

Public Financial Management in Peru

AN OECD PEER REVIEW





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Foreword

The Financial Technical Assistance Programme to Support the Continuous Improvement of Peru's Public Finances – Second Phase (PMC2) began with an inter-institutional agreement signed in 2017 between the Swiss Economic Secretariat – SECO, the Peruvian Ministry of Economy and Finance, and the Peruvian Agency for International Cooperation.

The main objective of the PMC2 is to provide assistance to strengthen the efficient and transparent management of public finances in Peru within the framework of the steering role and guidelines of the National Financial Management Systems, to contribute to sustainable growth, economic development with social inclusion and poverty reduction.

In January 2022, as part of the technical assistance funded by PMC2, the Ministry of Economy and Finance of Peru asked the Organisation for Economic Co-operation and Development (OECD) to conduct a peer review of Peru's challenges in meeting OECD standards in public financial management. The assessment focused on four strategic areas:

- 1. budget practices and budgetary governance
- 2. treasury management and cash management systems
- 3. fiscal management of human resources
- 4. public investment programming, budgeting and management.

To carry out this assessment, OECD experts:

- Held more than 30 virtual meetings involving the participation of more than 100 public officials between February and April 2022 with the various directors general and relevant actors in each of the four strategic areas, including representatives from subnational governments, sectoral ministries and public agencies as well as former ministers and other former high-level officials. These meetings aimed to provide a concrete understanding of how the systems that make up public sector financial management work in Peru today, what recent improvements have been made and what challenges remain.
- Undertook a mission to Lima in March 2022 to exchange in person with relevant stakeholders and
 organise an international seminar, inviting OECD peers to share good practices from their countries
 with Peruvian public servants and reflect on how these could inspire reforms in Peru.
- Analysed Peru's practices and challenges in the light of recent practices and reforms in OECD
 countries and drafted this report with a diagnosis of the main challenges and proposed
 recommendations to move towards practices aligned with OECD standards.
- Proposed and discussed with the authorities a "road map" for the proposed reforms which prioritises and sequences them.

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Camila Vammalle (Senior Public Policy Analyst, Public Management and Budgeting Division, Directorate for Public Governance) led and co-ordinated the report, under the supervision of Jón Blöndal (Head of Division, Public Management and Budgeting Division, Directorate for Public Governance) and Andrew Blazev (Deputy Head of Division, Public Management and Budgeting Division, Directorate for Public Governance). Camila Vammalle and Luisa Cajamarca (consultant) wrote Chapter 1. Camila Chapter 2. Almudena Fernandez (consultant) Felicitas Neuhaus, with the support of Natalia Nolán Flecha (both from the Public Management and Budgeting the Directorate for Public Governance). Division prepared Ana María Ruiz Rivadeneira (Infrastructure and Public Procurement Division, Directorate for Public Governance) and Luisa Cajamarca wrote Chapter 5. Jennifer Allain provided editorial support. The report was prepared for publication by Meral Gedik with administrative support from Lyora Raab, Deborah Merran and Aleksandra Bogusz (Public Management and Budgeting Division, Directorate for Public Governance).

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Abbreviations and acronyms

Abbreviation in English	Acronym in English	Abbreviation in Spanish	Acronym in Spanish	
AIRHSP	Computer Application for the Centralised Registration of Payroll and Human Resources Data of the Public Sector	AIRHSP	Aplicativo Informático para el Registro Centralizado de Planillas y de Datos de los Recursos Humanos del Sector Público	
CAS	Administrative service contracting	CAS	Contratación de servicios administrativos	
CGR	Comptroller General of the Republic	CGR	Contraloría General de la República	
DGGFRH	General Directorate of Fiscal Management of Human Resources	DGGFRH	Dirección General de Gestión Fiscal de los Recursos Humanos	
DGPMI	General Directorate of Multianual Investment Planning	DGPMI	Dirección General de Programación Multianual de Inversiones	
DGPP	General Directorate of Public Budget	DGPP	Dirección General de Presupuesto Público	
DGTP	General Directorate of Public Treasury	DGTP	Dirección General del Tesoro Público	
DL	Legislative decree	DL	Decreto legislativo	
DyT	Donations and transfers	DyT	Donaciones y Transferencias	
GDP	Gross domestic product	PIB	Producto interno bruto	
HR	Human resources	RR. HH	Recursos humanos	
HRM	Human resources management	GRH	Gestión de recursos humanos	
IPSAS	International Public Sector Accounting Standards	IPSAS	Normas Internacionales de Contabilidad del Sector Público	
LAC	Latin America and the Caribbean	ALC	América Latina y el Caribe	
MEF	Ministry of Economy and Finance	MEF	Ministerio de Economía y Finanzas	
MIP	Multiannual investment programme	PMI	Programa multianual de inversiones	
MTEF	Medium-term expenditure framework	MGMP	Marco de gasto de mediano plazo	
OECD	Organisation for Economic Co-operation and Development	OCDE	Organización para la Cooperación y el Desarrollo Económico	
PCM	Presidency of the Council of Ministers	PCM	Presidencia del Consejo de Ministros	
PIA	Aperture Institutional Budget	PIA	Presupuesto Institucional de Apertura	
PIM	Modified Institutional Budget	PIM	Presupuesto Institucional Modificado	
RD	Determined revenues	RD	Recursos Determinados	
RDR	Directly collected revenues	RDR	Recursos Directamente Recaudados	
		RR.HH	Recursos humanos	
RO	Ordinary resources	RO	Recursos Ordinarios	
ROOC	Resources from official credit operations	ROOC	Recursos por operaciones oficiales de crédito	
SAGRH	Administrative System of Human Resources Management	SAGRH	Sistema Administrativo de Gestión de Recursos Humanos	
SERVIR	National Civil Service Authority	SERVIR	Autoridad Nacional del Servicio Civil	
SIAF	Financial Administration System	SIAF	Sistema Integrado de Administración Financiera	
SIAPE	Integrated Human Resources Administration System	SIAPE	Sistema Integrado de Administración de Recursos Humanos	
SNIP	National Public Investment System	SNIP	Sistema Nacional de Inversión Pública	
SUNAT	National Superintendency of Customs and Tax Administration	SUNAT	Superintendencia Nacional de Aduanas y Administración Tributaria	
TSA	Treasury Single Account	CUT	Cuenta Única del Tesoro	
US	United States	EE. UU	Estados Unidos	

Executive summary

The public financial management system that Peru has developed since the 1990s has successfully ensured the fiscal sustainability of the public sector: growth has been above the average for Latin America and the Caribbean, with fiscal deficit and public debt levels lower than those of the region. Rising per capita incomes allowed Peru to achieve upper middle-income country status in 2008. These results are internationally recognised, as shown by the invitation in 2022 to begin the process of accession to the OECD.

This study analyses Peru's challenges in meeting OECD standards in public financial management, focusing on four strategic areas: 1) budget practices and governance; 2) treasury management and cash management systems; 3) fiscal management of human resources; and 4) public investment programming, budgeting and management.

The public financial management system in Peru has some special characteristics, which complicate the process and reduce the public sector's planning capacity in general, affecting the efficiency and quality of public services:

- The Ministry of Economy and Finance of Peru centralises a number of functions that in OECD countries are the responsibility of sectoral ministries or subnational governments.
- Expenditures are linked to specific funding sources, which does not allow for fungibility of public funds. This leads, among others, to difficulties in estimating revenues and calculating baselines, and thus to allocating public resources to government priorities.
- The budget voted by Congress (the opening institutional budget) represents an expenditure floor, and budget allocations are modified (increased) significantly during the execution of the budget.
- The budget system is micro-focused, based on inputs (payroll for human resources, individual projects for investment) and execution levels, rather than focusing on expenditure ceilings, performance and quality.

For Peru's public financial management system to fully fulfil its strategic role as a central government document, showing how annual and multiannual objectives will be prioritised and achieved while maintaining fiscal stability achievements, the main recommendations in each of the areas are:

1. Improving budget practices and governance

- Simplify the budget law. Move from a long and rigid budget based on inputs and physical targets to a more synthetic budget with a greater emphasis on overall expenditure ceilings and results. This requires, in particular, removing the link between expenditures and funding sources and strengthening control mechanisms for budget execution (including the role of the Comptroller General's Office).
- Introduce a top-down budget formulation process, clearly indicating the fiscal space available and allocating credible spending ceilings to each entity early in the budget process, before entities submit their demands.

- Improve the quality and credibility of the opening budget by improving revenue projections and strengthening implementation control mechanisms.
- Strengthen the entities' fiscal management units, with a view to delegating certain functions to them, supporting the transition of the role of the General Directorate of Public Budget, more focused on its responsibility as the governing body of the system, guarantor of fiscal stability.
- Strengthen budget execution control systems, in order to move from an input-based monitoring system to a control system based on expenditure ceilings and results.

2. Modernising treasury and cash management systems

- The major challenge for treasury modernisation is to achieve full fungibility of funds. Replace the system of sub-accounts of the executing units with a system of virtual accounts, and integrate certain important accounts that are still outside (e.g. the pension reserve fund) into the Treasury Single Account.
- Cash planning would benefit from being better integrated with the budget area. Estimates of revenue and expenditure flows are unrealistic, partly due to frequent and significant changes in the budget during implementation. The quality and regularity of the information sent by the entities to the General Directorate of Public Treasury need to be improved.
- o Proper measurement and management of fiscal risks are essential to inform various phases of the budget cycle and to adopt risk mitigation mechanisms. The Fiscal Risk Directorate could be given more autonomy and invest in risk mapping, technical capacity building and mechanisms to collect information from other entities.

3. Ensuring a competitive and fiscally sustainable remuneration policy for the Peruvian public administration

- Reduce the complexity of the public employment system to improve strategic planning and facilitate the fiscal control of human resources.
- Shift from a micro and reactive approach to human resources spending to a more holistic and proactive approach. Make expenditure projections at a more aggregated level. Set human resources expenditure ceilings per entity.
- Develop human resource management and fiscal human resource management capacities in entities, especially at the subnational level.
- o Strengthen the internal control system, moving from process-based to results-based control.

4. Improving programming, budgeting and management of public investment

- Develop a medium- and long-term strategic vision and strengthen the needs assessment process.
- Strengthen the pre-investment phase and ensure that the programming phase is realistic. Vote investment budgets at a more aggregated level (by sector and/or territory rather than by project), reinforcing quality control processes at the selection stage of individual projects.
- Strengthen the project prioritisation process and separate it from the implementation process.
 Strengthen the system for monitoring the execution of investments to ensure that investments are indeed those that have been prioritised and programmed.
- Develop a targeted ex post evaluation system.

Main characteristics and crosscutting challenges for public financial management in Peru

This chapter gives a brief overview of the recent achievement in the field of public finances in Peru. It then presents some key characteristics of Peru's public financial management framework and discusses the areas with the greatest potential for improving public financial management in Peru.

1.1. Introduction

The public financial management system that has been developed in Peru since the 1990s has successfully ensured the public sector's fiscal sustainability. Its good results are reflected in international recognition, as shown by the invitation in 2022 to begin the accession process to the OECD. This means that Peru's practices are now analysed in light of OECD best practices.

These achievements result from institutional transformations, particularly improvements in public financial management processes. This review analyses the main public financial management systems in Peru today and proposes recommendations for aligning Peru's practices with OECD best practices.

The four areas analysed are:

- 1. budget practices and governance
- 2. treasury and cash management systems
- 3. fiscal management of human resources
- 4. public investment programming, budgeting and management

The recommendations presented in this report represent a significant change and should thus be implemented gradually. To this end, it is essential to create the necessary conditions, particularly in terms of the capacities of all actors, before taking on new responsibilities. This study also recognises that any changes must preserve the achievements in terms of fiscal stability, controlling deficit and current public spending. The recommendations could lead to changes in existing control mechanisms but should in no way lead to the removal of controls without first creating the necessary conditions for this to be done without jeopardising financial stability.

1.2. Peru has been successful in terms of growth and control of public finances

1.2.1. Economic growth has been higher than the regional average

The success of the Peruvian economy is the result of a combination of good domestic policies and a favourable external context. Economic growth has been stable over the last decades. Between 2002 and 2019, the Peruvian economy had an annual growth rate of 5.1%, higher than the average of 3.5% for Latin America and other countries in the region, such as Chile (3.7%), Colombia (4.0%) and Mexico (2.1%) (Figure 1.1). The increase in per capita income¹ allowed Peru to reach upper middle-income country status in 2008. Projections for 2027 highlight the good dynamism of the Peruvian economy, with a forecast growth rate of 3%, higher than the Latin American average of 2.4% and that of OECD countries (IMF, 2022_[11]).

