Management System was established in 2005 to face emergency situations, such as a pandemic. For instance, the National Emergency Fund, a contingency fund administered by the National Commission for Risk Prevention and Emergency, was used and reinforced with resources transferred from the institutions' ordinary budgets and cash donations. The resources transferred were identified by the different public institutions across government, based on reprioritisation exercises. From the beginning of the pandemic in March 2020 until July 2021, around 39 million colons (0.14% GDP 2020) from the National Emergency Fund have been used to finance the country's response to COVID-19.

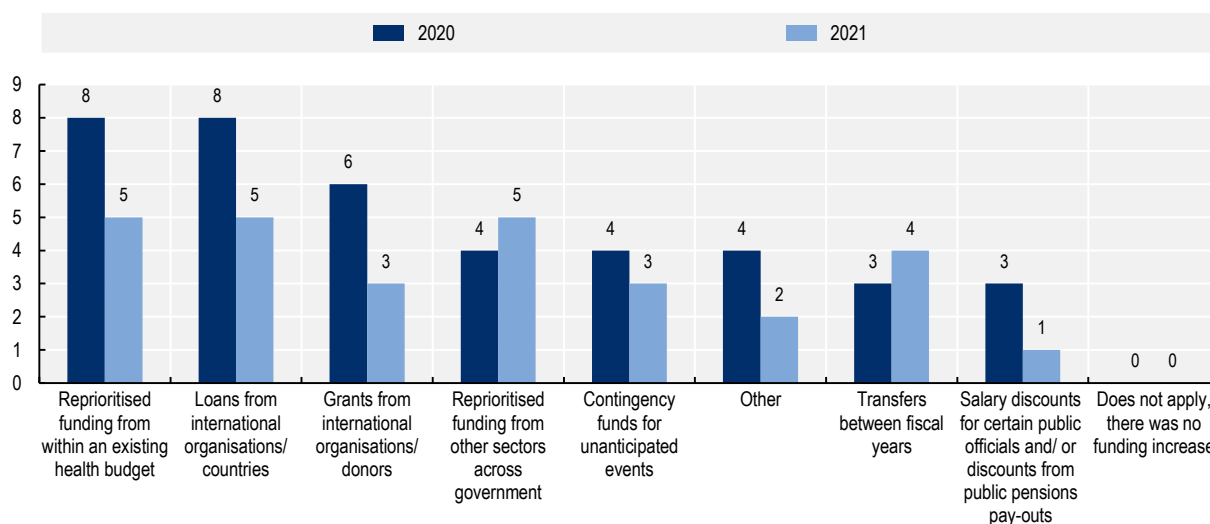
Other resources used by Costa Rica to finance health emergency measures include the Contingency Fund of the Costa Rican Social Security Fund, loans from international organisations and donations from foreign governments, the private sector and international organisations.

- Paraguay:** Based on rapid needs assessments and analyses of the approved budget, national authorities led by the Ministry of Finance reprioritised funding from within the existing health budget and from other sectors across government. As a result, around 50% of the 2020 budget was redistributed and reorganised into measures aiming at mitigating the effects of COVID-19. Additional resources to respond to the pandemic also came from salary discounts applied for three months in 2020 to officials whose salaries exceeded five minimum wages, and loans from international organisations.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

While in 2020, most countries reprioritised expenditures within the existing health budget (8 out of 13 countries surveyed), in 2021, reprioritisation also came from other sectors across government (5 countries reprioritised within health, and 5 countries across sectors) (Figure 7; Annex Table 1.B.1 in Annex 1.B). In 2020, loans and grants from international institutions and other international donors were a very important source of financing (8 countries received loans, 6 countries received grants), this funding source was less relevant in the first half of 2021 (only 5 countries received loans and 3 countries received grants). Using resources in contingency funds was also frequent, in particular in 2020 (4 countries). Finally, some countries implemented solidarity measures consisting of salary discounts applied to public servants with high level salaries, such as Colombia and Paraguay.

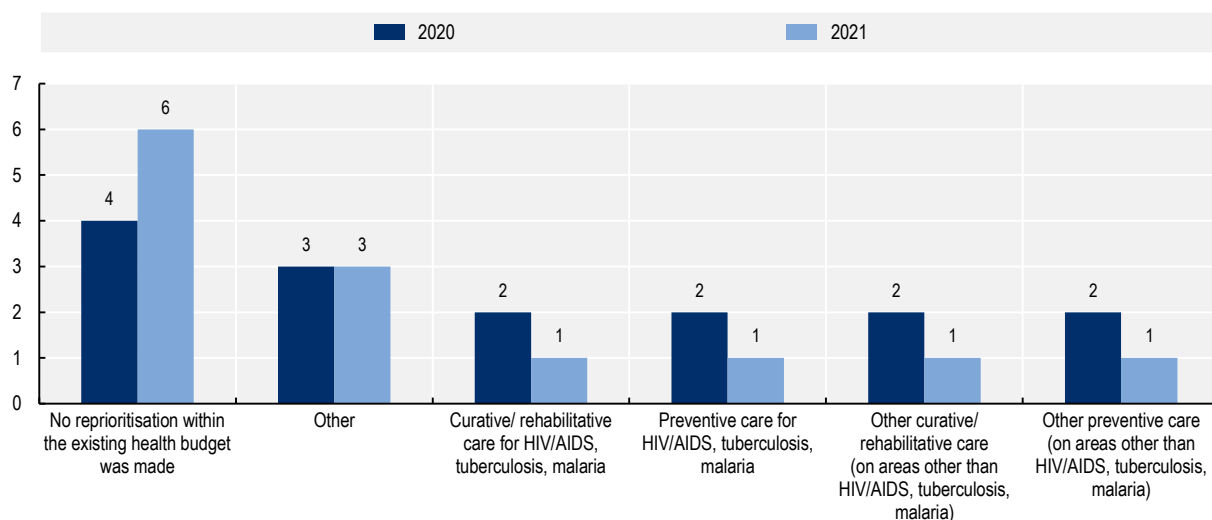
**Figure 7. Resource mobilisation mechanisms for the budgetary response to COVID-19, 2020 and 2021**



Note: Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

As showed in Figure 7, initial financial resources came mainly from reallocating funds within the health budget towards the COVID-19 response. In most countries, this reprioritisation did not affect the funding directed to programmes related to the fight against HIV/AIDS, tuberculosis, and malaria. In 2020, only 2 countries (Dominican Republic and Honduras) reprioritised resources from curative, rehabilitative and preventive care for HIV/AIDS, tuberculosis, and malaria directed them to COVID-19 response, while only Honduras reprioritised health resources in this way in 2021 (Figure 8).

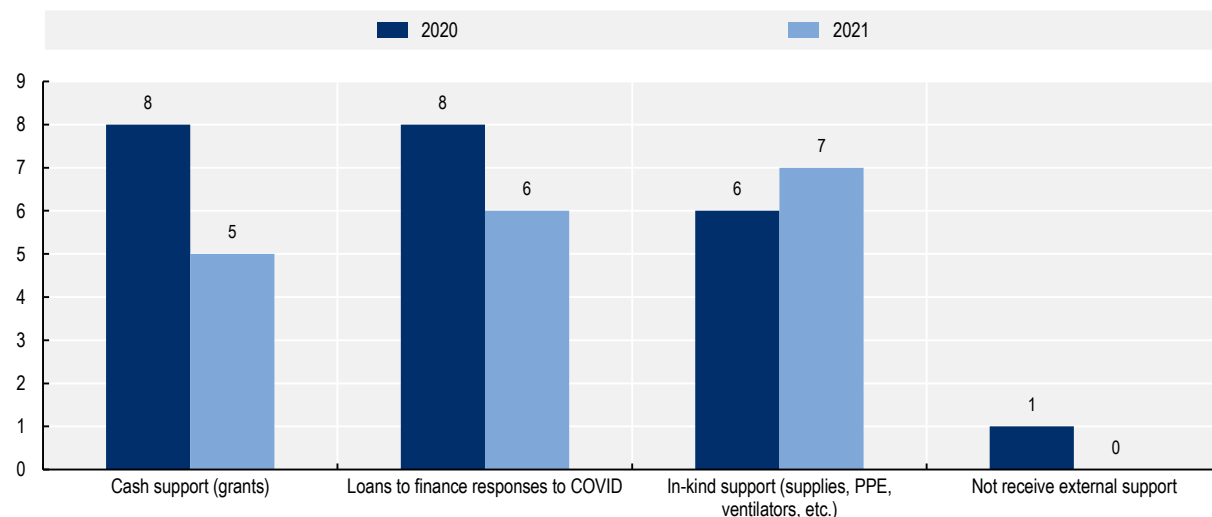
**Figure 8. Sources of reprioritisation within the existing health budget, 2020 and 2021**

Note: Data not available for Colombia and Guatemala for 2020, and for Dominican Republic, Guatemala, Haiti and Paraguay for 2021. Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

*External support in cash or in kind was essential, especially during the first year of the pandemic*

External support through loans and grants also played an important role in financing the budgetary responses of the health sector to COVID-19 in LAC. In 2020, all but one LAC country (Brazil) reported receiving external support to combat the pandemic (Figure 9; Annex Table 1.B.3 in Annex 1.B). External support took the form of loans and donations (both cash and in-kind). Lenders were mainly multilateral organisations supporting countries through specific programmes targeted to strengthen health systems to cope with the pandemic. Donors included international organisations, foreign governments and the private sector.

**Figure 9. Forms of external support received by countries to implement their response to COVID-19 in the health sector, 2020 and 2021**

Note: Data not available for Colombia and Haiti for 2020, and for Colombia and Guatemala for 2021. Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Donations received in the form of in-kind support consisted mainly of medical and laboratory supplies, PPE, diagnostic tests, ventilators, and COVID-19 vaccines. For instance, in Costa Rica, in-kind support was fundamental to guarantee continuity in the services provided by the Costa Rican Institute of Research and Teaching in Nutrition and Health during the first weeks of the pandemic. Laboratory supplies and equipment donations allowed the Institute to meet the growing demand for diagnostic tests, while the public procurement processes were taking place in a market characterised by excess of demand, limited supply and increasing prices.

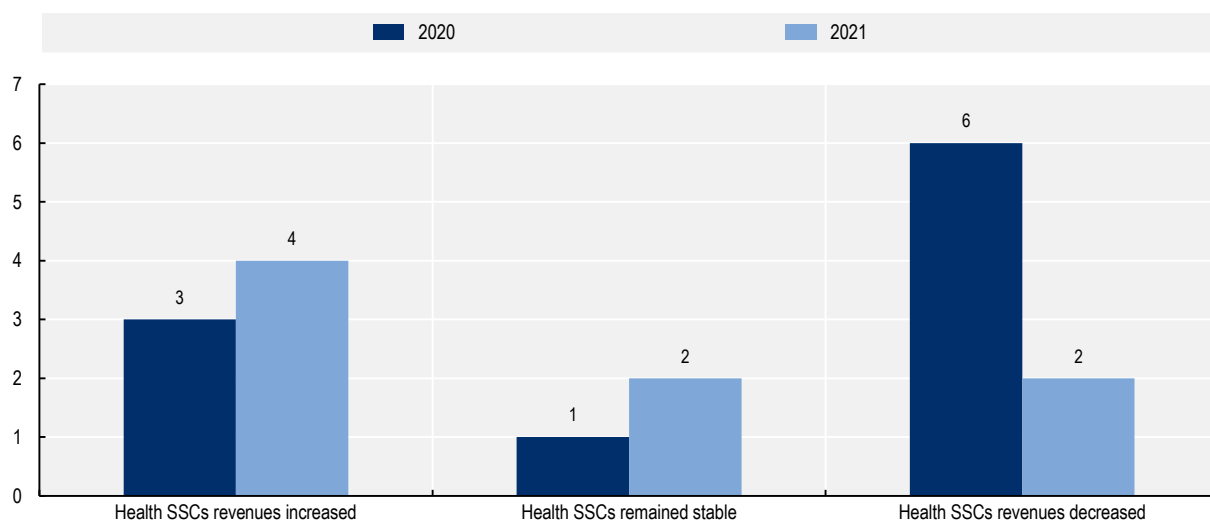
Loans and cash donations were mostly incorporated in countries' budgets and either directly managed by or at least accounted for by ministries of finance. In-kind donations did not follow the same procedure, and in most cases, ministries of finance did not have information about the total amount of in-kind donations received by their countries. In these cases, donations were received directly by the ministries of health, special bodies created to manage the response to the pandemic, health providers, and local governments, amongst others.

*Government general revenues and health revenues declined in 2020, and uncertainty about revenues in 2021 remained high through the year*

While health expenditure needs increased, fiscal challenges arising from the economic impact of COVID-19 resulted in a decline in general tax revenue and health taxes revenues (e.g. taxes on alcohol, sugar, tobacco, etc.) in 2020. Indeed, all LAC countries surveyed reported that general tax revenues decreased in 2020 compared to 2019.<sup>6</sup> This decrease ranges from -24.7% in Honduras to -3.4% in Guatemala. Additionally, all LAC countries surveyed, except for Argentina and Haiti, reported that health taxes revenues decreased in 2020 compared to 2019. This decrease ranges from -23.4% in Peru to -2.2% in Brazil.

Health social security contributions revenues were also affected by the pandemic in 2020, but in a more heterogeneous way (Figure 10).

**Figure 10. Impact of the COVID-19 crisis on Health Social Security Contributions revenue**

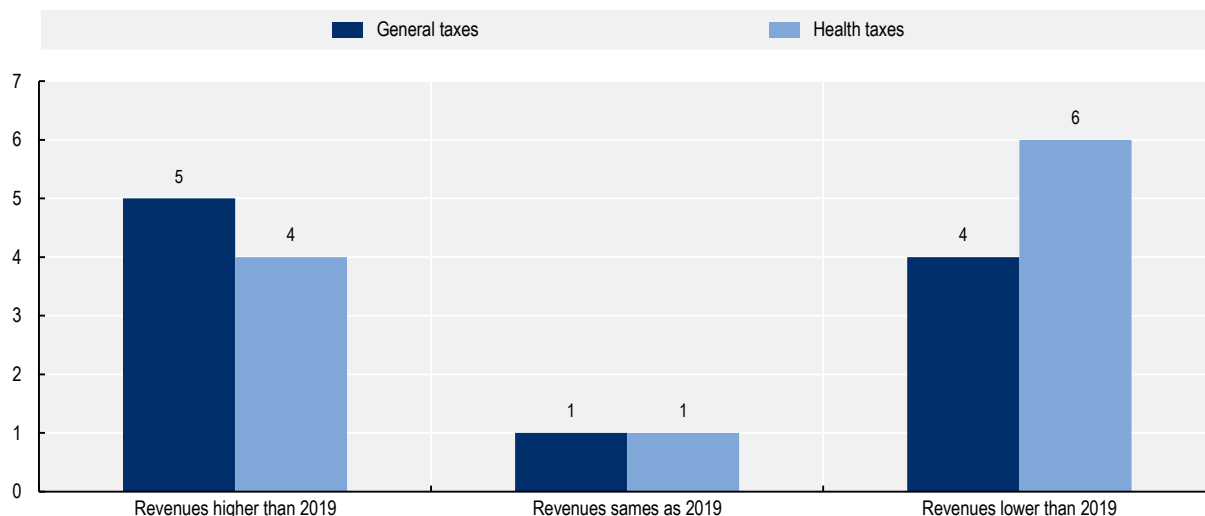


Note: Data not available for Guatemala and Peru for 2020, and for Guatemala, Honduras, Peru and Uruguay for 2021. Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Despite certain improvements by mid-2021, the situation in terms of government revenues (general tax, health tax and social security contributions revenues) was still uncertain for 2021 (Table 4). This can be evidenced by the lack of a unanimous answer across all revenues' categories as well as the high number of countries that did not provide information on their expectations regarding their revenues in 2021.

**Figure 11. Impact of the COVID-19 crisis on tax revenues in 2021**



Note: Data not available for Costa Rica, Haiti and Uruguay for general taxes revenues, and for Haiti and Uruguay for health taxes revenues. Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Table 4. Impact of the COVID-19 crisis on general tax, health social security contributions and health taxes revenues by country, compared to 2019**

| Country            | General tax revenues |      | Health Social Security |      | Health taxes revenues |      |
|--------------------|----------------------|------|------------------------|------|-----------------------|------|
|                    | 2020                 | 2021 | 2020                   | 2021 | 2020                  | 2021 |
| Argentina          | ↓                    | ↔    | ↓                      | ↓    | ↔                     | ↔    |
| Brazil             | ↓                    | ↓    | ↑                      | ↑    | ↓                     | ↓    |
| Colombia           | N/A                  | ↑    | ↓                      | ↑    | ↓                     | ↓    |
| Costa Rica         | N/A                  | N/A  | ↓                      | ↑    | ↓                     | ↓    |
| Dominican Republic | ↓                    | ↓    | ↑                      | ↑    | ↓                     | ↓    |
| El Salvador        | ↓                    | ↔    | ↓                      | ↓    | ↓                     | ↑    |
| Guatemala          | ↓                    | ↔    | N/A                    | N/A  | ↓                     | N/A  |
| Haiti              | N/A                  | N/A  | ↔                      | ↔    | ↔                     | N/A  |
| Honduras           | ↓                    | ↓    | ↓                      | N/A  | ↓                     | ↑    |
| Jamaica            | ↓                    | ↓    | N/A                    | -    | ↓                     | ↓    |
| Paraguay           | ↓                    | ↑    | ↑                      | ↑    | ↓                     | N/A  |
| Peru               | ↓                    | ↑    | N/A                    | N/A  | ↓                     | ↑    |
| Uruguay            | ↓                    | N/A  | ↓                      | N/A  | ↓                     | N/A  |

Note: "N/A" means information not available at the date of survey (June 2021). Jamaica does not have information on Health Social Security Contributions. Costa Rica reported collected revenues as of June 2021 compared to June 2020.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

## Formulation, implementation, monitoring and transparency of COVID-19 health spending

*Assessment of health spending needs to address the COVID-19 crisis was challenging and had to be frequently revised*

During the first weeks of the pandemic, finance and health officials worked together to estimate the resources required to strengthen the health system and cope with the pandemic. In 2020, all LAC countries surveyed carried out rapid needs assessments to estimate new spending needs for 2020 and define an indicative budget envelope for 2021. For instance, Colombia carried out rapid needs assessments led by the Ministry of Health and Social Protection which allowed to identify the sector's needs in terms of human resources, medical equipment and supplies, PPE, and intensive care units, and co-ordinate a centralised response to support subnational governments. These assessments were conducted several times during the year, as new information on cases and international experiences became available, leading to changes in assumptions and needs' estimates that were informed to the Ministry of Finance and Public Credit.

In 2021,<sup>7</sup> 8 LAC countries conducted rapid needs assessments to estimate new spending needs. Additionally, 6 countries carried out more in-depth assessments to establish medium-term expenditure requirements (Annex Table 1.B.7 in Annex 1.B). These more in-depth assessments included new data from the previous waves and lessons learnt from the first months of the pandemic, and considered different scenarios related to the acquisition and administration of COVID-19 vaccines.

*The main budget tools used to allocate funds to the COVID-19 response were supplementary budgets and extra-budgetary COVID-19 specific funds*

Countries used different strategies to implement their budgetary response to COVID-19 in the health sector, including passing supplementary budgets, creating contingency extra-budgetary funds, and issuing emergency decrees (Box 3).

### Box 3. Strategies to implement the budgetary response to COVID-19 in the health sector

Supplementary budgets and extra-budgetary funds were some of the budgetary mechanisms used to authorise the use of additional funds:

- **Supplementary budgets:** Proposed amendments to the annual budget, used to authorise additions or changes in allocations that were not foreseen at the time of the original budget. They typically require parliamentary approval, but can be subject to simpler legislative procedures (OECD, 2021<sup>[11]</sup>).
- **Extra-budgetary funds:** Special funds owned by the Government, that are not part of the budget and that receive revenues from earmarked levies, possibly in addition to other sources such as fees and contributions from the general revenue fund (Allen and Radev, 2007<sup>[12]</sup>).

Country examples of strategies to implement the budgetary response to COVID-19 in the health sector:

- **Guatemala:** In April 2020, the Congress of Guatemala approved three supplementary budgets with additional expenditure commitments of around 19 800 million Quetzals (10.8% of the GDP in 2020) to finance a series of health, social and economic measures designed to mitigate and contain the spread of COVID-19. In particular, Decree 12-2020 and Decree 20-2020 allocated resources to the Ministry of Public Health and Social Assistance for the purchase of medical equipment, supplies, and PPE, adjustment of laboratories and testing facilities, health workforce risk bonus, amongst others. These supplementary budgets were financed mainly through loans

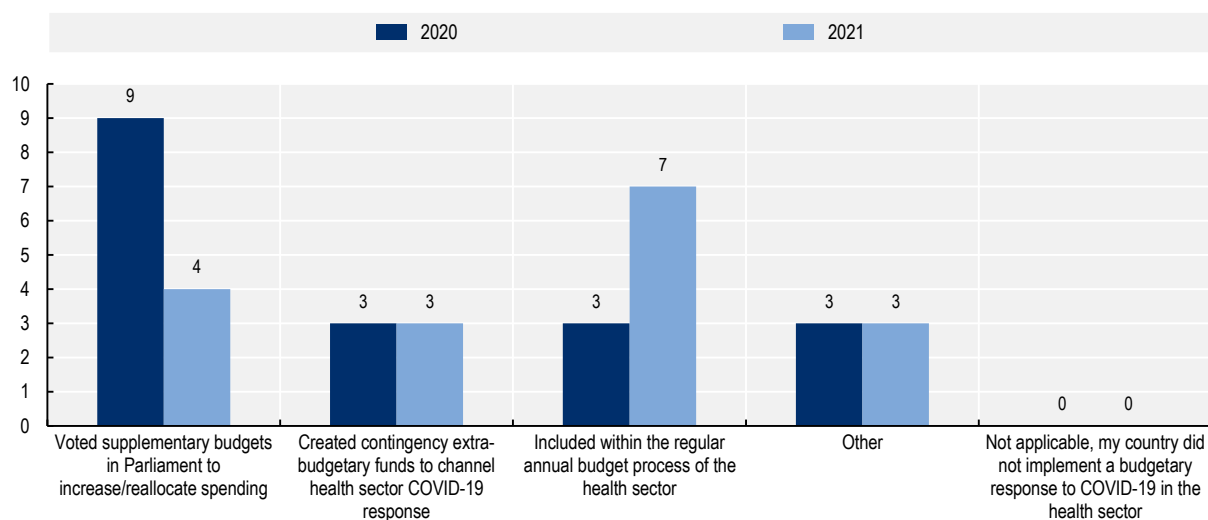
from international organisations, and the issuance of treasury bonds acquired by the Central Bank of Guatemala.

- **Brazil** implemented a War Budget (*Orçamento de Guerra*), which is a fiscal, financial and contracting regime of extraordinary nature, to be applied in a situation of public calamity. This Constitutional Amendment Proposal was created in early 2020, and made changes to the constitutional text in order to allow greater flexibility in federal government spending to facilitate actions to combat the COVID-19 pandemic and its effects.

Source: Health Financing and Governance Responses to COVID-19 in Guatemala case study and OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

The strategies to implement the budgetary response to COVID-19 in the health sector changed across years. In 2020, most LAC countries surveyed implemented their budgetary response to COVID-19 through supplementary budgets voted by legislators to reallocate spending and increase the spending capacity of the Ministry of Health and/or other health sector institutions. In 2021, most countries included their budgetary response to COVID-19 in the regular health sector annual budget process, although supplementary budgets continued to be one of the most frequently used strategies (Figure 12; Annex Table 1.B.8 in Annex 1.B). Finally, some countries, such as Brazil, created a new budget framework, the “War budget” framework, to allow for greater flexibility in federal government spending when facing a situation of public calamity, such as COVID-19 (Box 3).

**Figure 12. Strategies to implement the budgetary response to COVID-19 in the health sector**



Note: Data not available for El Salvador and Haiti for 2021. Countries could select as many answers as it applied.

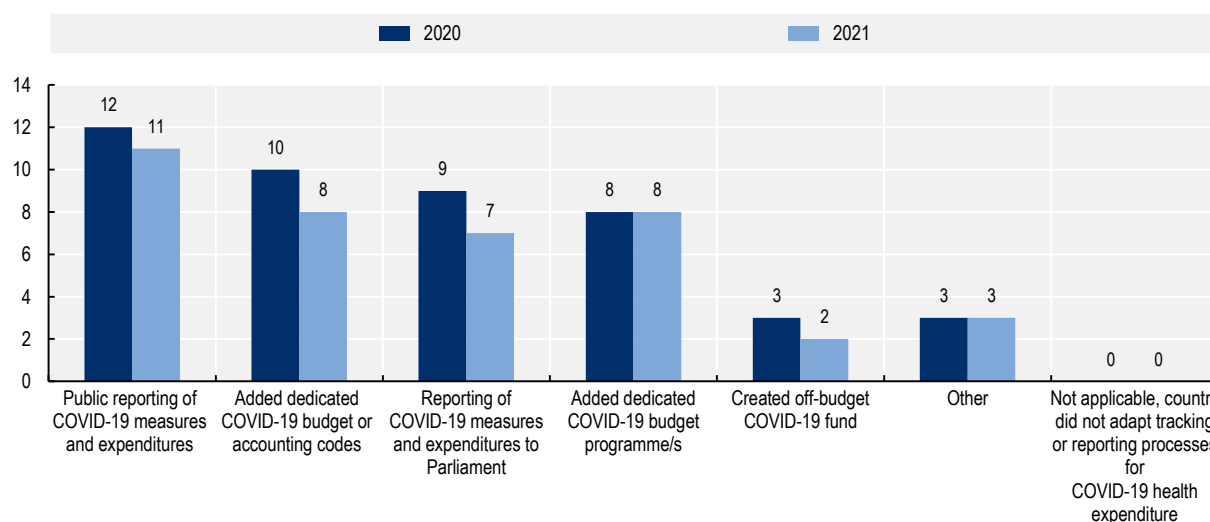
Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

### *LAC countries reinforced monitoring and transparency procedures for COVID-19 health spending*

All LAC countries surveyed adapted their tracking and reporting processes to ensure the accountability of COVID-19 expenditure, promote transparency and verify the adequate use of resources (Figure 13; Annex Table 1.B.9 in Annex 1.B). Such processes are particularly relevant in an emergency situation like the COVID-19 pandemic, considering that several countries accelerated procurement procedures to guarantee a timely implementation of the emergency response. Most countries reported COVID-19

measures and expenditures in special websites dedicated to the pandemic or in the website of the ministries of Finance and Health. Additionally, almost all countries added dedicated COVID-19 budget or accounting codes that allowed to manage COVID-19 expenditure separated from the regular budget and facilitated tracking and reporting processes. However, as mentioned in the previous section, information about in-kind donations, directly received by Ministries of Health and health providers was often not transmitted to the Ministries of Finance, and is therefore not reported or evaluated.

**Figure 13. Tracking and reporting processes for COVID-19 health expenditure, 2020 and 2021**



Note: Data not available for El Salvador for 2021. Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

#### Box 4. Country examples of actions to monitor COVID-19 spending

Country examples of actions aiming at monitoring COVID-19 spending:

- Honduras:** The government adopted measures to track and report budget expenditures and public programmes dedicated to COVID-19, such as accounting codes to differentiate the COVID-19 budget. Additionally, the Ministry of Health published and reported the financial information to the National Congress.

In terms of monitoring of government measures and expenditures, institutions such as the Superior Court of Accounts of Honduras and different civil society organisations (including ASJ Honduras and the National Convergence Forum (*Foro Nacional de Convergence*)) played an important role in recommending actions to strengthen the measures and purchases to combat the pandemic. Those recommendations have influenced the government's action.

- Paraguay:** With support of the Inter-American Development Bank, Paraguay developed a digital tool (*MapaInversiones + Módulo COVID-19*) to track all COVID-19 expenses and facilitate ongoing monitoring by civil society and independent audit institutions. The platform integrates information from different sources including the Ministry of Health, the Ministry of Finance, and the National Directorate of Public Procurement. It contains detailed information on programmes, contracts, subsidies, and donations related to the responses to COVID-19. Additionally, the

General Budget Office elaborated and published periodical reports on the COVID-19 measures and expenditures implemented in the health, social and economic fields.

- **Peru:** Peru began monitoring the execution of COVID-19 spending in 2020, through the transparency portal of the Ministry of Economy and Finance.<sup>1</sup> The portal offers a user-friendly system that allows to download data on the resources programmed, added and executed in response to the COVID-19 pandemic. The Ministry of Economy and Finance also published and regularly updated a control panel with information on the COVID-19 budget execution (at the central, regional and municipal government levels), and a summary of the different measures implemented to support the health sector, homes and businesses.<sup>2</sup>

1. For further details on monitor the execution of COVID-19 spending in Peru, see

[https://apps5.mineco.gob.pe/coronavirus/navegador/navegar\\_1.aspx](https://apps5.mineco.gob.pe/coronavirus/navegador/navegar_1.aspx).

2. For further details on the control panel, see [https://www.mef.gob.pe/es/?option=com\\_content&language=es-ES&Itemid=102662&lang=es-ES&view=article&id=6366](https://www.mef.gob.pe/es/?option=com_content&language=es-ES&Itemid=102662&lang=es-ES&view=article&id=6366) and on the summary of the measures implemented see: <https://www.mef.gob.pe/planeconomicocovid19/>.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

## Health emergency measures and governance of health responses to COVID-19 in Latin America and the Caribbean

### ***Global shortages of medical equipment and supplies, and local shortages of workforce complicated health emergency measures in response to COVID-19***

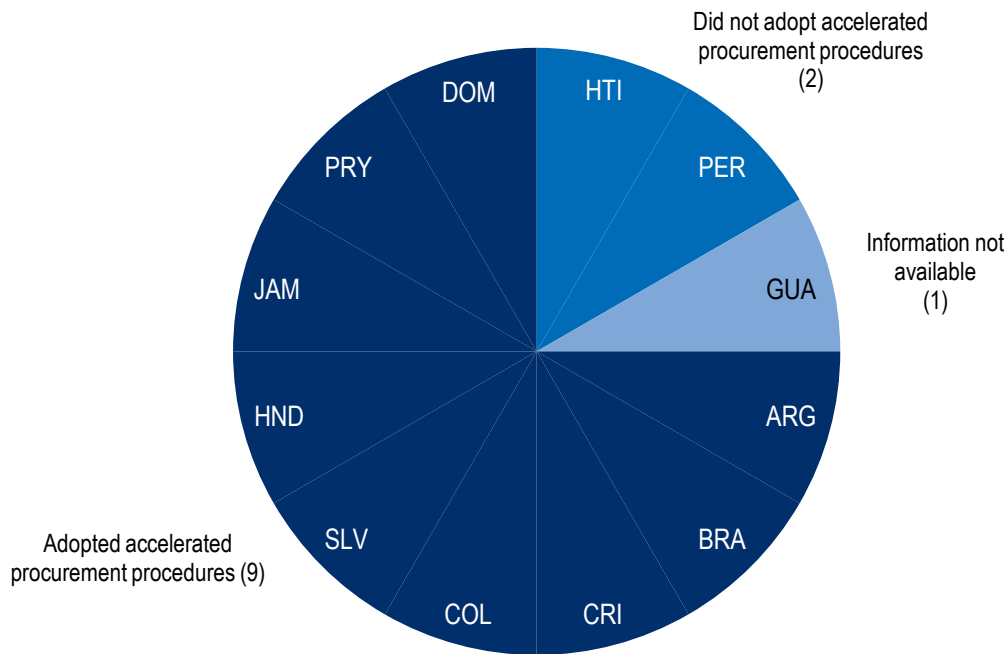
LAC countries dedicated unprecedented resources to strengthen their health systems. In 2020, common health emergency measures across surveyed countries included purchasing PPE, medical supplies and other essential items for testing and treatment, increasing health workforce remunerations and awarding bonus payments, and enhancing and expanding health infrastructure capacity. In 2021, most resources have been used to finance the COVID-19 vaccination campaign, including purchasing of vaccines and hiring additional health personnel to administer the vaccine to citizens.

*Global shortages of medical equipment, supplies, and PPE were one of the main challenges for responding to the pandemic*

#### **Countries put in place accelerated procurement procedures**

To ensure the continuous capacity to diagnose and treat COVID-19 patients, all LAC countries surveyed purchased PPE supplies and medical equipment (such as medicines, ventilators, monitors, and/or laboratory reagents). Most LAC countries adopted accelerated procurement procedures or implemented emergency procurement frameworks for purchasing health goods and services, providing exemptions and flexibilities to general procurement rules (Figure 14; Annex Table 1.B.12 in Annex 1.B). In some cases, this was already foreseen in the regulation creating the emergency fund, as in Colombia or Costa Rica (Box 5).

**Figure 14. Use of accelerated procurement procedures across surveyed countries, 2020**



Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

### Box 5. Country examples of accelerating public procurement procedures

Country examples of accelerating public procurement procedures:

- Colombia:** Decree 444 of 2020 created the Emergency Mitigation Fund, and exempted purchases made with resources from this Fund from general public procurement rules (used private law). All medical devices and PPE were also exempted from the general procurement regime (Decree 499 of 2020). This allowed public buyers to purchase medical devices and PPE directly from international producers without any formal tender procedures.
- Costa Rica:** The declaration of the state of emergency due to COVID-19 allowed to apply a centralised and simplified procurement process to purchase medical equipment and supplies with resources from the National Emergency Fund, as foreseen in the National Risk Management System created in 2005 (National Emergency and Risk Prevention Law No. 8488). The National Commission for Risk Prevention and Emergency Attention was responsible for justifying and purchasing the items needed. Additionally, the Costa Rican Social Security Fund defined a new procedure for exceptional urgent or unpredictable purchases to guarantee the continuity of the provision of health services. This allowed the Costa Rican Social Security Fund to purchase supplies and medical equipment directly from producers without any formal tender process.