Peru Mexico Brazil Chile Colombia Argentina Germany France Italy Spain

15
10
-5
-10
-15
2014
2015
2016
2017
2018
2019
2020
2021

Figure 1.1. GDP growth rate in Peru and selected countries, 2014-21

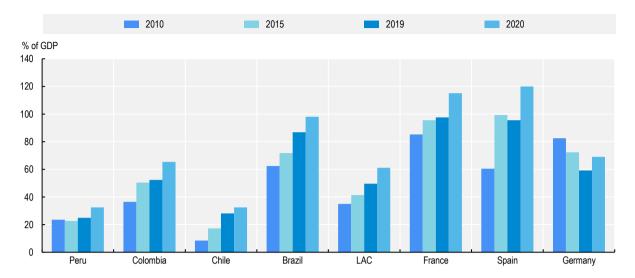
Source: OECD stat.

1.2.2. Peru's fiscal deficit and public debt levels have been better than those of the region

At the domestic level, macroeconomic stability in terms of control of the fiscal deficit and public debt is noteworthy. These promising results allowed, for example, the adoption of measures to manage the crisis generated by the COVID pandemic. Despite having one of the highest mortality rates² in 2020, Peru designed transitional programmes that allowed it to stimulate the economy and mitigate the effects of the measures adopted to curb the spread of the COVID-19 virus. The Peruvian economy achieved a growth rate of 13.3% in 2021, which is largely due to these measures.

Peru's public indebtedness in recent years has remained below the regional average. Its public debt levels over the period 2010-19 remained relatively constant, ranging between 18% and 22% of gross domestic product (GDP), while the average for the Latin America and Caribbean region was 42% in the same period (Figure 1.2). In the same period, the fiscal deficit remained at an average of -0.7% of GDP, lower than the average fiscal deficit of -2.2% in Latin America and -1.8% across the OECD. This value increased by more than 7 percentage points (from 1.6% to 8.9%) due to measures implemented in 2020 to respond to the COVID-19 pandemic (Figure 1.3). In 2021, the fiscal deficit returned to -2.6% of GDP, thanks to higher natural resource prices,³ higher tax revenues, tax debt collection and the gradual withdrawal of the fiscal stimulus measures adopted in 2020 (IMF, 2022[2]).

Figure 1.2. Public debt in Peru and selected countries



Note: LAC: Latin America and the Caribbean.

Source: OECD Development Centre based on IMF (2021[3]), Global Debt Dataset.

StatLink https://stat.link/yq9ldf

Figure 1.3. Peru's general government revenue, expenditure and deficit, 2010-21



Source: Central Reserve Bank of Peru.

StatLink https://stat.link/rxj6ep

1.2.3. Economic growth is highly dependent on the price of raw materials

Externally, the good performance of natural resource commodity prices allowed international trade to play a key role in Peru's positive economic performance. Between 2004 and 2013, world mineral and food prices rose sharply, generating strong export revenues. Historically, Peru's export basket is composed of mining products, such as gold, copper, tin, oil and natural gas, representing on average about 66% of total

exports (Central Reserve Bank of Peru, 2020_[4]). This feature is one of Peru's greatest challenges today. Most of the volatility of fiscal revenues is associated with the international context, and in particular, export prices (Figure 1.4).

Natural resource-related current revenues Non-resource current revenues Total current revenues % of GDP 25% 22% 22% 22% 22% 21% 21% 21% 20% 20% 20% 19% 19% 19% 19% 20% 18% 18% 18% 18% 18% 18% 17% 15% 10% 5% 3% 3% 2% 2% 2% 2% 2% 1% 2009 2006 2007 2010 2011 2016 2017 2019 2020 2021

Figure 1.4. Peru's general government current revenues, 2006-22

Source: MEF (2022_[5]), 2022 Multiannual Macroeconomic Framework 2023-2026.

StatLink https://stat.link/2r31vy

1.3. Main characteristics of Peru's public financial management system

Public financial management reforms in Peru since the 1990s have been successful in achieving fiscal stability in the public sector, thanks to clear fiscal rules and very strict control by the Ministry of Economy and Finances (MEF). However, some of the public financial management practices today complicate operational management and, thus, service delivery. In particular, some elements hamper the entities' management capacity:

- The budget voted by Congress (opening institutional budget) represents a spending floor that is significantly modified (increased) during execution. This does not allow entities to efficiently programme their activities, procurement or staff recruitment processes. Moreover, it generates a continuous budget discussion process that mobilises important human resources in both the MEF and the entities throughout the year.
- The budget system is micro-focused, based on inputs and execution levels rather than expenditure
 ceilings, results and quality. In particular, expenditures are linked to specific funding sources, which
 does not allow for the fungibility of public funds. This creates difficulties in estimating revenues,
 calculating baselines and thus allocating public resources according to government priorities.
- Building management capacities in the entities (ministries and subnational governments) is difficult due to high staff turnover.

The response to the various challenges has been to centralise responsibilities in the MEF, with an emphasis on obtaining information and controlling the budget at the micro, input level (investment projects, human resources payroll, etc.).

Thus, today, the MEF centralises several functions that are the responsibilities of sectoral ministries or subnational governments in OECD countries. However, this input-oriented supervision may actually further reinforce the challenges (by making predictability and management more difficult for the public sector) without fully controlling the quantity or quality of public spending.

This leads to a short-term approach to public financial management in Peru that lacks credibility, with a planning horizon of less than a year, and which responds to the priorities established or modified by the heads of the entities. The budget becomes a reactive instrument, "estimating" expenditures and "registering" the modifications proposed by the entities instead of being the central instrument for planning and "authorising" expenditures by the MEF.

This OECD study of public financial management in light of best practices in OECD countries proposes identifying and fixing the problems at their root, so that such strict supervision at the input level by the MEF is not necessary, and so that each entity is in a position to credibly plan its expenditures during the fiscal year, and as a consequence perform effective and efficient operational management.

1.4. Areas with the greatest potential for improvement for public financial management in Peru

The substantive chapters of this report identify challenges in the different four different areas under review: public budget, treasury management, fiscal management of human resources and public investment. This section presents a summary of each of these areas.

1.4.1. Moving from a micro approach based on inputs and quantities to a more aggregated approach based on results and quality

Peru's current public financial management system is based on a micro to aggregate approach. Programming and formulation are characterised by a very granular focus on inputs, leaving overall amounts or results in the background.

Expenditure is linked to funding sources

The most challenging element of public sector budgeting and financial management in Peru is the link between expenditures and sources of financing. The budget not only provides estimates of revenues from different sources of financing but also allocates expenditures according to these sources of financing (see Chapter 2, Section 2.2.3, 2.5.3, 2.7.2, 2.7.3; Chapter 3, Section 3.2.2). Several complications arise from this relationship, the most important of which are as follows:

- It generates a high level of rigidity, as it requires a budget amendment to transfer expenditure from one source to another if there is, for example, an error in revenue estimation per source.
- It generates complications in the management of the treasury and accounts (see Chapter 3, Section 3.2.2, 3.2.3) since it is not sufficient to estimate the overall evolution of income for each type of source. Still, it is necessary to have a very precise estimate of each type of resource for each entity.
- The principle of the fungibility of money, which is essential for forecasting, execution and profitability, is violated.
- There may be incentives for entities to underestimate or overestimate different sources of revenue because the way differences are treated between the amount of revenue estimated in the budget and the revenue actually collected varies according to the source of funding.

Projection of human resources expenditure based on micro data

At the budget programming stage, the General Directorate of Public Budget calculates the financial needs for civil servants' remuneration at the central and regional levels based on estimates provided by the General Directorate of Fiscal Management of Human Resources. To make these estimates, the directorate aggregates the staffing needs of each entity, both at the national and regional levels, based on previous years' expenditures as well as current employee records. For this purpose, the General Directorate of Fiscal Management of Human Resources uses a database called the Computer Application for the Centralised Registration of Payroll and Human Resources Data of the Public Sector (AIRHSP) (See Chapter 4, Section 4.9.3). Staff costs are formulated at the micro level (per employee) rather than as a high-level aggregation of human resources costs by entity. This generates several difficulties, including:

- It does not give entities the flexibility to structure their staff costs according to their needs. To meet new staffing needs, entities must therefore request an increase in their payroll, which leads to an increase in total human resources expenditure.
- It reduces the ability to make medium- and long-term human resource projections of personnel costs since, by the law of large numbers, it is possible to make medium- and long-term projections of the overall mass of a country's human resources. It is, however, not possible to predict the evolution of each individual who makes up this overall wage bill.

Investment based on annual gap diagnosis and not on a medium-term development vision

The Invierte.pe investment system has brought about improvements in terms of identifying needs, generating indicators, defining prioritisation criteria and selecting projects. However, as the gap diagnosis exercise is an annual process, it risks being carried out in a mechanical and routine manner. This short-term practice, identifying current rather than future gaps, may represent an inefficient use of the public resources invested. Moreover, not linking strategic planning to the annual execution of investment projects limits its long- or medium-term vision (see Chapter 5, Section 5.3.3, 5.4.2). It is also characteristic of an approach based on a micro vision (the individual investment), not a global one of the trajectory for public investment.

The main indicator is the level of budget execution, not the objectives achieved

Today, the main indicator that is monitored daily is the level of budget execution by each of the budget units and areas. The best budget execution is on expenditure on human resources, while subnational governments have the lowest level of budget execution. There is no rigorous monitoring of the objectives achieved.

However, as mentioned in the next section, the budget allocated to each budget unit at the beginning of the year is modified (increased) throughout the year. In particular, subnational governments' opening budget doubles or triples during the budget year, and the executed levels are systematically higher than the opening budgets. Therefore, one of the major causes of the low level of execution is the lack of predictability of allocated resources (see next section).

A level of budget execution systematically well below the allocated budget should also raise the question of whether the allocated budget really corresponds to a need and targets priority expenditures.

1.4.2. Improve predictability and appropriate allocation of resources

The micro approach mentioned above and the difficulties it creates for resource estimation, coupled with the MEF's characteristic prudence in revenue estimation, results in frequent budget changes that affect the proper allocation of resources and generate several negative incentives (see Chapter 2, Section 2.5.5, 2.6).

Difficult and unreliable resource estimation

The dependence of public revenues on commodity prices, which are highly volatile and beyond the country's control, makes resource estimation difficult, particularly for subnational governments. However, beyond this external factor, two internal factors affect adequate resource estimation:

- 1. Responsibility for revenue calculation is diluted, as many units are responsible for calculating revenues.
- 2. Moreover, as there is a link between expenditures and funding sources (revenues), the calculation has to be so detailed that it adds a lot of complexity and reduces reliability. This forces the estimates to be made at a very micro level, per budget unit and per funding source, which reduces the quality of the estimates (due to the law of large numbers).

In addition, linking spending authorisations to each budget unit's level of directly collected revenue makes estimating these levels a political process. The reform to be implemented from fiscal year 2023 to consider the national government's budget units' directly collected revenue as ordinary revenue is a step in the right direction. The impact of this reform will need to be analysed a few years after its implementation. However, as long as expenditures are linked to funding sources, there is a risk that incentives to make honest revenue estimates will be insufficient (see Chapter 2, Section 2.2.3).

Frequent and important changes to the budget

Budget modifications are more significant and more frequent in Peru than in OECD countries. The budget discussed and approved by Congress, called the "opening institutional budget", is considered to be a spending floor. All actors (the MEF, sectoral ministries, public entities, subnational governments, etc.) know and expect this opening budget to be modified (increased) during the year. There are several sources of budget modifications: important and systematic errors in the estimation of revenue, which lead to an effective collection higher than the estimates used in the voted budget, as indicated in the preceding paragraphs; late incorporation of the carry-forward budget; late incorporation of resources from canon and royalties; and transfers of items, among others (see Chapter 2, Section 2.6).

Frequent budget modifications generate a large gap between the opening institutional budget and the modified institutional budget, do not allow for an inclusive debate, or to take decisions that reflect the government's priorities. Similarly, they make it difficult to have an overall view of expenditure, to discuss and decide to which institution and for what purpose resources are allocated, and can therefore generate equity problems since the modified (and executed) budget may not take into account the balances discussed in the initial budget formulation. This reduces the usefulness of the budget as an instrument for prioritising spending strategically, as it ends up being treated as a spending floor rather than as an honest and credible picture of what is to be spent (see Chapter 2, Section 2.6).

Lack of budgetary instrument to commit resources over several years

Most infrastructure investments are made over several years. The lack of a budgetary instrument to commit funds over several years creates uncertainty for both the contracting authority and the contractor. In addition, infrastructure planners have difficulties developing a project portfolio without medium-term visibility on the availability of budgetary resources.

While multiannual investment programming has enabled great advances in identifying needs and how these can inform the investment process, some limitations hinder its ultimate objective. Because it is not binding, programming ended up being an unlimited exercise in identifying needs and projects, and its capacity to effectively programme investment is limited. Indeed, Invierte pe indicates an order of priority for prioritising projects, but projects already authorised and being implemented must be included again due to the lack of a budgetary instrument to commit funds over several years (within a budget system that

remains annual). This leads to confusion between the prioritisation and implementation stages, jeopardising the strategic prioritisation of investment (see Chapter 5, Section 5.4.4).

There is a lack of credible and timely data, in particular for subnational governments

In the budget process, whether for treasury management, human resource management or public investment, subnational entities must provide accurate and truthful information and data. For example, the assessment of current and future infrastructure needs is done through comprehensive data collection to provide the executing agency with information for long-term planning. However, in Peru, some actors state that the data and information with which these indicators are constructed have gaps, as they are not constructed jointly between sectors. Nor is there a true sectoral diagnosis, and programming is based on a current diagnosis of the service to be provided (see Chapter 5, Section 5.3.3).

In terms of human resources at the subnational level, entities find it difficult to produce robust data on policy performance and service delivery, which undermines forward-looking planning and policy prioritisation. These factors result in an environment where effective controls and safeguards are very weak, which can create opportunities for corrupt employment practices and weaken the public administration's capacity (see Chapter 4, Section 4.5.2).

Peru still lacks systems for the systematic collection of relevant data and for ensuring that responsibility for carrying out analysis, dissemination and learning from such data is clearly identified (see Chapter 4, Section 4.6.3 and Chapter 5, Section 5.6.2).

1.4.3. Moving from input monitoring systems to effective expenditure execution control systems

The MEF centralizes several oversight functions that in OECD countries are usually the responsibility of line ministries, sub-national governments or comptroller institutions with accredited capacities. However, this oversight is mainly focused on quantities and inputs, and there is a need for efficient instruments to monitor expenditure levels or the quality of spending.

This is reflected for example in the investment budget, which is voted at an unusually micro and detailed level, as it indicates each investment project (some with amounts of less than 5,000 soles, or 1200 euros). However, not all projects initially prioritized in the Multiannual Investment Programming and in the draft budget submitted to Congress remain in the initial approved investment budget. Not all projects that are in the initial approved investment budget are implemented. And many projects that are implemented were neither in the initial approved budget nor in the Multiannual Investment Programming. This means that, de facto, the detail of the budget law does not help to control either the quantity or the quality of investment spending.

This is also reflected in human resources spending, where the MEF centralizes the supervision of every public sector employee, but where, nevertheless, entities continue to hire staff outside the payroll, and there are still staff on the payroll who do not meet the required criteria.

The trend in OECD countries is to reduce oversight on inputs, and to establish more efficient control instruments on overall spending amounts and quality requirements. Many countries reform their budgets to vote at more aggregated levels (ministries, mission or programme), setting strict expenditure ceilings and strict accountability and quality control mechanisms.

1.4.4. Develop a culture of long- and medium-term planning

Detailed analysis of the four sectors under review shows that Peru has limited strategic planning capacity, which could be strengthened. Credible expenditure ceilings and predictable resources for subnational governments are essential to enable medium- and long-term planning.

Credible expenditure ceilings are essential for planning

Needs are, by nature, potentially infinite, but the resources available to governments are limited. There are, however, ways of achieving objectives, depending on the amount of money available. It is, therefore, essential to know what resources are available to be able to plan strategically and optimise the use of the finite resources.

In Peru, the "expenditure ceiling" that the MEF communicates to the different entities at the beginning of the budget formulation process is seen by all as the minimum amount that will be allocated to them, and all entities submit budget requests higher than these "expenditure ceilings" and actually obtain a higher amount. Therefore, these "expenditure ceilings" are perceived by the entities as minimum allocations and do not allow entities to effectively prioritise their demands for new policies (see Chapter 2, Section 2.3.2).

In addition, the opening institutional budget voted by Congress does not represent a ceiling on expenditures since all entities know and expect this budget to be modified (increased). This further reduces the predictability of the resources that will be available during the year (see Chapter 2, Section 2.6)

This practice helps to limit fiscal risk, as it provides the MEF with complete information on the directly collected revenue of the various public entities. However, it reduces the quality and efficiency of public spending due to the underestimates that can occur.

This is particularly problematic for public investment programming and budgeting. For example, until 2021, the multiannual investment programming did not have budget ceilings, which led to estimates of needs being made on demands without considering the capacity to finance these needs. This has been identified as one of the most notorious shortcomings of the investment system. In 2022, the incorporation of budget ceilings was piloted, which should be evaluated after two to three years of implementation (see Chapter 5, Section 5.3.4).

As for the staff expenditure ceiling, in practice, it is also a spending floor or baseline calculation rather than a maximum amount of expenditure, as each entity develops its own staffing needs, which may exceed the previously allocated ceiling. However, this is an area where budget execution deviates the least (see Chapter 4, Section 4.7, 4.8).

For subnational governments, this requires improving the predictability of their resources

The lack of credible expenditure ceilings is also relevant for sub-national governments. In this case, the challenge comes from the difficulty of estimating the resources that subnational governments will have, and the late determination of these resources in the fiscal year. Ninety per cent of subnational government revenues in Peru are transfers received from the national government. However, the final value of these transfers is only known when the national government budget is voted on 30 November. Therefore, the formulation process of sub-national government budgets is intrinsically conditioned to the formulation process of the national government budget. On 30 November, when the final amount of transfers is known, subnational governments can adjust their budgets with the final figure.

Develop a long-term vision for infrastructure and human resources

Peru does not have a medium- or long-term vision for infrastructure or human resources, and existing planning mechanisms have not been sufficient to achieve this objective. Peru should develop centralised strategic planning guidelines that reflect and reaffirm the linkages and articulation between sectors or entities.

In terms of public investment, there is no long-term infrastructure vision at the sectoral or inter-sectoral level to establish a clear path of priorities based on an estimation of the available resources and a rigorous assessment of current and future infrastructure needs. The annual process of diagnosing gaps and defining indicators in the Invierte pe system represents wear and tear for civil servants, as well as an

inefficient use of the public resources invested. The gap closure exercise tends to be used mechanically and routinely. On the other hand, it does not respond to medium-term criteria or objectives but to present needs. It may not even represent a solution to cross-sectoral problems in the country (see Chapter 5, Section 5.3.3, 5.6.1). The greatest challenge in Peru's investment system is to generate strategies with a long-term perspective, prioritising investment projects with technical sense and social responsibility.

The objective of prospective workforce planning is to recruit and build the necessary skills in the medium and long term. In Peru, limited capacities in human resource management and public budgeting weaken such forward planning. There is also a lack of strategic workforce planning. Given the complexity of the employment system, administrative processes take up most of the human resources units' time, which issue to the General Directorate of Fiscal Management of Human Resources a large number of requests for advice and clarifications on the legality of employment and/or salary concepts. This has two consequences. First, the directorate loses its capacity to plan and analyse the situation and the needs to be met. Second, it has an impact on financial planning. Finally, human resources budget requirements are based on immediate needs without considering the workforce's needs and future evolution (see Chapter 4, Section 4.3.1, 4.8).

Develop sectoral infrastructure plans

Peru does not have a tradition of long-term strategic planning at the sectoral level that identifies current and future needs and available resources in each sector. The sectoral planning mechanisms or initiatives that are developed within the SINAPLAN framework are not linked to each other and are not linked to multiannual investment programming. In this particular case, the link between gap closure and a more general long-term vision of the country is limited, and the strategic capacity of the investment system restricted (see Chapter 5, Section 5.6.1, 5.2.2).

1.4.5. Investing in enabling factors and capacities

Difficulty in attracting and retaining qualified staff

The public administration in Peru is characterised by high staff turnover. This high turnover has a negative impact on the capacity of the Peruvian public administration to develop new services or improve existing ones. It also hinders building a professional civil service and strengthening knowledge and skills through experience building or training. High levels of turnover are observed among civil servants in charge of implementing the system, for example in Invierte.pe and in many human resources units. High staff turnover occurs especially at subnational levels, thus losing the knowledge acquired in different areas (see Chapters 2, Section 2.7.4; Chapter 4, Section 4.4.3, 4.4.1; and Chapter 5, Section 5.2.3). This reduces the benefits of the MEF's and sectoral ministries' efforts to provide training.

Fragmentation of the system leads to increased staffing and co-ordination needs

Peru's budget system is fragmented. This means that multiple entities perform similar functions independently without constant communication or co-ordination between them. A fragmented system can result in the displacement of planning to day-to-day budgetary processes, as well as duplication of efforts in physical and human resources.

To illustrate how fragmented the system is, in Peru there are more than 500 public employment rules, no standardised job positions, more than 400 salary criteria, no standardised recruitment criteria and limited staff planning. The combination of these factors makes the administration of the system in the entities and the financial control from the Directorate General for Fiscal Management of Human Resources difficult. This hampers the formulation and budget execution of public service's wagebill and medium- and long-term projections of personnel costs. While the Peruvian civil service has taken considerable steps towards a

public service system more consistent with the design of the Administrative System of Human Resources Management, the regime remains highly complex (see Chapter 4, Section 4.3.1).

Two examples illustrate the need to deploy staff due to the fragmentation of the system: the entities' resource estimates and budget modifications. The budget units, including regional and local governments, estimate their revenues for the following year in January and February. However, the allocation of expenditures according to funding sources complicates this process. As a very precise estimate of directly collected revenue is required, staff must be deployed to take responsibility for establishing these estimates, as well as to negotiate them with the General Directorate of Public Budget (see Chapter 2, Section 2.6.1). On the other hand, budget modifications must be reviewed and authorised by the MEF, which requires the mobilisation of an entire team (Thematic Budget Directorate). This generates a high cost and absorbs human resources that could be dedicated to more strategic issues related, for example, to the quality of spending, its efficiency, etc. (see Chapter 2, Section 2.6.1).

Duplication of operating systems

Within the framework of the development of integrated financial administration systems, Peru has modernised its systems and developed the technical and material infrastructure for this process. For example, the SIAF has been in continuous movement, the investment system has been integrated with other state systems, and the General Directorate of Fiscal Management of Human Resources has been interoperating with information systems such as RENIEC, MINSA and SERVIR. Similarly, in 2018, the integration of the systems for multiannual programming and investment management, public budget, debt, accounting, treasury, procurement, and the fiscal management of human resources was provided for.

Despite these advances, greater and more effective systems integration should be pursued. In Peru, there are currently certain difficulties in terms of interoperability: the SIAF does not integrate information from the Central Registry of Payrolls and Data of Human Resources of the Public Sector, or from the Investment Bank, or from Invierte.pe, nor does it allow obtaining information on debt and treasury in real time; the multi-annual programming of investments and the gap approach are not articulated with other systems; the General Directorate of Fiscal Management of Human Resources uses several computer applications that are not all interoperable; the treasury and debt systems are not integrated and are not on line (see Chapter 2, Section 2.9.1; Chapter 3, Section 3.2.3; Chapter 4, Section 4.9.4; and Chapter 5, Section 5.2.2).

1.5. Conclusion

This study **Public Financial Management in Peru: An OECD Peer Review** presents a detailed analysis of current practices in Peru in four essential areas of public management in the light of best practices in OECD countries.

This study shows that Peru has made important reforms in recent years, and has been successful in ensuring the fiscal sustainability of the public sector. However, some of the central features of the system today create challenges that reduce the ability of the public sector to plan and prioritize its actions, and thus reduce the quality and quantity of goods and services for citizens and fail to fully exploit development opportunities for the country.

This study proposes concrete recommendations to improve public financial management in Peru in order to support sustainable growth, economic development with social inclusion, and poverty reduction. Some of the recommendations can be implemented immediately, others would require further analysis to identify concrete actions to be taken, build consensus on the need for change and the direction to take. All require political support and a group of public servants in the MEF to design and implement this agenda. This implies effort, accepting to step out of one's comfort zone, patience and long-term commitment.

References

[6] CAF (2021), Perú: La implementación de una política fiscal eficiente en un contexto post-COVID con notarias dificultades en la estructura social y pública. [4] Central Reserve Bank of Peru (2020), REPORTE DE INFLACIÓN: Panorama actual y proyecciones macroeconómicas 2020-2022, https://www.bcrp.gob.pe/docs/Publicaciones/Reporte-Inflacion/2020/diciembre/reporte-deinflacion-diciembre-2020.pdf. [2] IMF (2022), Peru: Staff Concluding Statement of the 2022 Article IV Mission, International Monetary Fund, Washington, DC, https://www.imf.org/es/News/Articles/2022/03/07/mcs030722-peru-staff-concludingstatement-of-the-2022-article-iv-mission. [1] IMF (2022), World Economic Outlook: War Sets Back the Global Recovery, International Monetary Fund, Washington, DC. [3] IMF (2021), Global Debt Database, International Monetary Fund, Washington, DC. https://www.imf.org/external/datamapper/datasets/GDD. [5] MEF (2022), Multiannual Macroeconomic Framework 2023-2026, Ministry of Economy and Finances, Lima, https://www.mef.gob.pe/es/?option=com_content&language=es-ES&Itemid=100869&lang=es-ES&view=article&id=3731.

Notes

¹ From USD 6 653 in 2002 to USD 12 854 in 2019. Data measured at purchasing power parities (constant 2011 international prices). See: https://datos.bancomundial.org/indicator/NY.GDP.PCAP.PP.KD?locations=PE.