Source: Health Financing and Governance Responses to COVID-19 in Colombia case study; Health Financing and Governance Responses to COVID-19 in Costa Rica case study; OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Most LAC countries faced difficulties to access medical supplies and equipment on time and in the quantities needed, despite the additional resources mobilised and the implementation of accelerated procurement procedures. Shortages of stock at an international level, limited production capacity at a local level, excess demand, high competition for the same products, and delays in the delivery of purchased goods, were some of the difficulties countries faced for the acquisition of medical supplies and equipment.

**To overcome international shortages of medical equipment and supplies, many LAC countries centralised purchases and some benefited from in-kind donations**

Many LAC countries centralised the purchase of health products to avoid the internal competition for supplies and strengthen the country's purchasing capacity in an international market characterised by an increasing demand and limited supply capacity (Box 6). In other cases, in kind donations from international organisation, foreign governments and the private sector were fundamental to guarantee the continuation of health services, especially at the beginning of the pandemic.

**Box 6. Country examples of actions to overcome medical equipment and supplies' shortages**

Country examples of actions aiming at overcoming medical equipment and supplies' shortages:

- **Costa Rica:** The National Commission for Risk Prevention and Emergency Attention carried out centralised purchases of supplies and medical equipment, including of COVID-19 vaccines, with resources from the National Emergency Fund.
- **Colombia:** The Ministry of Public Health and Social Protection led the execution of different measures to strength the health system in terms of human resources, medical equipment and supplies and health infrastructure. Additionally, the National Unit for Disaster Risk Management (*Unidad Nacional de Gestión de Riesgos de Desastres*) contributed by centralised purchases of biomedical equipment, personal protective equipment, medical supplies and vaccines that were later distributed to national entities and the local governments.
- **Uruguay:** Given the shortage of medicines, PPE and medical equipment such as ventilators, the Centralized Procurement Unit (*Unidad Centralizada de Adquisiciones*) made large and centralised purchases that were later distributed amongst the different public entities.

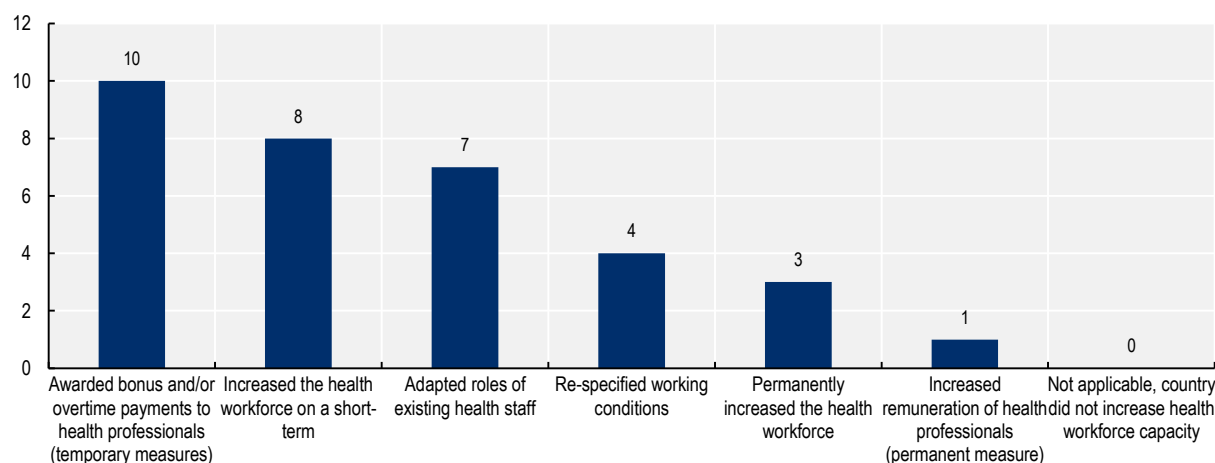
Source: Health Financing and Governance Responses to COVID-19 in Colombia case study; Health Financing and Governance Responses to COVID-19 in Costa Rica case study; OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

*Shortages of health sector staff with the right skills was another major challenge*

**To overcome medical staff shortages, countries granted bonuses and overtime payments, hired new personal and adapted roles of existing personnel**

Countries were forced to adapt and strengthen their health systems to cope with the COVID-19 pandemic, including actions to strengthen their health workforce. In 2020, all countries surveyed implemented measures to boost the number of people in the frontline of the pandemic (Figure 15, Annex Table 1.B.11 in Annex 1.B). Most countries awarded bonuses or overtime payments to health staff. Additionally, several countries temporarily hired new health staff and adapted roles of existing health staff to support COVID-19 patient's diagnosis and treatment.

**Figure 15. Main expenditure areas of the central government to increase staff capacity in the health sector, 2020**



Note: Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021

In 2021, all LAC countries continued implementing measures increase frontline staff. The main actions implemented continued to be awarding bonuses or overtime payments (10 countries) and temporarily hiring new health staff (8 countries) (Annex Table 1.B.11 in Annex 1.B). For instance, Uruguay temporarily hired people to support the COVID-19 vaccination campaign and administer vaccines.

### **Most workforce-related measures were short-term, and chronic health workforce challenges are still to be addressed**

Most LAC countries focused their health emergency response in short-term measures that allowed them to quickly and temporary increase staff capacity in the health sector (Box 7). It is expected that health workforce numbers and wages would go back to pre-pandemic conditions in the short-term, leaving the health sector unprepared to face new emergencies.

#### **Box 7. Country examples of actions to increase staff capacity in the health sector**

Country examples of actions aiming at increasing staff capacity in the health sector:

- Costa Rica:** The Costa Rican Social Security Fund temporarily suspended teaching activities and medical specialty training to appoint residents (medical students) as frontline health workers. Residents awaiting for their training were put in charge of outpatient telephone follow-up of COVID-19 patients. Additionally, the Institute of Research and Teaching in Nutrition and Health summoned microbiologists from laboratories all over the institution to work on diagnostic tests for COVID-19 (PCR and antigen tests).  
  
The National Commission also hired additional laboratory personnel to support the activities of the Institute of Research and Teaching in Nutrition and Health during the first months of the pandemic.
- Dominican Republic:** The National Health Service temporarily hired additional medical professionals (doctors and nurses) and staff to support intensive care units and the COVID-19 vaccination campaign.

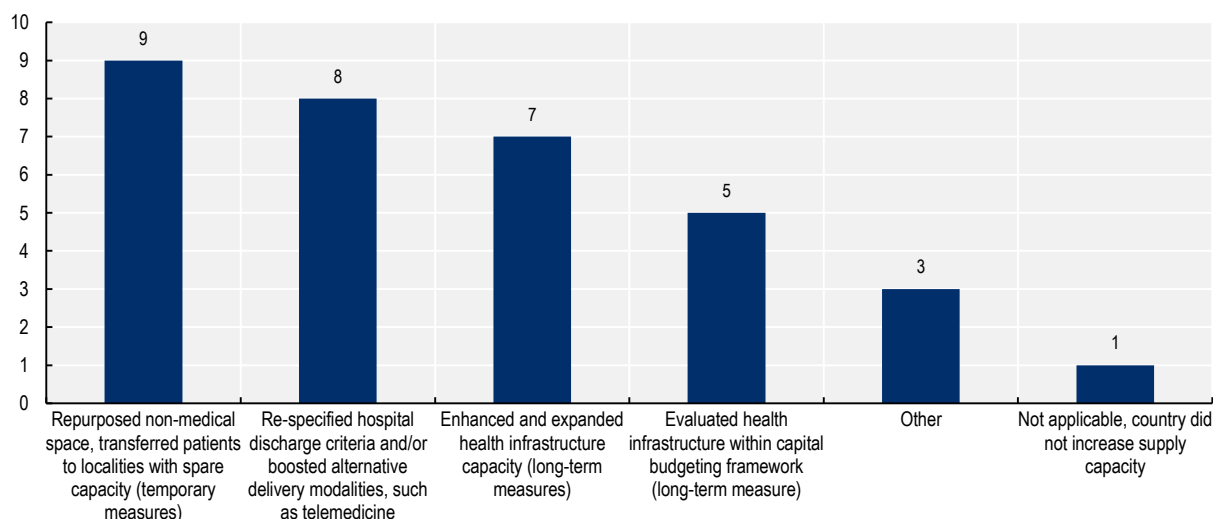
- **El Salvador:** El Salvador awarded three bonus of USD 150 each to all frontline workers (including personnel from the Ministry of Health, the Police and the Armed Forces). Additionally, it offered a life insurance to all health frontline workers from the public health system. The amount invested in these insurances represents more than USD 2.5 million (Presidencia de la República de El Salvador, 2020<sup>[13]</sup>).

Source: Health Financing and Governance Responses to COVID-19 in Costa Rica case study; Health Financing and Governance Responses to COVID-19 in Dominican Republic case study; OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

*Supply capacity in the health sector was increased by building hospitals and temporary care centres, modifying organisation of care and introducing new delivery modes*

The COVID-19 pandemic forced countries to boost infrastructure capacity in the health sector to cope with an increasing number of seriously ill COVID-19 patients and high contagion rates. In 2020, all LAC countries surveyed, except Haiti, implemented measures to boost the supply capacity in the health sector (Figure 16; Annex Table 1.B.12 in Annex 1.B). Most LAC surveyed countries repurposed non-medical space to create temporary hospitals, treatment facilities and vaccination centres, and transferred patients to localities with spare capacity. Additionally, several countries re-specified hospital discharge criteria and/or boosted alternative delivery modalities, mainly telemedicine and follow up phone calls. Other measures implemented by LAC countries include adapting existing medical facilities for COVID-19 patients' care and increasing hospital beds' capacity, particularly intensive care units (Box 8).

**Figure 16. Main expenditure areas of the central government to increase supply capacity in the health sector, 2020**



Note: Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

### Box 8. Country examples of actions to increase supply capacity in the health sector

Country examples of actions aiming at increasing diagnosis and treatment capacity in the health sector:

- **Guatemala:** In April 2020, Guatemala began the construction of five field hospitals to provide additional care for COVID-19 patients. The hospitals were built in 6 months and located in the country's capital (centre) and in the departments of Escuintla (south), Quetzaltenango (west), Petén (north) and Zacapa (east). In August 2020, the Guatemalan government began the construction of three additional field hospitals and the remodelling and improvements of two healthcare centres in Chiquimula and Sololá.
- **Peru:** Peru created 40 Temporary Care Centres (*Centros de Atención Temporal*) nationwide, which increased the public health sector care capacity for COVID19 patients and suspected COVID-19 patients with symptoms. To guarantee the operation of these centres, the Government invested S/ 650 million in 2020 and S/ 306.6 million in 2021 (0.13% and 0.06% of GDP in 2020) (INEI, 2021<sup>[14]</sup>).
- **Uruguay:** Uruguay increased the number of beds in public sector intensive care units from 600 to more than 1 000. Loans were granted to private health providers to purchase respirators and monitors based on the number of new available beds in intensive care units. Equipment costs were recovered by the Government through discounts from the reimbursements payments of the health services offered by providers.

Source: Health Financing and Governance Responses to COVID-19 in Guatemala case study; OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

### Capacity boosting measures continued in 2021, and discussions around sustainable health infrastructure planning started

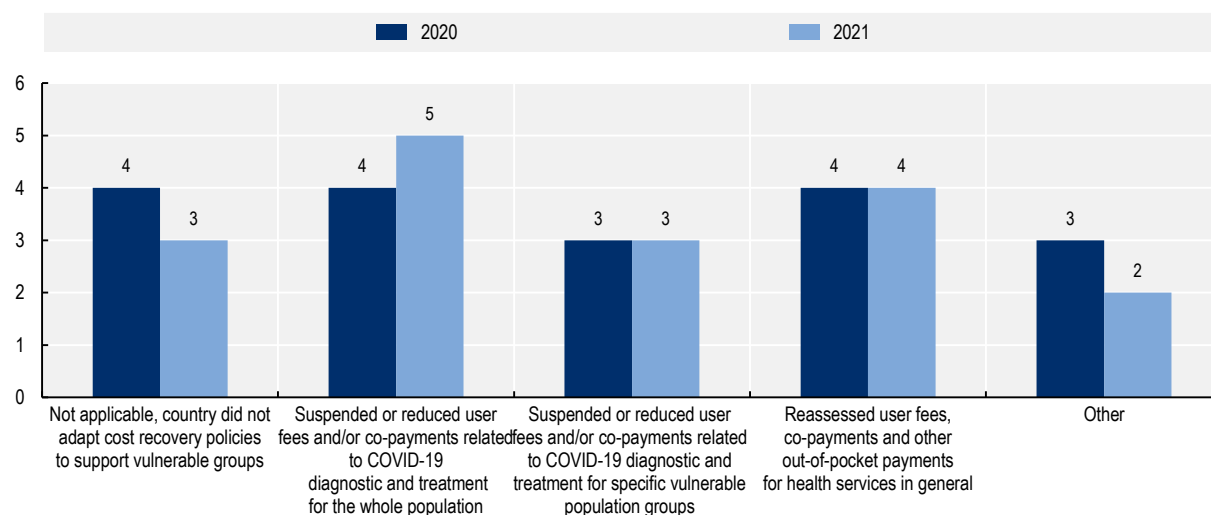
In 2021, all LAC countries surveyed, except Haiti, continued implementing measures to boost the supply capacity in the health sector. Particularly, compared to 2020, more countries started implementing long-term actions. For example, seven countries carried out evaluations of the health infrastructure within capital budgeting framework. This shows the importance of conducting discussions around sustainable health infrastructure planning for the medium-term, with the purpose of increasing countries' resilience towards future health crisis events.

#### *Countries adapted cost recovery policies to support health care access of vulnerable groups*

The health emergency and the economic and social restrictions generated by the COVID-19 put many workers and families in a vulnerable situation, which led countries to adapt health user fees and co-payments to guarantee vulnerable citizens' access to health care.

Almost all surveyed countries took some action to support vulnerable groups as soon as 2020 (only Brazil, El Salvador, Haiti and Jamaica did not report doing so in the survey). Among the countries which took actions to support vulnerable groups, one third suspended or reduced fees or co-payments for the whole population, one third suspended these only for vulnerable groups, and the last third reassessed user fees, co-payments and other out-of-pocket (OOP) payments for health services in general (Annex 1.A). Costa Rica, Colombia and Uruguay also temporarily extended the health insurance coverage to workers who lost their jobs or families whose insured head of household passed away from COVID-19.<sup>8</sup> Uruguay made COVID-19 tests free of charge for the population, and reimbursed the cost of these tests and insurance extension to the National Health Insurance through the Coronavirus Fund.

**Figure 17. Cost recovery policies in the health sector to support vulnerable groups for accessing health care**



Note: Countries could select as many answers as it applied.

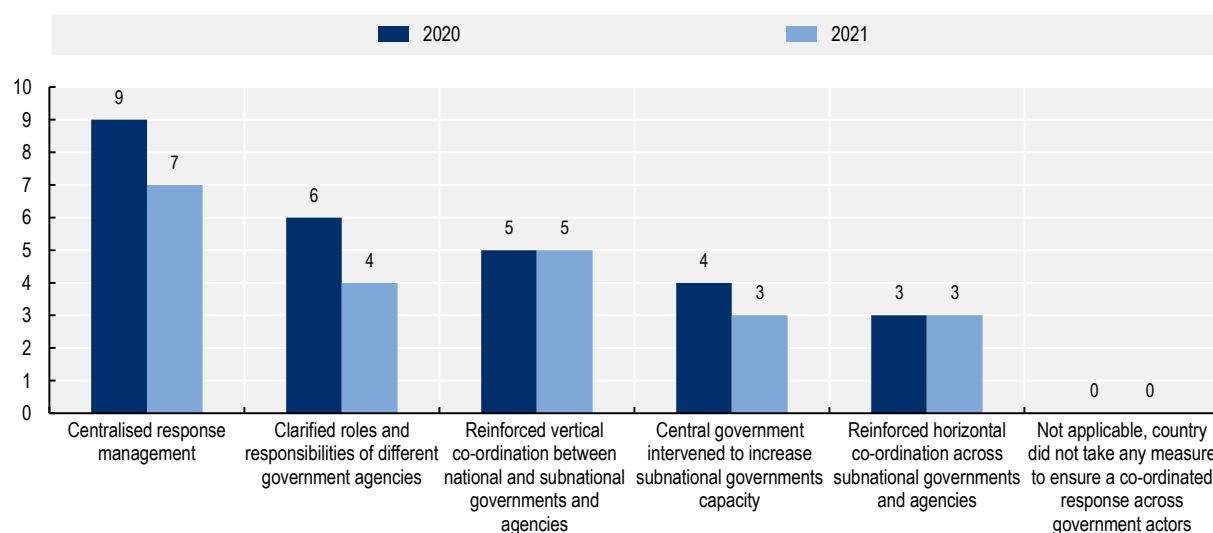
Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

### **Good governance and co-ordination of health responses to COVID-19 was a key factor for success**

*In most countries, responses were centralised and multi-sector co-ordination entities were created*

Multiple actors within and beyond the public health sector participated in the actions for combatting the pandemic. Co-ordination mechanisms were fundamental to ensure a rapid and effective response to COVID-19, as well as to guarantee consistency across policy decisions and strategies. All LAC countries surveyed implemented measures to ensure a co-ordinated response across government actors (Figure 18; Annex Table 1.B.14 in Annex 1.B). In 2020 and 2021, most LAC countries surveyed (9 for 2020, and 7 countries for 2021) implemented a centralised response management strategy, by creating and implementing new national government co-ordination bodies, or by using existing national high-level boards and committees to lead the health response to COVID-19 (Box 9).

For instance, Honduras created the Strength Honduras Operation (*Operación Fuerza Honduras*) to support health services at the municipal level transferring 250 million Lempiras (0.1% of GDP in 2020) from the central government to municipalities, allowing them to purchase equipment, hire health staff and cover other health-related supply needs.

**Figure 18. Measures to ensure a co-ordinated response across government actors, 2020 and 2021**

Note: Data not available for Guatemala for 2020, and El Salvador and Guatemala for 2021. Countries could select as many answers as it applied.  
 Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

### Box 9. Country examples of centralised response management to COVID-19

Country examples of centralised response management to COVID-19:

- Costa Rica:** Once the state of emergency was declared on 16 March 2020, different decision-making, co-ordination and execution institutions within the National Risk Management System were set up. The National Commission for Risk Prevention and Emergency Attention, as the governing body of the National Risk Management System, took responsibility for defining and leading a national plan to face the emergency. The Emergency Operations Centre, which brings together all public institutions and non-governmental organisations working in the first response phase to the emergency, acted as the permanent co-ordinating body of the COVID-19 response. A health operation working group defined actions, implemented decisions and provided information for an effective health sector response. The health operation working group was led by the Ministry of Health and comprised all frontline health institutions.
- Uruguay:** The National Health Board assumed responsibility for leadership and co-ordination of the health sector response to the pandemic. The Board is the governing body of the National Health System since 2007, and comprises representatives of the Ministries of Health and Economy, the Social Security Bank (which administers the National Health Fund), private health sector workers, and the private health system. Additionally, the Presidency of the Republic assumed an active role in the negotiation process of COVID-19 vaccines, directly leading all purchases.

Source: Health Financing and Governance Responses to COVID-19 in Costa Rica case study; OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

## COVID-19 vaccination campaign in Latin America and the Caribbean

### *Financing and implementation of the COVID-19 vaccination campaign*

LAC countries acquired COVID-19 vaccines through different mechanisms, including the COVAX Facility (Box 10) and bilateral agreements with pharmaceutical companies and country-to-country purchases. LAC countries also received in-kind donations from countries and the private sector.

#### Box 10. COVAX Facility

On April 2020, the World Health Organisation (WHO) and several partners launched the **Access to COVID-19 Tools (ACT) Accelerator** partnership, a global collaboration to accelerate the development, production, and equitable access to COVID-19 tests, treatments, and vaccines. The ACT-Accelerator is organised into four pillars of work: diagnostics, treatment, vaccines and health system strengthening.

The **COVID-19 Vaccines Global Access (COVAX) Facility** is the vaccines pillar of the ACT Accelerator. It is co-led by the WHO, GAVI (The Vaccine Alliance) and the Coalition for Epidemic Preparedness Innovations (CEPI), and its aim is to accelerate the development and manufacture of COVID-19 vaccines, as well as to guarantee fair and equitable access for countries across the world.

To do so, the COVAX Facility acts as a platform to support the research, development and manufacturing of a wide range of COVID-19 vaccine candidates, and negotiate their pricing:

- The COVAX Facility continually monitors the COVID-19 vaccine landscape to identify the most suitable vaccine candidates, and works with manufacturers to incentivise them to produce the doses needed.
- The COVAX Facility has also used the collective purchasing power that comes from having many participating countries (over 180 countries engaged) to negotiate highly competitive prices from manufacturers that are then passed on to participants.

Both self-financing countries and funded countries can join the COVAX Facility. Self-financing countries can request vaccine doses sufficient to vaccinate between 10-50% of their populations, based on how much they pay. All participating countries, regardless of their income level, are expected to have equal access to vaccines through this Facility.

Additionally, countries with substantial supply of COVID-19 vaccines can shared doses through the COVAX Facility, which will be equitably allocated to developing countries by the end of 2021.

There also exists a separate funding mechanism, the **Gavi COVAX Advance Market Commitment (AMC)**, which supports access to COVID-19 vaccines for 92 middle- and lower-income countries. Funding for the Gavi COVAX AMC is entirely separate from that of the COVAX Facility, as it is funded mainly through Official Development Assistance and contributions from the private sector and philanthropy.

Note: Partners of the Access to COVID-19 Tools (ACT) Accelerator partnership are: the Bill & Melinda Gates Foundation; the Coalition for Epidemic Preparedness Innovations - CEPI; the Foundation for Innovative New Diagnostics - FIND; Gavi the Vaccine Alliance; The Global Fund; Unitaaid, the Wellcome Trust; and the World Bank Group.

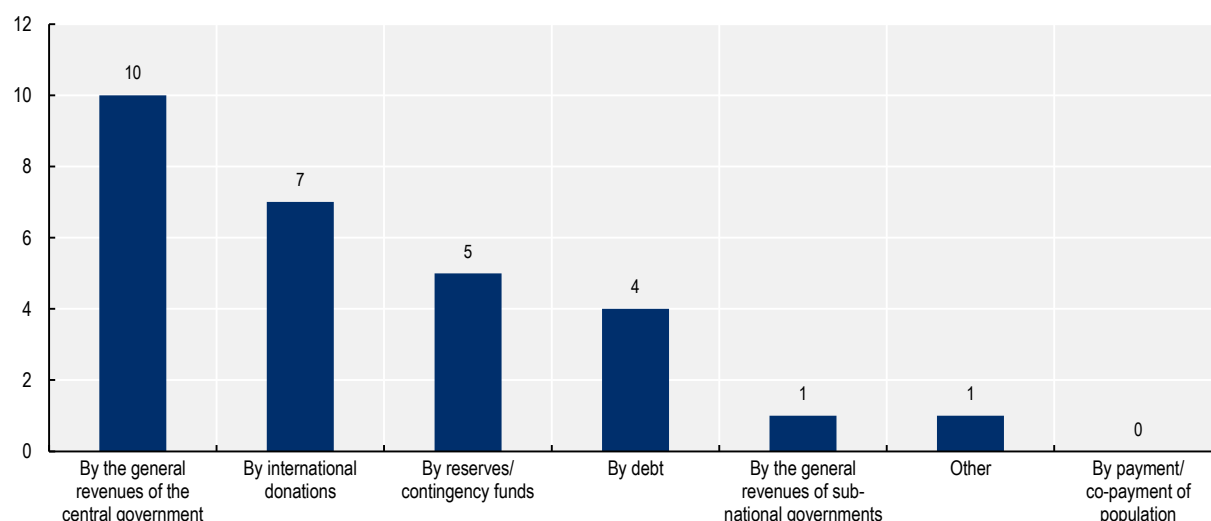
Source: (WHO, 2020<sup>[15]</sup>; Berkley, 2020<sup>[16]</sup>).

*Vaccination campaigns were mainly financed by central government revenues and was freely distributed to all the population*

The financial cost of purchasing vaccines was borne mainly by central governments (10 countries). Seven countries also received international support to purchase vaccines, and five used reserves or contingency funds. It is worth noting that no country requested population to pay for COVID-19 vaccination and only Haiti reported vaccines to be financed by sub-national governments' own revenues (Figure 19; Annex Table 1.B.16 in Annex 1.B).

In most countries, vaccination campaign budgets were included in the regular health budget (9 countries), and about half of countries created a separate dedicated fund (Annex Table 1.B.15 in Annex 1.B).

**Figure 19. COVID-19 vaccination campaign financing, 2021**



Note: Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

*Ministries of Health were responsible for organising and co-ordinating vaccination campaigns*

All LAC countries established vaccination plans and campaigns led by their national ministries of health and/or the main health providers (e.g. in Costa Rica, the Costa Rican Social Security Fund was responsible for implementing the COVID-19 vaccination campaign) (Annex Table 1.B.17 in Annex 1.B). These campaigns identified the priority population for receiving vaccines, based on their level of risk and exposition the virus, starting with health personnel, first line respondents and elderly people (Box 11).

### Box 11. Country examples of COVID-19 vaccination campaign financing and implementation

Country examples of COVID-19 vaccination campaign financing and implementation:

- Argentina:** The Strategic Plan for COVID-19 vaccination sets out the procedure for phased implementation and defines the order of prioritisation of groups to access the vaccine. To define the prioritisation criteria, risks such as exposure to the virus, diseases or conditions of vulnerability were considered. Access to the vaccine will be provided by the State for all the population, regardless of health coverage and nationality. In terms of financing, the budget is the responsibility of the Ministry of Health and provincial ministries and has been mainly derived from national revenues. With this budget, Argentina acquired vaccines through the COVAX Facility and signed bilateral agreements. For example, thanks to the contract signed with the government of Russia, Argentina was one of the first countries in the region to start vaccinating its population. Recently, the World Bank approved a USD 500 million loan to strengthen the fight against the pandemic, through the purchase of vaccines for more than 30% of the population, as well as activities to support the implementation of the national vaccination plan (The World Bank, 2021<sup>[17]</sup>).
- Dominican Republic:** In February 2020, the government of the Dominican Republic presented its National Vaccination Plan to vaccinate 7.8 million people aged 18 and over. To accomplish this objective, it created a centre to support legal, contractual and communication issues associated with the purchase and administration of the vaccines. The scheme was designed in three phases: In the first phase, the prioritised groups were healthcare personnel, people aged 60 and over, teachers, and military population; the second phase aimed to vaccinate people aged 50-59, and the third phase, population aged between 18-49. The plan set out to vaccinate 1.5 million people in the first phase, 1.2 million people in the second phase, and 5.1 million people in the third phase. Additionally, more than 1 000 vaccination centres were opened. Resources to finance the vaccination campaign included general revenues of the central government, donations from foreign governments and the private sector. Those resources allowed to the government acquire COVID-19 vaccines through the COVAX Facility, and to sign bilateral agreements with pharmaceuticals. Furthermore, the government also receive in-kind donations from the People's Republic of China and the United States government.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

*By December 2021, about 50% of the LAC population had received two doses of COVID-19 vaccine*

Most LAC countries started implementing their vaccination campaigns in January-February 2021, except for Argentina and Costa Rica which started in December 2020 (Table 5). Although most LAC countries surveyed faced important challenges related to the procurement and delivery of COVID-19 vaccines by the end of 2021, efforts from national and sub-national authorities have allowed LAC countries to achieve a regional average of 115 282 vaccine doses administered per 100 000 inhabitants<sup>9</sup> (Figure 20).

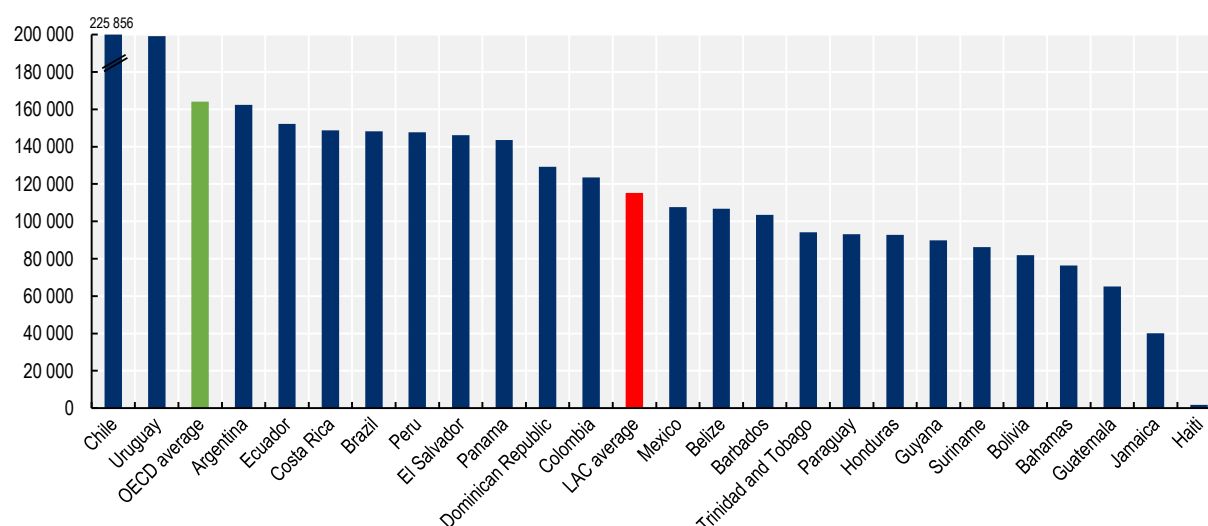
**Table 5. Beginning of the COVID-19 vaccination campaign in LAC countries surveyed**

| Country            | Date of the beginning of the COVID-19 vaccination campaign |
|--------------------|------------------------------------------------------------|
| Argentina          | 29 December 2020                                           |
| Brazil             | 17 January 2021                                            |
| Colombia           | 17 February 2021                                           |
| Costa Rica         | 24 December 2020                                           |
| Dominican Republic | 16 February 2021                                           |
| El Salvador        | 17 February 2021                                           |
| Guatemala          | 22-28 February 2021                                        |
| Haiti              | 17 July 2021                                               |
| Honduras           | 2021                                                       |
| Jamaica            | 2021                                                       |
| Paraguay           | 22 February 2021                                           |
| Peru               | 9 February 2021                                            |
| Uruguay            | 1 March 2021                                               |

Source: Authors, based on official websites and interviews.

**Figure 20. COVID-19 vaccine doses administered in LAC in 2021**

Per 100 000 inhabitants



Note: Data as of 23 December 2021; LAC average corresponds to the average number of vaccines doses administered per 100 000 inhabitants in the 22 LAC countries included in the figure.

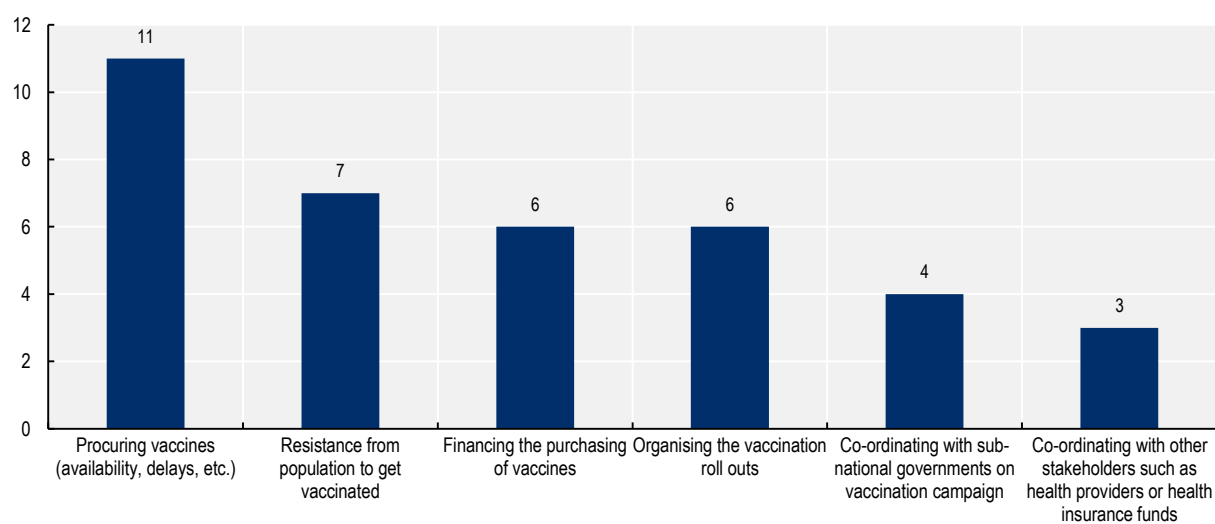
Source: Authors, based on (WHO, 2021[2]).

### ***Access to vaccines was the main challenge to implement the vaccination campaign***

The two main challenge faced by LAC countries in 2021 was procuring vaccines and financing their acquisition. Most countries surveyed had started efforts to purchase COVID-19 vaccines in 2020, but actual rolling out of vaccination campaigns did not start until 2021.