² With 263 deaths per 1 000 people, followed by Bulgaria (254 per 1 000 people), the Russian Federation (245), Mexico (240) and Ecuador (229) (CAF, 2021_[6]).

³ The IMF index includes price changes in aluminum, cobalt, copper, iron ore, lead, molybdenum, nickel, tin, uranium and zinc (IMF, 2022_[2]).

2 Budget practices and governance in Peru

This chapter analyses the key elements of the overall budget process and budget governance in Peru in light of the OECD's Good Budget Governance Practices. It provides recommendations to align Peru's practices with OECD standards, and to improve the role of the public sector budget for planning, prioritising, executing and accountability of public expenditure.

2.1. Introduction

The Budget is a central policy document of the government, showing how annual and multiannual objectives will be prioritised and achieved. Budgets should present a full and accurate account of all government expenditures.

This chapter analyses the key elements of the overall budget process and budget governance in Peru in light of the OECD's Good Budget Governance Practices (OECD, 2015[1]). The chapter provides an international benchmark against which to assess Peru compared to OECD countries, along with recommendations for aligning Peru's practices with OECD standards.

Section 2.2 presents the regulatory and institutional framework for the Budget in Peru. Section 2.3 analyses the mechanisms for ensuring fiscal sustainability and the medium-term perspective, while Section 2.4 presents the budget formulation and approval process. Section 2.5 discusses a distinctive aspect of the Peruvian budget system, the significant and frequent budget modifications during the budget execution process. Another feature of the budget process in Peru is that it encompasses the national and subnational governments in the same budget process and Budget Law. Section 2.6, therefore, presents and analyses the specific challenges of subnational governments in the budget process in Peru. Section 2.7 analyses the link between budget expenditures and government priorities. The last section analyses accounting practices and control of public accounts.

2.2. Regulatory and institutional framework

2.2.1. Policy and institutional framework for the Budget

The principles set out in the institutional framework for public budgeting are generally aligned with OECD good practice

The regulatory framework of the Budget is determined by the Legislative Decree (DL) of the National Budget System No. 1440¹ of September 2018, which amends the General Law of the National Budget System No. 28411 of December 2004. The objective of DL 1440 is to establish the principles, processes and procedures that regulate the National Budget System. The stated principles governing the Budget align with general OECD principles. For example:

- Balanced budget: it is forbidden to include spending authorisations without corresponding funding.
- Macro-fiscal balance: the Budget must respect the Fiscal Responsibility and Transparency Law and the Fiscal Decentralisation Law.
- No earmarking: "the public funds of each entity are intended to finance all public expenditure provided for in the public sector budgets".
- Multiannual programming principle: "the budget process should be guided by the objectives of the National Strategic Development Plan and be based on previous years' results and take into account the prospects for future years".

The public Budget is comprised of three laws

- 1. Public Sector Budget Law
- 2. Law on the Financial Balance of the Public Sector Budget
- 3. Public Sector Debt Law.

These three laws are discussed and presented for the consolidated public sector (i.e. they include the national government, subnational governments and all public entities, such as universities, etc.).

2.2.2. Actors' roles and functions

The roles and functions of the different actors are clearly set out

The budget process in Peru is centralised in the Ministry of Economy and Finance (MEF), mainly under the stewardship of the General Directorate of Public Budget (DGPP) (Table 2.1). Public entities that receive a budget appropriation in the Annual Public Sector Budget Law are called "pliegos" in Peru; the term "budget units" will be used in this report.

Table 2.1. Actors and roles in the budget process in Peru

Actors	Main functions in the budget process
General Directorate of Public Budget (DGPP) (Ministry of Economy and Finance [MEF] – Vice-Ministerial Office of Finance)	 Estimates the assumptions used in the draft of the project and in the Budget Law Drafts the preliminary draft of the Budget Law and the Law on the Financial Balance Elaborates the multiannual macroeconomic framework Leads, guides and monitors the budget process Issues directives, guidelines and other complementary budgetary rules Issues an authoritative opinion on budgetary matters exclusively and exclusively for the public sector Gives an opinion on budget modifications, where appropriate
General Directorate of Macroeconomic Policy and Fiscal Decentralisation (MEF – Vice- Ministerial Office of Economy)	Performs macroeconomic projections used for budget assumptions
General Directorate for the Thematic Budget (MEF – Vice-Ministerial Office of Finance)	 Follows implementation of the Budget by the budget units Issues an opinion when an additional budget request is issued (verifies compliance with requirements and need for additional revenue) Responds to questions from the budget units on regulations, guidelines, etc.
National Superintendency of Customs and Tax Administration	 Provides estimates of the collection of ordinary revenue used by the DGPP to make budget assumptions
Central Reserve Bank	 Provides interest rate and terms of trade estimates used by the DGPP to make budget assumptions
Council of Ministers	 Amends and approves the preliminary draft Budget Law and the multiannual macroeconomic framework
Fiscal Council	 Issues opinions on the multiannual macroeconomic framework and policy guidelines and macroeconomic projections used in the multiannual macroeconomic framework
Budget units – Head of the entity	 Carries out budget management in the phases of multiannual programming, formulation, approval, implementation and evaluation Determines the the entity's spending priorities Leads budget management
Budget units – Entity's budget office	 Leads the management of the institutional budget during the entity's budget process Organises, consolidates, presents and monitors the information generated in their respective executing units and cost centres and tracks this information Co-ordinates and monitors information on the execution of revenues and expenditures authorised in the budgets and their modifications
Budget units – Executing unit	 Administers income and expenditure and co-ordinates with the DGPP Determines and collects directly collected revenue Participates in the stages of the budget process Records the actions and operations carried out Reports on the fulfilment of and progress towards achieving targets Organises cost centres
National Congress	Discusses and approves the Budget Law and the Law on the Financial Balance
General Directorate of Public Treasury (MEF – Vice-Ministerial Office of Finance)	Responsible for treasury management and the Treasury Single Account
General Directorate of Public Accounting (MEF – Vice-Ministerial Office of Finance)	Draws up and consolidates public sector accounts
Office of the Comptroller General of the Republic	Audits the General Account of the Republic and issues an opinion

Source: Based on interviews.

Box 2.1. Role and structure of central budget offices in OECD countries

The central budget authority is the nerve centre of the budget process. In almost all OECD countries, the central budget authority is located in the Ministry of Economy and/or Finance. The central budget office may be concentrated in a single directorate general (as, for example, in France, Spain or Sweden) or spread across several directorates general (often a DG Budget and a DG Treasury, for example).

In most OECD countries, the head of the central budget office is a senior civil servant, i.e. a government official who normally remains in this position when there is a change of government. However, in some countries, it may be a political appointee, i.e. a person who does not usually remain in his or her post when there is a change of government (as in the case of Chile, Mexico and the United States).

The central budget office is responsible for different tasks during the budget process. In OECD countries, its most common responsibilities are: drafting the budget circular, preparing the executive's budget proposal, negotiating with line ministries, preparing supplementary budgets, determining line ministries' ceilings, and preparing mid-year and year-end reports. Some tasks are often shared with other institutions or agencies (public or private), such as the methodology of fiscal projections, monitoring line ministries' performance and communicating with the public.

Source: Downes et al. (2017_[2]), Strengthening budget institutions in Public Expenditure Management Peer Assisted Learning (PEMPAL) countries: Results of the 2013-14 OECD PEMPAL Budget Practices and Procedures Survey.

2.2.3. Particularities of the regulatory and institutional budget framework in Peru

The Budget discussed and voted on in Congress is consolidated between national and subnational governments; no non-consolidated budgets are presented that clearly show the revenues of each level of government and the transfers between them

The 1993 Political Constitution of Peru stipulates that the subnational governments have political and economic autonomy, approve their budgets, and have their own revenue. However, the Constitution also mentions that the public sector Budget voted by the National Congress contains a section for the decentralised bodies. This is a very unusual practice. In OECD countries, subnational government budgets are not included in the Budget Law voted by the national Congress. The Budget Law only presents the revenues constitutionally allocated to the national government as well as transfers to subnational governments. These can take the form of negative revenues in the form of tax sharing collected by the national government on behalf of subnational governments. Accounting then consolidates transactions internal to the public sector (transfers from the national government to the subnational governments) so that there is no double counting of the same expenditure. This allows for transparency in the revenues and expenditures constitutionally attributed to each level of government and the transfers between them.

In Peru, the consolidated public sector Budget is formulated and voted on without formulating and approving the budgets of the national and subnational governments independently. All revenue is considered as public sector revenue and no distinction is made between national government revenue, transfers and subnational governments' own revenue.

In all countries, subnational governments must send their budgets to the Ministry of Finance for the consolidated public sector Budget. However, the budgets are first approved by the regional/municipal councils then consolidated into the public sector Budget, which guarantees subnational governments' autonomy.

Integrating subnational government budgets into the Budget prepared by the MEF and approved by the national Congress allows the MEF to have very tight control over the budget execution at all levels of government, thus ensuring fiscal stability. It also ensures that the MEF has a complete picture of the revenues and expenditures of the public sector as a whole. This is not the case in all OECD countries. For example, in Greece, prior to the 2010 Kallikrates reform, there was no mechanism for ensuring the fiscal sustainability of the entire public sector. It took several months before the Ministry of Finance managed to consolidate execution data, so that deviations from fiscal targets were not identified in time to take corrective action (Box 2.2) (Moretti, 2019_[3]).

However, including subnational budgets in the national Budget also creates challenges:

- It makes the public sector Budget Law longer and more complex, as it must include a breakdown
 of each revenue and expenditure by level of government (aggregate), as well as for each regional
 and municipal government.
- It is one of the elements that makes the subnational government budget process more complex, less transparent and less predictable (see Section 2.6).
- It requires the use of institutional transfers, which represent a budget modification, instead of revenues transfers, which correspond to budget execution.

There are other mechanisms to ensure the financial sustainability of the public sector rather than merging national and subnational budgets into one document. Fiscal rules, for example, are a very important instrument for allocating deficit and debt authorisations between levels of government, since the public sector deficit and debt are calculated on the consolidation of the national government, subnational governments and social security (Vammalle and Bambalaite, 2021[4]). OECD countries also have mechanisms in place to monitor the execution of subnational budgets to ensure that they comply with the limits set in their budgets. Some countries have institutions to ensure that subnational budgets comply with the rules. For example, Greece recently implemented a major reform of the subnational government budgeting and reporting process, which both respects the principles of subnational government autonomy and reinforces the financial sustainability of the subnational sector (Box 2.2).

Box 2.2. Subnational budgeting and control in Greece

Prior to the 2010 reform, the Greek central government did not have a comprehensive picture of public sector revenues and expenditures, and no ministry had explicit responsibility for the fiscal sustainability of general government entities¹ (in particular, subnational governments). Moreover, consolidated general government budget data were not produced in time to allow for early corrective action.

In 2010, as one of the responses to the country's debt crisis, Greece passed the Kallikrates Law, which reorganised the local sector from 15 000 to 2 000 institutions, including 325 municipalities and 13 regions.

The Greek Constitution grants local governments administrative and financial independence, so the new scheme had to ensure their fiscal responsibility and respect this autonomy.

Formulation of local budgets

The new 2010 regulation gives the Ministry of Finance and the Ministry of Interior shared authority for determining revenue ceilings (from transfers as well as own revenue) authorised in subnational governments' draft budgets.

Local governments must prepare balanced budgets (no deficits) and are only allowed to borrow for investment, and on the condition that they meet two requirements: 1) annual repayments must not

exceed 20% of their ordinary revenue; 2) total liabilities (debts and accounts payable) must not exceed 60% of their annual revenues.

Local governments must also follow two essential rules in preparing their budgets: 1) the previous year's payables must be included in the next budget before new expenditures can be allocated; 2) local governments must prepare an amended budget in February if the prior year's execution shows a new accounts payable.

Monitoring fiscal sustainability

The 2010 law creates an Observatory for the Financial Autonomy of Local Governments, which is responsible for issuing an opinion on local government budgets. The Observatory is composed of 14 members: it is headed by the representative of the Court of Auditors and has four members from the Ministry of Finance, six from the Ministry of Interior, and three from the Association of Regions and Municipalities. One of the Observatory's most frequent observations on the budgets presented to it is that they overestimate transfers and revenues and underestimate accounts payable.

Accountability

Accountability for the execution of subnational budgets has also been strengthened. Subnational governments must enter their financial information (budget provisions and execution, summary of financial assets and liabilities, record of commitments, etc.) within the first 15 days of the following month through a specific computer system. The quality of the information is controlled by a statistics officer in each entity and by the Ministry of the Interior.

Every quarter, the regional and local councils, the Observatory, the Ministry of Finance, and the Ministry of Interior monitor the quarterly execution against the budget. The Observatory must suggest corrective actions if a deviation of more than 10% is observed.

Results

This reform and this new governance have been successful in improving the fiscal sustainability of subnational governments, which started to record surplus balances in 2011.

1. General government refers to the sum of the national government, subnational governments (regional and local), and social security funds (where these exist).

Source: Moretti (2019_{[31}), "Budgeting in Greece", OECD Journal on Budgeting, Vol. 2019/2.

The expenditure budget is broken down by funding source

In all OECD countries, the national budget indicates the sources of revenue by type of revenue (e.g. value-added tax, fees and duties, personal income tax, corporate tax, etc.). This is usually done in the first section of the budget, which authorises the different types of taxes and fees and specifies their base and rate. However, all these revenues serve to finance all government expenditures, due to the principle of budgetary universality. Generally, countries have a budgetary category for funds received for specific purposes, such as financing by an international institution or a private actor of an investment project or a specific expenditure (such as the "fonds de concours", or competitive funds, in France). However, these are often small compared to total revenues.

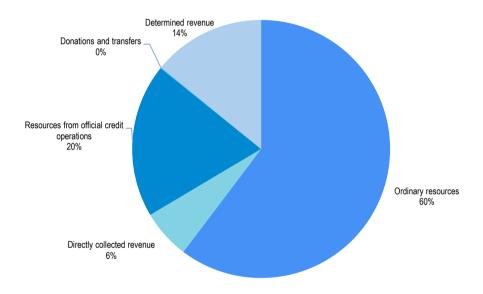
In Peru, the budget not only gives estimates of revenues from different funding sources, it also allocates expenditures according to these funding sources (Table 2.2 and Figure 2.1). Annex 4 of the budget shows the expenditure distribution by level of government, budget unit and source of financing.

Table 2.2. Sources of funding in the budget in Peru

Source	Description		
Ordinary resources (Recursos ordinaries, RO)	Revenue from tax collection, net of collection fees and banking services		
Directly collected revenue (Recursos Directamente Recaudado,s(RDR)	Revenue generated by public entities, such as property income, fees, the sale of goods and the provision of services, among others		
Resources from official credit operations (Recursos por Operaciones Oficiales de Crédito, ROOC)	Funds from credit operations (national or international)		
Donations and transfers (Donaciones y Transferencias, DyT)	Non-reimbursable financial funds received by international development agencies, governments, international institutions and organisations, natural and legal persons, among others		
Determined revenue (Recursos Determinados, RD)	Includes contributions to mandatory workers' contribution funds, municipal compensation funds, municipal taxes, canon, surcharges, royalties, customs revenue and participations		

Source: MEF (2020[5])

Figure 2.1. Relative weight of different funding sources in the opening institutional budget, 2022



Source: Public Sector Budget Law for the year 2022 (Law No. 31365).

StatLink https://stat.link/fl4gax

This creates a high level of rigidity, as it requires a budget amendment to transfer expenditures from one source to another if there is, for example, an error in the revenue estimation per source. It creates an additional administrative burden on entities to link their expenditures to their revenue sources and creates complications in treasury and account management, as each expenditure must be tagged to a revenue source rather than simply coming out of a Single Treasury Account that would pool all revenue sources (see Chapter 3).

In addition to these administrative complications, the way differences between the amount of revenue estimated in the budget and the revenue actually collected are treated varies depending on funding source. This differential treatment creates incentives for different entities to under- or over-estimate different revenue sources (see the discussion in Section 2.6.1). Indeed, up to and including the 2022 Budget, any directly collected revenue that exceeded the amount estimated in the Budget Law it could be spent at the discretion of the head of the entity without the need to go through Congress again. A possible consequence is that "modified" budgets do not always correspond to the distribution of spending and priorities

established in the Council of Ministers and discussed and approved by Congress. This is not in line with the OECD Recommendation of the Council on Good Budgetary Practices, which states "closely align budgets with the medium-term strategic priorities of government" (OECD, $2015_{[6]}$).

From the 2022 Budget, the national government's directly collected revenue collected above budget will be returned to the Treasury. This is a first step towards reducing the ratio of funding sources to spending in practice, but it does not lead to administrative and treasury management simplification.

It is worth mentioning that the funding sources used in Peru do not correspond to the generally used categories of public revenues (Box 2.3). In addition, the Peruvian budget considers resources from official credit operations as a source of financing of the same nature as other revenues. International public accounting practices, and in particular the System of National Accounts, calculate the balance in the non-financial accounts (net lending/net borrowing) as the difference between total revenues and total expenditures then describe in the financial accounts how this deficit will be financed (or surpluses will be reversed). According to the System of National Accounts, resources from official credit operations are not normally included in the income section).

Box 2.3. Classification of government revenue in the System of National Accounts

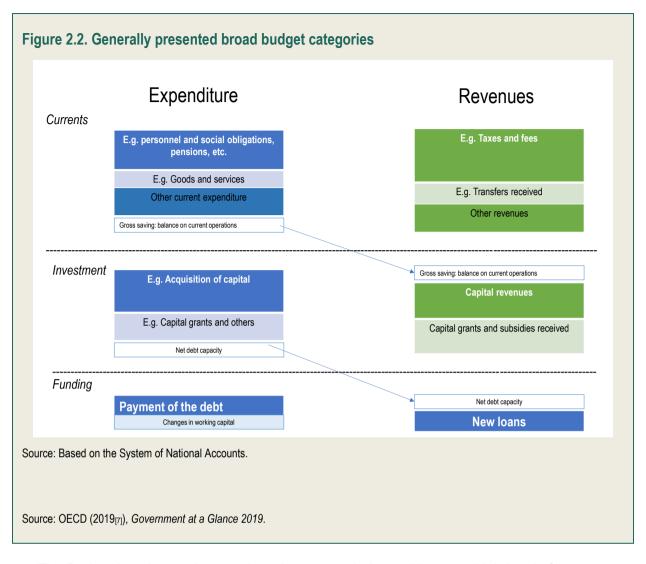
Income data are calculated from OECD *National Accounts Statistics* (database), which are based on the System of National Accounts. The System of National Accounts is a set of internationally agreed concepts, classifications, definitions and national accounting standards.

All OECD countries use the 2008 System of National Accounts framework.

Revenues are broken down into:

- taxes (e.g. on consumption, income, wealth, property and capital)
- net social contributions (i.e. pension, health and social security contributions, after deduction
 of the service charges of social security schemes, where applicable)
- sales of goods and services (e.g. market output of public entities, fees, etc.)
- transfers and other sources (e.g. current and capital transfers, property income, and subsidies).

The loans needed to cover the difference between total income and total expenditure are usually presented in a separate section (Figure 2.2).



The Budget Law is very long and carries appropriations with a very high level of disaggregation – but without indicating results

For each budget unit, the budget is presented by generic expenditure, expenditure category, level of government, function and source of funding, and different combinations of these categories (Table 2.3). This implies a very long and detailed budget bill, but one that is essentially focused on inputs rather than results.

The bill submitted to Congress comprises the Public Sector Budget Law (approximately 80 pages and 5 300 lines), which includes 13 annexes totalling more than 2 800 pages and approximately 84 000 lines).² This reduces the clarity of the Budget Law and creates rigidities when it is voted on at a very high level of detail.

Accepted good practice in OECD countries points towards short budget laws, with relatively high-level allocations and an emphasis on outputs rather than inputs. These laws are supplemented by annexes, which provide more detailed information on how expenditures, targets and indicators are allocated, but they are usually not part of the Budget Law and can therefore be amended without amending the Budget Law. A 2012 study, for example, showed that ten countries have budgets with less than 300 lines (OECD, 2014_[8]).

Table 2.3. Types of expenditure classifications in Peru

Classification	Content	
Generic expenditure	Contingency reserve Staff and social obligations Pensions and other social benefits Goods and services Donations and transfers Other expenditure Acquisition of non-financial assets Acquisition of financial assets Public debt service	
Expenditure category	Current expenditure Capital expenditure Debt servicing	
Level of government	National government Regional government Local government	
Function	Legislative External relations Contingency planning, management and reserve Defence and national security Public order and security Justice Work Trade Tourism Agropecuary Fishing Energy	Mining industry Transport Communications Environment Sanitation Housing and urban development Health Culture and sport Education Social protection Social welfare Public debt
Budget unit	153 budget units in the national government 25 regional budget units (one per region + Lima Metropolitan Municipality) 1 888 municipal budget units (one for each municipality)	

Source: Based on annexes to the Public Sector Budget Law for Fiscal Year 2022.

Until 2023, any directly collected revenue that exceeded the estimates was freely available to the entities, and therefore their use was not discussed or approved by Congress

To some extent, this meant that the public budget approved by Congress did not constitute expenditure ceilings for the entities but allocated ordinary revenue for each expenditure, with total expenditure depending on the entity's level of directly collected revenue. This was clearly stipulated in the previous General Law on the National Budget System (No. 28411): "the limits of the budget appropriations are constituted by the estimated revenues that the entities expect to receive, as well as the public funds that have been determined and communicated to them by the Ministry of Economy and Finance".

This practice allowed limiting the fiscal risk for the national government, since the amount of allocated regular revenue is determined. However, it also meant that budget discussions were not held on the amounts of each entity's expenditures, since these depended on the level of each entity's own revenue collection and on the estimated levels of these. This reduced the usefulness of the budget as an instrument for prioritising public spending and politicised the estimation of directly collected revenue, when revenue estimation should be a purely technical exercise.

It should be noted that from 2023 onwards, directly collected revenue from national government entities will be considered as ordinary revenue, so this challenge should be resolved for national government budget units.

According to OECD good practice, the national budget sets spending limits for each programme/allocation, regardless of each entity's own level of revenue collection. This is generally achieved automatically by not distinguishing between funding sources. However, there are certain cases where public entities are allowed to collect and retain fees and payments (in particular, where the costs to the entity depend on the level of service, such as the issuance of passports). However, there are usually rules to avoid creating incentives for entities to over-collect these fees and taxes or to under-declare their estimates (Box 2.4).

Box 2.4. Treatment of own revenue of public bodies in Ireland

In Ireland, some public bodies are authorised to collect fees and charges, where expenditure depends on the level of activity (such as the issuing of passports). Entities are allowed to keep some of this own revenue, but the budget indicates the level of spending authorised by Congress on the basis of directly collected revenue (called "appropriations-in-aid"). If these exceed the estimated level by more than 5%, the balance automatically returns to the National Treasury to be reallocated by Congress towards achieving strategic objectives (such as reducing the deficit).

Presenting directly collected revenue separately from regular revenue and allowing entities to keep 5% if they are higher than estimated preserves incentives for entities to maximise their own collection.

Source: Department of Public Expenditures and Reform (2019[9]), Public Financial Procedures Booklet.

The situation is different for subnational governments. As mentioned above, in OECD countries, subnational government budgets are separate from the national government's budget. The common practice in OECD countries is that transfers from the national government to subnational governments do not depend on the level of the subnational governments' own revenue collection.³ Therefore, subnational governments' level of spending does depend on the level of own revenue collection.

2.2.4. Recommendations for improving Peru's regulatory and institutional framework

Based on the analysis presented in the previous sections, this report proposes the following recommendations (Table 2.4).

Table 2.4. Recommendations for improving the regulatory and institutional budgetary framework in Peru

Findings	Implications	Recommendations
The budget discussed and voted on in Congress is consolidated between national and subnational governments. No non-consolidated budgets are presented that clearly show the revenues of each level of government and the transfers between them.	Makes the Budget Law longer and more complex. Difficult to reconcile with the notion of subnational government autonomy. Subnational government revenue and transfers made between levels of government are not clearly identified.	Consideration could be given to presenting the national and subnational governments' budgets in an unconsolidated form within the budget approved by Congress. Accompanying measures: Create mechanisms to guarantee the sustainability of the public sector, with sufficient controls and monitoring by the Ministry of Economy and Finance of subnational government spending levels to ensure compliance with fiscal rules. Ensure that the Office of the Comptroller General conducts effective oversight of the legality of subnational governments' budget execution to ensure there are no slippages between budget and execution. Design subnational budget processes which integrate good practices in public budgeting, planning, transparency, accountability, etc. Strengthen subnational governments' administrative capacity, in particular in public budgeting and accounting.