Additional obstacles to the roll-out of the vaccination campaigns included population resistance and organisation hurdles (Figure 21; Annex Table 1.B.19 in Annex 1.B). To address these challenges, countries implemented measures such as communication campaign, mobile vaccination centres, or imposing regional lockdowns based on the local epidemiological situation.

**Figure 21. Main challenges to implement the COVID-19 vaccination in LAC countries, 2021**



Note: No information available for Guatemala. Countries could select as many answers as it applied.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

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## Notes

- <sup>1</sup> Defined as number of cases per 100 000 inhabitants.
- <sup>2</sup> Government transfers include direct budget allocations for health by central and local governments, budget transfers to social health insurance funds (except government social contributions as an employer) and subsidies to the private sector, such as insurance companies and non-profit institutions.
- <sup>3</sup> Data not available for Haiti.
- <sup>4</sup> Data measured at purchasing power parity by World Bank (2020).
- <sup>5</sup> Contingency funds are established to finance unanticipated emergencies such as the COVID-19 pandemic, and their use do not require parliamentary approval beyond the approval of the annual budget (OECD, 2021<sup>[11]</sup>).
- <sup>6</sup> Information not available for Colombia, Costa Rica and Haiti.
- <sup>7</sup> Information not available for Colombia and El Salvador for 2021.
- <sup>8</sup> i.e. families were allowed to benefit from the social insurance system contribution, usually only for formal workers and their families, instead of transferring them to the subsidised health coverage, where the Ministry of Health provides care to otherwise uninsured people.
- <sup>9</sup> By December 2021, 50.5% of citizens had received two doses.

## Annex 1.A. COVID-19 cases and deaths

Annex Table 1.A.1. COVID-19 cases and deaths per million inhabitants in LAC countries, 2020 and 2021

| Panel 1             |                               |
|---------------------|-------------------------------|
| Country             | Cases per 100 000 inhabitants |
| Argentina           | 11 817                        |
| Uruguay             | 11 593                        |
| Costa Rica          | 11 155                        |
| Panama              | 11 149                        |
| <b>OECD average</b> | <b>10 918</b>                 |
| Brazil              | 10 440                        |
| Colombia            | 10 015                        |
| Barbados            | 9 348                         |
| Chile               | 9 338                         |
| Suriname            | 8 735                         |
| Belize              | 7 823                         |
| Peru                | 6 840                         |
| <b>LAC average</b>  | <b>6 609</b>                  |
| Paraguay            | 6 503                         |
| Bahamas             | 5 836                         |
| Trinidad and Tobago | 5 793                         |
| Guyana              | 4 903                         |
| Bolivia             | 4 755                         |
| Honduras            | 3 823                         |
| Dominican Republic  | 3 786                         |
| Guatemala           | 3 693                         |
| Jamaica             | 3 102                         |
| Mexico              | 3 040                         |
| Ecuador             | 3 024                         |
| El Salvador         | 1 869                         |
| Haiti               | 227                           |

| Panel 2             |                                |
|---------------------|--------------------------------|
| Country             | Deaths per 100 000 inhabitants |
| Peru                | 612                            |
| Brazil              | 290                            |
| Argentina           | 257                            |
| Colombia            | 254                            |
| Paraguay            | 232                            |
| Mexico              | 230                            |
| Chile               | 203                            |
| Suriname            | 201                            |
| Ecuador             | 190                            |
| Bahamas             | 180                            |
| Uruguay             | 177                            |
| <b>LAC average</b>  | <b>174</b>                     |
| Trinidad and Tobago | 174                            |
| Panama              | 171                            |
| Bolivia             | 166                            |
| <b>OECD average</b> | <b>156</b>                     |
| Belize              | 147                            |
| Costa Rica          | 144                            |
| Guyana              | 130                            |
| Honduras            | 105                            |
| Guatemala           | 95                             |
| Barbados            | 88                             |
| Jamaica             | 82                             |
| El Salvador         | 59                             |
| Dominican Republic  | 39                             |
| Haiti               | 7                              |

Note: Data as of 15 December 2021.

Source: Authors, based on (WHO, 2021<sup>[2]</sup>; The World Bank, 2020<sup>[3]</sup>).

## Annex 1.B. Summary by question: Survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries

Annex Table 1.B.1. Funds associated to the budgetary response to COVID-19 on health

| Country                          | Does not apply, there was no funding increase |          | Reprioritised funding from within an existing health budget |          | Reprioritised funding from other sectors across government |          | Transfers between fiscal years |          | Contingency funds for unanticipated events |          | Loans from international organisations/ countries |          | Grants from international organisations/ donors |          | Salary discounts for certain public officials and/ or discounts from public pensions pay-outs |          | Other    |          |
|----------------------------------|-----------------------------------------------|----------|-------------------------------------------------------------|----------|------------------------------------------------------------|----------|--------------------------------|----------|--------------------------------------------|----------|---------------------------------------------------|----------|-------------------------------------------------|----------|-----------------------------------------------------------------------------------------------|----------|----------|----------|
|                                  | 2020                                          | 2021     | 2020                                                        | 2021     | 2020                                                       | 2021     | 2020                           | 2021     | 2020                                       | 2021     | 2020                                              | 2021     | 2020                                            | 2021     | 2020                                                                                          | 2021     | 2020     | 2021     |
| Argentina                        |                                               |          |                                                             |          |                                                            |          | •                              | •        |                                            |          | •                                                 | •        |                                                 |          |                                                                                               |          | •        | •        |
| Brazil                           |                                               |          |                                                             |          |                                                            |          | •                              | •        |                                            |          |                                                   |          |                                                 |          |                                                                                               |          | •        |          |
| Colombia                         |                                               |          | •                                                           |          |                                                            |          |                                |          | •                                          | •        |                                                   |          |                                                 |          | •                                                                                             |          |          |          |
| Costa Rica                       |                                               |          | •                                                           | •        |                                                            |          |                                |          | •                                          | •        |                                                   |          |                                                 |          |                                                                                               |          | •        | •        |
| Dominican Republic               |                                               |          | •                                                           | •        | •                                                          | •        |                                |          |                                            |          | •                                                 |          | •                                               |          |                                                                                               |          |          |          |
| El Salvador                      |                                               |          | •                                                           | •        | •                                                          |          |                                |          |                                            |          | •                                                 | •        | •                                               |          |                                                                                               |          |          |          |
| Guatemala                        |                                               |          |                                                             | •        |                                                            | •        |                                | •        | •                                          |          | •                                                 |          |                                                 |          |                                                                                               |          | •        |          |
| Haiti                            |                                               |          | •                                                           |          | •                                                          | •        | •                              | •        |                                            |          |                                                   |          | •                                               |          |                                                                                               |          |          |          |
| Honduras                         |                                               |          | •                                                           | •        |                                                            |          |                                |          |                                            |          | •                                                 | •        | •                                               | •        |                                                                                               |          |          |          |
| Jamaica                          |                                               |          | •                                                           |          |                                                            | •        |                                |          |                                            |          |                                                   |          | •                                               | •        |                                                                                               |          |          |          |
| Paraguay                         |                                               |          | •                                                           |          | •                                                          | •        |                                |          |                                            |          | •                                                 |          |                                                 |          | •                                                                                             |          |          |          |
| Peru                             |                                               |          |                                                             |          |                                                            |          | •                              | •        | •                                          | •        | •                                                 | •        |                                                 |          | •                                                                                             | •        |          |          |
| Uruguay                          |                                               |          |                                                             |          |                                                            |          |                                |          |                                            |          | •                                                 | •        | •                                               | •        | •                                                                                             | •        |          |          |
| <b>Total number of countries</b> | <b>0</b>                                      | <b>0</b> | <b>8</b>                                                    | <b>5</b> | <b>4</b>                                                   | <b>5</b> | <b>3</b>                       | <b>4</b> | <b>4</b>                                   | <b>3</b> | <b>8</b>                                          | <b>5</b> | <b>6</b>                                        | <b>3</b> | <b>3</b>                                                                                      | <b>1</b> | <b>4</b> | <b>2</b> |

Note: • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.2. Activities within the health sector were/are decreased to make room for additional COVID-19 related expenditure**

| Country            | No reprioritisation within the existing health budget was made |          | Curative/ rehabilitative care for HIV/AIDS, tuberculosis, malaria |          | Preventive care for HIV/AIDS, tuberculosis, malaria |          | Other curative/ rehabilitative care (on areas other than HIV/AIDS, tuberculosis, malaria) |          | Other preventive care (on areas other than HIV/AIDS, tuberculosis, malaria) |          | Other    |          |
|--------------------|----------------------------------------------------------------|----------|-------------------------------------------------------------------|----------|-----------------------------------------------------|----------|-------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                           | 2021     | 2020                                                              | 2021     | 2020                                                | 2021     | 2020                                                                                      | 2021     | 2020                                                                        | 2021     | 2020     | 2021     |
| Argentina          | •                                                              | •        |                                                                   |          |                                                     |          |                                                                                           |          |                                                                             |          |          |          |
| Brazil             | •                                                              | •        |                                                                   |          |                                                     |          |                                                                                           |          |                                                                             |          |          |          |
| Colombia           | N/A                                                            | •        | N/A                                                               |          | N/A                                                 |          | N/A                                                                                       |          | N/A                                                                         |          | N/A      |          |
| Costa Rica         |                                                                |          |                                                                   |          |                                                     |          |                                                                                           |          |                                                                             |          | •        | •        |
| Dominican Republic |                                                                | N/A      | •                                                                 | N/A      | •                                                   | N/A      |                                                                                           | N/A      |                                                                             | N/A      |          | N/A      |
| El Salvador        |                                                                |          |                                                                   |          |                                                     |          |                                                                                           |          |                                                                             |          | •        | •        |
| Guatemala          | N/A                                                            | N/A      | N/A                                                               | N/A      | N/A                                                 | N/A      | N/A                                                                                       | N/A      | N/A                                                                         | N/A      | N/A      | N/A      |
| Haiti              |                                                                | N/A      |                                                                   | N/A      |                                                     | N/A      |                                                                                           | N/A      | •                                                                           | N/A      |          | N/A      |
| Honduras           |                                                                |          | •                                                                 | •        | •                                                   | •        | •                                                                                         | •        | •                                                                           | •        |          |          |
| Jamaica            |                                                                | •        |                                                                   |          |                                                     |          | •                                                                                         |          |                                                                             |          |          |          |
| Paraguay           |                                                                | N/A      |                                                                   | N/A      |                                                     | N/A      |                                                                                           | N/A      |                                                                             | N/A      | •        | •        |
| Peru               | •                                                              | •        |                                                                   |          |                                                     |          |                                                                                           |          |                                                                             |          |          |          |
| Uruguay            | •                                                              | •        |                                                                   |          |                                                     |          |                                                                                           |          |                                                                             |          |          |          |
| <b>Total</b>       | <b>4</b>                                                       | <b>6</b> | <b>2</b>                                                          | <b>1</b> | <b>2</b>                                            | <b>1</b> | <b>2</b>                                                                                  | <b>1</b> | <b>2</b>                                                                    | <b>1</b> | <b>3</b> | <b>3</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.3. Type of external support that your country receive to implement its responses to COVID-19 in the health sector

| Country            | Did not receive external support |          | Received cash support (grants) |          | Received in-kind support (supplies, PPE, ventilators, etc.) |          | Received loans to finance responses to COVID |          |
|--------------------|----------------------------------|----------|--------------------------------|----------|-------------------------------------------------------------|----------|----------------------------------------------|----------|
|                    | 2020                             | 2021     | 2020                           | 2021     | 2020                                                        | 2021     | 2020                                         | 2021     |
| Argentina          |                                  |          |                                |          |                                                             |          | •                                            | •        |
| Brazil             | •                                |          |                                |          |                                                             | •        |                                              |          |
| Colombia           | N/A                              | N/A      | N/A                            | N/A      | N/A                                                         | N/A      | N/A                                          | N/A      |
| Costa Rica         |                                  |          | •                              | •        | •                                                           | •        |                                              |          |
| Dominican Republic |                                  | •        | •                              | •        | •                                                           | •        | •                                            |          |
| El Salvador        |                                  |          | •                              |          | •                                                           |          | •                                            | •        |
| Guatemala          |                                  | N/A      | •                              | N/A      |                                                             | N/A      | •                                            | N/A      |
| Haiti              | N/A                              |          | N/A                            |          | N/A                                                         | •        | N/A                                          |          |
| Honduras           |                                  |          | •                              |          |                                                             |          | •                                            | •        |
| Jamaica            |                                  |          | •                              | •        | •                                                           | •        |                                              |          |
| Paraguay           |                                  |          | •                              | •        | •                                                           | •        | •                                            |          |
| Peru               |                                  |          |                                |          |                                                             |          | •                                            | •        |
| Uruguay            |                                  |          | •                              | •        | •                                                           | •        | •                                            | •        |
| <b>Total</b>       | <b>1</b>                         | <b>0</b> | <b>8</b>                       | <b>5</b> | <b>6</b>                                                    | <b>7</b> | <b>8</b>                                     | <b>6</b> |

Note: "N/A" means information not available at the date of survey (June 2021); • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.4. How do general tax revenues collection/foreseen collection compare to their level in 2019?

| Country            | Same as in 2019 |          | Lower than in 2019 |          | Higher than in 2019 |          |
|--------------------|-----------------|----------|--------------------|----------|---------------------|----------|
|                    | 2020            | 2021     | 2020               | 2021     | 2020                | 2021     |
| Argentina          |                 | •        | •                  |          |                     |          |
| Brazil             |                 |          | •                  | •        |                     |          |
| Colombia           | N/A             |          | N/A                |          | N/A                 | •        |
| Costa Rica         | N/A             | N/A      | N/A                | N/A      | N/A                 | N/A      |
| Dominican Republic |                 |          | •                  | •        |                     |          |
| El Salvador        |                 |          | •                  |          |                     | •        |
| Guatemala          |                 |          | •                  |          |                     | •        |
| Haiti              | N/A             | N/A      | N/A                | N/A      | N/A                 | N/A      |
| Honduras           |                 |          | •                  | •        |                     |          |
| Jamaica            |                 |          | •                  | •        |                     |          |
| Paraguay           |                 |          | •                  |          |                     | •        |
| Peru               |                 |          | •                  |          |                     | •        |
| Uruguay            |                 | N/A      | •                  | N/A      |                     | N/A      |
| <b>Total</b>       | <b>0</b>        | <b>1</b> | <b>10</b>          | <b>4</b> | <b>0</b>            | <b>5</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.5. Impact of the COVID-19 crisis on Health Social Security Contributions revenue

| Country            | Health SSCs remained stable |          | Health SSCs revenues decreased |          | Health SSCs revenues increased |          |
|--------------------|-----------------------------|----------|--------------------------------|----------|--------------------------------|----------|
|                    | 2020                        | 2021     | 2020                           | 2021     | 2020                           | 2021     |
| Argentina          |                             |          | •                              | •        |                                |          |
| Brazil             |                             |          |                                |          | •                              | •        |
| Colombia           |                             |          | •                              |          |                                | •        |
| Costa Rica         |                             | •        | •                              |          |                                |          |
| Dominican Republic |                             |          |                                | •        | •                              |          |
| El Salvador        |                             |          | •                              | •        |                                |          |
| Guatemala          | N/A                         | N/A      | N/A                            | N/A      | N/A                            | N/A      |
| Haiti              | •                           | •        |                                |          |                                |          |
| Honduras           |                             | N/A      | •                              | N/A      |                                | N/A      |
| Jamaica            | N/A                         | N/A      | N/A                            | N/A      | N/A                            | N/A      |
| Paraguay           |                             |          |                                |          | •                              | •        |
| Peru               | N/A                         | N/A      | N/A                            | N/A      | N/A                            | N/A      |
| Uruguay            |                             | N/A      | •                              | N/A      |                                | N/A      |
| <b>Total</b>       | <b>1</b>                    | <b>2</b> | <b>6</b>                       | <b>2</b> | <b>3</b>                       | <b>4</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.6. Impact of the COVID-19 crisis on Health taxes revenue

| Country            | Health taxes revenues remained stable |          | Health taxes revenues decreased |          | Health taxes revenues increased |          |
|--------------------|---------------------------------------|----------|---------------------------------|----------|---------------------------------|----------|
|                    | 2020                                  | 2021     | 2020                            | 2021     | 2020                            | 2021     |
| Argentina          | •                                     | •        |                                 |          |                                 |          |
| Brazil             |                                       |          | •                               | •        |                                 |          |
| Colombia           |                                       |          | •                               | •        |                                 |          |
| Costa Rica         |                                       |          | •                               | •        |                                 |          |
| Dominican Republic |                                       |          | •                               | •        |                                 |          |
| El Salvador        |                                       |          | •                               |          |                                 | •        |
| Guatemala          |                                       |          | •                               |          |                                 | •        |
| Haiti              | •                                     | N/A      |                                 | N/A      |                                 | N/A      |
| Honduras           |                                       |          | •                               |          |                                 | •        |
| Jamaica            |                                       |          | •                               | •        |                                 |          |
| Paraguay           |                                       |          | •                               | •        |                                 |          |
| Peru               |                                       |          | •                               |          |                                 | •        |
| Uruguay            |                                       | N/A      | •                               | N/A      |                                 | N/A      |
| <b>Total</b>       | <b>2</b>                              | <b>1</b> | <b>11</b>                       | <b>6</b> | <b>0</b>                        | <b>4</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer. Health tax revenues include for example taxes on alcohol, sugar, tobacco, etc.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.7. Estimate resource needs for COVID-19 health systems responses

| Country            | Not applicable, country did not estimate resource needs for health systems responses |          | Conducted rapid needs assessments to estimate new spending needs and indicative budget envelope for current and/or following year |          | Conducted more in-depth assessments to establish medium-term expenditure requirement |          | Other    |          |
|--------------------|--------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                                 | 2021     | 2020                                                                                                                              | 2021     | 2020                                                                                 | 2021     | 2020     | 2021     |
| Argentina          |                                                                                      |          | •                                                                                                                                 | •        |                                                                                      |          |          |          |
| Brazil             |                                                                                      |          | •                                                                                                                                 | •        |                                                                                      |          |          |          |
| Colombia           | N/A                                                                                  | N/A      | N/A                                                                                                                               | N/A      | N/A                                                                                  | N/A      | N/A      | N/A      |
| Costa Rica         |                                                                                      |          | •                                                                                                                                 | •        | •                                                                                    | •        |          |          |
| Dominican Republic |                                                                                      |          | •                                                                                                                                 | •        |                                                                                      |          |          |          |
| El Salvador        |                                                                                      | N/A      | •                                                                                                                                 | N/A      |                                                                                      | N/A      |          | N/A      |
| Guatemala          |                                                                                      |          | •                                                                                                                                 | •        | •                                                                                    | •        |          |          |
| Haiti              |                                                                                      |          | •                                                                                                                                 |          |                                                                                      | •        |          |          |
| Honduras           |                                                                                      |          | •                                                                                                                                 | •        |                                                                                      | •        |          |          |
| Jamaica            |                                                                                      |          | •                                                                                                                                 |          |                                                                                      | •        |          |          |
| Paraguay           |                                                                                      |          | •                                                                                                                                 | •        |                                                                                      |          |          |          |
| Peru               |                                                                                      |          | •                                                                                                                                 |          |                                                                                      | •        |          |          |
| Uruguay            |                                                                                      |          | •                                                                                                                                 | •        |                                                                                      |          |          |          |
| <b>Total</b>       | <b>0</b>                                                                             | <b>0</b> | <b>12</b>                                                                                                                         | <b>8</b> | <b>2</b>                                                                             | <b>6</b> | <b>0</b> | <b>0</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.8. Implementation of the budgetary response to COVID-19 in the health sector

| Country            | Not applicable, my country did not implement a budgetary response to COVID-19 in the health sector |          | Voted supplementary budgets in Parliament to increase/reallocate spending |          | Created contingency extra-budgetary funds to channel health sector COVID-19 response |          | Included within the regular annual budget process of the health sector |          | Other    |          |
|--------------------|----------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                                               | 2021     | 2020                                                                      | 2021     | 2020                                                                                 | 2021     | 2020                                                                   | 2021     | 2020     | 2021     |
| Argentina          |                                                                                                    |          | •                                                                         | •        |                                                                                      |          |                                                                        |          |          |          |
| Brazil             |                                                                                                    |          | •                                                                         | •        |                                                                                      |          |                                                                        |          | •        |          |
| Colombia           |                                                                                                    |          |                                                                           |          | •                                                                                    | •        | •                                                                      |          |          | •        |
| Costa Rica         |                                                                                                    |          | •                                                                         | •        | •                                                                                    | •        |                                                                        | •        |          |          |
| Dominican Republic |                                                                                                    |          | •                                                                         |          |                                                                                      |          |                                                                        | •        |          |          |
| El Salvador        |                                                                                                    | N/A      | •                                                                         | N/A      |                                                                                      | N/A      |                                                                        | N/A      |          | N/A      |
| Guatemala          |                                                                                                    |          | •                                                                         |          |                                                                                      |          |                                                                        | •        |          |          |
| Haiti              |                                                                                                    | N/A      | •                                                                         | N/A      |                                                                                      | N/A      |                                                                        | N/A      |          | N/A      |
| Honduras           |                                                                                                    |          | •                                                                         | •        |                                                                                      |          | •                                                                      | •        |          |          |
| Jamaica            |                                                                                                    |          |                                                                           |          |                                                                                      |          | •                                                                      | •        |          |          |
| Paraguay           |                                                                                                    |          | •                                                                         |          |                                                                                      |          |                                                                        | •        | •        | •        |
| Peru               |                                                                                                    |          |                                                                           |          |                                                                                      |          |                                                                        | •        | •        | •        |
| Uruguay            |                                                                                                    |          |                                                                           |          | •                                                                                    | •        |                                                                        |          |          |          |
| <b>Total</b>       | <b>0</b>                                                                                           | <b>0</b> | <b>9</b>                                                                  | <b>4</b> | <b>3</b>                                                                             | <b>3</b> | <b>3</b>                                                               | <b>7</b> | <b>3</b> | <b>3</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.9. Tracking and reporting processes for COVID-19 health expenditure to ensure accountability

| Country            | Not applicable, country did not adapt tracking or reporting processes for COVID-19 health expenditure |          | Added dedicated COVID-19 budget or accounting codes |          | Added dedicated COVID-19 budget programme/s |          | Created off-budget COVID-19 fund |          | Public reporting of COVID-19 measures and expenditures |           | Reporting of COVID-19 measures and expenditures to Parliament |          | Other    |          |
|--------------------|-------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------|----------|---------------------------------------------|----------|----------------------------------|----------|--------------------------------------------------------|-----------|---------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                                                  | 2021     | 2020                                                | 2021     | 2020                                        | 2021     | 2020                             | 2021     | 2020                                                   | 2021      | 2020                                                          | 2021     | 2020     | 2021     |
| Argentina          |                                                                                                       |          | •                                                   | •        | •                                           | •        |                                  |          | •                                                      | •         |                                                               |          |          |          |
| Brazil             |                                                                                                       |          | •                                                   | •        | •                                           |          |                                  |          | •                                                      | •         | •                                                             | •        |          |          |
| Colombia           |                                                                                                       |          | •                                                   |          | •                                           | •        |                                  |          | •                                                      | •         |                                                               |          | •        | •        |
| Costa Rica         |                                                                                                       |          | •                                                   | •        |                                             |          | •                                | •        | •                                                      | •         | •                                                             | •        | •        | •        |
| Dominican Republic |                                                                                                       |          | •                                                   | •        |                                             |          | •                                |          | •                                                      | •         | •                                                             | •        |          |          |
| El Salvador        |                                                                                                       | N/A      |                                                     | N/A      |                                             | N/A      |                                  | N/A      | •                                                      | N/A       | •                                                             | N/A      |          | N/A      |
| Guatemala          |                                                                                                       |          |                                                     |          | •                                           | •        |                                  |          | •                                                      | •         |                                                               |          |          |          |
| Haiti              |                                                                                                       |          | •                                                   |          |                                             | •        |                                  |          | •                                                      | •         |                                                               |          |          |          |
| Honduras           |                                                                                                       |          | •                                                   | •        | •                                           | •        |                                  |          | •                                                      | •         | •                                                             | •        |          |          |
| Jamaica            |                                                                                                       |          |                                                     |          | •                                           | •        |                                  |          |                                                        |           | •                                                             | •        |          |          |
| Paraguay           |                                                                                                       |          | •                                                   | •        | •                                           | •        |                                  |          | •                                                      | •         | •                                                             | •        | •        | •        |
| Peru               |                                                                                                       |          | •                                                   | •        |                                             |          |                                  |          | •                                                      | •         | •                                                             | •        |          |          |
| Uruguay            |                                                                                                       |          | •                                                   | •        | •                                           | •        | •                                | •        | •                                                      | •         | •                                                             |          |          |          |
| <b>Total</b>       | <b>0</b>                                                                                              | <b>0</b> | <b>10</b>                                           | <b>8</b> | <b>8</b>                                    | <b>8</b> | <b>3</b>                         | <b>2</b> | <b>12</b>                                              | <b>11</b> | <b>9</b>                                                      | <b>7</b> | <b>3</b> | <b>3</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.10. Main actions to evaluate the effectiveness of government COVID-19 related spending in the health sector

| Country            | Not applicable, there were no actions to evaluate the effectiveness of government COVID-19 related spending |          | Rapid cost-effectiveness assessments of government policies |          | In-depth cost-effectiveness assessments of government policies |          | Adapted programmes and performance budgeting frameworks to clarify the objectives of government spending |          | Conducted spending reviews related to COVID-19 health responses |          | Other    |          |
|--------------------|-------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------|----------|----------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                                                        | 2021     | 2020                                                        | 2021     | 2020                                                           | 2021     | 2020                                                                                                     | 2021     | 2020                                                            | 2021     | 2020     | 2021     |
| Argentina          |                                                                                                             |          |                                                             |          |                                                                |          |                                                                                                          |          |                                                                 |          | •        | •        |
| Brazil             | N/A                                                                                                         | N/A      | N/A                                                         | N/A      | N/A                                                            | N/A      | N/A                                                                                                      | N/A      | N/A                                                             | N/A      | N/A      | N/A      |
| Colombia           |                                                                                                             |          |                                                             |          |                                                                |          |                                                                                                          |          | •                                                               | •        |          |          |
| Costa Rica         |                                                                                                             |          |                                                             |          |                                                                |          |                                                                                                          |          | •                                                               | •        | •        | •        |
| Dominican Republic |                                                                                                             |          | •                                                           | •        |                                                                |          |                                                                                                          |          | •                                                               | •        |          |          |
| El Salvador        | •                                                                                                           |          |                                                             |          |                                                                |          |                                                                                                          |          |                                                                 |          |          | •        |
| Guatemala          |                                                                                                             |          |                                                             |          |                                                                |          | •                                                                                                        | •        |                                                                 |          |          |          |
| Haiti              | •                                                                                                           | •        |                                                             |          |                                                                |          |                                                                                                          |          |                                                                 |          |          |          |
| Honduras           |                                                                                                             |          |                                                             |          |                                                                |          |                                                                                                          |          | •                                                               | •        | •        | •        |
| Jamaica            |                                                                                                             |          |                                                             |          |                                                                |          |                                                                                                          |          | •                                                               | •        |          |          |
| Paraguay           | •                                                                                                           | •        |                                                             |          |                                                                |          |                                                                                                          |          |                                                                 |          |          |          |
| Peru               | •                                                                                                           | •        |                                                             |          |                                                                |          |                                                                                                          |          |                                                                 |          |          |          |
| Uruguay            |                                                                                                             |          | •                                                           | •        |                                                                |          |                                                                                                          |          |                                                                 |          |          |          |
| <b>Total</b>       | <b>4</b>                                                                                                    | <b>3</b> | <b>2</b>                                                    | <b>2</b> | <b>0</b>                                                       | <b>0</b> | <b>1</b>                                                                                                 | <b>1</b> | <b>5</b>                                                        | <b>5</b> | <b>3</b> | <b>4</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.11. Increase/is increasing staff capacity in the health sector

| Country            | Not applicable, country did not increase health workforce capacity |          | Adapted roles of existing health staff |          | Increased remuneration of health professionals (permanent measure) |          | Awarded bonus payments and/or overtime payments to health professionals (temporary measures) |           | Re-specified working conditions |          | Took measures to increase the health workforce on a short-term |          | Took measures to permanently increase the health workforce |          | Other    |          |
|--------------------|--------------------------------------------------------------------|----------|----------------------------------------|----------|--------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------|-----------|---------------------------------|----------|----------------------------------------------------------------|----------|------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                               | 2021     | 2020                                   | 2021     | 2020                                                               | 2021     | 2020                                                                                         | 2021      | 2020                            | 2021     | 2020                                                           | 2021     | 2020                                                       | 2021     | 2020     | 2021     |
| Argentina          |                                                                    |          | •                                      | •        |                                                                    |          | •                                                                                            | •         |                                 |          |                                                                |          |                                                            |          |          |          |
| Brazil             |                                                                    |          |                                        |          |                                                                    |          | •                                                                                            | •         |                                 |          |                                                                |          |                                                            |          |          |          |
| Colombia           |                                                                    | N/A      |                                        | N/A      |                                                                    | N/A      | •                                                                                            | N/A       |                                 | N/A      |                                                                | N/A      |                                                            | N/A      |          | N/A      |
| Costa Rica         |                                                                    |          | •                                      | •        |                                                                    |          | •                                                                                            | •         |                                 |          | •                                                              | •        |                                                            |          |          |          |
| Dominican Republic |                                                                    |          |                                        |          |                                                                    | •        | •                                                                                            | •         |                                 |          | •                                                              | •        |                                                            |          |          |          |
| El Salvador        |                                                                    |          | •                                      | •        | •                                                                  | •        | •                                                                                            | •         | •                               | •        | •                                                              | •        | •                                                          | •        |          |          |
| Guatemala          | N/A                                                                | N/A      | N/A                                    | N/A      | N/A                                                                | N/A      | N/A                                                                                          | N/A       | N/A                             | N/A      | N/A                                                            | N/A      | N/A                                                        | N/A      | N/A      | N/A      |
| Haiti              |                                                                    |          |                                        |          |                                                                    |          | •                                                                                            | •         |                                 |          |                                                                |          |                                                            |          |          |          |
| Honduras           |                                                                    |          | •                                      | •        |                                                                    | •        |                                                                                              | •         |                                 |          | •                                                              | •        | •                                                          | •        |          |          |
| Jamaica            |                                                                    |          | •                                      | •        |                                                                    |          | •                                                                                            | •         | •                               | •        | •                                                              | •        | •                                                          | •        |          |          |
| Paraguay           |                                                                    |          | •                                      | •        |                                                                    |          | •                                                                                            | •         | •                               | •        | •                                                              | •        |                                                            |          |          |          |
| Peru               |                                                                    |          |                                        |          |                                                                    |          | •                                                                                            | •         | •                               | •        | •                                                              | •        |                                                            |          |          |          |
| Uruguay            |                                                                    |          | •                                      | •        |                                                                    |          |                                                                                              |           |                                 |          | •                                                              | •        |                                                            |          |          |          |
| <b>Total</b>       | <b>0</b>                                                           | <b>0</b> | <b>7</b>                               | <b>7</b> | <b>1</b>                                                           | <b>3</b> | <b>10</b>                                                                                    | <b>10</b> | <b>4</b>                        | <b>4</b> | <b>8</b>                                                       | <b>8</b> | <b>3</b>                                                   | <b>3</b> | <b>0</b> | <b>0</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.12. Increase/ is increasing supply capacity in the health sector