Findings	Implications	Recommendations
		Associated actions Create horizontal co-ordination mechanisms to achieve economies of scale. Create multi-level budget governance mechanisms to ensure co-ordination between levels of government.
The expenditure budget is broken down by funding source and use of debt is assimilated to income from other sources	Generates a high level of rigidity. Increases the administrative burden for all budget units. Difficult to manage the treasury and accounts. Generates perverse incentives (because rules applicable to each type of revenue vary).	Eliminate sources of financing from the structure of public expenditure, except in exceptional cases where a resource has been granted by an external body to finance a specific project. Present public credit operations separately from ordinary revenues.
The Budget Law is very long, with a very high number of appropriations focused on inputs and physical targets, with little emphasis on expenditure ceilings and outcomes.	Reduces the clarity of the Budget Law and its usefulness in prioritising expenditures. Makes implementation inflexible, leading to alternative mechanisms to increase spending flexibility.	Peru could move towards a shorter Budget Law, with a greater emphasis on results. Voting on more global allocations: Vote on more global budget allocations. Put the more detailed breakdown in annexes for informatior (but not as part of the law). Strengthen monitoring and accountability so that each budget unit is required to explain where and why it made changes from the annexes. Strengthen the role of the Office of the Comptroller General of the Republic to control and ensure the legality of operations. This represents a major reform and would require a special implementation study to be carried out.
Until 2023, directly collected revenues collected in excess of the estimated values were freely available to the entities, and therefore their use was not discussed or approved by Congress. From 2023 onwards, the directly collected resources of the national government's budget units will be considered ordinary revenue.	Limits the fiscal risk for the national government. The Ministry of Economy and Finance has complete information on the resources collected by the different entities. Reduces the usefulness of the budget as a spending prioritisation tool, as the budget does not determine expenditure ceilings. Integrating directly collected revenue into ordinary revenue is a first step towards eliminating funding sources.	Remove the link between expenditure and funding sources. Do not take into account each entity's own revenue-raising capacity in determining its expenditure allocation (except where there is a direct link between the level of activity and revenue collection, and expenditure).
Peru has a General Law on the National Budget System (DL 1440).	3	Amend the General Law in line with the implementation of the recommendations of this report, where necessary.

2.3. Fiscal sustainability and medium-term perspective

2.3.1. Fiscal rules

A comprehensive regulatory framework for fiscal rules including a debt rule, a deficit rule and a public expenditure growth rule

In the late 1990s, after several decades of macroeconomic instability caused by a lack of prudent fiscal and monetary policy management, Peru began to develop an institutional framework to ensure fiscal stability (Box 2.5). Today, the regulatory framework for fiscal responsibility is based on two instruments:

- 1. Legislative Decree 1276 of 2016 establishes four fiscal rules for the non-financial public sector:⁴
 - Debt rule: Total gross debt of the non-financial public sector ≤ 30% of gross domestic product (GDP).
 - Exceptionally, in cases of financial volatility and provided that the other macro-fiscal rules are complied with, public debt may have a temporary deviation of no more than 4 percentage points of GDP.
 - o **Economic performance rule:** Non-financial public sector fiscal deficit ≤ 1% of GDP.
 - General Government Non-Financial Expenditure Rule: The real annual growth rate cannot deviate by more than 1 percentage point from the 20-year average of real annual GDP growth. The average is calculated using the real GDP growth rates of the 15 years before the elaboration of the multiannual macroeconomic framework, the estimate of the fiscal year in which the multiannual macroeconomic framework is prepared, and the projections for the four years thereafter.
 - The real rate is calculated using the Consumer Price Index of Metropolitan Lima according to the multiannual macroeconomic framework.
 - General Government Current Expenditure Rule: General government current expenditure (excluding maintenance expenditure) must respect the above rule (i.e. offset current expenditure growth cannot be offset by reducing capital expenditure growth).
- 2. Legislative Decree 1275 of 2016 adds two fiscal rules for subnational governments:
 - Regional or Local Government Total Debt Balance Fiscal Rule: Total debt balance
 ≤ annual average of total current revenues for the last four years.
 - Where the total debt balance comprises the balance of financial liabilities, debt owed to government entities and real debt to private pension fund managers, and total current revenue comprises tax, non-tax revenue and current transfer revenue.
 - Current Account Savings Fiscal Rule: Total current revenue ≥ total current non-financial current expenditure.

Box 2.5. Evolution of Peru's institutional framework for ensuring fiscal stability

In Peru, the decades prior to 1990 were characterised by macroeconomic instability in the use of monetary policy to finance the public deficit, which led to periods of hyperinflation and economic stagnation. By 1990, Peru's public debt reached 89% of gross domestic product (GDP), the public deficit was 8.9% of GDP and inflation was 7 650% (hyperinflation). In the 1990s, Peru began to implement reforms to restore fiscal sustainability. For example, the 1993 Constitution prohibits the Central Reserve Bank of Peru from lending to the government. Since then, the institutional framework to guarantee the fiscal sustainability of public finances has been built and modified:

1999: Fiscal Prudence and Transparency Law

- Fiscal rules:
 - o Ceiling for the consolidated public sector deficit and a ceiling on government borrowing.
 - o Limit on the growth of general government non-financial expenditure.
- Establishment of a sovereign wealth fund.
- Establishment of a medium-term macroeconomic framework.

2003: Law for Strengthening Fiscal Accountability and Transparency

- Modifies the financing rules of the Fiscal Stabilisation Fund.
- Raises the limit on the growth of non-financial government expenditure.

2007: Supplementary Credit Act

- Modifies the previous law in two dimensions:
 - Restricts the scope of the ceiling for the public sector deficit and for the government deficit to the government average.
 - Limits the application of the public expenditure rule to current expenditure, excluding investment expenditure.

2015: New modification of tax rules and creation of the Independent Fiscal Council

- Non-financial public sector deficit not to exceed 1% of GDP, taking cyclically adjusted expenditure and GDP.
- Expenditure growth should be consistent with the non-financial public sector deficit rule.
- Set the ceiling for total non-financial public sector gross debt at 30% of GDP.

2016: New modification of tax rules

Abandons cyclically adjusted variables and bases fiscal rules on observable variables.

Source: Schmidt-Hebbel (2022_[10]), *Política y reglas fiscales: evaluación y propuestas de reforma para el Perú*; Valderrama (2022_[11]), *Hitos de la Reforma Macroeconómica en el Perú* 1990-2020: La Recompensa de los Tamías.

The tax rules provide for an exception clause

As in most countries, macro-fiscal rules can be modified exceptionally in the case of disaster or significant extreme shocks. DL 1276 clearly states the procedure to be adopted and that this temporary modification should explicitly state the gradual return to the rules. This clause has recently been used as a consequence of the national emergency caused by the COVID-19 pandemic for fiscal year 2021.

The Ministry of Economy and Finance is in charge of monitoring fiscal rules and accompanying subnational governments

The MEF is in charge of calculating fiscal rules and monitoring their application.

In the case of the rules for the non-financial public sector, slippages must be compensated for the following fiscal year. In the case of regional and local governments, the MEF can adopt corrective measures in case of non-compliance. These include, for example: preventive monitoring, prevention from entering into new short-term debt operations or from entering into a new public-private partnership contract. Subnational governments subject to corrective measures must submit a "commitment to comply with fiscal rules" to the MEF and the Comptroller General of the Republic. The commitment must be approved by the regional or municipal council and explains the measures taken to avoid further non-compliance.

The MEF can also provide technical assistance to implement good practices in fiscal management to subnational governments that request it.

The MEF publishes regular monitoring reports on subnational governments' public finances and compliance with the rules (four quarterly reports and one annual report each year).

The deficit target is not clearly mentioned in the Budget Law, and the fiscal space available is not clearly stated

In many OECD countries, the Ministry of Finance makes a fiscal space calculation resulting from the application of fiscal rules. The revenue projections and the various rules generate a firm expenditure ceiling for the public sector and for each level of government. In countries with a top-down budgeting process, the budget process starts with the fiscal space calculation and the political decision on the level of deficit and expenditure (which cannot be higher than stipulated in the fiscal rule but can be lower). This is usually clearly shown in the first pages of the draft and then of the public Budget Law.

In Peru, the opening institutional budget (and the modified institutional budgets) do not clearly show the level of the deficit because the resources from ordinary lending operations are presented together with the funding sources. However, there is a difference in nature between tax revenues and debt financing. In most countries, credit operations are presented as financing the net deficit (the difference between total revenues and total expenditures). In the System of National Accounts, net borrowing/net lending is equal to the difference between total revenues and total expenditures.

2.3.2. Medium-term perspective and expenditure ceilings

Peru has several multiannual instruments in the budget process, but there is a lack of coherence between them, and none has a binding expenditure ceiling

The MEF produces three multiannual documents for the budget process. The medium-term perspective is thus taken into account and efforts are made to make economic projections and expenditure estimates. However, the revenue and expenditure assumptions and estimates used in the annual budget process are not consistent with these documents (Table 2.5).

Table 2.5. Multiannual economic and budgetary outlook documents in Peru

Instrument	Month of publication	Description	Analysis
Multiannual Budget Programming and Budget Formulation Directive and its annexes, guides and factsheets	Published between December of year t-2 and February of year t-1	Directive indicating how estimates of income, expenditure, etc. should be made, who should do what, fill in which spreadsheet, by what deadline, etc.	This directive does not contain expenditure ceilings. Apart from the timing of the meetings, much of the content of this directive could be included in a general law, as it does not vary from year to year. The directive stipulates that it is the budget units that make their proposals for multiannual budget programming. It should be noted that this exercise is carried out without information on the amounts of expenditure that will be allocated to them. In the same way, the directive stipulates that the budget units must indicate multiannual performance targets without knowing the amount of resources that will be allocated to them, since the directive does not define the amounts of expenditure that will actually be allocated.
Multiannual macroeconomic framework (t, t+1, t+2, t+3)	In August of year t-1, the multiannual macroeconomic framework (t - t+3) is published, which will be updated in April of year t.	This document contains the macroeconomic projections and the assumptions on which they are based for a four-year period, covering the year for which the public sector budget is being prepared and at least the following three years. The Ministry of Economy and Finance is responsible for preparing and publishing the multiannual macroeconomic framework. The multiannual macroeconomic framework is approved by the Council of Ministers.	The multiannual macroeconomic framework contains expenditure projections, but these do not constitute expenditure ceilings. The projections used in the annual budget are not the same as those used in the multiannual macroeconomic framework because the multiannual macroeconomic framework is based on global estimates, whereas the annual budget is based on estimates at the level of the budget units, made by the budget units themselves.
Multiannual Budget Allocations Programming Report	Before 30 May	The multiannual budget allocation is defined as "the ceiling of budget appropriations corresponding to each budget unit". Multiannual budget allocations are calculated by the Ministry of Economy and Finance for the year for which the budget is being prepared (year t) and the two following years (year t+2 and year t+3). Multiannual budget allocations are estimated taking into account revenue and expenditure programming, subject to macroeconomic and fiscal policy objectives, prioritised outcomes and economic conditions. The multiannual budget allocation is binding for the first year (year t) and indicative for the following two years (year t+2 and year t+3). It is reviewed annually and modified in case of changes in any of the factors taken into account for its estimation.	The Multiannual Programming Report 2022-2024 published in 2021 presents a table (Table No. 5) with "estimated expenditure gel by functional classification" for the current year and the following three years. The revenues and expenditures mentioned in year 1 of the multiannual macroeconomic framework effectively correspond to the revenues and expenditures in the opening institutional budget, but as the opening institutional budget does not represent what will actually be spent in the year, the benefit of the multi-year exercise is lost. The opening institutional budget of year t+1 is usually lower than the budget of year t implemented,* which would represent a decrease in expenditure, and which is not very credible.

^{1.} See Figure 2.9. Opening institutional budget revenues vs. collected revenue Source: MEF (2022 $_{[12]}$), « Plataforma digital única del Estado Peruano ».

The OECD has identified good practices for implementing a medium-term expenditure framework (Box 2.6) and analysed the practices in those countries that best implement them (Table 2.6). In several OECD countries, the medium-term budgetary and/or fiscal framework is discussed and approved by parliament. It is in these discussions that the parliament analyses and decides on the allocations of available funds among different sectors and priorities. It should be noted that it takes a long time to reach these levels, and it has taken decades for these countries to develop and refine these practices.

Box 2.6. Medium-term expenditure frameworks in OECD countries

Almost all OECD countries have some form of medium-term expenditure framework (MTEF), but their coverage and design vary widely. MTEFs need four elements to function properly:

- · fiscal objectives clearly mentioned in the budget law
- credible projections of available resources
- monitoring of expenditure commitments, i.e. regular updating of the baseline
- binding expenditure ceilings.

The way these four elements work together is essential to the success of the MTEF. A quality MTEF has several benefits: it serves as an anchor for agents' anticipations, demonstrates credibility and political leadership, and serves as a basis for accountability.