| Country            | Not applicable, country did not increase supply capacity |          | Accelerated procurement procedures for PPE, medical devices, and other essential items |          | Reformed procurement procedures, including potential domestic production of some essential supplies |          | Repurposed non-medical space, transferred patients to localities with spare capacity (temporary measures) |          | Re-specified hospital discharge criteria and/or boosted alternative delivery modalities, such as telemedicine |          | Evaluated health infrastructure within capital budgeting framework (long-term measure) |          | Enhanced and expanded health infrastructure capacity (long-term measures) |          | Other    |          |
|--------------------|----------------------------------------------------------|----------|----------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                     | 2021     | 2020                                                                                   | 2021     | 2020                                                                                                | 2021     | 2020                                                                                                      | 2021     | 2020                                                                                                          | 2021     | 2020                                                                                   | 2021     | 2020                                                                      | 2021     | 2020     | 2021     |
| Argentina          |                                                          |          | •                                                                                      | •        |                                                                                                     |          |                                                                                                           |          |                                                                                                               |          |                                                                                        |          | •                                                                         | •        |          |          |
| Brazil             |                                                          |          | •                                                                                      | •        |                                                                                                     |          | •                                                                                                         | •        | •                                                                                                             | •        |                                                                                        |          |                                                                           |          |          |          |
| Colombia           |                                                          |          | •                                                                                      | •        |                                                                                                     |          | •                                                                                                         | •        | •                                                                                                             | •        |                                                                                        |          | •                                                                         |          |          |          |
| Costa Rica         |                                                          |          | •                                                                                      | •        | •                                                                                                   | •        | •                                                                                                         | •        | •                                                                                                             | •        | •                                                                                      | •        | •                                                                         | •        | •        | •        |
| Dominican Republic |                                                          |          | •                                                                                      | •        |                                                                                                     |          | •                                                                                                         | •        | •                                                                                                             |          | •                                                                                      | •        | •                                                                         | •        |          |          |
| El Salvador        |                                                          |          | •                                                                                      |          |                                                                                                     |          | •                                                                                                         | •        | •                                                                                                             | •        | •                                                                                      | •        | •                                                                         | •        |          | •        |
| Guatemala          | N/A                                                      | N/A      | N/A                                                                                    | N/A      | N/A                                                                                                 | N/A      | N/A                                                                                                       | N/A      | N/A                                                                                                           | N/A      | N/A                                                                                    | N/A      | N/A                                                                       | N/A      | N/A      |          |
| Haiti              | •                                                        | •        |                                                                                        |          |                                                                                                     |          |                                                                                                           |          |                                                                                                               |          |                                                                                        |          |                                                                           |          |          |          |
| Honduras           |                                                          |          | •                                                                                      | •        | •                                                                                                   | •        | •                                                                                                         | •        |                                                                                                               | •        | •                                                                                      | •        | •                                                                         | •        |          |          |
| Jamaica            |                                                          |          | •                                                                                      | •        |                                                                                                     |          | •                                                                                                         | •        | •                                                                                                             | •        |                                                                                        | •        |                                                                           |          |          |          |
| Paraguay           |                                                          |          | •                                                                                      |          | •                                                                                                   | •        | •                                                                                                         | •        | •                                                                                                             | •        | •                                                                                      | •        | •                                                                         | •        | •        | •        |
| Peru               |                                                          |          |                                                                                        |          |                                                                                                     |          | •                                                                                                         | •        |                                                                                                               | •        |                                                                                        | •        |                                                                           | •        |          |          |
| Uruguay            |                                                          |          | •                                                                                      | •        |                                                                                                     |          |                                                                                                           |          | •                                                                                                             | •        |                                                                                        |          |                                                                           |          | •        | •        |
| <b>Total</b>       | <b>1</b>                                                 | <b>1</b> | <b>10</b>                                                                              | <b>8</b> | <b>3</b>                                                                                            | <b>3</b> | <b>9</b>                                                                                                  | <b>9</b> | <b>8</b>                                                                                                      | <b>9</b> | <b>5</b>                                                                               | <b>7</b> | <b>7</b>                                                                  | <b>7</b> | <b>3</b> | <b>4</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.13. Cost recovery policies in the health sector to support vulnerable groups for accessing health care

| Country            | Not applicable, country did not adapt cost recovery policies to support vulnerable groups |          | Suspended or reduced user fees and/or co-payments related to COVID-19 diagnostic and treatment for the whole population |          | Suspended or reduced user fees and/or co-payments related to COVID-19 diagnostic and treatment for specific vulnerable population groups |          | Reassessed user fees, co-payments and other out-of-pocket payments for health services in general |          | Other    |          |
|--------------------|-------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                                      | 2021     | 2020                                                                                                                    | 2021     | 2020                                                                                                                                     | 2021     | 2020                                                                                              | 2021     | 2020     | 2021     |
| Argentina          |                                                                                           |          | •                                                                                                                       | •        |                                                                                                                                          |          |                                                                                                   |          |          |          |
| Brazil             | •                                                                                         | •        |                                                                                                                         |          |                                                                                                                                          |          |                                                                                                   |          |          |          |
| Colombia           |                                                                                           |          |                                                                                                                         |          |                                                                                                                                          |          |                                                                                                   |          | •        | •        |
| Costa Rica         |                                                                                           |          |                                                                                                                         |          |                                                                                                                                          |          | •                                                                                                 | •        | •        |          |
| Dominican Republic |                                                                                           |          | •                                                                                                                       | •        | •                                                                                                                                        | •        | •                                                                                                 | •        |          |          |
| El Salvador        | •                                                                                         | N/A      |                                                                                                                         | N/A      |                                                                                                                                          | N/A      |                                                                                                   | N/A      |          | N/A      |
| Guatemala          | N/A                                                                                       | N/A      | N/A                                                                                                                     | N/A      | N/A                                                                                                                                      | N/A      | N/A                                                                                               | N/A      | N/A      | N/A      |
| Haiti              | •                                                                                         | •        |                                                                                                                         |          |                                                                                                                                          |          |                                                                                                   |          |          |          |
| Honduras           |                                                                                           |          | •                                                                                                                       | •        | •                                                                                                                                        | •        | •                                                                                                 | •        |          |          |
| Jamaica            | •                                                                                         | •        |                                                                                                                         |          |                                                                                                                                          |          |                                                                                                   |          |          |          |
| Paraguay           |                                                                                           |          | •                                                                                                                       | •        |                                                                                                                                          | •        | •                                                                                                 | •        |          |          |
| Peru               |                                                                                           |          |                                                                                                                         | •        | •                                                                                                                                        |          |                                                                                                   |          |          |          |
| Uruguay            |                                                                                           |          |                                                                                                                         |          |                                                                                                                                          |          |                                                                                                   |          | •        | •        |
| <b>Total</b>       | <b>4</b>                                                                                  | <b>3</b> | <b>4</b>                                                                                                                | <b>5</b> | <b>3</b>                                                                                                                                 | <b>3</b> | <b>4</b>                                                                                          | <b>4</b> | <b>3</b> | <b>2</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.14. Ensure a co-ordinated health response across government

| Country            | Not applicable, country did not take any measure to ensure a co-ordinated response across government actors |          | Clarified roles and responsibilities of different government agencies |          | Centralised response management |          | Reinforced vertical co-ordination between national and subnational governments and agencies |          | Reinforced horizontal co-ordination across subnational governments and agencies |          | Central government intervened to increase subnational governments capacity |          | Other    |          |
|--------------------|-------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------|----------|---------------------------------|----------|---------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                                                        | 2021     | 2020                                                                  | 2021     | 2020                            | 2021     | 2020                                                                                        | 2021     | 2020                                                                            | 2021     | 2020                                                                       | 2021     | 2020     | 2021     |
| Argentina          |                                                                                                             |          |                                                                       |          | •                               | •        | •                                                                                           | •        |                                                                                 |          |                                                                            |          |          |          |
| Brazil             |                                                                                                             |          |                                                                       |          |                                 |          |                                                                                             |          | •                                                                               | •        | •                                                                          | •        |          |          |
| Colombia           |                                                                                                             |          |                                                                       |          | •                               |          | •                                                                                           | •        |                                                                                 |          | •                                                                          |          |          |          |
| Costa Rica         |                                                                                                             |          | •                                                                     | •        | •                               | •        | •                                                                                           | •        | •                                                                               | •        |                                                                            |          |          |          |
| Dominican Republic |                                                                                                             |          | •                                                                     |          | •                               | •        |                                                                                             |          |                                                                                 |          |                                                                            |          |          |          |
| El Salvador        |                                                                                                             | N/A      | •                                                                     | N/A      | •                               | N/A      |                                                                                             | N/A      |                                                                                 | N/A      |                                                                            | N/A      |          | N/A      |
| Guatemala          | N/A                                                                                                         | N/A      | N/A                                                                   | N/A      | N/A                             | N/A      | N/A                                                                                         | N/A      | N/A                                                                             | N/A      | N/A                                                                        | N/A      | N/A      | N/A      |
| Haiti              |                                                                                                             |          | •                                                                     | •        |                                 |          |                                                                                             |          |                                                                                 |          |                                                                            |          |          |          |
| Honduras           |                                                                                                             |          |                                                                       |          | •                               | •        | •                                                                                           | •        |                                                                                 |          | •                                                                          | •        |          |          |
| Jamaica            |                                                                                                             |          | •                                                                     | •        | •                               | •        | •                                                                                           | •        | •                                                                               | •        |                                                                            |          |          |          |
| Paraguay           |                                                                                                             |          | •                                                                     | •        | •                               | •        |                                                                                             |          |                                                                                 |          |                                                                            |          |          |          |
| Peru               |                                                                                                             |          |                                                                       |          |                                 |          |                                                                                             |          |                                                                                 |          | •                                                                          | •        |          |          |
| Uruguay            |                                                                                                             |          |                                                                       |          | •                               | •        |                                                                                             |          |                                                                                 |          |                                                                            |          |          |          |
| <b>Total</b>       | <b>0</b>                                                                                                    | <b>0</b> | <b>6</b>                                                              | <b>4</b> | <b>9</b>                        | <b>7</b> | <b>5</b>                                                                                    | <b>5</b> | <b>3</b>                                                                        | <b>3</b> | <b>4</b>                                                                   | <b>3</b> | <b>0</b> | <b>0</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.15. COVID-19 vaccination campaign budgeted

| Country            | Not applicable, vaccination campaign not yet started |          | Through the regular health budget |          | Through a separate dedicated fund |          | Through subnational government budgets |          | Other    |          |
|--------------------|------------------------------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|----------------------------------------|----------|----------|----------|
|                    | 2020                                                 | 2021     | 2020                              | 2021     | 2020                              | 2021     | 2020                                   | 2021     | 2020     | 2021     |
| Argentina          |                                                      |          | •                                 | •        |                                   |          |                                        |          | •        | •        |
| Brazil             |                                                      |          | •                                 | •        |                                   |          | •                                      | •        | •        | •        |
| Colombia           |                                                      |          |                                   |          | •                                 | •        | •                                      | •        |          |          |
| Costa Rica         |                                                      |          | •                                 | •        | •                                 | •        |                                        |          |          |          |
| Dominican Republic |                                                      |          | •                                 | •        |                                   |          |                                        |          |          |          |
| El Salvador        | •                                                    |          |                                   | •        |                                   |          |                                        |          |          |          |
| Guatemala          |                                                      |          |                                   |          | •                                 | •        |                                        |          |          |          |
| Haiti              | •                                                    | •        |                                   |          |                                   |          |                                        |          |          |          |
| Honduras           | •                                                    |          |                                   | •        |                                   |          |                                        |          |          |          |
| Jamaica            |                                                      |          | •                                 | •        |                                   |          |                                        |          |          |          |
| Paraguay           |                                                      |          | •                                 | •        | •                                 | •        |                                        |          |          |          |
| Peru               | N/A                                                  |          | N/A                               | •        | N/A                               |          | N/A                                    |          | N/A      |          |
| Uruguay            |                                                      |          |                                   |          | •                                 | •        |                                        |          |          |          |
| <b>Total</b>       | <b>3</b>                                             | <b>1</b> | <b>6</b>                          | <b>9</b> | <b>5</b>                          | <b>5</b> | <b>2</b>                               | <b>2</b> | <b>2</b> | <b>2</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.16. COVID-19 vaccination campaign financing

| Country            | Not applicable, vaccination campaign not yet started |          | By the general revenues of the central government |           | By the general revenues of sub-national governments |          | By reserves/contingency funds |          | By international donations |          | By debt  |          | By payment/ co-payment of population |          | Other    |          |
|--------------------|------------------------------------------------------|----------|---------------------------------------------------|-----------|-----------------------------------------------------|----------|-------------------------------|----------|----------------------------|----------|----------|----------|--------------------------------------|----------|----------|----------|
|                    | 2020                                                 | 2021     | 2020                                              | 2021      | 2020                                                | 2021     | 2020                          | 2021     | 2020                       | 2021     | 2020     | 2021     | 2020                                 | 2021     | 2020     | 2021     |
| Argentina          |                                                      |          | •                                                 | •         |                                                     |          |                               |          |                            |          |          |          |                                      |          |          |          |
| Brazil             |                                                      |          | •                                                 | •         |                                                     |          |                               |          |                            |          |          |          |                                      |          |          |          |
| Colombia           |                                                      |          | •                                                 | •         |                                                     |          | •                             | •        |                            | •        |          |          |                                      |          |          |          |
| Costa Rica         |                                                      |          | •                                                 | •         |                                                     |          | •                             | •        |                            |          |          |          |                                      |          |          |          |
| Dominican Republic |                                                      |          | •                                                 | •         |                                                     |          |                               |          |                            | •        |          |          |                                      |          |          |          |
| El Salvador        | •                                                    |          |                                                   | •         |                                                     |          |                               |          |                            | •        | •        |          |                                      |          |          |          |
| Guatemala          |                                                      |          |                                                   | •         |                                                     |          |                               | •        |                            |          | •        |          |                                      |          |          |          |
| Haiti              | N/A                                                  |          | N/A                                               |           | N/A                                                 | •        | N/A                           |          | N/A                        |          | N/A      |          | N/A                                  |          | N/A      |          |
| Honduras           | •                                                    |          |                                                   | •         |                                                     |          |                               |          |                            | •        |          |          |                                      |          |          | •        |
| Jamaica            |                                                      |          | •                                                 | •         |                                                     |          |                               |          | •                          | •        |          |          |                                      |          |          |          |
| Paraguay           |                                                      |          | •                                                 | •         |                                                     |          | •                             | •        | •                          | •        | •        | •        |                                      |          |          |          |
| Peru               |                                                      |          |                                                   |           |                                                     |          | •                             | •        |                            |          | •        | •        |                                      |          |          |          |
| Uruguay            |                                                      |          |                                                   |           |                                                     |          |                               |          |                            | •        | •        | •        |                                      |          |          |          |
| <b>Total</b>       | <b>2</b>                                             | <b>0</b> | <b>7</b>                                          | <b>10</b> | <b>0</b>                                            | <b>1</b> | <b>4</b>                      | <b>5</b> | <b>2</b>                   | <b>7</b> | <b>4</b> | <b>4</b> | <b>0</b>                             | <b>0</b> | <b>0</b> | <b>1</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.17. Organisation responsible for the COVID-19 vaccination programme**

| Country            | Organisation                                                                                                                                                                                                                                                                                                                              |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Argentina          | Ministry of Health and provincial ministers                                                                                                                                                                                                                                                                                               |
| Brazil             | Subnational governments                                                                                                                                                                                                                                                                                                                   |
| Colombia           | Ministry of Health and Social protection                                                                                                                                                                                                                                                                                                  |
| Costa Rica         | The Costa Rican Social Security Fund                                                                                                                                                                                                                                                                                                      |
| Dominican Republic | Ministry of Health and National Service of Health                                                                                                                                                                                                                                                                                         |
| El Salvador        | Ministry of Health                                                                                                                                                                                                                                                                                                                        |
| Guatemala          | N/A                                                                                                                                                                                                                                                                                                                                       |
| Haiti              | OPS/WHO                                                                                                                                                                                                                                                                                                                                   |
| Honduras           | As Rector of Health, the Secretariat in the Health Offices is responsible for the organisation of the campaigns, through the Expanded Program of Immunization (PAI), it is attached to the National Biological Centre and co-ordinated with the Health Regions of each Department and is in turn with the health units of each community. |
| Jamaica            | Ministry of Health and Wellness                                                                                                                                                                                                                                                                                                           |
| Paraguay           | Ministry of Health and Social Welfare                                                                                                                                                                                                                                                                                                     |
| Peru               | Ministry of Health                                                                                                                                                                                                                                                                                                                        |
| Uruguay            | Ministry of Public Health and Presidency of the Republic                                                                                                                                                                                                                                                                                  |

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.18. Challenges encountered for implementing health responses to COVID-19

| Country            | There were no challenges in the implementation of the health response to COVID-19 |          | Estimating health resource needs for the COVID-19 response |          | Estimating the available revenues for health (general taxes, social security contributions, health taxes) |          | Anticipating the amounts of external support for coming years |          | Finding the financial resources to fund/ finance the COVID-19 response |          | Implementing a co-ordinated response to COVID-19 across government |          | Implementing a co-ordinated response to COVID-19 across levels of government (central government and sub-national) |          | Maintaining health care services for non-COVID-19 patients |          | Having access to medical supplies, personal protective equipment, and equipment for testing or treatment on time and in the quantities needed |          | Increasing the capacity of treatment and testing facilities |          | Availability of health workforce |          | Adapting accountability/ reporting requirements to COVID-19 |          | Other    |          |
|--------------------|-----------------------------------------------------------------------------------|----------|------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------|----------|------------------------------------------------------------------------|----------|--------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------|----------|----------------------------------|----------|-------------------------------------------------------------|----------|----------|----------|
|                    | 2020                                                                              | 2021     | 2020                                                       | 2021     | 2020                                                                                                      | 2021     | 2020                                                          | 2021     | 2020                                                                   | 2021     | 2020                                                               | 2021     | 2020                                                                                                               | 2021     | 2020                                                       | 2021     | 2020                                                                                                                                          | 2021     | 2020                                                        | 2021     | 2020                             | 2021     | 2020                                                        | 2021     | 2020     | 2021     |
| Argentina          |                                                                                   |          | •                                                          | •        |                                                                                                           |          |                                                               |          |                                                                        |          | •                                                                  | •        |                                                                                                                    |          |                                                            |          |                                                                                                                                               |          |                                                             |          |                                  |          |                                                             |          |          |          |
| Brazil             |                                                                                   |          |                                                            |          |                                                                                                           |          |                                                               |          |                                                                        |          |                                                                    |          |                                                                                                                    |          |                                                            |          | •                                                                                                                                             | •        | •                                                           |          | •                                | •        |                                                             |          |          | •        |
| Colombia           |                                                                                   |          | •                                                          | •        |                                                                                                           |          |                                                               |          | •                                                                      | •        | •                                                                  | •        | •                                                                                                                  | •        | •                                                          | •        | •                                                                                                                                             | •        | •                                                           | •        | •                                | •        | •                                                           |          |          |          |
| Costa Rica         |                                                                                   |          |                                                            |          |                                                                                                           |          |                                                               |          | •                                                                      |          |                                                                    |          |                                                                                                                    |          | •                                                          | •        | •                                                                                                                                             | •        | •                                                           | •        | •                                | •        | •                                                           | •        | •        | •        |
| Dominican Republic |                                                                                   |          |                                                            | •        |                                                                                                           |          |                                                               |          | •                                                                      | •        |                                                                    |          |                                                                                                                    |          |                                                            |          | •                                                                                                                                             | •        | •                                                           |          |                                  |          |                                                             |          |          |          |
| El Salvador        |                                                                                   |          | •                                                          |          |                                                                                                           |          |                                                               |          | •                                                                      | •        |                                                                    |          | •                                                                                                                  |          |                                                            |          | •                                                                                                                                             |          | •                                                           | •        | •                                | •        |                                                             |          |          |          |
| Guatemala          | N/A                                                                               | N/A      | N/A                                                        | N/A      | N/A                                                                                                       | N/A      | N/A                                                           | N/A      | N/A                                                                    | N/A      | N/A                                                                | N/A      | N/A                                                                                                                | N/A      | N/A                                                        | N/A      | N/A                                                                                                                                           | N/A      | N/A                                                         | N/A      | N/A                              | N/A      | N/A                                                         | N/A      | N/A      | N/A      |
| Haiti              |                                                                                   |          | •                                                          | •        |                                                                                                           |          | •                                                             |          | •                                                                      | •        | •                                                                  | •        |                                                                                                                    |          | •                                                          | •        | •                                                                                                                                             | •        |                                                             |          | •                                | •        | •                                                           | •        |          |          |
| Honduras           |                                                                                   |          | •                                                          | •        |                                                                                                           | •        |                                                               |          | •                                                                      |          | •                                                                  |          |                                                                                                                    |          |                                                            |          | •                                                                                                                                             |          |                                                             |          |                                  |          |                                                             |          |          |          |
| Jamaica            |                                                                                   |          |                                                            |          |                                                                                                           |          |                                                               |          |                                                                        |          |                                                                    |          |                                                                                                                    |          | •                                                          | •        | •                                                                                                                                             | •        | •                                                           |          |                                  | •        |                                                             |          |          |          |
| Paraguay           |                                                                                   |          |                                                            |          |                                                                                                           |          |                                                               |          |                                                                        |          | •                                                                  | •        |                                                                                                                    |          |                                                            |          | •                                                                                                                                             | •        | •                                                           | •        |                                  |          |                                                             |          |          |          |
| Peru               |                                                                                   |          | •                                                          |          |                                                                                                           |          |                                                               |          |                                                                        |          | •                                                                  | •        | •                                                                                                                  |          |                                                            |          |                                                                                                                                               | •        |                                                             |          |                                  | •        |                                                             |          |          |          |
| Uruguay            |                                                                                   |          | •                                                          |          |                                                                                                           |          |                                                               |          |                                                                        |          |                                                                    |          |                                                                                                                    |          | •                                                          | •        |                                                                                                                                               |          | •                                                           | •        |                                  |          |                                                             |          |          |          |
| <b>Total</b>       | <b>0</b>                                                                          | <b>0</b> | <b>7</b>                                                   | <b>5</b> | <b>0</b>                                                                                                  | <b>1</b> | <b>1</b>                                                      | <b>0</b> | <b>4</b>                                                               | <b>6</b> | <b>6</b>                                                           | <b>5</b> | <b>3</b>                                                                                                           | <b>1</b> | <b>5</b>                                                   | <b>5</b> | <b>9</b>                                                                                                                                      | <b>8</b> | <b>8</b>                                                    | <b>5</b> | <b>5</b>                         | <b>7</b> | <b>2</b>                                                    | <b>3</b> | <b>1</b> | <b>2</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

Annex Table 1.B.19. Challenges faced/are facing when implementing the COVID-19 vaccination campaign

| Country            | Procuring vaccines<br>(availability, delays,<br>etc.) |           | Financing the<br>purchasing of<br>vaccines |          | Organising the<br>vaccination roll<br>outs |          | Co-ordinating with sub-<br>national governments on<br>vaccination campaign |          | Co-ordinating with other<br>stakeholders such as health<br>providers or health insurance<br>funds |          | Resistance from<br>population to get<br>vaccinated |          | Other    |          |
|--------------------|-------------------------------------------------------|-----------|--------------------------------------------|----------|--------------------------------------------|----------|----------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------|----------|----------------------------------------------------|----------|----------|----------|
|                    | 2020                                                  | 2021      | 2020                                       | 2021     | 2020                                       | 2021     | 2020                                                                       | 2021     | 2020                                                                                              | 2021     | 2020                                               | 2021     | 2020     | 2021     |
| Argentina          |                                                       |           |                                            |          |                                            |          | •                                                                          | •        |                                                                                                   |          |                                                    |          |          |          |
| Brazil             | •                                                     | •         |                                            |          |                                            |          |                                                                            |          |                                                                                                   |          |                                                    |          |          |          |
| Colombia           |                                                       | •         | •                                          | •        | •                                          | •        | •                                                                          | •        | •                                                                                                 | •        |                                                    | •        |          |          |
| Costa Rica         |                                                       | •         |                                            | •        | •                                          | •        |                                                                            |          | •                                                                                                 | •        | •                                                  | •        |          |          |
| Dominican Republic | •                                                     | •         | •                                          | •        |                                            |          |                                                                            |          |                                                                                                   |          |                                                    | •        |          |          |
| El Salvador        | N/A                                                   | •         | N/A                                        | •        | N/A                                        | •        | N/A                                                                        |          | N/A                                                                                               |          | N/A                                                |          | N/A      |          |
| Guatemala          | N/A                                                   | N/A       | N/A                                        | N/A      | N/A                                        | N/A      | N/A                                                                        | N/A      | N/A                                                                                               | N/A      | N/A                                                | N/A      | N/A      | N/A      |
| Haiti              | •                                                     | •         | •                                          | •        |                                            |          | •                                                                          | •        | •                                                                                                 | •        | •                                                  | •        |          |          |
| Honduras           | N/A                                                   | •         | N/A                                        |          | N/A                                        | •        | N/A                                                                        |          | N/A                                                                                               |          | N/A                                                | •        | N/A      |          |
| Jamaica            | N/A                                                   | •         | N/A                                        |          | N/A                                        |          | N/A                                                                        |          | N/A                                                                                               |          | N/A                                                | •        | N/A      |          |
| Paraguay           | •                                                     | •         | •                                          | •        |                                            |          |                                                                            |          |                                                                                                   |          | •                                                  | •        |          |          |
| Peru               | •                                                     | •         |                                            |          |                                            | •        |                                                                            | •        |                                                                                                   |          |                                                    |          |          |          |
| Uruguay            | •                                                     | •         |                                            |          |                                            | •        |                                                                            |          |                                                                                                   |          |                                                    |          |          |          |
| <b>Total</b>       | <b>6</b>                                              | <b>11</b> | <b>4</b>                                   | <b>6</b> | <b>2</b>                                   | <b>6</b> | <b>3</b>                                                                   | <b>4</b> | <b>3</b>                                                                                          | <b>3</b> | <b>3</b>                                           | <b>7</b> | <b>0</b> | <b>0</b> |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.20. Size of the increase in current health expenditure in 2020 compared to what was budgeted in 2019 for 2020**

| Country            | Increase in current health expenditure in 2020 (%) |
|--------------------|----------------------------------------------------|
| Argentina          | 60.0                                               |
| Brazil             | 25.3                                               |
| Colombia           | 10.0                                               |
| Costa Rica         | 5.3                                                |
| Dominican Republic | 23.3                                               |
| El Salvador        | 10.0                                               |
| Guatemala          | 9.9                                                |
| Haiti              | N/A                                                |
| Honduras           | 8.8                                                |
| Jamaica            | 9.5                                                |
| Paraguay           | 40.0                                               |
| Peru               | 25.5                                               |
| Uruguay            | N/A                                                |

Note: "N/A" means information not available at the date of survey (June 2021)

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.21. Total amount spent by the central government for the health sector response to COVID-19**

| Country            | Amount spent (USD PPP billion) |      |
|--------------------|--------------------------------|------|
|                    | 2020                           | 2021 |
| Argentina          | 1.4                            | 2.2  |
| Brazil             | 16.2                           | 14.6 |
| Colombia           |                                | 5.2  |
| Costa Rica         |                                |      |
| Dominican Republic | 0.4                            | 0.7  |
| El Salvador        |                                |      |
| Guatemala          | 0.3                            | 0.6  |
| Haiti              |                                |      |
| Honduras           | 0.5                            | 0.4  |
| Jamaica            | 0.1                            | 0.1  |
| Paraguay           | 1.1                            | 0.7  |
| Peru               | 1.7                            | 1.2  |
| Uruguay            | 0.7                            | 0.6  |

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.22. Total amount spent by the central government for other sectors different to health in response to COVID-19**

| Country            | Amount spent (USD PPP billion) |      |
|--------------------|--------------------------------|------|
|                    | 2020                           | 2021 |
| Argentina          | 23.6                           | 2.7  |
| Brazil             | 191.4                          | 22.6 |
| Colombia           | 11.6                           | 6.2  |
| Costa Rica         | N/A                            | N/A  |
| Dominican Republic | 5.6                            | N/A  |
| El Salvador        | N/A                            | N/A  |
| Guatemala          | 3.3                            | 0.6  |
| Haiti              | N/A                            | N/A  |
| Honduras           | 0.2                            | 0.3  |
| Jamaica            | N/A                            | N/A  |
| Paraguay           | 2.9                            | 0.3  |
| Peru               | 8.9                            | 3.0  |
| Uruguay            | 1.2                            | 0.8  |

Note: "N/A" means information not available at the date of survey (June 2021). For 2021, Dominican Republic informed the executed expenditure from 1 January to 18 June, not the value schedule for 2021.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.23. Did the central government take non-financial support measures for health providers and/or insurance funds?**

| Country            | 2020     |          |
|--------------------|----------|----------|
|                    | Yes      | No       |
| Argentina          | •        |          |
| Brazil             | N/A      | N/A      |
| Colombia           | N/A      | N/A      |
| Costa Rica         | N/A      | N/A      |
| Dominican Republic |          | •        |
| El Salvador        |          | •        |
| Guatemala          | N/A      | N/A      |
| Haiti              | •        |          |
| Honduras           | •        |          |
| Jamaica            | •        |          |
| Paraguay           | •        |          |
| Peru               | N/A      | N/A      |
| Uruguay            |          | •        |
| <b>Total</b>       | <b>5</b> | <b>3</b> |

Note: Non-financial support measures include for example: guarantees, recentralisation of health responses to COVID-19, etc.; “N/A” means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.24. Total current expenditures and amount scheduled by sub-national governments from their own resources for the health sector response to COVID-19**

| Country            | 2020                      |                 | 2021                      |                 | 2022                      |                 |
|--------------------|---------------------------|-----------------|---------------------------|-----------------|---------------------------|-----------------|
|                    | Information not available | USD PPP billion | Information not available | USD PPP billion | Information not available | USD PPP billion |
| Argentina          | •                         |                 | •                         |                 | •                         |                 |
| Brazil             | •                         |                 | •                         |                 | •                         |                 |
| Colombia           | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Costa Rica         | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Dominican Republic | •                         |                 | •                         |                 | •                         |                 |
| El Salvador        | •                         |                 | •                         |                 | •                         |                 |
| Guatemala          | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Haiti              | N/A                       | N/A             | •                         |                 | •                         |                 |
| Honduras           | •                         |                 | •                         |                 | •                         |                 |
| Jamaica            | •                         |                 | •                         |                 | •                         |                 |
| Paraguay           | •                         |                 | •                         |                 | •                         |                 |
| Peru               |                           | 1 065           |                           | 864             | •                         |                 |
| Uruguay            | •                         |                 | •                         |                 | •                         |                 |
| <b>Total</b>       | <b>8</b>                  | <b>1</b>        | <b>9</b>                  | <b>1</b>        | <b>10</b>                 | <b>1</b>        |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

**Annex Table 1.B.25. Total current expenditures and amounts scheduled to spend by social health insurance agencies for the health sector response to COVID-19**

| Country            | 2020                      |                 | 2021                      |                 | 2022                      |                 |
|--------------------|---------------------------|-----------------|---------------------------|-----------------|---------------------------|-----------------|
|                    | Information not available | USD PPP million | Information not available | USD PPP million | Information not available | USD PPP billion |
| Argentina          | •                         |                 | •                         |                 | •                         |                 |
| Brazil             | •                         |                 | •                         |                 | •                         |                 |
| Colombia           | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Costa Rica         | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Dominican Republic |                           | 1.102           |                           | 256             | •                         |                 |
| El Salvador        | •                         |                 | •                         |                 | •                         |                 |
| Guatemala          | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Haiti              | •                         |                 | •                         |                 | •                         |                 |
| Honduras           | •                         |                 | •                         |                 | •                         |                 |
| Jamaica            | •                         |                 | •                         |                 | •                         |                 |
| Paraguay           |                           | 20              |                           | 65              | •                         |                 |
| Peru               | N/A                       | N/A             | N/A                       | N/A             | N/A                       | N/A             |
| Uruguay            | •                         |                 | •                         |                 | •                         |                 |
| <b>Total</b>       | <b>7</b>                  | <b>2</b>        | <b>7</b>                  | <b>2</b>        | <b>9</b>                  | <b>0</b>        |

Note: "N/A" means information not available at the date of survey (June 2021), • means country has selected this answer.

Source: OECD survey on Health financing and governance responses to COVID-19 in Latin American and the Caribbean countries, 2021.

# How can independent fiscal institutions make the most of assessing past economic forecasts?

Scott Cameron, Policy Analyst, OECD

Forecasts of economic variables like GDP, inflation and unemployment are the starting points for budget planning. Most OECD countries have designated an independent fiscal institutions to scrutinise or endorse the economic forecasts prepared by finance ministries. Although external assessments of past forecast errors can help uncover systematic bias or underperformance in official forecasts, there are several conceptual and practical problems with doing so that limit their usefulness. This paper describes the limitations of *ex post* forecast assessments and offers some suggestions on how independent fiscal institutions can add the most value in providing them.

**JEL classification:** E37, H60, H61, H68

**Keywords:** surveillance of public finances, independent fiscal institutions, fiscal council, fiscal discipline, oversight of fiscal policy, macroeconomic forecasting, budget forecasting, fiscal forecasting

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## Introduction

If budgets were houses, economic forecasts would be their concrete footings—the foundation upon which all else rests. Just as concrete footings benefit from being inspected periodically by a structural engineer, a budget's economic forecasts may benefit from being evaluated by an independent expert.

Most OECD countries have designated an independent fiscal institution (IFI) as this expert, mandating it with the responsibility of assessing the reasonableness of official economic forecasts both as budgets are being proposed (*ex ante* assessments) and after they have been implemented (*ex post* assessments). For IFIs doing *ex post* assessments, roughly half publish detailed reports on the bias and persistency of past forecast errors and their causes (OECD, 2021<sup>[1]</sup>).

The motivation for establishing many IFIs was specifically to fulfil this role, responding to concerns from budget stakeholders over the objectivity of official economic forecasts—specifically, that optimistic or pessimistic economic outlooks were being used to portray a rosier or gloomier picture of the public finances than merited (von Trapp, Lienert and Wehner, 2016<sup>[2]</sup>).

Of course, accurate forecasts are better than inaccurate. An optimistic outlook for GDP growth would overestimate the tax base and underestimate social welfare benefits. This could result in a scramble to finance unexpected borrowing and ultimately an erosion of public confidence in the government's financial management. The pressure of an IFI's external scrutiny could reduce the likelihood of this coming to pass.

However, an IFI's resources are finite. Designers of fiscal monitoring frameworks and an IFI's senior management must choose which activities to prioritise in contributing to the public debate. Debate will once again be heating up as countries enter a post-pandemic fiscal tightening cycle and reassess their rule design. Priority setters should ask themselves: Is an emphasis on *ex post* economic forecast assessments in monitoring frameworks justified?

I argue that any significant commitment to *ex post* forecast error analysis is likely to move quickly past the point of diminishing returns. This is for three reasons:

1. Economic forecasts are to plan for the future, not predict it.
2. Economic forecasts are one area of judgment among many (and the most transparent).
3. Economic forecasts cannot be assessed accurately or fairly.

## Economic forecasts are to plan for the future, not predict it

During the Second World War, economist Kenneth Arrow observed that the U.S. Air Force's long-term weather forecasts performed no better than a random guess. The response from senior officials was "The Commanding General is well aware that the forecasts are no good. However, he needs them for planning purposes (Arrow, 1974<sup>[3]</sup>)."

A poll of deputy ministers would reveal a similar sentiment about the economic forecasts behind budget plans.

Budget plans tell a story. A story about how the economy affects the public finances and how the public finances affect the economy. This story helps the government transparently explain to the public how its policy agenda may materialise over the coming years. A good budget lets stakeholders think through the sensitivity of the government's plan to economic developments and the relative merits of its choices while preparing for an uncertain future.

Budget planners know to expect the unexpected. They know that good times will not last forever—the real economy will not grow at 2% for the next five years. They know that the central bank will need to act to achieve its inflation target—interest rates will diverge from their natural level, if such a concept exists. They know that the political climate will change—there will be new governments with different policy priorities

and different financial management philosophies. Budget planners rely on assumptions that they know to be ‘no good’ so that a conversation about resource priorities can move forward.

All models of the economy that produce these assumptions are themselves ‘no good’ in different ways. When analysts in finance ministries set out to create a medium-term fiscal plan, they have two general classes of models to choose from: (1) forecasting models, and (2) policy models (Table 6).<sup>1</sup>

**Table 6. Forecasting models versus policy models**

| Forecasting models                                                                                                                                                                                                                                                                                                                                                                                                              | Policy models                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Only include an explanatory variable if it reduces forecast error.</li> <li>Do not care about the direction of a relationship (no assumptions for causality or restrictions on coefficients).</li> <li>Make no assumptions about the future values of variables in the system (are unconditional on exogenous variables).</li> <li>Black boxes (do not need to be explained).</li> </ul> | <ul style="list-style-type: none"> <li>Capture key relationships to assess different scenarios, imposing assumptions based in theory.</li> <li>Are purely deterministic—no room for randomness is built into them.</li> <li>Make assumptions about future values of variables (conditional on outcomes of exogenous variables).</li> <li>Open books (must tell a sensible story).</li> </ul> |

Forecasting models are designed to predict the future accurately (that is, they are specified to minimise forecast errors or a *loss function*).<sup>2</sup> They are not constrained by economic theory. They are black boxes that only include key relationships between variables if doing so improves the forecast. For example, sometimes the best forecast for this year’s corporate profits (a volatile component of income-based GDP) is simply the ratio of corporate profits to national income that prevailed in the previous year.

Policy models (also known as structural models or explanatory models) are designed to establish causal relationships between variables and simulate scenarios under alternative assumptions. They include all the relationships between variables that help policymakers answer questions about the impact of policies, as well as variables that help isolate those relationships more precisely. If a finance minister were to ask how higher interest rates would affect corporate profits, ministry officials would need to include interest rates in their model, along with other variables that potentially influence profits.

There can be overlap between the two classes of models. For example, analysts may include statistical time series dynamics in policy models, or combine the two classes at different time horizons (for example, statistical forecasting models for the next four quarters and theory-based policy models to anchor the medium-term outlook). However, in general, the goal of forecasting models—minimising forecast errors—and the goal of policy models—estimating structural parameters—conflict. That is, forecasting models are not very good for assessing policy and policy models are not very good for forecasting. Even if a model can capture the relationship between interest rates and corporate profits with 100% certainty, it cannot predict future corporate profits if interest rates themselves cannot be predicted.

Budget watchers would be excused for thinking that forecasting models are used to produce budget forecasts. In fact, that is the exception, and a rare one.<sup>3</sup> The most common models used to draft budgets are policy models because only policy models tell a story. Without a convincing story, budgets risk being rejected by the legislature and the public.

## Economic forecasts are one area of judgment among many (and the most transparent)

The budget planning process begins with a forecast of the economy; however, that is only the first step of a process with many moving parts and many opportunities for analysts to apply judgment. Here are five.

1. **Budget planners apply judgment in converting the economic forecast into tax bases and spending drivers.** The economic forecasts that are typically published in budgets and assessed by IFIs are (1) real GDP growth, (2) GDP inflation, (3) interest rates, (4) exchange rates, and (5) unemployment rates.<sup>4</sup> Most forecasts of taxes and government spending do not depend directly on these variables. Instead, forecasters use granular data and a bottom-up approach to approximate the tax bases specified in the tax code and the spending drivers defined in social benefits legislation or that guide discretionary spending decisions. In some cases, this approach uses a more detailed subcomponent of GDP that is unpublished—for example, personal consumption expenditure for estimating value-added tax receipts or a subset of only the recently unemployed labour force for estimating unemployment insurance payments. In other cases, separate models are used to estimate a more appropriate tax base or spending driver according to its relationship with a macroeconomic aggregate—for example, the price of gasoline at the pump (correlated with the price of oil on world markets) for forecasting receipts from road fuels duty. These models can have larger margins of error and room for judgment than the aggregate economic forecasts upon which they may or may not be based.
2. **Budget planners apply judgment in converting tax bases and spending drivers to fiscal forecasts.** Most commonly this is accomplished by applying an “elasticity” of revenue or expenditure with respect to the economic base—that is, an estimate of how revenue or spending have changed historically in response to a change in economic activity. For example, revenue from a progressive tax on personal income will grow faster than its tax base, as real income growth pushes wage earners into higher tax brackets. These elasticities are very blunt tools for forecasting, with little room for nuance related to policy or administrative developments. A small difference in judgment when estimating an elasticity, or the choice of papers to include in a meta-study of the estimates of other researchers, can lead to dramatically different fiscal forecasts.
3. **Budget planners apply judgment in converting forecasts from national accounting concepts to financial accounting concepts.** Macroeconomic forecasts are prepared on a national accounts basis—the internationally standardised accounting rules that statisticians use to estimate the amount of an economy’s current production in a given year. National budgets and year-end financial statements are prepared using a range of different financial accounting techniques that are rarely aligned to national accounting concepts. For example, certain tax rebates may be classified as transfers from governments to households in the national accounts but be presented as deductions from revenue in the government’s budget and financial statements. These differences in accounting treatment can be large, volatile and biased, with no systematic reconciliation. A budget planner may ultimately need to exercise considerable judgment in bridging the two, weakening the direct link from macroeconomic forecasts to fiscal forecasts.
4. **Budget planners apply judgment in deciding how much weight to place on recent data.** Forecasts are born as the raw output of a model but are adjusted based on the opinions of budget planners. These adjustments are particularly important when overriding short-run fiscal forecasts with intra-annual data on financial outcomes, which requires making assumptions about the importance of recent surprises going forward (for example, the forecast error of the most recent result may be added to each future period using either an intercept shift or a slope change). Although empirical techniques may assist this process, analysts ultimately use “ocular regression” (eyeball it). These judgment calls may be the most significant factor in influencing fiscal forecasts—more so than any change in macroeconomic assumptions.

5. **Budget planners apply judgment in deciding how much prudence to build into forecasts.**

Fiscal forecasters tend to be risk averse (that is, their loss function is asymmetric—they would rather be surprised by more money left at the end of the year than less). No matter the macroeconomic starting point or ultimate political pressure to influence the outlook, each step of the preparation of fiscal forecasts offers opportunities for analysts to choose assumptions with an eye for risk management. For example, if there is a wide confidence interval for forecasts of unemployment insurance contributions and benefits, planners may choose the lower end of the range for contributions and the upper end for benefits. An optimistic economic forecast may have little correlation with whether a fiscal forecast is optimistic.

A common theme to each of these five areas of judgment is that they are rarely revealed to the public. Macroeconomic forecasts, in contrast, are nearly always published transparently. This may make them the area *least* likely to be adjusted subjectively to achieve fiscal planning goals. That said, evaluations of economic forecasts might nevertheless assist the scrutiny of other aspects of judgment in the budget, provided they can be done accurately and fairly.

## Economic forecasts cannot be assessed accurately or fairly

If IFIs are to carry out their mandates to assess whether macroeconomic forecasts were reasonable *ex post*, they should be confident that they could do so accurately and fairly. But there are a number of hurdles that limit an IFI's ability to assess past errors, regardless of the technical prowess and objectivity of its analysts. Here are five of the challenges that IFIs face in assessing macroeconomic forecasts.

1. **The policy environment is constantly changing.** Macroeconomic forecasts made several years in the past cannot predict the policies of the present. Policy regimes change quickly. Forecasters should not be held accountable if they did not incorporate a trillion dollar stimulus bill that was announced six months after publishing their forecast. Indeed, if budget planners predicted that an emerging recession would be severe and it turned out to be mild, it may mean that they fulfilled their role perfectly: they identified a crisis and the government took action to mitigate it.
2. **Macroeconomic risks are asymmetrical.** In normal times, when the economy is growing at its potential, it will never surprise with 10% annual real growth. However, large, sudden contractions are common. As a baseline assumption, budget planners cannot assume that there will be a specific recession in outer years of the forecast. They can only plan prudently for that eventuality, such as by using a mean forecast (the expected value of the future economy that adjusts for the probability of future recessions each year) rather than a modal forecast (that assumes a typical year will not have a recession). The consequence of asymmetrical risk is that an unbiased forecast will appear optimistic when viewed over certain horizons and pessimistic over others.
3. **Macroeconomic outcomes are revised frequently and their true outcomes are never known.** Macroeconomic models rely on historical outcomes as input variables. However, these outcomes are revised frequently. There are typically three rounds of revisions to national accounts data and the 'final' revision may not be published for up to three years following the period in question. Beyond scheduled revisions, the methodology underlying national accounting is highly contentious and changes regularly (for example, differences between the international System of National Accounts (SNA) 93 and SNA 2008 led to significant restatements of macroeconomic variables as far back to the beginning of their time series as was possible. Combined with the daily rate at which new economic series are released, it is virtually impossible for an external evaluator to know which vintage of data that finance ministry officials had available to them at the time of the forecast. Further, *ex post* assessments assume the existence of realised outcomes of 'actual' macroeconomic data. But most historical macroeconomic data are themselves estimated, often using low-frequency surveys with large measurement error, or they are theoretical constructs with no observable 'true' value, such as the concept of potential GDP

that is central to the European Union fiscal surveillance framework (OECD, 2018<sup>[4]</sup>). Correspondingly, the true errors in planning assumptions are never known.

4. **IFIs can only assess a model's published results, not its underlying estimation procedure.** The fair way to evaluate a forecast is to evaluate whether the model that produced it is the best one among the options available to the modeller. To do so, a reviewer should use out-of-sample testing, where a recent period of known history is removed from a model's inputs and its estimation procedure is applied to recalculate its parameters. The reviewer should then compare predictions under that model with the removed sample of known outcomes to determine the model's forecasting errors, in turn comparing those errors to the errors produced by other model candidates. Unfortunately, most IFIs do not have access to the models used by finance ministries to run out-of-sample tests. Large forecast errors in published results are not evidence that finance ministries did not use the best possible model specification and estimation procedure.
5. **Macroeconomic forecasts are not entirely a budget planner's own.** Budget planners rely on a range of inputs that includes exogenous forecasts from the private sector or other providers. Although external forecasts may be the consensus view at the time, they may also have a poor prediction record. For example, budget planners often rely on the aggregate bond yield curve and commodity futures prices as an impartial market outlook of interest rates and oil prices. However, studies generally conclude that these have suboptimal prediction properties (Roache and Reichsfeld, 2011<sup>[5]</sup>). To assess forecasts based on market information is to hold a government accountable for the performance of others and to penalise budget planners for introducing independently sourced assumptions.

## How IFIs can make the most of assessing past economic forecasts

If the economic forecasts in budgets are not meant for prediction, just one area of judgment and problematic to assess, is there any merit to evaluating their accuracy after the fact?

Forecasters certainly benefit from monitoring their own *ex post* performance. Most IFIs that produce in-house forecasts conduct detailed evaluations of their own errors (OECD, 2021<sup>[11]</sup>). These IFIs unanimously report that a rigorous framework for thinking through their mistakes helps them identify improvements for next time.

Finance ministry officials report similar benefits from external performance monitoring. They say that an IFI's opinion helps avoid personal blind spots and the perils of groupthink (OECD, 2021<sup>[6]</sup>). An IFI's opinion also reinforces the legitimacy of forecasts in the eyes of the finance ministry's negotiation partners in line ministries and among other stakeholders (OECD, 2021<sup>[7]</sup>).

Clearly some *ex post* evaluation is beneficial. How can institutional designers and IFI managers ensure that these forecast assessments add value and that they are suitably weighted among the IFI's overall responsibilities? The following suggestions may help.

### ***Emphasise transparency over accuracy***

IFIs that assess the historical accuracy of official economic forecasts should be careful to communicate their findings in a way that does not over-emphasise the consequences of mistaken economic assumptions, prompting headlines of government deceit when there may be explanations that are more pedestrian. By acknowledging the modelling constraints faced by budget planners and the challenges in accurately assessing economic forecast errors, IFIs can encourage budget planners to discuss more openly the judgment they have applied to raw model results and how that judgment may have been misguided.

IFIs should also encourage budget planners to adopt pre-specified practices for incorporating prudence. For example, any risk adjustment in planning assumptions should be shown as a separate line item, so that budget watchers can debate its appropriateness in magnitude and direction. This is the practice in Latvia, where the *Fiscal Discipline Law* requires governments to adjust budgeted expenditures by an explicit prudence margin that is based on an empirical assessment of the magnitude of risks to the budget outlook (OECD, 2021<sup>[7]</sup>). The government's risk assessment is published in a report that must be accompanied by an opinion from Latvia's IFI on the comprehensiveness of its contents.

IFIs can also encourage budget planners to be transparent by being fully transparent in their own work. For example, if IFIs publish their own input files, code, raw results and judgment decisions—blemishes and all—they can show that it is okay to apply judgment and okay to be messy if you show your work. A forecaster's credibility should only be called into question if they claim that judgment and mess are not part of the process.

### ***Provide the pure forecast benchmarks that governments cannot***

Governments need to use policy models to draft budget plans that are intuitive to the legislature and the electorate. IFIs, on the other hand, are analytically independent and free to make forecasts using unconstrained forecasting approaches. That is, they can set aside storytelling and choose models (or an average of different models) that are specified solely to maximise predictive power, providing insightful benchmarks against which stakeholders can compare official planning assumptions. IFIs can say, "While the government is telling a sensible story that the recession last year will decrease corporate profits this year, when we look back over history with a statistical time-series approach we see that policy models are missing something. We do not know what is missing—perhaps it is a flaw in the national accounts survey methodology or a misspecification of how losses are carried forward—but when we use a theory-agnostic approach, we find that the government may have more money than it thinks."

Statistical benchmarks may also have the benefit of requiring fewer staff resources with no trade-off in performance. A simple autoregressive or exponential smoothing model that predicts a tax base only by its recent history can be done with the click of a software button. There is convincing evidence that the old adage to "keep it simple" produces more accurate economic forecasts (Green and Armstrong, 2015<sup>[8]</sup>).

### ***Assess policy models for policy performance***

Because the models used for budget planning are policy models, they should be evaluated on their policy performance. This is easier said than done. Ideally, governments would make their models available to IFIs. However, a more plausible middle ground would be for governments to publish tables of the sensitivity of economic and fiscal forecasts to different planning assumptions. For example, if a sensitivity table suggests that a one-percentage-point change in the central bank's policy rate has a \$12 billion impact on borrowing costs two years in the future, IFIs can test the reasonableness of that policy model using outcomes of interest rates and borrowing costs as they materialise.

### ***Help budget planners with fiscal elasticities***

IFIs can also leverage their access to information and their relationships with officials to retrieve and assess the elasticities that budget planners use to produce official fiscal forecasts. With elasticities in hand, they could invest time in constructively improving them to support budget planners. For example, the Irish Fiscal Advisory Council created a unique dataset of policy-adjusted fiscal time series that allowed both themselves and the government to more accurately estimate revenue elasticities (OECD, 2021<sup>[9]</sup>). IFIs could also help finance ministries by conducting meta-studies of academic research on fiscal elasticities and publishing them proactively for government economists to use.

### ***Concentrate on past forecast errors that have current policy consequences***

Many of the macroeconomic forecasting mistakes of the past will be relatively inconsequential for how the public finances have been managed in practice. However, governments may sometimes take specific action based on a mistaken premise supplied by their macroeconomic advisors. For example, if an economic forecast anticipates a dramatic and sustained drop in the price of oil, the government may create a relief programme to support businesses and employees in that sector. If the fall in price does not materialise, an IFI can add value by showing the magnitude of the mistaken premise and communicating the need to review current policy in light of it.

### ***Assess fiscal forecast errors directly***

We may never know a country's true macroeconomic outcomes. However, we do know a government's true fiscal outcomes down to the decimal. Further, in preparing cost estimates or assessing the impact of fiscal initiatives, if the same economic forecasting error is made in both the pre-policy baseline and post-policy scenario, the resulting fiscal estimates are relatively unaffected. If stakeholders are concerned about budget planning bias or risk, then it is sensible for IFIs to devote the most attention to assessing the past performance of fiscal forecasts directly.

When assessing fiscal forecasts, IFIs should scrutinise them at the most disaggregated budget line available. Too often budget watchers focus attention on the government's performance in forecasting the budget balance. However, the budget balance is the relatively small difference between two large numbers. The accuracy of the forecast of the budget balance, along with most fiscal aggregates (revenues, operating expenses, social transfers, etc.), says very little about the forecasting performance of the individual revenue and expenditure models that underlie them.

## **Conclusion**

The economic forecasts that form the foundation for public budgets should be sensible. External scrutiny of past mistakes can help. IFIs are justified in devoting at least some of their work plan to evaluating *ex post* forecast performance.

That said, placing too much importance on the accuracy of economic inputs to the budget process could create incentives against good fiscal governance. Budget planners may be motivated to switch to more opaque statistical forecasting methods that result in smaller forecast errors by forgoing the narratives that help legislatures and the public hold them accountable for policy decisions. Planners may shift their prudence adjustments from economic forecasts to more hidden areas of judgment. The conceptual and practical weaknesses surrounding *ex post* forecast evaluation may inadvertently reward bad forecasts and castigate good forecasts.

The analytical weight that each IFI places on evaluating past economic forecasts will be as unique as its mandate, size and priorities. In choosing the balance, priority setters should bear in mind that anyone can assess the track record of the government's economic assumptions—they are published for the world to see. IFIs have been given special powers to access information and have been staffed with leading experts in fiscal analysis. Rather than dwelling on the past, their resources may have a greater impact looking to the future—to the policy decisions not yet taken and the money not yet spent.

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## Notes

<sup>1</sup> For a discussion on classifying macroeconomic models with which these definitions approximately align, see Blanchard (2018<sub>[11]</sub>).

<sup>2</sup> A loss function specifies the costs associated with getting an estimate wrong. For example, negative surprises may be more costly than positive surprises, and one large mistake may be relatively more expensive than an equal amount of smaller mistakes.

<sup>3</sup> Pure forecasting models are primarily found in the workflows of liquidity management teams that are responsible for ensuring that the government's cheques do not bounce. The models and forecasts of these teams typically depart from those that underlie budget plans. Their success is defined by prediction, not storytelling.

<sup>4</sup> Of these, even fewer are included in the *ex post* evaluations of IFIs. For example, Finland's IFI in the National Audit Office assesses three forecast series: (1) GDP growth, (2) unemployment rates, and (3) inflation (National Audit Office of Finland, 2018<sub>[10]</sub>).

# Using behavioural insights to inform budget policy making: Eight Israeli case studies

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This article summarises the Israeli experience with utilising behavioural insights in the work of budget officials and aims to assist budget officials in other OECD countries with integrating behavioural economics tools and evidence-based policy-making methods in their work. Behavioural economics has grown in recent years to become increasingly integrated in the work of public institutions, particularly those in the forefront of policy making. In the context of public budgeting, behavioural insights tools had initially focused on improving tax compliance. In this article we widen the scope of budget officials' perspective, and responsibility, to develop behaviourally informed policies that are primarily citizen-focused. This approach harmonises and aligns the work of ministries of finance with public policy objectives more generally, and provides actionable "know how" based on the experience of the budget department in the Israeli Ministry of Finance.

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## Effective policy is needed in response to an undesirable behaviour

Governments have mandates for managing certain patterns of behaviour of individuals and use policies and regulation to encourage people to behave in a sought-after manner. Undoubtedly, if people naturally conducted themselves in ways their governments wanted, there would be no need for regulations. The challenge, of course, is that there are many opportunities in daily lives for individuals to engage in suboptimal behaviours. This is where governments choose to intervene, whether to limit drug use, make rules about parking, force people to send their children to school, or encourage healthy eating, among many examples.

Once the behaviour we want to be limited or encouraged is clarified, the next step is determining what regulatory mechanism or policy is most likely to induce people to act in desirable ways. The question of how to select such mechanisms or policies is the main subject of this article.

When governments select a policy approach to encourage behavioural change, they *first* need to recognise that behaviour and behavioural changes are context specific. That is, the kind of mechanism that could motivate someone to stop smoking is very different from the mechanism that could impel someone to drive safely or to pay taxes on time. *Second*, governments need to recognize how complex the behaviour they are trying to change is. *Third*, it must be acknowledged how little governments, and people in general, know about the behaviour they are trying to change, or what causes that behaviour. Unfortunately, the combination of these three building blocks reveal the fundamental limitations of humanity's favourite decision-making tool: intuition. While we each may have very strong intuitions about what would or would not generate a specific needed behavioural change, a better methodology for arriving at a solution should be based on data and experiments. Applying the three building blocks mentioned above to the behavioural goal of encouraging mask wearing during COVID-19, we see how complicated it can be to encourage desirable behaviour. Take, for example, the behaviour of mask wearing in different contexts, like surgeons, or in Japan, where citizens commonly wear masks on public transportation during flu season. While the rationale is the same (protection from germs), there are differences in the motivation required to encourage people to wear masks during COVID. When a habit is yet to be formed, as occurred with COVID, in contrast to the examples of Japan and surgeons, people need a specific motivation to put on a mask, and they also need to overcome basic barriers, like remembering to put it on and to do so consistently, even when it is uncomfortable. Social norms also vary greatly between contexts, assuming different roles and having different implications for behavioural change. For example, different social norms can affect how a person can effectively communicate that they do not feel comfortable in the presence of another person who is not wearing a mask.

One regulatory option to encourage mask wearing may be to threaten people with punishment, such as fines. The problem with this approach is that when fines are not imposed immediately and uniformly, the impact of the threat diminishes, because statistically, the punishment is not universal or inevitable. If I suffered no legal or other consequences – in the context of a policy that is aimed at protecting the health of others and ourselves – perhaps what I did was not so terrible. The result is that after not putting on the mask several times with impunity, it becomes harder to change one's behaviour to comply with the regulations or conform to expectations for different conduct. Habit formation is very different from onetime games and, therefore, different behavioural rules apply to it. In recurring events that require significant habit formation, working to make a certain behaviour socially appropriate might be a better approach than punishment. Other questions arise regarding the required behavioural change: Will people become accustomed to the change at some point? If so, how long will it take? What is the appropriate response to people who question the effectiveness of masking? And what are the reasons behind the denial of COVID and the behaviours that come with it?

Understanding the underlying behavioural mechanisms is key to developing a sound theory of behavioural change; that is, a good hypothesis about how behavioural change will occur in a specific context. Developing a clear methodology for evaluating alternative courses of action, often involving very different levels of resource allocation, is particularly important for governments and their budget managers.

Behavioural economics is a field of study that seeks to understand both behaviours and the barriers to behavioural change, together with the alternative mechanisms that could help produce a desired behavioural change. In addition to the theoretical tools supplied by behavioural economics, data represents another important tool for better understanding the details of any specific behaviour. This short article will examine some examples of how Israel's Ministry of Finance (MoF) has been using behavioural insights (BI), data, behavioural economics, and experiments to encourage effective and efficient policies.

Before delving into a discussion of how precepts of behavioural economics have been implemented in Israel, it is worthwhile considering more generally the cost-benefit of generating and using data to inform government decision making. Imagine a scale with costs on one axis and the quantity of data on the other. At the bottom-left of the scale, we have zero data with zero cost. On the upper-right, we have enormous amounts of costly data – like that generated from the Randomized Controlled Trials (RCT)<sup>1</sup> conducted for new medications (with current estimates for a U.S. Food and Drug Administration (FDA) approval process estimated to amount to about USD 1 billion). In identifying the ideal balance between data generated and its costs for each policy programme examined, it is useful to evaluate the extent to which we can learn about how people might respond to changes in policy from data already collected. For example, because behaviours related to parking regulations have been widely tested in various contexts and with different solutions, it is worthwhile exhausting these resources before investing heavily in experiments and obtaining additional data. On the other hand, we know little about how to address fake news, for example, or how to protect consumers from crypto risks. In these areas, we need to invest more in learning about the desired behavioural change before formulating behavioural intervention policies.

For the purpose of this article, we will divide the methodologies of behavioural intervention into three main types: applying behavioural insights from existing literature, collecting data and analysing what might work, and running experiments. We will discuss examples from Israel for all these in the section, “Examples of applying BI to public policies.”

## **Incorporating behavioural insights in Israel's Ministry of Finance (MoF)**

The case studies detailed below describe Israel's experience with implementing behavioural economics tools in the policy process. In Israel, the implementation and administration of the tools has been led by the Ministry of Finance (MoF). While this may not always be the case in other countries, we do want to point out some of the advantages of having finance ministries take the lead.

There is no one clear arm of government where a central behavioural economics initiative should originate. That being said, ministries of finance – in this case, Israel's Ministry of Finance – have several key advantages for leading and administering such an effort: the interest of budget officials in individuals' economic decisions; the focus of budget officials on efficiency and effectiveness of outcomes versus specific outcomes; and their centralised and strategic perspective.

In principle, behavioural economics deals with how people make economic decisions. Therefore, behavioural tools can prove useful to finance ministries that are focused on improving macro-financial outcomes that are often affected by the aggregate economic choices of individuals. A renowned example in this context, already used by several governments, is utilising behavioural interventions to boost tax compliance and to improve the attitudes of both the public and tax officials. There are, however, many more possible applications, including improving public health and the efficiency of public spending by promoting preventative healthcare (Rapoport, Scartascini and Rojas Mendez, 2020<sup>[1]</sup>), encouraging

participation of underrepresented communities in public education and in the workforce, encouraging pension plan savings, reducing traffic congestion, and even urging better utilisation of public lands.

Overall, budget officers' mandates involve deciding upon the optimal allocation of resources, more than guaranteeing any particular policy outcomes. This is reflected in the process of budget officials examining how alternative funding levels can result in different outcomes in the course of spending reviews (OECD, 2011<sup>[2]</sup>). As a result, these officials are well-suited to perform neutral evaluations of programmes that are based on highly measurable, transparent and non-context specific goals. Behavioural economics tools are less concerned with political pressures and considerations that may enter into the budgeting process. They, therefore, offer neutral methodologies for evaluating the chances that policy programmes will achieve the goals for which they were designed; this as a prerequisite to budgeting them and as an assistive tool for prioritising them.

Moreover, since ministries of finance are more interested in efficiency and effectiveness than in context specific success, budget officers are inherently more willing to give weight to results indicating that a certain programme is not working. This open-mindedness makes budget officers better candidates for incorporating tools that focus on collecting data and running experiments.

Lastly, budget officers, whose viewpoints encompass government-wide strategic resource allocation priorities, can also develop cross-area tools to measure effectiveness and responsiveness to policies based on behavioural insights. Such tools can measure behavioural responses to changes in tax benefits or rates; they also have built-in mechanisms to evaluate alternative incentive plans, such as sensitivity to payment schedules or payment timing. Behavioural tools can also prove effective in conducting spending reviews in which the objective of utilising BI is not only to increase the proactive participation of line ministries in programmes using incentives, but also to boost their motivation for improving internal processes that favour longer-term, long-lasting, continuous savings over one-time savings opportunities.

An example of a specific cross-sectional tool that was developed for the Israeli MoF is an index for the burden of bureaucracy. The tool adopts citizens' perspectives and measures the level of bureaucratic burden they experience when using governmental services. The citizen-centric approach represented by the index highlights four pillars to aim for in the public services experience: clarity of the procedure in order to reduce anxiety and disorientation (i.e. the importance of avoiding the "black boxes" of bureaucracy); feasibility of completing the bureaucratic process (i.e. minimising frustrations that result from not knowing how much time and effort are required for successful completion); level of autonomy (i.e. citizens' ability to complete tasks on their own); and trust in public institutions, reflecting a deep understanding of the importance of building trust in interactions with citizens and designing systems accordingly. The index reflects the view that these are basis of citizens' overall perception of administrative burdens, and that these perceptions, as well as trust in public institutions more broadly, are built over time.<sup>2</sup>

The next section will describe the introduction of the behavioural economics initiative to the work of Israel's MoF's Budget Department, beginning in 2016. It describes each stage of the introduction of the process to government partners, as well as the specific circumstances of how the process developed in the way that it did.

## The Israeli government's experience with behavioural insights

Introducing any change to customary workflows can be challenging, particularly in the work of public officials, where existing procedures are often in place for many years and changes are also technically difficult to implement. From a budget perspective, such an effort needs to be justified economically. Equally important is that the challenge of introducing change becomes even greater if the benefits are still vague, or if it is suspected that unfamiliar analyses, research, or experimentation are required to evaluate a programme, thereby causing delays in initiating that programme. Bringing public officials onboard and

engaging them in building a new framework for evaluating programmes/policies/regulations requires careful deliberation.

We first identified a need for concrete motivation to participate in a process of integrating BI in policy development. To introduce the idea, we identified an opportunity for change that was both a central governmental challenge with clear and significant behavioural elements – namely, that of rapidly growing traffic congestion. The prospect of using behavioural tools that are expected to be more efficient and at the same time require less financing, versus heavy investment in infrastructure, ignited high interest and engagement from stakeholders.

While it is important to create engagement at the beginning of the process, it is no less critical to maintain it throughout the daily work process to ensure successful implementation of a policy change. Policy making is work in progress, and it is not always easy to identify areas that can benefit from behavioural analysis. The main goal of the behavioural economics initiative was to help public servants develop critical behavioural thinking skills and a citizens-focused approach when designing public policies. Therefore, the introductory phase included educational sessions using case studies of possible challenges faced by the budget officers and theoretical discussions about possible paths to solutions based on behavioural analysis. These were intended to familiarise officials with the “language” of behavioural tools and allow them to identify potential projects for behavioural intervention, as well as interact efficiently with the research team.

Following the introductory phase, it was important to create a work process that aligned with the cyclical nature of the budget office work. At the beginning of every budget cycle, a “wish list” of topics with potential for behavioural interventions was generated. The list was adopted as an integral part of the annual budget cycle and included a combination of “small” interventions (derived from applying BI based on existing literature and, therefore, quicker to implement), and “large” interventions (topics that were more complex and required deeper analysis and experimentation techniques, but were a focus of interest of the government, and therefore enjoyed higher motivation for application and implementation).

Integrating the wish list within existing budget procedures proved helpful, since it facilitated making one comprehensive decision on which projects to pursue, based on a defined set of criteria, instead of deciding on each project individually. The criteria for deciding which projects should be prioritised embedded a cost-benefit analysis for every potential project. The final assessment was based on three simple parameters: implementability of the suggested intervention, scalability of possible solutions, and potential behavioural impact.

Lastly, an important feature of the wish list approach was scarcity. Governments, and finance ministries in particular, operate in inherently resource-constrained environments. In our context, starting with a larger list of projects than was included in the annual allocation was helpful with identifying the best opportunities for behavioural change, and created a setting of internal competition which increased the perceived value of participating and improved engagement from stakeholders.

Since the inception of the national behavioural economics initiative in 2016, the Israeli government has performed dozens of experiments based on behavioural tools in various areas of public policy, most of them co-ordinated by the Budget Department in the Ministry of Finance. The following section outlines examples of selected topics and describes the behavioural approaches drawn upon in the policy process, the tools used to find suitable solutions, and the specific impact, as well as more general possible applications.

## Examples of applying BI to public policies (promoted by the Budget Department at the Ministry of Finance, MoF)

In this section, we review various examples of the application of behavioural tools in public policy making in Israel that demonstrate different methodologies of research implementation and their impact. The first six examples are RCT-based research projects with varying degrees of complexity. Factors that influence our evaluation of the level of complexity range from the ease of applying behavioural insights and identifying relevant research and case studies, through the difficulty of collecting and analysing data, all the way to the complexity of the experiments in terms of their design and execution. The last two examples are projects based on alternative research methods (user experience (UX) research and user interface (UI) design, which focus on studying the phenomenon of UX – such as research on how experiences are formed or what people may experience, expect to experience, or have experienced – and finding the means for designing systems that enable particular UXs, and big data analysis).

All eight studies were led by the national behavioural economics initiative in the MoF and an external team of behavioural-economics experts (“the research team”). We present a summary of the research process and methodology, and an analysis of the different types of barriers in studying and applying the chosen mechanisms of behavioural change in [Annex 1.A](#).

### ***Raising employment rates among people with disabilities***

There are over 1.4 million people in Israel with disabilities, amounting to a considerable 17% of the general population. People with disabilities are among the weak socioeconomic populations in the country, in part due to a low employment rate of 51% (compared to 79% among people without disabilities at the time of the study).