MTEFs are essential elements for the success of fiscal rules, as they provide a projection of medium-term baselines and are, therefore, an early warning mechanism when the trajectory of public finances is not sustainable. MTEFs also facilitate the financing of new government priorities by reallocating funds and allow to plan and see the results of measures that take several years to come to fruition (such as large infrastructure projects, new programmes, organisational restructuring, etc.). The presentation and discussion of the MTEF allow bringing different commitments and constraints together in one place, which allows visualising trade-offs and taking informed decisions, taking into account the impact of decisions in the medium term (Figure 2.3). In year t, a ceiling for total expenditure is allocated (green line). In subsequent years (t+1, t+2, t+3 depending on the country), the baseline expenditure needed to finance the same services and activities as in year t is calculated under the assumption that there is no policy change and that the same mix of inputs is used to produce these goods and services (green line). Then, savings are sought on that natural increase in the baseline, to create fiscal space for new priorities. These savings can come either from closing programmes that are no longer aligned with government priorities, or by modifications in the input mix that result in efficiency gains. Spending reviews are a frequently used instrument to identify such opportunities for savings on the baseline. On the other hand, medium-term expenditure ceilings are set (for years t+1, t+2, t+3 depending on the country). These ceilings are calculated in order to comply with fiscal rules, taking into account growth and revenue projections. Countries usually keep an unallocated contingency reserve over the expenditure ceilings, in case the projections turn out to be too optimistic. These reserves tend to be larger for more distant years, as uncertainty is higher. Once the baselines and potential savings generated are covered, the fiscal space available to finance new initiatives is the sum of the efficiency savings over the baselines and the estimated revenue increases.

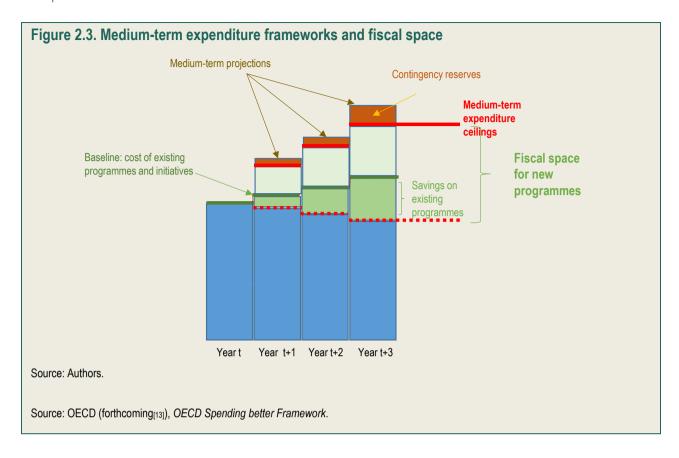


Table 2.6. OECD good practice for efficient medium-term expenditure frameworks

Good practice	OECD best practices	
Clearly defined fiscal objectives Essential to achieve fiscal outcomes: act as an "anchor" for subsequent fiscal principles. Fiscal targets should be explicitly disclosed (budget balance, aggregate levels of revenue, expenditure, debt). Political commitment is essential, whether in legislation, the government's political programme or a coalition agreement. Simple in design, promotes transparency and accountability.	New Zealand Tax Strategy Report New Zealand does not have fiscal rules in legislation. Instead, under the Public Finance Act 1989, the government must prepare a Fiscal Strategy Report, which is published with each budget. In this report, the government presents its short-term fiscal objectives and the long-term fiscal objectives of fiscal policy, which include five variables: • total current expenditure • total current revenues • the balance between total current expenditure and total current revenue • total debt • total equity. In addition to setting out these objectives, the government should explain how it is accountable for its fiscal strategy. The provisions also require the government to look back and assess the extent to which its fiscal performance was consistent with its published fiscal strategy.	
2. Reliable economic projections	Office for Budget Responsibility in the United Kingdom Established in 2010 to provide independent and official analysis of the United Kingdom's public finances. Its responsibilities include: • producing the official economic and fiscal assumptions used to prepare the budget • assessing the extent to which the government's fiscal targets have been met • assessing the accuracy of the previous year's economic and fiscal projections.	
Maintain up-to-date multi-year baseline calculations Multi-year baseline calculations allow visualising the consequences of spending decisions over a	Forward estimates in Australia Include a baseline estimate for all expenditures for the three years following the next budget year.	

Good practice	OECD best practices
three- to five-year period. They should be published and reviewed regularly, and a reconciliation should be made with the levels of expenditure incurred, including all expenditures. It should be the responsibility of the entity preparing the budget.	 Updated throughout the year to ensure that they reflect all the available information on the evolution of policy parameters and decisions at any given time. Prepared at the same level of detail as the annual budget, allowing reconciliation between the budget figures and the first year of future estimates to be made each year. Published with the budget and an updated report published in mid-year.
4. Top-down spending ceilings	Expenditure ceilings in Finland
 They are the basis of the budget process and allow for the operationalisation of high-level fiscal objectives. They are decided at the beginning of the budget preparation process, before receiving budget requests from line ministries. They can only be flexible for certain categories of expenditure that depend on the economic situation (such as unemployment insurance expenditures). Reallocations may be allowed under the ceilings of a ministry, with permission from the Ministry of Finance. They require a strong monitoring and enforcement mechanism. 	 They are fixed for a period of four years, covering 80% of total central government expenditure (some variable expenditures such as unemployment insurance or housing transfers are excluded). Sectoral ministries must reallocate their expenditure below their ceilings to finance new priorities. If a ceiling is breached, the Ministry of Finance has the authority to reduce budget allocations the following year. Only essential price and cost-level adjustments, as well as some essential structural corrections, are made annually.

Source: OECD (forthcoming[13]), OECD Spending better Framework.

2.4. Recommendations for strengthening fiscal sustainability and the mediumterm perspective of the budget

Recommendations for strengthening fiscal sustainability and the medium-term perspective in the budget are presented in (Table 2.7).

Table 2.7. Recommendations for strengthening fiscal sustainability and the medium-term perspective of the budget in Peru

Findings	Implications	Recommendations
Peru has well-defined fiscal rules, including a public expenditure growth rule and an escape clause.	The public expenditure growth rule is essential to control the expenditure path and ensure fiscal sustainability.	Continue to respect fiscal rules. Establish a credible plan for a return to fiscal rule. Complement the fiscal rule with a medium-term expenditure framework to act as a warning mechanism in case the public expenditure path is not sustainable in the medium term, and early corrective action can be taken. In the first part of the annual budget, clearly mention the deficit target and the link between the fiscal rules and the authorised revenue and expenditure amounts.
Peru has several so-called multiannual budget instruments, but there is a lack of coherence between them, and none sets credible spending levels for subsequent years.	The annual budget is not based on a medium-term perspective. Medium-term instruments lose credibility as they are not consistent and there is no <i>ex post</i> analysis to explain the differences between projections and realisations.	Ensure that the multiannual macroeconomic framework's "macroeconomic indicators" are those used for the budget. Include a table in the draft budget and in the Budget Law showing the multi-year projection of the previous year vs. the proposed opening institutional budget in the proposed Budget Law. Publish an analysis of the deviations between the amounts projected in the multiannual macroeconomic framework and the amounts realised (revenues and expenditures).

2.5. Budget formulation and approval

2.5.1. Timetable for budget formulation

Peru's budget calendar has few binding dates

The budget calendar in Peru is not very clearly institutionalised, and most of the major milestones have dates that are aspirational, but not legally binding (Table 2.8). Having and respecting a fixed calendar is a crucial element of a budget system. On the one hand, it allows the different actors to plan their workload during the year. On the other hand, it also allows the discussion process to be limited in time, as all actors know at which point in time they can discuss which issue. This also increases the transparency and fairness of the system by giving all actors the same opportunities and time to discuss.

Table 2.8. Summary timetable of the budget process in Peru

Period	Activities	
	Programming and formulation	
Towards January/February	 The General Directorate of Public Budget (DGPP) issues a Directive on Multiannual Budget Programming and Budget Formulation. Between February and March, the DGPP, regional governments and the prioritised local governments hold meetings to support the estimation of revenues.¹ 	
March	 The DGPP and the budget units hold meetings to support the multiannual expenditure estimate of the prioritised portfolio of projects and external borrowing operations. 	
Towards the end of April	 The Directorate General for Macroeconomic Policy and Fiscal Decentralisation publishes an update of the multiannual macroeconomic framework published in August of the previous year. 	
30 April	 The General Directorate of Multiannual Investment Programming approves the multiannual investment programme. 	
Before the last week of May	 The Ministry of Economy and Finance (MEF) estimates revenues from ordinary revenue, determined revenue and resources from official credit operations for all the budget units.² The DGPP prepares the Report on the Multiannual Budget Allocation and the MEF proposes it to the Council of Ministers for approval. After approval, the DGPP communicates the report to each budget unit. 	
June-July	 The national and regional government budget units disaggregate and negotiate additional new resources for priority programmes. 	
31 July	The DGPP submits the preliminary draft Budget Law to the Minister of Economy and Finance.	
First half of August	 The Directorate General for Macroeconomic Policy and Fiscal Decentralisation proposes the multiannual macroeconomic framework with policy guidelines and macroeconomic projections for the next three years and submits it to the Fiscal Council. The Fiscal Council comments on the multiannual macroeconomic framework for the triennium starting the following year (e.g. in 2022, multiannual macroeconomic framework 2023-25). 	
Before 31 August	 The Council of Ministers approves the preliminary draft Budget Law and the multiannual macroeconomic framework. 	
	Parliamentary discussion and approval	
First week of September	The MEF submits the draft Budget Law to Congress with an explanatory memorandum.	
Until 30 November	Congress approves the Budget Law for the following fiscal year.	
31 December	 The MEF issues the Directive for Budget Execution. The MEF indicates a first annual commitment schedule.³ Subnational governments approve their institutional aperture budgets 	
	Budget implementation and modifications	
1 January to 31 December	 The budget units execute their budgets. Budget units make modifications. When necessary, the MEF reviews and ensures that they comply with the criteria and definitions contained in the Budget Law and issues a favourable opinion. The DGPP updates the annual commitment schedule quarterly based on the information provided by the budget units. 	

Note: Dates in bold are legally binding.

- 1. Note that what is called "revenues" here includes directly collected revenue by subnational governments, but also revenues from general taxes (Ordinary resources) that will be allocated to sub-national governments. In most countries, these would be identified as discretionary transfers from the national government to subnational governments.
- 2. Same comment, here it is not only a matter of estimating the directly collected revenue by each budget units, but also of conducting the political discussion of how the Ordinary resources are distributed among each budget units. In most countries, these would be considered as discussions on the expenditure ceilings of the entities, and not discussions on revenues.
- 3. Pursuant to Article 37 of Legislative Decree No. 1440, the annual commitment schedule is a short-term public expenditure programming instrument for all sources of financing, which makes it possible to reconcile the cash programming of revenues and expenditures with the real financing capacity for the respective fiscal year, within the framework of the fiscal rules in force. This instrument is determined by the General Directorate of Public Budget.

Source: Based on interviews with the Ministry of Economy and Finance.

OECD countries usually have an institutionalised budget calendar with clear and legally binding dates for the delivery of key documents (see the case of Greece in Box 2.7). In European Union countries, these guidelines are given at the European level, and all countries must follow them (Table 2.10).

Box 2.7. Budgetary calendar and process in Greece

Since the reform of the budget process in 2014, the new General Budget Law establishes a top-down budget process and clearly identified key dates. The state budget must be prepared "respecting indicative targets and binding ceilings for expenditures". The General Budget Law also stipulates that the Ministry of Finance must prepare a statement of compliance with the ceilings approved in the medium-term strategy. In case of non-compliance with the ceilings, the Minister of Finance must submit an explanation to parliament, justifying the deviation and proposing a corrective plan.

The timetable for budget formulation, discussion and approval is clearly stipulated (Table 2.9).

Table 2.9. Stages of the budget cycle in Greece

Month	Stages
February	 Development of the first version of the macroeconomic projections. Publication by the General Accounting Office of instructions on the procedures and methodologies for preparing revenue and expenditure estimates for the Medium-Term Fiscal Strategy and communicating economic forecasts to the General Directorates of Financial Services.¹
April	Submission of the medium-term financial forecast and its explanatory report to the Council of Ministers for approval.
May	 Fiscal Council's view on fiscal and macroeconomic projections. Presentation of the Medium-Term Fiscal Strategy to parliament. Publication, by the Budget Directorate, of a circular with instructions for the preparation of the general government budget.
June	Publication by the General Directorate of Public Investment (Ministry of Economy and Development) of its own budget circular with instructions for preparing the "investment budget".
July	Budget requests prepared by ministries and communicated to the Budget Directorate before 31 July.
August	 Analysis of the requests by the Budget Directorate and bilateral discussions with the budget units of the ministries/entities. Preparation of the regular budget proposal by the Budget Directorate. Preparation by the Budget Directorate of the draft investment budget.
September	 Preparation of the second version of the macroeconomic projections. Adoption of the Preliminary Draft Budget by the Council of Ministers.
October	 The Fiscal Council's view on fiscal and macroeconomic projections. Presentation of the Preliminary Draft Budget to parliament on the first Monday in October. Submission of the Preliminary Draft Budget to the European Commission (from 2018).
November	Submission of the draft state public budget to parliament "at least 40 days before the beginning of the next fiscal year".
December	Adoption of the public budget by parliament before 31 December.

January	Publication of the budget implementation circular by the Budget Directorate.
	Signing of the memorandum of understanding on budget implementation with all ministries.
	Allocation of appropriations to line ministries.
	Analysis of final budget execution by the Budget Directorate.