Workplace accessibility is one of the main barriers preventing people with disabilities from entering the employment market: adjustments, such as reducing work hours or installing a wheelchair ramp, have a critical effect on minimising gaps in productivity caused by the employee’s disability. Thus, the decision to hire people with disabilities becomes in many cases not only a social decision, but also an economic one. Adjusting the workplace can impose a great financial cost on the employer, and the process of filing a request for a government grant (reimbursement for the cost of adjustment) is very protracted: receiving the reimbursement grant takes about one year and causes great friction (a lot of work and trouble) for employers, who therefore fail to use it.

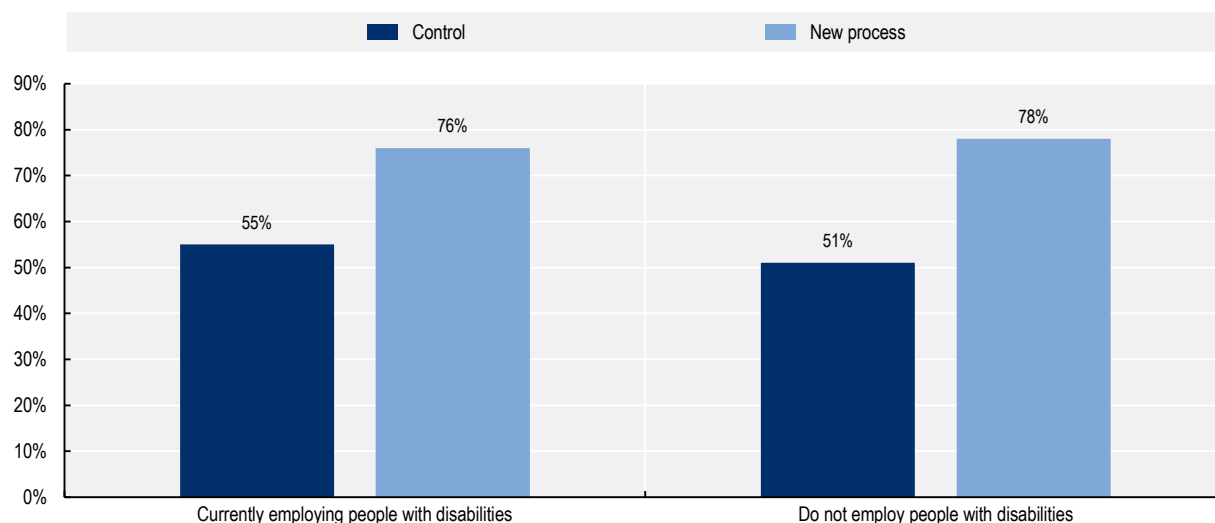
At the time of the study, the process included more than 11 stages (depending on the type of adjustment) and lasted at least 60 days. Following extensive research and a series of experiments, the research team developed an alternative process for filing a request for reimbursement based on principles from the field of behavioural economics. The new process focused on enabling faster reimbursement and reducing friction and bureaucratic burden, which exists due to policy makers’ mistrust and fear of potential fraud.

Specifically, the alternative process aimed to transfer responsibility for the application from the employer to the employee. Whereas under the existing process the employer was required to gather information, such as the employee’s personal medical information, in the alternative process, the employee is the one who is required to submit the request for workplace adjustments together with his personal medical information. Furthermore, a significant amount of time in the existing process was spent on providing evidence that the required budget for adjustments was reasonable. For example, instead of requiring the employer to present three quotes for each installation, in the alternative process the employer can request a budget for the adjustments according to a predefined price list. Lastly, in the existing process the employer received the payment as a loan that became a grant after about a year, only on condition that the employer met the terms of the grant during that year. In the existing process, the employer was not only required to perform all installations, but also to invite a professional to confirm the quality of the

installation and send proof that the installation was carried out. This created a risk that the employer may not receive the money and imposed a considerable bureaucratic burden due to the lack of trust. Therefore, in the alternative process, the money is granted immediately; to prevent fraud, employers must send a photo of the workplace before and after making the adjustment (in case of physical adjustments) or declare that the employee is still employed by the company (in case of other adjustments). Later, validation of the adjustments will be made.

The effectiveness of the alternative process was examined in an experiment with 483 employers and HR managers who deal with employee recruitment. Results indicate that compared with the control group, which relied on the existing process, the willingness to hire people with disabilities in the treatment group was measured by intentions stated by employers and yielded a significant improvement among the treatment group – 23% higher than the control group. In addition, the effect of the new process was significantly higher among employers that did not employ people with disabilities at the time (see Figure 22).

**Figure 22. Willingness to hire as a dependency on personal experience in hiring people with disabilities**



Note: N=483

To summarise, people prefer doing nothing rather than doing something. When policy makers design systems, they need to keep in mind that the “big prize” — incentives and motivations — may not be as effective as removing friction in a certain task that affects policy compliance. Behavioural frictions generally decrease the likelihood that we will complete a specific task or act in a certain manner. They will also increase our propensity to avoid making choices. Fortunately, friction is something policy makers can study, analyse, and react to.

Reducing friction in the process of filing a request for reimbursement is an example of regulatory design that can be applied to various policies. An example that merits further examination is the bureaucratic burden of opening and running businesses, especially small and medium-sized ones. It is also clear that policy makers should examine their own preconceptions, especially because they are prone to perceive some behaviours as rooted in complex or covert considerations, and thus have little faith in efforts to change them, even when their preconceptions are not necessarily accurate (an example of this is the assumption that employers do not apply for a reimbursement grant because they are not genuinely willing to employ those with disabilities). Another important point to be aware of is the lack of specific motivation

for institutional representatives themselves to encourage grant deployment; hence the tendency to overemphasise risk consciousness and fraud prevention at the expense of the efficacy of policy programmes.

Awareness of the method of communication of policies and their delivery can improve their overall effectiveness, especially when the reason for underutilisation is the difficulty in deployment: long bureaucratic processes that require beneficiaries to provide multiple forms of evidence along the way. Simplifying these processes and highlighting trust may improve not only the rate of deployment, but also the overall satisfaction resulting from the benefits and the interaction with the public authority itself. (Christensen et al., 2019<sup>[31]</sup>)

“To summarize, people prefer doing nothing over doing something. When policymakers design systems, they need to keep in mind that the “big prize” — incentives and motivations — may not be as effective as removing friction in a certain task that affects policy compliance.”

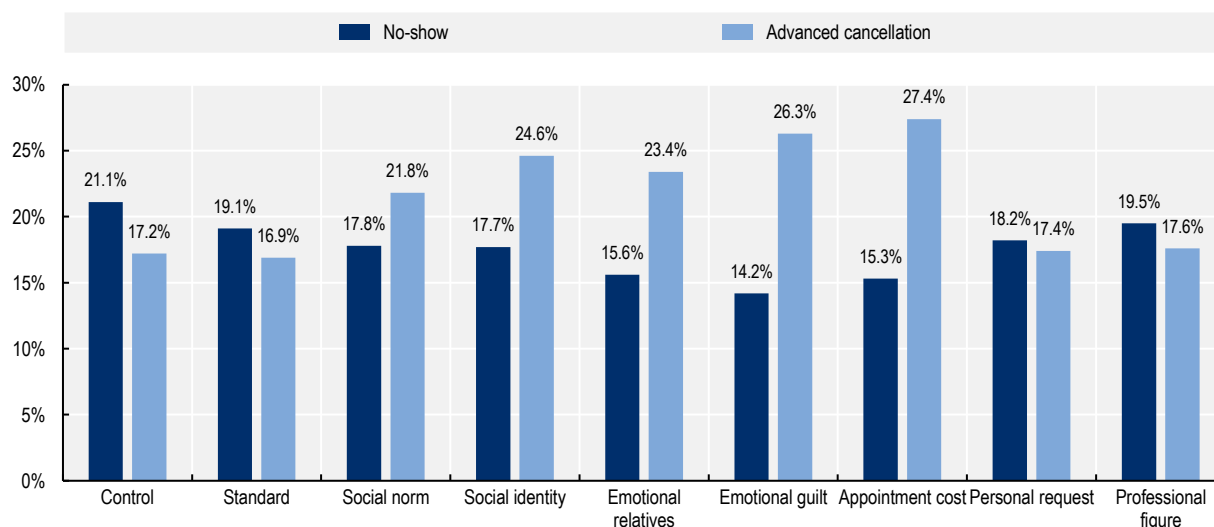
### ***Healthcare: No-shows***

In medical literature, an appointment no-show is a situation where a patient fails to attend a scheduled appointment without cancelling in advance. According to the statistics supplied by all four-health maintenance organisations (HMOs) in Israel at the time of the research, the no-show rate in the HMO is approximately 25%. Missed appointments have a detrimental impact on care quality: the time cannot be transferred to other patients. On an economic level, no-shows therefore lead to unnecessary expenses and a waste of financial and human resources, as well as infrastructure; these consequently reduce the accessibility and availability of medical care for all patients.

The no-show phenomenon is common throughout the entire healthcare system – within the HMOs, ambulatory care, and elective surgery. The goal of the research project was to propose and develop behavioural tools that will help minimise this phenomenon and its negative effects. The intervention examined how various versions of SMS reminders, based on emotional and mental approaches, affect the actual behaviour of members of Clalit Health Services (CHS), Israel's largest HMO. In a procedure based on theoretical principles from behavioural economics, members who had scheduled outpatient clinic appointments in 14 CHS hospitals were randomly assigned to one of nine groups and received a SMS text reminder five days before the appointment. The messages were intended to minimise the appointment no-show rates by raising patients' involvement and motivating them to attend their appointments, or at least cancel them in advance.

The reminder effect was examined in terms of the rate of cancellations and actual appointment attendance. Out of eight versions of messages tested on different groups, the results for five groups differed significantly from the control group. Members who received a reminder designed to evoke emotional guilt (“Not attending without prior notification delays treatment in patients who require medical attention”) had the lowest no-show rate of 14.2%, compared with 21.1% in the control group.

Figure 23 shows that five out of the eight alternative message reminders (“appointment cost”, “emotional relatives”, “emotional guilt”, “social norm”, and “social identity”) had significantly lower rates of no-shows and higher rates of cancelling in advance compared with the routinely used message reminder.

**Figure 23. No-show and advanced cancellation rates by SMS group**

Note: % No-show rate calculated as the number of people who did not attend an appointment (and did not cancel in advance) out of the total population with appointments. % Advanced cancellation calculated as the number of people who cancelled an appointment in advance out of the total number who clicked on the SMS link.

Source: Berliner Senderey et al. (2020<sup>[4]</sup>), "It's how you say it: Systematic A/B testing of digital messaging cut hospital no-show rates", PLOS ONE, Vol. 15/6, p. e0234817, <https://doi.org/10.1371/journal.pone.0234817>.

As of 2018 (at the time of the trial), the annual proportion of unattended appointments across all outpatient clinics in all 14 CHS in Israel was approximately 21.1% of all outpatient clinic appointments. Results indicate that replacing the reminder message with a carefully designed message can potentially reduce unattended appointments annually by 33% compared to the currently used reminder at the 14 hospitals. This has the potential to improve clinic management and waiting time to appointments, reduce overbooking rates, and improve the quality of care across the country. The intervention system was fully adopted by CHS from May 2019, and has saved approximately 3 million annual waiting days at the national level, creating a substantial improvement in scheduling appointments and freeing up time and resources in the medical system.

The outcomes of this trial show how relatively simple and inexpensive measures can yield significant results. The simple, cost-effective, strategic use of traditional SMS reminders enables healthcare providers to systematically customise their interaction with members in order to increase the effectiveness of healthier behaviour and reduce public expenditure. Broadly speaking, this simple intervention shows the untapped potential of smart messaging in health care.

The no-show intervention demonstrates how people often do not act in the interests of society, in terms of efficiency, not because they forget (since the baseline reminders did not create the desired effect), but because they lack the motivation or awareness to do so. More positively, the study also highlights how policy makers can use simple policy tools to nudge people toward the desired behaviour.

The trial was later expanded to include more specific tailored messaging for sub-groups of society, which decreased no-show rates even further. Testing what type of motivational efforts work on different groups of people can have significant implications for other healthcare-related services, such as vaccinations and preventative care. Furthermore, such efforts can be effective in other types of policies that depend on people's motivation to act – especially when non-action harms the common good of society – such as policies to encourage tax payment and policies to encourage environmentally friendly behaviours.

“The outcomes of this trial show how relatively simple and inexpensive measures can yield significant results. The simple, cost-effective, strategic use of traditional SMS reminders enables healthcare providers to systematically customize their interaction with members in order to increase the effectiveness of healthier behaviour and reduce public expenditure.”

### ***Money laundering: Reducing the use of cash in the economy***

Cash is still a basic, common and widely accepted means of payment among the general public. However, the prevalence of cash has many negative effects, such as facilitating criminal activity, money laundering, financing of terrorism and fuelling the shadow economy. According to a report by the Israel Money Laundering and Terror Financing Prohibition Authority, the most popular method of money laundering in 2016 was the use of cash. According to the World Bank Report on Shadow Economies All Over the World, a correlation was found between the scope of the shadow economy and the cash to GDP ratio (Schneider, Buehn and Montenegro, 2010<sup>[5]</sup>).

The size of the shadow economy in Israel is among the highest in developed countries. It is estimated at about NIS 240 billion, which corresponds to approximately 22% of GDP. The loss of state tax revenues due to activity in the shadow economy is estimated at about 5% of GDP. An investigation of the movements of cash from the banking system to the shadow economy has found that about 95% of the shadow economy originates in cash withdrawn from banks every year by the public, which is then transferred through economic activity to private entities, businesses, and the shadow economy.

Due to recent improvements in digital technology, the number of cash withdrawals is trending downwards. However, at the moment, despite the decrease in cash withdrawn from bank branches, there has been an increase in cash withdrawn from ATMs. The average withdrawal amount from ATMs increased by 82% between 2012-20.<sup>3</sup>

In light of the situation described above, the research team examined which policy tools are likely to be effective in achieving the government's objective to reduce the use of cash and increase the use of alternative payment methods. The premise of the study, as presented by the Budget Department staff, is that the use of cash is a behavioural phenomenon and that action should be taken to reduce the cash circulating among the law-abiding population. Such reduction would in turn lead to a reduction in the flow of cash into criminal activities, thus reducing the negative effects on society and government finances.

The study examined whether it is possible to reduce the amount of cash in circulation by influencing the average amount of cash withdrawn by the public through the ATM interface, the medium by which cash is transferred from the banking system to the public. Specifically, the influence of “choice architecture” (a term coined by researchers Thaler and Sunstein referring to the design of different ways choices can be presented to consumers) on ATM users was evaluated using behavioural tools. These included lowering default withdrawal amounts, using anchoring by changing selection options to lower withdrawal amounts, increasing the difficulty of withdrawing higher amounts by applying a slower and longer process, providing information about the negative effects of cash, and reducing the sense of anonymity by identifying the withdrawn banknotes with the specific customer to encourage prosocial behaviour.

As part of the experiment, about 1300 Israelis were randomly assigned to one of 15 groups to evaluate the effects of the various behavioural tools described above, and the effect of combining several tools in a “golden interface” featuring multiple forms of intervention. The experiment showed that the “golden interface” reduced the average withdrawal amount by 50%. An analysis of the factors in the experiment showed, for example, that the interaction between low withdrawal amounts and automatic default settings

had a statistically significant effect on the withdrawal amount, and that the warning statement providing information about the negative effects of cash had no effect.

In the case of a shadow economy, personal habits do not necessarily reflect a strong personal motivation to engage in harmful social behaviour, but, in the aggregate, such behaviour can prove harmful to the economy. The intervention in the ATM cash withdrawal is consistent with and supportive of macro changes in the economy, in light of technological advancements and the transition to digital wallets that are reducing the need for ATM withdrawals.

Interventions aimed at changing everyday behaviours often attempt to alter people's beliefs and intentions, but research shows they are unlikely to prove effective regarding repetitive behaviours that have become habits and automatic behaviour. Successful habit change interventions involve disrupting the environmental factors that automatically cue habit performance. Since the root of the behaviour at ATMs is in people's habits, and the environment of choice is easily identifiable, the approach was to nudge behaviour by designing an environment of choice encouraging behavioural change. Indeed, the findings support the premise that a simple choice architecture based on a default system can lead to effective behavioural change.

More generally, when considering the implementation of policies that deal with similar habitual and often unconscious behaviours, for example, energy consumption and healthy eating, policy makers can bridge the gap between people's intentions and their behaviour by removing the barrier to the desired behaviour – the need to actively undertake an action – and design the choice environment in a way that is likely to promote the desired behaviour.

“Successful habit change interventions involve disrupting the environmental factors that automatically cue habit performance.”

### ***Education: Underrepresentation of women in high tech***

In the Israeli high-tech sector, there is an imbalance between high demand for employees and inadequate supply. In addition, women make up only a quarter of those employed in the sector and are therefore one of the populations with the largest potential for increasing the supply of human capital. There is a myriad of reasons for women's underrepresentation in this area. Few women study STEM (Science, Technology, Engineering and Mathematics) in high school and at institutions of higher education. They also choose not to enter technological professions due to gender structuring and the perception of male dominance created around these fields. According to Israel's Ministry of Finance, the scarcity of women in high-tech fields results in a loss of innovation and creativity that talented women could offer.

The research focused on increasing the presence of women in the high-tech sector, specifically at the first point of selection carried out by adolescents when deciding on a future career – choosing their major in high school. Therefore, the study focused on increasing girls' participation in computer science (CS) majors, and other tech-related majors. Surveys conducted with about 450 pupils from grades eight to twelve suggested that one of the main factors for female pupils in not choosing to major in CS is a lack of exposure to the field. When reviewing the selection process itself, the research showed that choosing a major is subject to various biases. Information regarding the majors is delivered differently by each school and by family members, and not necessarily in a way that encourages pupils to choose subjects with which they are less familiar.

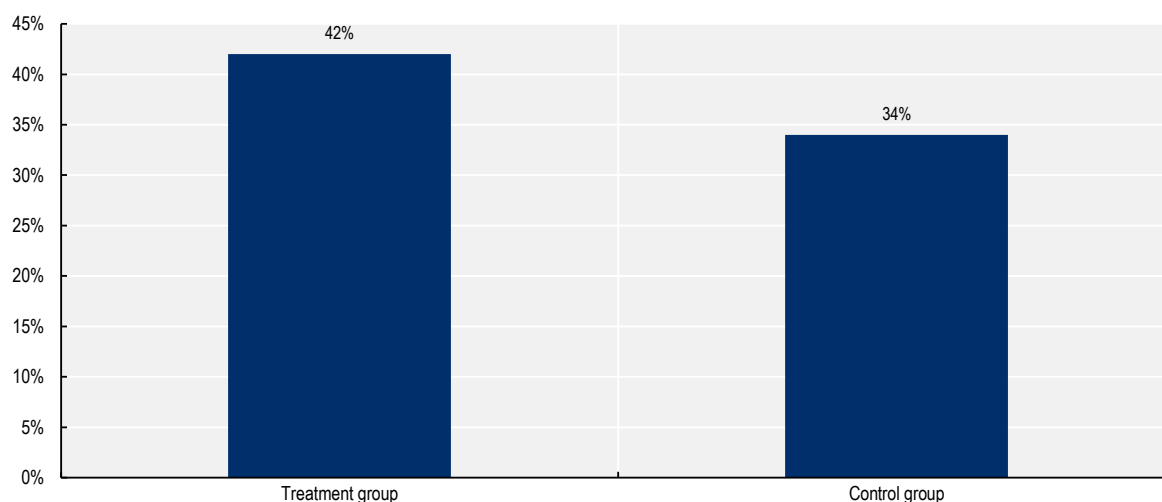
In two field experiments, the research team examined two alternative approaches to solving this familiarity problem. The first approach included an experiment that was conducted among 500 ninth graders before they chose a major, measuring the effect of adding a four-session CS course on the willingness to major in CS. The experiment was intended to create familiarity with the subject via hands-on experience. The results of the experiment showed that the course had no significant influence on the level of willingness or interest.

The second approach was designed to measure the effect of the impression created from the exposure to others' personal experiences, delivered via informative videos on the decision to major in CS, presented on a "majors digital platform": a website with video clips of various major graduates talking about their day-to-day life at work, and the contribution of their major to the career path they chose. The solution focused on enhancing familiarity with CS using various behavioural tools, such as choice architecture, personalisation, enhancing perceived self-efficacy, and reducing present bias.

Six thousand ninth graders were exposed to the platform at the beginning of the school year. Results indicate that watching these clips increased students' willingness to choose computer science by about 25% (see Figure 24). Both boys and girls increased their willingness to the same extent. However, at the end of the school year, six months after the intervention, the actual choice of 1 122 students showed that 36% in the treatment group actually chose CS compared to 33% in the control group: not a statistically significant difference. A possible explanation for the decline of the effect is that the timing of intervention is crucial for creating a genuine behavioural change. If this is the case, then presenting information immediately prior to the actual choice of major would lead to a better chance that the positive effect on students' intentions will be translated into an actual behavioural change.

**Figure 24. Likelihood of willingness to major in computer science**

Reported willingness among students who did not choose a major



Note: N=6088

As noted by Sheeran (2002<sup>[6]</sup>), human behaviour is often characterised by an intention-behaviour gap i.e. the failure of individuals to translate their positive intentions into action. Beyond the timing of the intervention, combining additional behavioural tools which allow students to translate motivation into action, such as goal-setting techniques that promote the implementation of intentions, might have been an effective force for maintaining the intervention's positive effect on intention to study CS (and would create a positive engagement in behavioural change as a result).

Increasing the number and diversity of young women choosing a STEM career is a “wicked problem,” namely a problem that has many causes which are interlinked and consequently does not have one single, simple solution. Policy design requires policy makers to break down the set of experiences and decisions that shape wicked problems. In order to do so, they need to examine the details of the problem, and identify and test a wide scope of possible interventions which may have the potential to produce the eventual desired outcome.

“Policy design requires policymakers to break down the set of experiences and decisions that shape wicked problems. In order to do so, they need to examine the details of the problem, and identify and test a wide scope of possible interventions which may have the potential to produce the eventual desired outcome.”

### ***Increasing employment rates among Bedouin women***

Bedouins are an ethnic group with a tribal social structure living mainly in the Negev region of the south of Israel. This population is characterised by extremely low employment rates among women, about 26% (compared to 83% among Jewish women living in the south of Israel, at the time of the study).

Upon entering the employment market, Bedouin women are faced with a host of barriers, some of which are structural – for example, lack of appropriate education, lack of satisfactory public transportation, and lack of services and programmes for children. In addition, there are factors related to the Bedouin social structure which specifically affect women who try to find jobs: Bedouin society is traditional, with a patriarchal structure according to which the men are the ones holding the power and making the decisions, while women are relegated to the domestic space and the family unit. These traditional perceptions of women’s role make it difficult for women in some areas to find work.

As part of the efforts to reduce poverty in this population by increasing the employment rates of women, the project was aimed to assist in delivering solutions to the challenges described above. Three experiments were conducted to examine how attractive a series of employment opportunities would be for the target audience, and those opportunities were adapted to remove the barriers faced by the women and to meet the requirements of employers in the region. In addition, the experiments evaluated the influence of each of the solutions on the employment rates of women.

Findings from the three trials reveal a number of significant insights that contribute to a deeper understanding of barriers to employment, and point to potential directions for intervention. First, getting home from work at a reasonable hour is a major barrier to finding work, as most women are looking for a job that allows them to return home in the early afternoon so they can be there for their children. Second, a strong link was found between having a driver’s license and employment. Third, the study showed that unemployed women look for work mostly informally and often rely on information from friends and family rather than taking active steps, such as sending out their resume or going for a job interview. This behaviour limits their ability to effectively find a suitable job.

Contrary to popular belief regarding Bedouin women, most of the women who participated in the trials did not express strong opposition to working outside their area of residence, although most were looking for work within their town or municipality. Also contrary to popular belief, no significant relationship was found between employment and the availability, hours of operation, and cost of childcare.

Based on the findings of the study, applicable behavioural solutions were formulated. The solutions were tailored to different target audiences, depending on the type of intervention offered, for example:

1. Encouraging Bedouin high school students to get a driver's license. This solution consists of three parts: allocating an hour of study in the school schedule for all 12th graders to study driving theory; assistance in bureaucratic procedures, including providing transportation to the licensing office and assisting in filling out forms; subsidising driving lessons and relevant fees for female students and subsidising driver's license fees contingent on proof of active job search.
2. Recruiting community placement co-ordinators. This solution involves locating working women, or those who have worked in the past, and recruiting them for the position of placement co-ordinators in the community. The placement co-ordinators would receive information about vacancies and an incentive to match the women in the community with these jobs. The jobs would be advertised in a way that is intended to encourage distribution by word of mouth.
3. Incentives for women to proactively search for employment and for men to support this search. These would include setting up job search stands (kiosks) in various hubs in recognised localities, and providing incentives to women to use these kiosks.

Culture can be recognised as a pervasive and ubiquitous cause as well as a product of human behaviour. Whereas basic thinking processes in the human species (such as heuristics, association, recall, perception, inference, and comparison) are common, the origins of complex human behaviour are rooted in cultural experience. Behavioural tools have proven to be effective in cases of regulatory design which influence basic processes of human behaviour, for example, choices that are easily influenced by the information at hand and the range of available options; by using choice architecture and the design of convenient options (especially default options); and by identifying the salient points of options or attributes that affect how they are weighted in decisions. When it comes to complex culture-dependent behaviours, policy design should be exercised with caution, together with learning processes that aim to understand the unique cultural frictions (difficulties in engaging with a specific behaviour) and motivations that exist, in addition to the basic, universal processes of human behaviour.

“Behavioural tools have proven to be effective in cases of regulatory design which influence basic processes of human behaviour...When it comes to complex culture-dependent behaviours, policy design should be exercised with caution, together with learning processes that aim to understand the unique cultural frictions (difficulties in engaging with a specific behaviour) and motivations that exist, in addition to the basic, universal processes of human behaviour.”

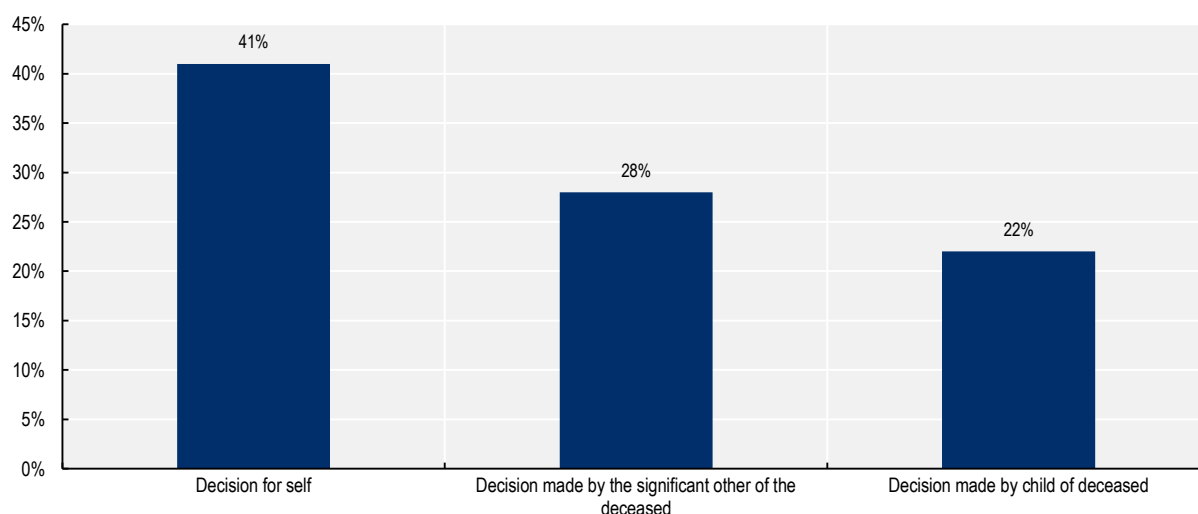
### ***Efficient burial: How to use limited land more wisely***

By the end of 2050, an area of about 6458 km<sup>2</sup> will be required for burial land, amounting to 29% of the total land area of Israel, or five times the area of New York City. Israel's burial problem is unique and provides an unprecedented case study as a result of the twofold complexity the state is faced with an unprecedented combination of halakhic (Jewish law) restrictions and customs and extremely high population density (population to area ratio), especially in metropolitan centres. The country is forced to find alternative solutions at cemeteries, such as layered burial. Despite the obvious advantages of layered burial, which is space efficient and complies with institutional Jewish law and customs, the Israeli public is generally reluctant to choose it, opting mostly for field burial, which is perceived as the normative and preferred option.

This study was designed to review and analyse which behavioural tools are expected to be most effective in motivating Israelis to choose the layered method of burial, without restricting their decision-making process and freedom of choice. Two major situations in which the individual is required to make a decision regarding the burial method were identified: 1) a decision made by the living individual, which reflects his or her personal desire and is therefore characterised by rational thought; and 2) a decision made in the name of the deceased by a family member (by a significant other or by the deceased's children), usually when under severe emotional stress.

Three online questionnaires designed as a Randomized Control Trial were distributed to a representative sample of 2 262 Israelis. Results indicate that regarding the question of burial, people's choice for themselves differs from their choice for their family members, and that the proportion of people who choose layered burial is higher when they decide for themselves (see Figure 25). Furthermore, the study showed higher satisfaction among respondents who chose layered burial for themselves, compared to those who chose field burial for themselves.

**Figure 25. Proportion of respondents who chose layered burial as part of the experiment: Decision for self/decision made by a significant other or child**



These findings suggest the likely effectiveness of a policy that encourages citizens to decide on their method of burial during their own lifetimes. Following this finding, the study further tested the effect of a new model for layered burial, which allows individuals to decide for themselves how they would like to be buried when the default is layered burial. Results show that the simplest, most cost-effective, and applicable solution to motivate the public to opt for this method is a default system of layered burial offered for free, with field burial offered as an alternative at a price, with payment to be made in multiple instalments. This condition encouraged 69% of participants to prefer layered burial to field burial, compared to 43% in the control group. Furthermore, participants in this group were more satisfied with their decision relative to other groups.

The study suggests that the effectiveness of the model is largely explained by the possibility of obtaining a free plot, and that free burial is the most influential variable in the choice of layered burial. Moreover, the study also shows that presenting respondents with a choice between burial in a plot of land alone versus layered burial next to family members or spouses led to an increase in the choice of layered burial and increased satisfaction with the choice. Changing the basic narrative to one wherein layered burial is presented as a solution to a problem – that is, a response to people's preference to be buried next to family members and the difficulty in obtaining adjacent plots for family members – increases the satisfaction of individuals with their decision and is therefore likely to form the basis of a sustainable public policy.

This case highlights the importance of the context in which policy meets people's decisions. The shortage of land for burial appears at first to be an economic question involving the price people are willing to pay for the land needed for field burial, but the question in fact deals with one of the most sensitive issues they face in life: decisions regarding death. Policy makers should take into account the fact that people do not always evaluate the optimal decision as one that maximises their economic wealth. Policy makers should also understand both the harmful and beneficial emotional drivers contained within policies. This understanding makes it possible to predict how emotional drivers affect behaviour, better equipping policy makers to choose economically efficient solutions for society as a whole.

“This case highlights the importance of the context in which policy meets people's decisions... Policymakers should take into account the fact that people do not always evaluate the optimal decision as one that maximizes their economic wealth.”

### ***Public digital interfaces: Evidence-based policy***

The process of digitising government services has a significant positive effect on the economy and society. For the public, the main advantages are an easy and simple interaction with government entities, better and far more accessible services, minimising bureaucracy and frustration, and reducing the need to visit government offices in person, thereby saving valuable time. As far as the government is concerned, the process leads to a significant saving in resources, as well as increased efficiency and productivity.

Expenses can be saved as a consequence of reducing the need for front-office service providers, offices for receiving the public, office supplies, and more. Thus, for example, the British government estimates that since it added the option of receiving government services online, it has saved approximately GBP 1.7 to GBP 1.8 billion per year (GOV.UK, 2012<sup>[7]</sup>).

Insights from the Israeli research project, which aimed to advance public services, highlighted the importance of a one-stop shop, which provides citizens with a single focal point from which to access all the necessary information, transactions and services. When done well, one-stop shops can reduce transaction costs and provide “win-win” outcomes for governments and clients by improving both services and compliance with regulations. Citizens and businesses can more easily locate forms, supply information once for multiple purposes, and do business more easily. Governments can receive better quality information and improved compliance rates that reduce the number of resources needed for enforcement.

In a survey conducted as part of the research project, 88% of respondents stated that they prefer interacting with the government through a one-stop shop-style platform. A significant gap was found between the desire to receive end-to-end digital services and the perceived digitalisation currently in place, which consists mostly of only partially-digitised government services. The gap described creates a sense of frustration and disappointment, which lowers the likelihood of using digital governmental services again in the future by 50%. Those who experienced satisfaction from digital government services are more likely to use them again.

In order to create an efficient interaction between the Israeli government and its citizens, the solution focused on digitising government services, based on the idea of a one-stop shop. The nature of the platform was based on various behavioural aspects, such as personalisation, gamification, compensation and incentives, nudging action through a sense of progress, positive feedback, minimising friction, and other features. Principles from the platform's elements were implemented in gov.il, Israel's official government services and information website.

The idea of a one-stop shop is not unique to Israel, and many countries have advanced its implementation. This case study therefore does not focus on the use of data for identifying and forming policy solutions, but rather highlights the power of data as a catalyst in the process of adapting to change. Further, it shows how the application of behavioural economic tools does not necessarily need to focus on specific moments of decision making, and how it can be generally applied to human-centred design processes to make products and services more reliable, intuitive, effective, and easy to use.

“This case-study therefore does not focus on the use of data for identifying and forming policy solutions, but rather highlights the power of data as a catalyst in the process of adapting to change.”

### ***Public transportation: A data problem***

The transportation system in Israel is far from optimal. Traffic congestion costs the economy hundreds of thousands of working hours every day, causing an escalation in mental stress and a deterioration in welfare due to loss of leisure time. Despite the fact that the COVID-19 pandemic has had a significant impact on mobility due to “stay-at-home” orders during the outbreak, and while some commuters changed their working and travel habits in the post pandemic period; as the world gradually adjusts to living alongside COVID-19, it is clear that road congestion during peak hours remains a serious problem. It is thus essential to improve the efficiency of travel networks and options in urban areas, and optimise public transportation systems and private mobility.

The analysis, which was based on anonymised and aggregated data, allowed the budget department to extract useful information about traffic trends and identify intervention points based on areas with a high potential to bring about behavioural change. For example, the analysis divided 500 commuters from the Ramat Hachayal neighbourhood in Tel Aviv into three levels of potential for changing commuting habits: low, medium, and high. It showed that 16% of the commuters had a high potential to use public transport, bike or walk to work, and another 33% had medium potential with the right nudge – a total of 49% with the potential to change their commuting behaviour.

The research emphasised the need to improve the tools used by policy makers to design transportation policies which meet citizens’ needs. Due to the lack of literature and relevant data, collecting dynamic data based on behavioural gap analysis was a necessary preliminary stage for planning concrete interventions to promote an effective behavioural change in commuting behaviour patterns. Insights drawn from the data led to a series of field experiments. The ability to collect and analyse large amounts of data enables decision makers to cut through potential distortions to discover where intervention is most needed, or where the potential for an effective behavioural change is the greatest. The case of transportation highlights the importance of building a broad database before examining policy alternatives and constructing concrete solutions, as well as the importance of understanding differences between sub-populations and geographical areas.

“The ability to collect and analyse large amounts of data enables decision makers to cut through potential distortions to discover where intervention is most needed, or where the potential for an effective behavioural change is the greatest.”

## Conclusions from Israel's experience applying Behavioural Insights in policy making

A few conclusions drawn from Israel's experience as discussed in this article, might prove helpful to other OECD governments contemplating implementing behavioural insight tools in their policy processes.

First is the importance of integrating behavioural methodologies as part of existing, cyclical processes, and as early as possible. This alleviates the need for tools to be “pulled” intentionally in each case and lowers the barriers to their use. In addition, enabling the official field managers rather than the behavioural experts to control the processes proved key. This approach is particularly helpful for implementation: while behavioural experts know more about how to manage the learning process, they are not close to the reality of the dynamics in the field and are thus limited in their ability to identify obstacles and promote successful implementation. We also discovered that making sure that every budget cycle includes opportunities to work on topics of high priority to officials was beneficial in centralising the use of the BI tools and making them visible and readily available to many stakeholders relatively quickly.

When trying to implement behavioural insights into policy making, it is also important to remember that existing policies can be of great assistance. Every government has experience with what works and how well and performs varying degrees of cost-benefit analyses. It is important not to attempt to override good practices, and to opt instead for the integration of BI with existing policies when appropriate. Moreover, behaviourally informed interventions cannot achieve the desired outcomes when deployed alone; rather, these innovative tools are meant to complement more traditional policy tools (Rapoport, Scartascini and Rojas Mendez, 2020<sup>[1]</sup>). In fact, understanding how to implement a behavioural approach is an iterative process for each government and should occur at each government's singular pace and on its unique terms.

A key conclusion regarding the implementation of BI is the importance of adopting a citizen-focused approach which is primarily based on data (rather than on intuition) in order to know what does and does not work well. In many cases, regulation does not fully integrate a citizen's behavioural perspective, thus undermining efforts to achieve desired behavioural changes. Policy makers should carefully scrutinise the process from the perspective of the citizens in order to understand their views on what happens before a policy is implemented, what will change afterwards, and what is the measured impact of the change.

Using essentially neutral, evidence-based tools can also help promote co-operation and unqualified acceptance of the recommended course of action. It is easier to adopt solutions that are rooted in external factual analysis than those that are untested and, therefore, more prone to multiple interpretations and outside influence. As a result, MoF officials are particularly suited to being the leading agents in the government to advocate for the implementation of BI tools, given this ministry's strong focus on the efficiency and effectiveness of public spending. Evidence-based methodologies can be further reiterated by mechanisms of data sharing across line ministries and government agencies, and eventually across different regions and governments, learning from each other about mechanisms of change and what methodologies may work best in different policy areas.

A primarily data-based approach allows for sufficient room for flexibility and innovation, as people's behaviour changes in response to changes in their environment. Regulation should have built-in flexibility mechanisms (like sunset policies for the introduction of new and burdening regulations, e.g. in small- and medium-sized business regulation), which include behavioural developments by design. Policies should include motivation for policy makers to incorporate changes when the change in environment justifies this, such as removing burdens proven not to be necessary. Technology's impact on privacy is an excellent example of a rapidly changing environment to which policy makers should position themselves to respond. While privacy is very important and violations can be damaging, governments should nevertheless perform a cost-benefit analysis for privacy policies from a behavioural perspective. For example, to protect privacy, an unintegrated digital government services approach requires that citizens enter their details every time

they request a service. However, instead of assuming basic public mistrust, governments should ask their citizens about their privacy preferences. They may discover that people primarily prefer convenience and efficiency to privacy with almost all the services they consume, whether private or public.

It is important to perform cost-benefit analyses to determine what approach to take in specific cases: behavioural economics is not a code for magic solutions and cannot be applied universally. Rather, it is a set of tools which are context-specific, whose application depends on the strength and robustness of the evidence generated and which must be informed by a fair weighing of projected gains versus costs that aim to generate better and more efficient policies. The analysis should also include reference to scalability of the programme or solution considered, anticipated implementation difficulties, and the expected impact. In addition, it is important to take note of whether the course or policy considered is expected to be a one-time implementation effort or is the beginning of a longer process. In the case study of the public transportation data problem described above, the high investment in setting up the infrastructure for data collection and analysis was justified because it was a clear first step of many toward building a data framework. This framework was intended to significantly boost the understanding of behavioural biases in the use of national public transportation systems and was indeed used as a live database for several experiments. Importantly, it is expected to continue yielding benefits over a long period of time.

Finally, budget officials should also refer to past policies and analyse what worked and what did not, and under which circumstances. While it may not be possible to automatically apply conclusions from one successful application to a different policy question, past successes may still provide a good indicator for the direction of potential impact. For example, if a certain experiment showed that exposing citizens to information about how their tax money is being used increased tax compliance by 30%, it may serve as a valuable model for how to boost citizen engagement in other civil activities, even though we will not be able to rely on this information alone to infer the extent of impact.

## Conclusion

The advantages of integrating behavioural insights in developing public finance policies are significant. These include freeing resources by referring to often low-budget behavioural interventions in place of more complex structural solutions; enhancing efficacy of public policies by testing what works before implementing extensive and expensive public programmes; improving internal policy-making processes by moving to a primarily data-driven, citizen-focused approach (which has the added benefit of also improving motivation among government officials); and improving citizen appreciation and satisfaction with public services, with its collateral impact of increasing trust in public institutions and bolstering citizen motivation to more generally comply with regulations and pay taxes.

Our experience, represented in the case studies presented, suggests that there are practical and straightforward ways to adopt and utilise behavioural tools in policy making. If that is so, why is this approach not practiced more widely? Integrating behavioural economics in public policy is still being carried out cautiously, but not because it is controversial. In fact, the practical and self-explanatory nature of the tools and the ease with which they can be understood make them readily available to public institutions wishing to use them in varying contexts (John, 2016<sup>[8]</sup>). The cautiousness, instead, seems to arise more from resistance to changing habitual ways of thinking. Applying behavioural economics to public policy problems requires not only developing new critical thinking skills in order to thoroughly understand what works, but also doing so even when what we learn is counterintuitive. Not only is such intuition a strong force with which to contend, but it is also often easier and takes less time to explain our intuition than to dive in, interpret and explain the results of an experiment. People often also have a strong preference for avoiding experiments and an even stronger preference against being wrong. Experiments can highlight what we do *not* know, and measurement increases the chances of discovering that you are wrong from time to time.

In addition, it is interesting to examine the adoption of behavioural economics via the lens of behavioural economics. Curiously, behavioural insights focus a lot on friction, many times the friction that stands between citizens and doing the right thing for society as a whole. However, in addition to the effort involved in overcoming habitual patterns of thinking, the introduction of behavioural insights into the policy process, like the introduction of any innovation, can, on its own, create a lot of friction. We see such friction when attempting to apply a constructive research approach based on existing literature in areas that experienced teams feel they already know a lot about. Then there is the physical and psychological friction of collecting data, which has an asymmetrical chance of making people happy. If the data support what we believed *a priori*, then we consider it worth our time. But if the data contradicts our beliefs, the chances for adoption, or even further data collection to deepen our understanding, ironically drop.

The highest levels of friction are created when working teams ask to run complex experiments for testing uniquely tailored solutions in specific contexts. The perception that time and resources are wasted on such attempts is difficult to counter. However, as the case studies presented here demonstrate, the potential benefits of such efforts can be high.

With time, practice and success, the process of integrating behavioural economics in the policy-making process will get easier. Eventually, we recommend that governments should mandate data-driven policies in much the same way as the FDA mandates testing for new medications. We understand that we would not want to live in a world in which physicians can follow their intuition in determining what medications to prescribe. In time, we will come to expect data-driven public policies by default.

Finally, behavioural economists and their advised policy makers should increasingly engage with the details of policy making and practically become plumbers of data (Duflo, 2017<sup>[9]</sup>). When implementing behavioural insights and focusing on citizens' perspective, details can make all the difference in determining what will eventually work. While the specific approach and goals of integrating BI in policy making will differ across different public contexts and national governance structures, it is nevertheless increasingly important for every policy maker to engage in understanding data and the details of how mechanisms of behavioural change actually work, even in times when those create some level of friction.

Fortunately, friction is an important determinant of human behaviour, which suggests that if we implement changes correctly, and ensure that the standard is to have data-driven policies, over time this will become the norm – a good habit from which it will be harder to deviate.

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## Annex 1.C. Summary of case studies from the Israeli experience

|                                                        | Research process, data analysis and sample size                                                                                                                    | Did we use surveys?                                                                                                                                                                                                                                             | Did we use experiments?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Difficulty of conducting the study                                                                                                                                                          | Difficulty of applying chosen mechanism                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Efficient burial: how to use limited lands more wisely | <p>1. Literature review (based on limited literature and case studies).</p> <p>2. Three online RCTs.</p> <p><b>A total of 2 262 participants in the study.</b></p> | <p><b>No exploratory surveys were conducted as part of the study.</b></p> <p>RCTs were designed based on behavioural principles, preliminary qualitative research in the field and findings from the first and second RCTs as part of the research project.</p> | <p><b>3 randomised controlled trials</b> designed as online questionnaires:</p> <p>1. The first experiment examined the effect of the decision for self-compared to the decision made by the significant other or child (438 participants).</p> <p>2. The second experiment examined alternative payment models and their effect on behaviours (1 007 participants).</p> <p>3. The third experiment examined the effect of various types of payments alongside additional aspects of the model - burial next to family members or spouses (817 participants).</p> | <p><b>Relatively low.</b></p> <p>The main challenge of the study can be attributed to the social sensitivity of the research question and the absence of similar relevant case studies.</p> | <p><b>Regulatory barriers:</b> supportive regulation is required to effectively enforce the burial payment model and default.</p> <p><b>Political barriers:</b> implementing the payment and default solution has high potential to awaken opposition from specific interest groups in the system.</p> <p><b>Operative barriers:</b> securing future grave plots for spouses and family members.</p> |

|                                                         | Research process, data analysis and sample size                                                                                                                                                                                                                                                                                                                                                            | Did we use surveys?                                                                                                                                                                                                              | Did we use experiments?                                                                                                             | Difficulty of conducting the study                                                                                                                                                                                                          | Difficulty of applying chosen mechanism                                               |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Raising employment rates among people with disabilities | <p>1. Literature review which focused on relevant behavioural principles such as reducing friction and bureaucratic burden and mechanisms of trust.</p> <p>2. Two exploratory online surveys: the first for employers, the second for people with disabilities.</p> <p>3. An online RCT.</p> <p><b>A total of 1 057 employers, HR managers and people with disabilities participated in the study.</b></p> | <p><b>Two online surveys</b> with a total of 574 participants were conducted as part of an exploratory research.</p> <p>Findings from both surveys contributed to the design of the final online RCT experiment.</p>             | <b>A randomised controlled trial</b> designed as an online questionnaire (483 employers and HR managers participated).              | <p><b>Relatively low.</b></p> <p>The main challenge can be attributed to the social sensitivity of the research question. Also, the need to reach specific audiences contributed to complexity of the distribution and data collection.</p> | <b>Regulatory barriers:</b> requires changes in regulation.                           |
| Healthcare: No shows                                    | <p>1. Literature review</p> <p>2. A two-stage field study, which included a pilot trial (with 6 320 participants) and a RCT trial.</p> <p><b>A total of 167 907 patients participated in the study.</b></p>                                                                                                                                                                                                | <p><b>No exploratory surveys were conducted as part of the study.</b></p> <p>The RCT was designed based on existing RCTs and literature which proved the effectiveness of SMS reminders and emotional and mental approaches.</p> | <b>A randomised controlled trial</b> in the field, based on distribution of SMS text reminders (161 587 CHS patients participated). | <p><b>Medium.</b></p> <p>Dependency on the partnership with external institutions- in this case CHS. Even when there is full co-operation and alignment, a partnership of a few research groups can be operationally complex.</p>           | A simple solution since <b>implementation is based on an existing infrastructure.</b> |

|                                                             | Research process, data analysis and sample size                                                                                                                                                                                                                                                                                                     | Did we use surveys?                                                                                                                                                                                                                                         | Did we use experiments?                                                                                                                                                                                                                           | Difficulty of conducting the study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Difficulty of applying chosen mechanism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Money laundering: reducing the usage of cash in the economy | <p>1. Exploratory research was conducted with the goal to identify solutions and behavioural tools to reduce the use of cash in the economy. Three alternative policy approaches (one of which was the ATM design) were examined at the first stage.</p> <p>2. A simulator-based RCT.</p> <p><b>A total of 1 800 participants in the study.</b></p> | <p><b>No exploratory surveys for the design of the ATM interface were conducted as part of the study.</b></p> <p>The RCT was designed based on existing behavioural literature (such as choice architecture, defaults, anchoring, prosocial behaviour).</p> | <p><b>A randomised controlled trial,</b> simulated behaviour at the ATM interface (1 258 Israelis participated).</p>                                                                                                                              | <p><b>Relatively high.</b></p> <p>The ability to simulate the actual behaviour at the ATM was possible thanks to advanced technological and UX/UI capabilities of the research team (the team developed a dedicated experimental ATM digital- platform).</p>                                                                                                                                                                                                                                                                                                                                                | <p>The application of the very change of ATM interface is relatively simple, and does not require significant budgets or operational efforts.</p> <p><b>Political barriers:</b> the main barrier is the applicability in the field, due to the banks' reluctance to change the ATM interface (fear of potential harm to the quality of service and other considerations).</p>                                                                                                                                                                                                                                                                                                                                     |
| Education: under representation of women in hi tech         | <p>1. Literature review which focused on behavioural aspects of the challenge, such as choice architecture, personalisation, perceived self-efficacy, present bias.</p> <p>2. Two exploratory online surveys</p> <p>3. Two field RCTs.</p> <p><b>A total of 6 868 ninth-graders participated in the study.</b></p>                                  | <p><b>Two online surveys</b> with a total of 468 high-school students were conducted as part of an exploratory research. Findings from both surveys contributed to the design of two RCTs in the field.</p>                                                 | <p><b>Two randomised controlled trials</b> were conducted in the field:</p> <p>1. Four-session CS course RCT, measured the choice (400 ninth graders participated).</p> <p>2. Online digital platform RCT (6 000 ninth graders participated).</p> | <p><b>Relatively high.</b></p> <p>The main challenge was the dependency on the partnership with the Ministry of Education which assisted with the distribution (due to the need to reach a representative sample of ninth graders) and contributed to the design of the experiment.</p> <p>In addition, the implementation of the RCTs was complex: the four-session CS course required a complex field operation (content development, course delivery etc.) and the online digital platform required advanced technological and UX/UI capabilities for the design of the designated digital platform.</p> | <p>Overall, there is a high potential of applying the major online digital platform in the education system, mainly because it is a win-win solution for all stakeholders.</p> <p><b>Economic barriers:</b> the main barrier for implementation is an economic one – implementation of the platform requires investment both in the design of a “real-life” version and full characterisation of the platform, and in the infrastructure required for implementation.</p> <p><b>Operative barriers:</b> Like the experimental mode, implementation also requires high level of co-ordination and collaboration between the ministry, content contributors and producers and managers of the digital platform.</p> |

|                                                  | Research process, data analysis and sample size                                                                                                                                                                                                                                                                                                           | Did we use surveys?                                                                                                                                                                         | Did we use experiments?                                                                                               | Difficulty of conducting the study                                                                                                                                                                                                                                                                                                                                    | Difficulty of applying chosen mechanism                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Increasing employment rates among Bedouin women  | <p>1. Literature review (based on limited literature and case studies).</p> <p>2. Two exploratory online surveys</p> <p>3. An online RCT.</p> <p><b>A total of 2 934 Bedouin women participated in the study.</b></p>                                                                                                                                     | <p><b>Two online surveys</b> with a total of 1 544 Bedouin women were conducted as part of an exploratory research. Findings from both surveys led to the design of the RCT experiment.</p> | <p><b>A randomised controlled trial</b> via paper-pencil surveys in the field (1 390 Bedouin women participated).</p> | <p><b>Relatively high.</b></p> <p>The main challenge can be attributed to the sensitivity and complexity of the research question, which beyond the behavioural barriers is characterised by deep cultural barriers.</p> <p>Also, the need to reach a specific and inaccessible audience led to complexity in the distribution of the surveys and the online RCT.</p> | <p>Subsidising a driver's license is a simple solution in terms of applicability and scalability. Also, compared to resources invested in alternative solutions, it is not an expensive one.</p> <p><b>Implementation of the policy primarily requires a policy advocacy and decision.</b></p>                                                                                                                                                                                                                        |
| Public digital interfaces: evidence-based policy | <p>1. Literature review which focused on behavioural UX/UI literature and concepts such as personalisation, gamification, compensations and incentivisation, nudging action through a sense of progress, positive feedback, minimising friction</p> <p>2. Three exploratory online surveys.</p> <p><b>A total of 1 800 participants in the study.</b></p> | <p><b>Three online surveys</b> with a total of 1 800 participants were conducted as part of the design process.</p>                                                                         | <p><b>No RCTs were conducted as part of the study.</b></p>                                                            | <p><b>Relatively low.</b></p> <p>Vast literature and case studies from other countries allowed to conduct a relatively simple study. A crucial tool for the success of the research-project was the research teams' ability to visualise and illustrate the insights through a mockup of the product vision.</p>                                                      | <p><b>Political barriers:</b> the main difficulty is within the process of harnessing relevant stakeholders to adopt and apply insights from the research, and adapt policy accordingly.</p> <p><b>Regulatory barriers:</b> some issues require privacy related legislation.</p> <p><b>Operative barriers:</b> other difficulties can be attributed to implementation of changes in the interface, and back-end applications for subsequent processing and transferring of data between departments and agencies.</p> |

|                                       | Research process, data analysis and sample size                                                         | Did we use surveys?                                         | Did we use experiments?                      | Difficulty of conducting the study                                                                                                                                                                                                   | Difficulty of applying chosen mechanism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Public transportation: a data problem | Big-data analysis of 10 000 Israelis who commute daily to the Ramat Hachayal neighbourhood in Tel Aviv. | No exploratory surveys were conducted as part of the study. | No RCTs were conducted as part of the study. | <b>Medium.</b><br>Dependency on advanced data analysis capabilities to deduce relevant, scalable, and applicable policy tools and interventions. Also, the difficulty of setting infrastructure and gaining access to relevant data. | <b>Operative barriers:</b> setting a data-driven infrastructure and frequent data collection in order to allow ongoing data-based decision-making processes. Also, creating a perceptual change in the mindset, the basic assumptions and the work methodology which guide the public transportation planner.<br><br><b>Economic barrier:</b> a data-driven mindset naturally leads to the identification of new problems with various levels of difficulty. These problems create the need for new solutions, binding additional research processes and resources for implementation. |

## Notes

<sup>1</sup> Randomized Controlled Trials (RCT) are considered the highest standard of empirical trial, since they allow for the reduction of biases derived from people's choice to accept the intervention, and enable researchers to supervise, measure, and evaluate the impact of the intervention on actual behaviour. The RCT method allows for the isolation of the impact of the intervention under examination to ensure that the research results do indeed derive from it in a causative manner and to be able to compare its efficiency with other interventions. This type of trial can be conducted as a digital questionnaire with experimental manipulation, as a lab experiment, or as a field trial.

<sup>2</sup> The problem of complexity and burden in administrative services, and the potentially huge implications on citizens' lives, has not gone unnoticed, even earning the catchy name "sludge" from Cass Sunstein. Sunstein (2021<sup>[10]</sup>), *Sludge: What Stops Us from Getting Things Done and what to Do about it*, MIT Press.

<sup>3</sup> The Knesset (2021, February). Description and analysis of the automated devices market for cash withdrawals. Meir Azenkot, economist.

# Green budgeting: A way forward

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Green budgeting refers to the integration of climate and environmental perspectives into a government's budgetary processes. Based on the resources of the OECD's Paris Collaborative on Green Budgeting and experiences in OECD countries from implementing green budgeting, this paper identifies seven key areas to support the development of green budgeting practices in making progress toward climate and environmental goals. The key areas consider the institutional frameworks, budgetary tools, transparency and accountability arrangements and the enabling environment for budgeting in the public sector.

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## Overview

All OECD countries have committed to the 2015 Paris Agreement on climate change and have made commitments to reduce greenhouse gas emissions. In the majority of instances, the commitments are to achieve net-zero emissions by 2050 or sooner, as is the case for Austria (2040), Finland (2035), Germany (2045), and Sweden (2045). OECD countries have also made commitments relating to biodiversity, including those in the Aichi Biodiversity Targets. Many OECD countries have passed legislation and prepared national strategies on climate change and environment specify the policy rationale and basis of the reforms.

This paper focuses on the roles of central budget offices and the decision-making processes in budgeting. It is based on the work of the OECD Paris Collaborative on Green Budgeting, which supports OECD countries in the integration of climate and environmental perspectives into budgetary processes (Box 12). Recent work by the Collaborative has included the OECD Green Budgeting Framework (see Annex 1.D) and publications on the implementation of green budgeting in OECD countries. These resources have contributed to the OECD identifying seven key areas that can help to progress climate and environmental commitments through green budgeting (Box 13).

The implementation experiences in OECD countries indicate there is no single approach to integrating climate and environmental perspectives into budgeting. The variation is attributable to differences in national priorities, budgetary frameworks and limitations in the availability of timely information. However, the implementation experiences identify key areas to inform the ongoing development of green budgeting. For instance, the experiences of budget offices indicate a strong focus on *ex ante* assessment by analysing the intended results of reforms prior to including climate and environmental proposals in budgets.

### Box 12. OECD Paris Collaborative on Green Budgeting

The OECD Paris Collaborative on Green Budgeting was formed in 2017 as means to help countries with the integration of climate and environmental objectives into budgeting.

Its purpose is to provide a platform for countries to share experiences on the design of new and innovative tools to assess and drive improvements in the alignment of national objectives on climate change end environmental sustainability relative to budgetary processes and resources.

A unique feature of the Collaborative is its multi-disciplinary approach from bringing together experts on budgeting, the environment, taxation and other areas of the OECD. The Collaborative work on green budgeting is an integral part of the OECD's contribution to the Coalition of Finance Ministers for Climate Action and the 2021 meetings of the Conference of the Parties (COP26) (OECD, European Commission, IMF, 2012<sup>[1]</sup>).

Factors such as national strategies on climate change and environmental sustainability have contributed to the ever-increasing use of green budgeting in OECD countries. The increased relevance of green budgeting has in turn contributed to integrating green considerations into all policies, which helps in analysing the merits of budget proposals. It has also highlighted the importance of aligning policy commitments, particularly those passed in legislation by parliaments.

Green budgeting experiences in OECD countries have shown that not all budget proposals are of equal benefit and there can be more proposals than budgetary resources. Although this situation is not new for budgeting in general, it highlights the need for consistent prioritisation and decision-making processes across government to progress the budget proposals that will have the greatest impact.

Central budget offices are adapting existing budgetary tools, such as performance budgeting, fiscal risk management and macro-fiscal forecasting to ensure core activities of ministries of finance and treasuries include climate and environmental considerations. From a whole-of-government perspective, adapting existing tools extends to ensuring that the accountability arrangements for ministries and agencies include climate and environmental dimensions in planning, implementation, monitoring, evaluation, and reporting.

The implementation experiences have identified areas of ongoing work, examples include:

- Addressing differences in the capacities of government departments in preparedness to meet net-zero and related objectives.
- Identifying gaps in the tools and methods that are available to inform budget priorities (for instance, disclosures on fiscal risk and financial reporting).
- Increasing the performance information on the implementation of green budget initiatives.

This paper recognises that green budgeting practices continue to develop. Topics that are likely to influence budgetary practices in the coming years, including accounting standards on sustainability reporting. The OECD proposes to review the seven key areas in Box 2 over the next three years through its green budgeting surveys and direct engagement with member countries.

The key areas in this paper were discussed at the 2022 meeting of the OECD Paris Collaborative in junction with the Working Party on Financial Management and Reporting and the Working Party of Parliamentary Budget Officials and Independent Fiscal Institutions on 15 March 2022 in Paris.

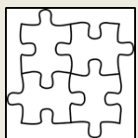
### Box 13. Green Budgeting: The Way Forward

#### 1. *Define green in terms of the results that are to be achieved*



Adopting results-based approaches to green budgeting enable governments to consider a broad range of potential impacts in a budget proposal, including climate and environmental impacts, to inform the selection of budget proposals that can contribute to a government's undertakings on net-zero emissions and related results.

#### 2. *Integrate green impacts into all governmental policies*



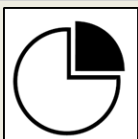
Climate and environmental considerations are not limited to new expenditure and should be applied to existing policies as well as budget proposals. The consideration of the potential impacts of policies to climate and the environment requires a comprehensive approach to policy development and provides information on the medium- and long-term budget implications of policies.

#### 3. *Align the relevant governmental commitments that apply to budgeting*



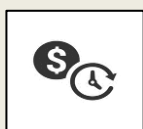
Parliament passes legislation on the government's budget and enters commitments that can have implications for the budget. Ministries of finance should identify where such implications exist and the mechanisms available to define the relationship and ensure alignment. An example is the relationship between fiscal budgets and carbon budgets where both instruments are approved by parliament.

#### 4. *Apply a consistent basis to prioritising the activities that matter most to climate and environmental goals*



Budgeting relies on the clear frameworks and consistent criteria to inform prioritisation and decision making. Taxonomies can enable ministries of finance to take stock of the composition of government expenditure relative to climate and environmental objectives. When combined with data on emissions and environmental considerations, governments can identify reforms that have the greatest impact.

### 5. Analyse green budget proposals on merit, separate from funding



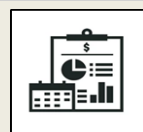
Many OECD countries have introduced carbon taxes, issued sovereign green bonds and allocated lump-sums for the purpose of advancing climate and environmental objectives. Budgetary disciplines analyse budget proposals on their merits within a funding envelope. The existence of funding for climate and environmental objectives does not reduce the need for such analysis.

### 6. Leverage existing budgetary frameworks to implement green budgeting



Green budgeting integrates climate and environmental perspectives into existing budgetary frameworks, tools and processes, which include fiscal risk management, medium and long-term fiscal statements and performance budgeting. The integration is relevant to the responsibilities of oversight institutions, and it has implications for the capacities needed within a ministry of finance in preparing advice and managing the budget.

### 7. Strengthen accountability and transparency requirements for the implementation of green initiatives



Government ministries and agencies are accountable for the use of budgetary funds and fulfil certain obligations on planning, monitoring, and reporting. These accountabilities apply to budget programmes that contribute to green objectives. Ministries of finance have a role in preparing guidance on the responsibilities that line ministries are to observe in relation to public expenditure on these matters.

## Define green in terms of the results that are to be achieved

Climate and environmental objectives comprise result-based undertakings, for instance to attain net-zero emissions by a specified date. The milestones within the objectives also focus on results, but at a more detailed level, such as the sectors of an economy, and can require co-ordination as covered in Key Area 3.

OECD countries use result-based approaches in budget frameworks, including performance budgeting and output-based appropriations. A result-based approach to green initiatives is relevant to managing performance through the budget cycle. In doing so, the focus on results minimises the risk of greenwashing, that is, an unsubstantiated inflation of what might be achieved from a budget initiative.

Adopting results-based approaches for green budgeting enable governments to consider a broad range of potential impacts from a budget proposal, including climate and environmental impacts, to inform the selection of budget proposals. Assessing budget proposals based on inputs can underweight innovation and productivity gains from mitigation and adaptation initiatives.

The results that OECD countries seek to achieve in relation to climate and environmental goals are specified in international commitments, such as the 2015 Paris Agreement and national commitments through legislation. These commitments are then expanded upon in national strategies that articulate the incremental results or milestones that are to contribute to achieving the overall commitment. Table 7 illustrates some of the commitments, by showing the form of the commitment, the target date to achieve the commitment, the scope, and the reporting obligations. The reporting obligations indicate that reporting the results achieved at specific points is an integral aspect of the overall commitment.

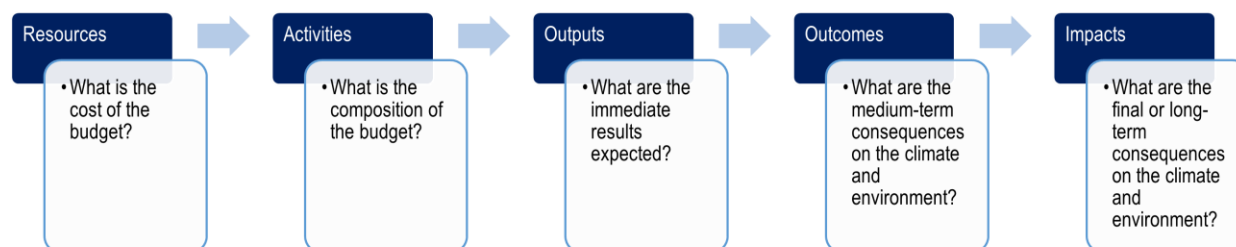
**Table 7. Commitments to net-zero emissions in selected OECD countries**

| Country         | Net Zero                | Date | Scope                       | Reporting Obligations  |
|-----------------|-------------------------|------|-----------------------------|------------------------|
| Austria         | In policy document      | 2040 | All GHG emissions           |                        |
| Canada          | In law                  | 2050 | All GHG emissions           | 2033, 2038, 2043, 2048 |
| Chile           | In proposed legislation | 2050 | All GHG emissions           | Every 4 years          |
| Colombia        | In proposed legislation | 2050 | CO2 emissions               |                        |
| Costa Rica      | In policy document      | 2050 | All GHG emissions           |                        |
| Denmark         | In law                  | 2050 | All GHG emissions           | Annual                 |
| Finland         | In proposed legislation | 2035 | CO2 emissions               | Annual                 |
| France          | In law                  | 2050 | All GHG emissions           | Every 5 years          |
| Germany         | In law                  | 2045 | All GHG emissions           | Annual                 |
| Hungary         | In law                  | 2050 | All GHG emissions           | Annual                 |
| Iceland         | In law                  | 2040 | All GHG emissions           |                        |
| Ireland         | In law                  | 2050 | All GHG emissions           | Annual                 |
| Italy           | In policy document      | 2050 | All GHG emissions           |                        |
| Japan           | In law                  | 2050 | All GHG emissions           | Annual                 |
| Korea           | In law                  | 2050 | All GHG emissions           |                        |
| Latvia          | In policy document      | 2050 | All GHG emissions           |                        |
| Luxembourg      | In law                  | 2050 | All GHG emissions           |                        |
| New Zealand     | In law                  | 2050 | Excludes specific emissions | Annual                 |
| Portugal        | In policy document      | 2050 | All GHG emissions           |                        |
| Slovak Republic | In policy document      | 2050 | All GHG emissions           |                        |
| Slovenia        | In proposed legislation | 2050 | CO2 emissions               | Annual                 |
| Spain           | In law                  | 2050 | All GHG emissions           | Periodically           |
| Sweden          | In law                  | 2045 | All GHG emissions           | Annual                 |
| Switzerland     | In policy document      | 2050 | All GHG emissions           |                        |
| United Kingdom  | In law                  | 2050 | All GHG emissions           | Annual                 |
| United States   | In policy document      | 2050 | All GHG emissions           |                        |

Source: IEA 2021.

Many OECD countries have elaborated on their climate and environmental commitments through national strategies, for example, Canada, France, Ireland, Japan, and the United Kingdom, which indicate the results that are needed in specific sectors or from specific policy reforms to help achieve the national commitments. The information in the strategies can help inform the prioritisation of budget proposals.

The majority of OECD countries use result-based approaches in budgeting to show what is to be achieved from a specified allocation of budget resources. Such approaches are evident from the specification of outputs, projects and programmes. The result-based frameworks express a chain of outputs and outcomes that are to state the objectives of the budgets proposals and the estimated impacts of policies (Figure 26). A result-oriented framework consists of indicators, sources of verification, method of information collection, frequency of data collection and responsibility for measurement. The information gathered from the frameworks make it possible to prioritise budgetary proposals.

**Figure 26. Result-Oriented Framework**

By focusing on what is to be achieved from a budget proposal the risk of greenwashing is reduced. Greenwashing refers to assertions that an activity is contributing to a climate or environmental objective more than is actually the case. The assertions identify climate or environmental credentials that are not valid and/or able to be proven. It is a potential cause of inflated estimates of the cost (and benefits) of a transition to net-zero emissions and environmental goals. Climate and environmental objectives require careful assessment as a policy action that is favourable for one objective, such as climate, may be detrimental to another, such as biodiversity.

The risk of greenwashing can occur throughout the budgetary process. It is highlighted by differences in determining what is green from the point when a budget proposal is prepared relative to monitoring reports and the accounting standards that are to apply in financial reports. In this regard, the emphasis on results is to provide measurable and verifiable evidence of what is to be achieved from a specific proposal in relation to climate and environmental objectives.

### **Integrate green impacts into all governmental policies**

Climate and environmental considerations are not limited to new expenditure and should be applied to existing policies as well as new spending proposals. Similarly, climate and environmental considerations are broader than the activities of ministries for climate change and the environment, and environmental protection expenditure.

The consideration of the potential climate and environment impacts from policies requires a comprehensive approach to policy development and to prepare information on the medium- and long-term budget implications of policies in relation to climate and environmental objectives.

Many climate mitigation and adaptation proposals require capital expenditure. Well-informed decisions on capital management and capital expenditure rely on information about changes in demand on the use of capital assets, which further supports consideration of the climate and environmental implications from public investment.

Governments develop policies by considering a broad range of policy variables in order to understand the potential impacts on people, communities, business and the environment. The climate and environment are relevant to policy development across government. The breadth of policy variables can help to identify the intended and unintended impacts of a new policy. Climate and environmental considerations should be part of the policy development process for all governmental policies regardless of whether it applies to new or existing expenditure.

Environmental impacts are broader than the activities of the Ministry for the Environment and environmental protection expenditure. In OECD countries, such as Denmark, France and Norway, environmental impact assessments are a pre-condition for advancing budget proposals.

### ***Projections on climate and environmental impacts***

Policy proposals that contribute to climate and environmental objectives can have large-scale budgetary impacts over time, for instance tax expenditures to support a reduction in carbon emissions, or assistance to individuals and communities that are vulnerable to the effects of climate change. In relation to reaching net-zero emission goals, a few OECD countries have adopted approaches that consider the medium-term and long-term expenditure impacts of policies by integrating climate and environmental considerations into macro-fiscal projections and scenarios, and the preparation of long-term fiscal statements. Examples of the former are available in Denmark and the United Kingdom (Box 14).

#### **Box 14. Macro-fiscal projections and climate change**

- **Denmark** has developed a macro-fiscal model to bring climate and environmental policy variables into its macroeconomic projections. The model, referred to as GreenREFORM, assesses the potential macro-fiscal impacts of climate and environmental policies. The model takes a long-term perspective, with the projections extending to 2100. The power of the model is its dynamic approach to identify potential macro-fiscal impacts from policy changes on such things as emissions and waste management. In doing, so, the model can look at the potential interaction of policy variables on Denmark's macro-fiscal outlook.
- **United Kingdom's** Office of Budget Responsibility publishes a Fiscal Risk Report that includes a chapter on climate change. The analysis in the report looks at the potential economic and budget impacts of climate change and the policy levers available to government. The report specifically considers the implications for public spending from decarbonising the UK economy by 2050. It presents a set of scenarios for achieving net-zero emissions, which include the implications of unmitigated climate change and delayed actions on productivity and other variables.

Source: (OECD, 2021<sup>[2]</sup>) and (Office for Budget Responsibility, 2021<sup>[3]</sup>)

### ***A special focus on capital expenditure***

The climate change objectives require structural changes to economies and the delivery of public services. The changes require capital expenditure as governments invest in new technologies on electricity generation, transportation, and other items. In order to develop reliable businesses cases for large-scale capital investment, it is important to estimate the potential changes in demand for those assets as a result of the users of the assets changing their behaviour as part of government policies that rely on those assets. The business cases should also include climate and environmental considerations, such as the price of estimated cost of carbon over the life of the investment.

## Align the relevant governmental commitments that apply to budgeting

The legislature enacts the government's annual budget and takes various other actions that can have implications for the budget. On climate and environmental matters, commitments in national strategies and related instruments can have implications for the budget. Ministries of finance should identify the extent to which such undertakings are relevant to the formulation of the budget and identify mechanisms to ensure alignment to help meet multiple commitments. An example is the relationship between fiscal budgets and carbon budgets where both are approved by parliament.

Governments have responsibilities in relation to multiple commitments. Some of the commitments are through the legislature, such as ratifying the Paris Agreement. At the same time, there are commitments from fiscal budgets on the level of expenditure within a budget period and carbon budgets that specify limits (ceilings) on the maximum level of emissions in a country and/or sector over a specific period (Box 15). A carbon budget informs the scale of transition in a given sector, and in doing so can inform priorities in a fiscal budget by the range of policies and initiatives that might be needed. Like the fiscal budget, carbon budgets are approved by parliament. Each of these instruments are designed to meet certain policy objectives, and the reporting requirements, implementation periods can vary.

The multiple instruments are often complementary in progressing a policy objective by more than one ministry. For instance, a ministry of finance on fiscal budgets, and ministries of climate change or environment on carbon budgets. However, co-ordination is not necessarily automatic and risks on non-compliance can exist from a lack of alignment and co-ordination within government.

Of the examples where consideration of alignment and co-ordination mechanisms may be required, two that are relevant to green budgeting are:

- Subnational governmental bodies where decision making and funding arrangements can sit outside of central government.
- Recovery plans that contain performance requirements on climate and environmental priorities.

### Box 15. Examples of carbon budgets in OECD countries

- **France:** The first three carbon budgets were adopted by decree in 2015 at the same time as the national low-carbon strategy. Covering the periods 2015-2018, 2019-2023 and 2024-2028, they set the national greenhouse gas emission ceilings that are not to be exceeded and defined the short-term path for reducing them.
- **Ireland:** The carbon budget establishes a whole-of-economy ceiling on greenhouse gas emissions by sector for a five-year period. The carbon budget is established in legislation (Climate Action and Low carbon Development (Amendment) Act 2021). The first covers the period from 2021 to 2025. The government has referred to the carbon budget as a roadmap to reach a climate neutral economy by 2050.
- **New Zealand:** In 2021, the government announced it plans to establish an emissions budget that would be monitored by the Climate Change Commission.
- **United Kingdom:** In 2020, the government released its sixth carbon budget based on recommendations by an independent Climate Change Committee. The five-year carbon budget covers the period from 2033 to 2037. It includes policy recommendations – intended to inform government policy and budgets priorities – to achieve the budget ceilings.

## Apply a consistent basis to prioritising the activities that matter most to climate and environmental goals

Budgeting relies on clear frameworks and consistent criteria to inform prioritisation and decision making. The arrangements should be transparent so they can be applied across government.

Taxonomies have enabled ministries of finance to take stock of the composition of government expenditure relative to climate and environmental objectives. When combined with data on emissions and environmental considerations, governments are able to identify the activities and sectors where decarbonisation and other reforms can have the greatest impact relative to policy objectives.

A key role of the ministry of finance is to prioritise budgetary proposals according to the government's policy objectives. Doing so requires established assessment frameworks and decision-making processes that can be applied across government. Such prioritisation helps to ensure the proposals with the greatest merit are included in a budget given limited resources. However, expenditure decisions that have implications for climate goals can also occur outside of annual budgetary processes, examples include: departmental funding or prioritisation rounds, spending reviews, climate investment funds, infrastructure bodies and through direct financing instruments.

Many OECD countries have used classification methodologies to tag expenditure to understand the composition of governmental expenditure relative to climate and environmental objectives. The methodologies can vary to reflect national characteristics (Table 8) and classification exercises have enabled ministries of finance to take stock of expenditure from a climate and environmental perspective.

In the case of France and Ireland, the experiences from tagging one budget have helped to expand the methodologies in subsequent budgets. Both France and Ireland use the European Union Taxonomy on Sustainable Activities, although the specific thresholds that are used differ in some instances. (European Parliament and Council, 2020<sup>[4]</sup>).

**Table 8. Green taxonomies in selected OECD countries**

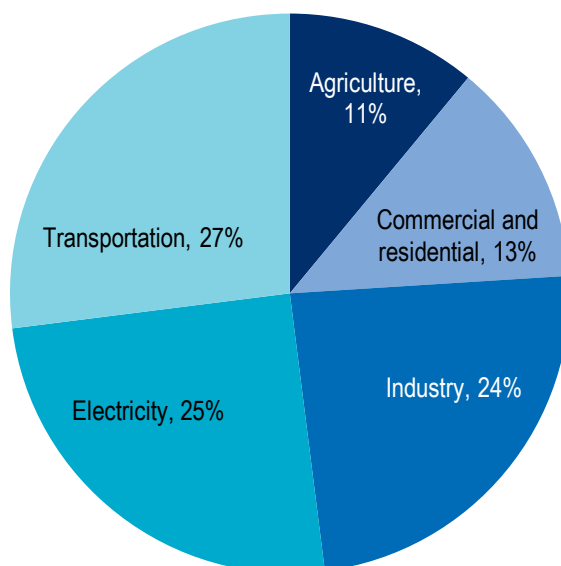
| Country        | Status                                          | Coverage                      | Notes                                                                                                                               |
|----------------|-------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Australia      | In development                                  | -                             | -                                                                                                                                   |
| Canada         | In development                                  | 8 sectors                     | -                                                                                                                                   |
| Chile          | In development                                  | Priority sectors              | Contains screening criteria                                                                                                         |
| Colombia       | Drafted                                         | 8 categories                  | Includes the do no Significant Harm principle                                                                                       |
| Japan          | Operational                                     | -                             | Refers to the transition to a low carbon, environmentally sustainable economy Includes a net zero objective Supported by guidelines |
| Korea          | Proposed version subject to public consultation | 9 categories<br>53 activities | Includes the do no Significant Harm principle                                                                                       |
| Mexico         | In development                                  | -                             | -                                                                                                                                   |
| New Zealand    | Proposed version subject to public consultation | 1 category<br>(agriculture)   | Seeks to align domestic and international parameters.                                                                               |
| United Kingdom | In development                                  | -                             | Governance includes a Green Technical Advisory Group                                                                                |

Source: (OECD, IEA, 2021<sup>[5]</sup>)

At the same time, ministries of climate change and environment and related organisations have completed assessments of the emission profiles of a country which have helped to identify the areas where the most gains are needed to reach targets such as net-zero emissions. The Environmental Protection Agency has identified the composition of emissions in the United States (Figure 27) (EPA, 2020<sup>[6]</sup>). The size,

composition and gas emissions of sectors vary by country, but indicate priority sectors for reforms on mitigation and adaptation relating to climate and the environment. This observation is consistent with findings of the European Union Technical Expert Group, which identified that 93.5% of Europe's greenhouse gas emissions were from just seven sectors that covered buildings, energy, industry, land use and transportation (Sweatman and Hessenius, 2021<sup>[7]</sup>).

**Figure 27. Greenhouse gas emissions by economic sector in the United States in 2020**



Source: (EPA, 2020<sup>[6]</sup>)

### Analyse green budget proposals on merit, separate from funding

Many OECD countries have introduced carbon taxes, issued sovereign green bonds, and allocated lump-sums for the purpose of advancing climate and environmental objectives. Budgetary disciplines analyse budget proposals on their merits within a funding envelope. The existence of funding for climate and environmental objectives does not reduce the need for such analysis and scrutiny.

Since 2017, there has been a significant increase in the mobilisation of funding in government for green purposes. Prominent examples include debt funding from the issuance of sovereign green bonds and revenue from carbon taxes (OECD, 2020<sup>[8]</sup>).

Carbon taxes are an important source of governmental revenue. In 2021, 60% of OECD countries had carbon taxes, including Canada, Chile, Denmark, France, Germany, Japan, Mexico, Netherlands, Spain, Sweden, and the United Kingdom. The revenues can be considered as central revenue or be earmarked for specific purposes (Table 9) (OECD, 2019<sup>[9]</sup>).

However, access to funding from a specified source should not reduce budgetary disciplines to analyse and prioritise budget proposals that will make the greatest contribution to climate and environmental objectives, as detailed in Principle 1 of this document. Initiatives that earmark and hypothecate funding should not provide a less rigorous path to funding new spending initiatives. The requirement for analysis and impact assessment exists to identify the most worthwhile proposals.

**Table 9. Examples of earmarked tax carbon in OECD countries**

| Country     | Introduced | Description                                                                                                                                                                                                                                                                                    |
|-------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Canada      | 2019       | The tax applies to the federal carbon pricing backstop if provinces do not have a sufficiently stringent carbon pricing system in place already. Provincial carbon taxes and emissions trading schemes predate the backstop; the first carbon tax was implemented by British Columbia in 2008. |
| Denmark     | 1992       | Used for environmental spending and industry compensation.                                                                                                                                                                                                                                     |
| Ireland     | 2010       | Helps to pay for the negative externalities caused by CO <sub>2</sub> emissions from transport and household heating.                                                                                                                                                                          |
| Japan       | 2012       | Supports renewable energy and energy efficiency programmes through green subsidies and research and development support.                                                                                                                                                                       |
| Luxembourg  | 2021       | Distributed among green projects.                                                                                                                                                                                                                                                              |
| Switzerland | 2008       | One-third of goes to reduce energy use in the building sector. The remaining two-thirds are reallocated to households and businesses.                                                                                                                                                          |

In December 2016, Poland became the first OECD country to issue a sovereign green bond followed by France in January 2017. By 2021, over half of OECD countries had issued a sovereign green bond, including in Belgium, Chile, Colombia, Denmark, France, Germany, Ireland, Italy, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, Poland, Slovenia, Spain, Sweden, and the United Kingdom (Table 10). Total amount of green bonds issued by OECD sovereigns exceeded USD 170 billion as of 2021.

From a budgetary perspective, the issuance of sovereign green bonds can fund initiatives that meet the requirements of the financing frameworks. The frameworks should work within the capital expenditure ceilings set by the government.

**Table 10. Examples of public green bonds issuance in OECD countries**

| Country   | First issuance | Maturity | Amount     | Description                                                                                                                                                                                                                                                                                                                                           |
|-----------|----------------|----------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Belgium   | 2018           | 15 years | EUR 4.5 Bn | The loan is used to finance Energy Efficiency, Clean Transportation, Renewable Energy, Circular Economy and Living Resources and Land Use.                                                                                                                                                                                                            |
| Colombia  | 2021           | 10 years | COP 200 M  | Colombia issued its first green sovereign bond to finance environmental investment projects.                                                                                                                                                                                                                                                          |
| Denmark   | 2022           | 10 years | DKK 15 Bn  | The issuance volume of green bonds is determined on the foundation of the quantity of eligible green expenditure. The green bond is issued as a twin bond in line with the twin bond concept introduced by Germany in 2020.                                                                                                                           |
| France    | 2017           | 22 years | EUR 7 Bn   | The bonds focus on spending from the state budget and the investment programme on climate change, adaptation, biodiversity, and pollution. The government committed to publish reporting on the environmental impacts of eligible green spending.                                                                                                     |
| Germany   | 2020           | 10 years | EUR 6.5 Bn | The Ministry of Finance issued a first green with an innovative twin bond concept. The issuance of this debt is part of a long-term strategy to make green budget spending more transparent and strengthen the country's position in the sustainable finance sector.                                                                                  |
| Italy     | 2021           | 24 years | EUR 8.5 Bn | Green bonds focus on the public green eligible expenditure, with positive environmental impact on Renewable electricity and heat, Energy efficiency, Transport, Pollution prevention and control and circular economy, Protection of the environment and biological diversity, Research.                                                              |
| Latvia    | 2018           | 8 years  | EUR 600 M  | The government planned to extend the resources received to the state budget expenditure carried out and planned in 2020-2022 for ensuring environmentally friendly transport, the preservation of Latvian forests, waters, biodiversity, reducing inequalities and poverty, and other measures aimed at achieving sustainable development objectives. |
| Lithuania | 2018           | 10 years | EUR 20 M   | The loan is used for the project 'Housing Renovation Fund', which helps owners of multi-apartment buildings to modernise buildings, improve energy efficiency and reduce heating costs.                                                                                                                                                               |

| Country        | First issuance | Maturity | Amount                | Description                                                                                                                                                                                                                                                                                                                                                         |
|----------------|----------------|----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Slovenia       | 2021           | 10 years | EUR 1 Bn              | The bond is used to finance or refinance environmental or social projects included in the national budget.                                                                                                                                                                                                                                                          |
| Spain          | 2021           | 20 years | EUR 5 Bn              | The bond framework includes seven eligible green categories, which are renewable energy, clean transportation, sustainable water and wastewater management, energy efficiency, protection and restoration of biodiversity and sustainable management of natural resources, pollution prevention and control and circular economy, and adaptation to climate change. |
| Sweden         | 2020           | 10 years | SEK 20 Bn             | The Government adopted a sovereign green bond framework and the selection of budget expenditure to which the proceeds from the bond will be linked, including protection of valuable natural environments, climate investments and railway maintenance.                                                                                                             |
| United Kingdom | 2021           | 32 years | GBP 10 Bn<br>GBP 6 Bn | The loan is used to finance expenditure in clean transportation, energy efficiency, renewable energy, pollution prevention and control, living and natural resources, and climate change adaptation.                                                                                                                                                                |

## Leverage existing budgetary frameworks to implement green budgeting

Green budgeting integrates climate and environmental perspectives into existing budgetary frameworks, tools and processes. It does not imply a separate decision-making process for a separate budget, which include fiscal risk management, medium and long-term fiscal statements and performance budgeting.

Green budgeting is relevant to the responsibilities of oversight institutions, such as fiscal councils, and audit institutions and standard setters, and in doing so leverages the institutional environment in which budget frameworks operate. Integrating climate and environmental perspectives into budget frameworks has implications for the capacities needed within a ministry of finance in its preparation of advice and management of the budget.

Green budgeting integrates climate and environmental perspectives into budget frameworks. It shows the actions a government is taking to progress climate and environmental objectives from the allocation of resources in the budget.

Since 2017, OECD countries have introduced green budgeting initiatives by adapting existing budgetary arrangements to manage resources that have climate and environmental impacts. Relevant examples include:

- Performance budgeting: by including performance indicators that are relevant to climate and environmental policy objectives.
- Fiscal risk management: by including fiscal risks for such things as extreme weather events.
- Medium-term expenditure frameworks: by analysing changes to revenue and expenditure over the medium-term, for instances changes to petrol excise revenues brought about by a greater use of electric vehicles.

Other relevant aspects of existing budgetary frameworks include institutions, in addition to the ministry of finance, that are relevant to the conduct of budgeting:

- Independent fiscal institutions, where the responsibilities can include commenting on fiscal forecasts, preparing scenarios, and costing election platforms. In such institutions, understanding the potential impact of climate and environmental considerations are central to the existing remit of the institutions and its ability to fulfil its functions.

- Supreme audit institutions in terms of the scope of disclosures and adherence to relevant accounting standards and financial reporting obligations.
- Standard setters that establish requirements such things as financial reporting and national environmental accounts.

The scaling up of green policy and budgetary initiatives in OECD countries has brought with it implications for the capacities of central budget offices in ministries of finance and treasuries. Ministries of finance and treasuries are not responsible for policies on climate change and environmental policy; however, the complex nature of climate change and environmental sustainability has broadened the scope of analysis and policy advice that a ministry of finance needs to consider. This has implications for the skills sets a finance ministry employs, the data it collects and the analysis it undertakes. Co-ordination between ministries of finance and ministries of climate change and environment has increased since the Paris Agreement, as has the awareness of how climate change and environmental policies can have implications for budget planning, execution and reporting (Coalition of Finance Ministers for Climate Action, 2022<sup>[10]</sup>). Examples on cross-government co-ordination and capacity development include:

- France: In 2022, the Prime Minister took on responsibility for planning the ecological and energy transition in France, which requires a co-ordinated response across ministries.
- United Kingdom: The 2021 New Zero Review considers the capacities the Treasury will require in order to provide high quality advice to government on a range of policy topics over the medium term (HM Treasury, 2021<sup>[11]</sup>).

## Strengthen accountability and transparency requirements for the implementation of green initiatives

Government ministries and agencies are accountable for the use of budgetary funds and fulfil certain obligations on planning, monitoring, and reporting, including requirements on the control environment for the use of public funds. These accountabilities apply equally to budget programmes that contribute to green objectives, however the inclusion of green dimensions in accountability documents is not necessarily automatic.

Ministries of finance have a role in preparing guidance on the responsibilities that line ministries are to observe in relation to public expenditure, e.g. administrative circulars on current and capital expenditure. The guidance should include the monitoring, disclosure and reporting of information relating to budget initiatives that progress climate and environmental objectives, as well as expenditure generally.

Government ministries and agencies manage public resources within budget frameworks and have accountability obligations on planning, incurring expenditure, monitoring and reporting. With respect to climate and environmental initiatives, the obligations do not fall necessarily to ministries of finance and require a whole-of-government approach, as the ministries and agencies implementing the initiatives have the strongest incentives best sources of information to complete the public accountability obligations.

Updating the guidance and requirements that ministries and agencies are to follow can help to ensure climate and environmental considerations are explicitly included in the accountabilities that ministries and agencies are to meet. The information can help to strengthen public financial management by ensuring the required information is available consistently across government. In the case of Ireland, the government has updated the capital expenditure component of the Public Spending Code and is in the process of updating the current expenditure components.

Other information that may be relevant for monitoring and reporting on a whole-of government basis is illustrated by the dashboard for the OECD International Programme for Action on Climate (Box 16).

### Box 16. International Programme for Action on Climate (IPAC)

In 2021, the OECD established IPAC to support progress towards net-zero emissions by providing information to help monitor the effectiveness of countries' actions through such things as a dashboard of indicators. The dashboard provides a cross-dimension perspective from 10 indicators:

- |                                                             |                               |
|-------------------------------------------------------------|-------------------------------|
| 1. GHG emission trends and intensities                      | 6. Changes in the energy mix  |
| 2. Net-zero mission trajectories                            | 7. Carbon pricing             |
| 3. Climate related impacts on environmental conditions      | 8. Climate related taxation   |
| 4. Climate related risks from extreme weather               | 9. Climate related innovation |
| 5. Climate related vulnerabilities and impacts on wellbeing | 10. Climate policy            |

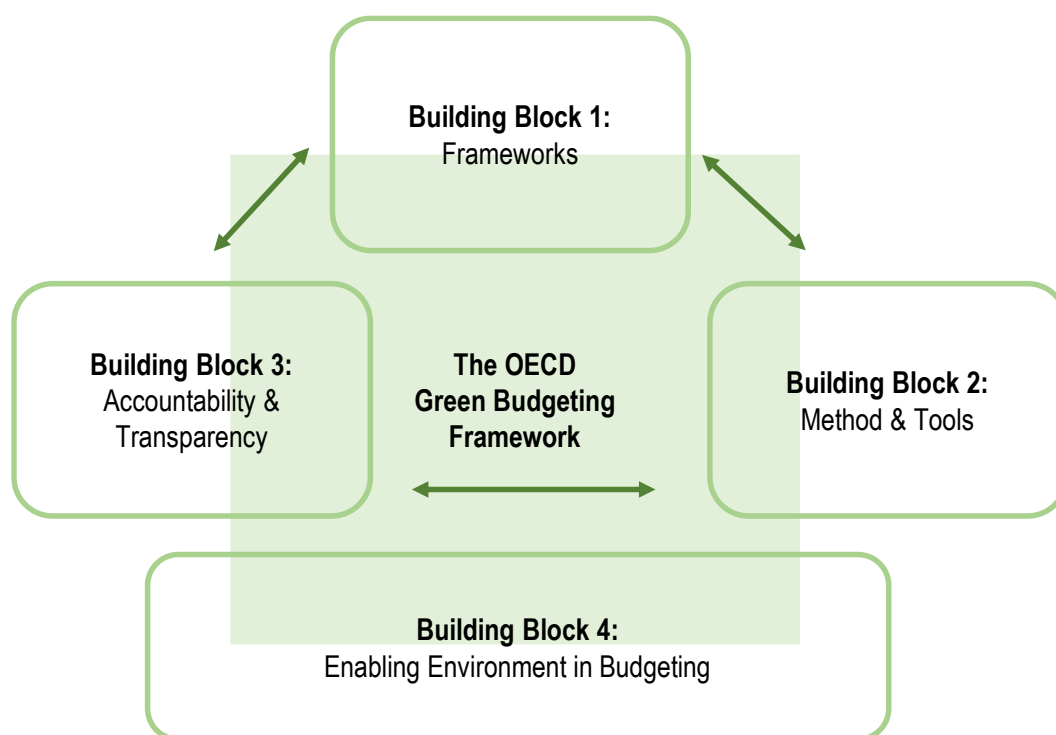
The development of indicators and data classification methodologies is in close co-ordination with the Paris Collaborative on Green Budgeting.

Source: (OECD, International Programme for Action on Climate<sup>[12]</sup>)

## Annex 1.D. OECD Green Budgeting Framework

The OECD Green Budgeting Framework articulates the development of green budgeting in OECD countries (Annex Figure 1.D.1). The framework comprises four building blocks which countries have used to integrate climate and environment perspective into budgeting. The OECD uses the framework to provide implementation support on green budgeting and to provide timely information on new developments.

**Annex Figure 1.D.1. OECD Green Budgeting Framework**



Source: (OECD, 2020<sup>[13]</sup>)

### Framework

In the OECD Green Budgeting Framework, Building Block 1 on Frameworks refers to the way governments establish the basis for green budgeting (Annex Table 1.D.1).

**Annex Table 1.D.1. Building Block 1: Framework considerations**

| Building Block 1 | Relevant Dimensions                           | Notes                                                                                                                                                                                                                                                                                                                   |
|------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Framework        | National Climate and Environmental Strategies | Countries are developing environmental, climate and biodiversity strategies. These strategies establish the national context and policy priorities relative to international agreements and country-specific consideration. The strategies in turn inform policy development and proposals for new spending in budgets. |
|                  | Legal basis                                   | The legal basis for green budgeting can include such the constitution, budget framework laws and administrative practices. The legal basis can illustrate a government's commitment to green budgeting and in particular beyond a single electoral period.                                                              |
|                  | Objectives                                    | Governments use various objectives and targets to define and monitor green budgeting initiatives. These objectives can vary by country and reflect national characteristics.                                                                                                                                            |
|                  | Policy making and prioritisation              | Green budgeting should be integrated into public policies in general and should be part of budget negotiations to guide the prioritisation of budgetary allocations and investments.                                                                                                                                    |
|                  | Governance                                    | The governance of green budgeting should identify which ministries are primarily responsible for green budgeting and its implementation, whether other actors are involved and whether the scope covers the entire budget.                                                                                              |
|                  | COVID-19 recovery plans                       | The majority of OECD countries have adopted recovery plans in response to the COVID-19 pandemic. These plans identify public expenditure to support an economic, environmental and social recovery.                                                                                                                     |

## Tools and methods

The building block on tools and methods has received considerable attention by ministries of finance across OECD countries to produce and synthesise information to help interpret climate and environmental considerations in budgeting (Annex Table 1.D.2).

**Annex Table 1.D.2. Building Block 2: Tools and methods**

| Building Block 2  | Relevant Dimensions              | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Methods and Tools | Medium-term perspective(s)       | The climate and environmental goals are expressed over medium-term and long-term periods. The relevance to budgeting is the alignment of goals into such things as a government's fiscal framework to mainstream policy objectives across relevant frameworks in government                                                                                                                                                                                                                                                                                 |
|                   | Macro-fiscal Projections         | The ministry responsible for macroeconomic forecasting should produce forecasts and scenarios that integrate environmental considerations according to a timetable that is consistent with the budgetary cycle.                                                                                                                                                                                                                                                                                                                                             |
|                   | Risk management                  | Fiscal risk management identifies potential fiscal risk in the short, medium and long term. The analysis of climate and environmental risks should be integrated into fiscal risk management across government.                                                                                                                                                                                                                                                                                                                                             |
|                   | Carbon-related tools             | Carbon tools include carbon assessment of budget measures, carbon-pricing instruments including the use of a shadow price of carbon to evaluate public policies and investments.                                                                                                                                                                                                                                                                                                                                                                            |
|                   | Impact appraisal                 | Several tools allow to measure the impact of green budgeting: <ul style="list-style-type: none"> <li>– Environmental cost-benefit analysis: An analysis of the cost and benefits of a budget proposal that takes into account the environment consequences that affect the natural environment.</li> <li>– Impact assessments and evaluations: It contributes to policy development by informing policy design and decision making with potential ways to adapt proposals in the future.</li> </ul>                                                         |
|                   | Budget classification and review | Tools are available to rank and score budgetary expenditure to facilitate the prioritisation of existing and new budgetary allocations: <ul style="list-style-type: none"> <li>– Green budget tagging: It classifies budget measures according to their climate and environmental impact and enhance the transparency of a government's green actions.</li> <li>– Green spending reviews: it considers the extent to which ministries and governmental agencies can transition to net-zero emissions and environmentally sustainable operations.</li> </ul> |
|                   | Taxation                         | Taxation can change the behavior of economic agents, including through a carbon tax, and a regular review of environmentally harmful tax expenditures and subsidies.                                                                                                                                                                                                                                                                                                                                                                                        |
|                   | Accounting                       | Require appropriate metrics for the government function to be applied consistently across departments.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                   | Green finance                    | Green bonds and sustainability bonds are an important lever for financing the ecological transition. They allow governments and public entities to finance environmental projects, especially infrastructure investments.                                                                                                                                                                                                                                                                                                                                   |

## Accountability and transparency

The accountability and transparency building block supports the functioning and credibility of government in its progress toward green policy objectives (Annex Table 1.D.3).

**Annex Table 1.D.3. Building Block 3: Accountability and transparency**

| Building Block 3                | Relevant Dimensions                                   | Notes                                                                                                                                                                                                                                                                                     |
|---------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accountability and transparency | Monitoring, evaluation and reporting                  | The ministry of finance and line ministries monitor and report on budgeting initiatives, which should include the climate and environmental considerations of budget initiatives.                                                                                                         |
|                                 | Disclosure and financial reporting and sustainability | Green budgeting information should be incorporated in public financial data disclosure and financial and sustainability reporting standards / requirements.                                                                                                                               |
|                                 | Oversight                                             | The fiscal impacts of climate change and environmental sustainability are relevant to the remit of oversight institutions, such as fiscal councils and audit offices, to support fiscal transparency and accountability.                                                                  |
|                                 | Transparency                                          | A structured dialogue between government, civil society bodies and other stakeholders on climate or environmental impact of budgets is central to communicating budget policies. Green budgeting initiatives should be published on an open and accessible platform (website, open data). |

## Enabling environment

The purpose of the last building block is to leverage the existing resources in budgetary frameworks and processes in the application of green budgeting and, where necessary, adapt these resources for green budgeting purposes (Annex Table 1.D.4).

**Annex Table 1.D.4. Building Block 4: Enabling environment**

| Building Block 4     | Relevant Dimensions   | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enabling environment | Performance budgeting | Performance measures, impact indicators and targets are designed to provide meaningful information about the purpose, execution and review of budget initiatives. Introducing a green perspective to performance budgeting can help to: clarify policy priorities and focus public spending accordingly, monitor and evaluate effectiveness of the expenditure, increase transparency and accountability, adjust policies, programmes and management systems according to the green results achieved. |
|                      | Programme budgeting   | A budget programme is a defined group of projects and/or activities that are intended to give effect to a policy. Programmes differ from input costs, as they articulate the public services and goods that are produced by a department. Introducing green budgeting within programme budgeting allows governments to assess how the programme relates to climate and environmental policy objectives, and to analyse the contribution of a ministry's actions to those objectives.                  |
|                      | Co-ordination         | Ministries of finance alone do not undertake all green budgeting. Co-ordination with the different levels of government, other line ministries (ministries of climate change and environment) and within ministries and departments is necessary to access specialist expertise and other resources that can inform budget priorities and assessment techniques.                                                                                                                                      |
|                      | Training              | The capacities required to undertake green budgeting often require new or adapted ways of going about existing budgetary functions. As part of the on-going training that central budget offices provide to staff, the green budgeting aspects of budget circulars and guidance can call for training initiatives within a ministry of finance as well as the line ministries that receive the circulars.                                                                                             |

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This issue consists of 4 articles: 1) Evaluation framework and practices: A comparative analysis of five OECD countries; 2) Health budgeting and governance responses to COVID-19 in Latin America and the Caribbean: Lessons for improving health systems' resilience; 3) How can independent fiscal institutions make the most of assessing past economic forecasts?; and 4) Using behavioural insights to inform budget policy making: Eight Israeli case studies.