^{1.} General directorates of financial services are budget units established in sectoral ministries. Source: Moretti (2019_[3]), "Budgeting in Greece", *OECD Journal on Budgeting*, Vol. 2019/2.

The budget formulation process in Greece starts in April with the publication of the annual circular. The first section of this document presents the macroeconomic assumptions, fiscal targets and policy priorities, as well as the binding ceiling for each sectoral ministry, as stipulated in the Medium-Term Fiscal Strategy. The second section of the document gives instructions for costing some budget lines (in particular, wages). This circular also provides instructions for the format, process and deadlines for the documents that sectoral ministries must submit to the General Accounting Office (the budget directorate in Greece). This circular is sent to the budget units of the line ministries at the end of May.

The line ministries' budget units prepare their budget requests, which mainly consist of a more detailed version of that presented in the Medium-Term Fiscal Strategy. The budget units submit their requests to the relevant minister, who forwards them to the General Accounting Office. Any request above the mandatory ceiling is automatically rejected, and the ministry must submit a new request within ten days.

Source: Moretti (2019_[3]), "Budgeting in Greece", OECD Journal on Budgeting, Vol. 2019/2.

Table 2.10. European Semester and Two Pack

Month	Stages
November (from the previous year)	 The European Semester begins with the publication by the European Commission of a series of macroeconomic documents, including: The Annual Sustainable Growth Survey, which contains the overall economic and social priorities for the European Union and policy orientations for its member states. The Alert Mechanism Report, which identifes macroeconomic imbalances and guidelines for correcting them. The draft Joint Employment Report, which analyses the employment situation in the European Union and policy orientations for member states. The Euro Area Recommendations, which provide policy orientations for the national dimensions of the European Union's economic governance in the euro area.
February and March	After preparation through discussions at the ministerial level, the European Council examines the reports.
February	The European Commission publishes a country report for each member state that analyses its macroeconomic situation and progress in implementing the member state's reform programme.
April	Member states submit their national reform programmes (on macroeconomic issues) and their stability programmes (for euro area countries) or convergence programmes (for non-euro area countries), which contain three-year budgetary plans.
May	The European Commission assesses these plans and presents a set of country-specific recommendations on macroeconomic and fiscal issues.
July	These policy recommendations are discussed and approved by the European Council.
Before 15 October	Under the "Two Pack", euro area member states must submit draft budgetary plans for the following year to the European Commission.
November	The European Commission assesses these plans against the requirements of the Stability and Growth Pact and submits the outstanding macroeconomic recommendations.

Source: OECD (2019[14]), Budgeting and Public Expenditures in OECD Countries 2019.

2.5.2. Budget directives

The Multiannual Expenditure Programming Directive has no information on macroeconomic assumptions, fiscal targets or the final amount of expenditure allocations

The budget process in Peru is initiated in January or February by the DGPP, which issues the Multiannual Expenditure Programming Directive. This document indicates to the budget units the calendar for the year and what they must do during the year. It is a technical document with a lot of administrative details (forms to be filled in, information to be entered into the system, etc.). The DGPP tries to issue this document in December, but it is often not issued until January or February.

In OECD countries, it is common for the budget process to start by issuing an "annual circular" or annual directive. Generally, the General Budget Law indicates when this directive should be issued. These directives usually contain information on macroeconomic assumptions, fiscal targets and policy priorities. In many countries, it also shows the expenditure ceilings for each ministry, as set out in the medium-term fiscal strategy. It also indicates deadlines, formatting guidelines and documents to be sent to the Budget Directorate by the various budget units (see, for example, the case of Greece in Box 2.7).

In Peru, there is no mandatory date for the publication of the Multiannual Expenditure Programming Directive. The directive does not include information on the macroeconomic situation or fiscal targets, nor guidelines on the target for expenditure increases, fiscal effort, etc. Budget units do not, therefore, have this information to start calculating their baselines, prioritising their actions or planning their budgets for the following year.

2.5.3. Macroeconomic projections and revenue estimates

Revenue estimation is very complex (it has to be done at a very micro level) because of the link between funding sources and expenditure allocations

The first stage of the budget process in Peru consists of estimating the different revenues to be collected. These estimates are made by the General Directorate of Macroeconomic Policy and Fiscal Decentralisation based on information provided by the National Superintendency of Customs and Tax Administration (estimated revenue collection), the General Directorate of Public Treasury (estimated financial market and credit operations), and the Central Reserve Bank (estimated growth, interest rate and inflation rate). Directly collected revenue estimates are made through discussions between the DGPP and the different budget units.

The allocation of expenditures according to funding sources implies a very complicated process since it is not sufficient to estimate the overall evolution of revenues in each type of source, but it is necessary to have a very precise estimate of each entity's directly collected revenue. Indeed, the level of expenditure allocated to each entity will depend on the directly collected revenue estimate used in the public budget. If the budget did not link expenditures to funding sources, it would be sufficient to have an overall estimate of directly collected revenue, and expenditure allocations would not depend on these, but rather on the evolution of baselines and political decisions to prioritise new expenditures. By linking spending authorisations to the level of directly collected revenue, estimating directly collected revenue also becomes a political process.

There are no mechanisms to control the quality of the assumptions used in the public budget

Revenue estimation is an essential element of the budget process; the level of authorised expenditure depends on it. In many countries, there is a tendency to overestimate these resources to increase the level of expenditure, which results in higher than desired deficits. To avoid conflicts of interest and improve the

quality and reliability of revenue estimates, many OECD countries have designed processes to control the quality of revenue estimates (Box 2.8).

The inputs used by the General Directorate of Macroeconomic Policy and Fiscal Decentralisation to make its ordinary revenue estimates are not published, and there is no explanation of how the estimates are calculated based on the various inputs nor subsequent analysis to explain the differences between the estimates and the levels actually collected. Directly collected revenue estimates are negotiated with budget units and there are incentives to underestimate them (see next section).

Box 2.8. Quality control of budget assumptions in OECD countries

Germany

The budget forecasting and formulation process in Germany allows a variety of opportunities for independent (or semi-independent) institutions to participate in economic projections and budget monitoring. For example, since July 2018, the Joint Economic Forecasting project group has been responsible for assessing and approving the government's macroeconomic projections underlying the budget. It is an independent body made up of the country's leading economic research institutions. In addition, the Stability Council, supported by an Advisory Council, monitors compliance with the balanced budget rule twice a year. The Stability Council is composed of the Federal Minister of Finance, the finance ministers of the federal states (*Länder*), and the Federal Minister of Economic Affairs and Energy. The Advisory Council is an independent body of experts.

Slovak Republic

In the Slovak Republic, the Macroeconomic Projections Committee approves the macroeconomic forecasts published by the Financial Policy Institute of the Ministry of Finance. The committee was established to increase the transparency and objectivity of the country's macroeconomic forecasts. It is composed of ten independent institutions: the commercial banks ING Bank, Tatra banka, SLSP, CSOB, VÚB, UniCredit and Volksbank; the Institute of Informatics and Statistics; the Slovak Academy of Sciences, and the National Bank of Slovakia. The committee examines the Ministry of Finance's forecasts then votes on their degree of realism. At least half of the committee has to give an opinion qualifying the projections as prudent or realistic for the projections to be officially approved. Once official, the Ministry of Finance's macroeconomic projections are used as the basis for the multiannual budget for the next three years and for updating the Slovak Republic's Convergence Programme.

In addition, the Slovak audit institution, the Budget Accountability Council, submits an assessment of fiscal policy in relation to budgetary and transparency rules to parliament.

Austria

In Austria, official macroeconomic forecasts are published by the Austrian Institute of Economic Research (WIFO). WIFO is a non-profit association under Austrian law, recognised for its high-quality economic research and realistic and unbiased forecasts. It is a long-established practice in Austria for the Ministry of Finance to base its budget plans on the macroeconomic projections produced by WIFO four times a year, following a set and pre-announced timetable. The Austrian monitoring institution is the Fiscal Advisory Council.* Its task is to assess the current budgetary situation and compliance with national fiscal rules with a forward-looking perspective. The Austrian Parliamentary Budget Office has the right to participate in the Fiscal Council's meetings in an advisory capacity.

1. Note that the term "fiscal" in English refers to both public revenues and expenditures, as opposed to the term "fiscal" in Spanish, which usually refers only to public revenue. In this paragraph, "Consejo Fiscal" refers to both revenue and expenditure.

Source: Moretti (2019_{[31}), "Budgeting in Greece", *OECD Journal on Budgeting*, Vol. 2019/2.

2.5.4. Substantiation of the budget allocations with budget units

The "expenditure ceilings" communicated to the budget units at the beginning of the budget process are systematically increased during the budget support meetings, and are therefore considered by all actors as the starting point of the discussion rather than as a binding ceiling

The budget units must make their expenditure requests based on the multiannual budget allocations. However, these multiannual budget allocations do not reflect credible expenditure ceilings but are *de facto* considered as the starting point for discussions that will lead to increased expenditure allocations. The budget units prepare their requests based on their estimated needs without having a credible spending ceiling. In June and July, the budget units and subnational governments conduct political discussions to obtain more resources to finance their new priority programmes. Depending on the evolution of the revenue estimates, the MEF (DGPP) accepts additions to the amounts established in the multiannual budget allocations.

This type of budget process, where revenues and expenditures are discussed simultaneously, corresponds to the traditional practice of bottom-up budgeting in OECD countries. Today, most OECD countries have moved towards a system of "top-down budgeting", which allows for better control of total spending, improves the quality of budget proposals, and reduces the wear and tear associated with lengthy and extensive political discussions to formulate a sustainable budget (Box 2.9).

Box 2.9. Top-down budgeting as a tool to ensure fiscal sustainability in the OECD

As part of an effort to control public deficits and improve the quality of public spending, many OECD countries reformed their budgetary practices from the 1990s onwards, implementing so-called "top-down budgeting". Top-down budgeting refers to the budgetary practice of defining from the outset binding ceilings on authorised expenditures, at the aggregate level and the level of each sectoral ministry, then requiring that multi-year and annual budgets respect these ceilings.

Typically, in top-down budgeting, the executive first determines aggregate targets for public finances (deficits, expenditures and revenues) based on medium-term deficit targets and macroeconomic forecasts. These aggregate ceilings are then distributed among the different sectors/ministries/budget units based on existing commitments, policy priorities and new interventions (Table 2.11).

This system is opposed to the traditional bottom-up budgeting system, which is a reactive, expenditure-driven system where the total expenditure level results from aggregating individual requests from each actor, and is not determined until the very end of the budget discussion process. This type of system favours a sense of ownership of resources by the budget units, making it very difficult to reallocate spending towards new priorities.

Table 2.11. Top-down vs. bottom-up budgets

	Top-down (proactive) budget	Bottom-up (reactive) budget
Main objective	Policy-driven process that aligns spending with key priorities (proactive)	Expenditure-driven process (reactive)
Role of the minister/finance secretary	Sets the level of aggregate expenditure based on the fiscal management objective and monitors compliance with it	Negotiates details of individual spending proposals to control detailed allocations
Role of ministers/secretaries of spending	Allocates financial resources to the various programmes within the allocated expenditure limits	Submits budget requests and negotiates detailed appropriations

Economic projection	Conducts a comprehensive fiscal analysis, taking into account economic forecasts	Ministry-by-ministry analysis, ignoring economic forecasts	
Efficiency	The streamlined process reduces inefficient practices and excessive applications	Slow and ineffective negotiation process	
Time frame	Multi-year perspective	Annual allocation process	

2.5.5. Congressional discussion and approval

The time frame for revising the draft budget and the amending powers are aligned with OECD good practice

Congress has three months to review, discuss and amend the draft Budget Law. It is allowed to comment on proposed and prioritised expenditures but cannot increase the total amount of expenditures. This is in line with OECD good practice.

Sectoral ministers and subnational governments substantiate their spending needs before the Congressional Budget Committee. Annex 5, which details the investment projects that will receive budget funds, usually receives the most attention and modifications. However, as discussed in Chapter 5, there are no limits or legal framework governing the changes that congresspeople can make to the list of projects included in Annex 5. In particular, while the government's Annex 5 proposal is developed based on a rigorous prioritisation and quality control process, the projects added by congresspeople during this phase of the budget discussion do not have the same technical and quality controls. In principle, the only limit on members of Congress' ability to amend Annex 5 is not to increase total spending. In practice, however, it is common for total spending to be increased during this phase of the budget process.

It is very unusual for subnational governments to have to submit their budgets and substantiate their spending needs to Congress. There are always discussions to increase transfers from the national government to the various subnational governments, but not the substantiation of the subnational governments' budgets.

However, the Budget Law voted by Congress represents a spending floor and will be modified throughout the year without systematically going through Congress again

The budget approved by Congress is called the "opening institutional budget", and it is established that it represents a floor for expenditures and will be modified throughout the year. In most cases, Congress does not review or authorise these modifications. Some of these modifications have been pre-approved in the opening Budget Law, but as the voted budget is consolidated between levels of government, what in other countries would be recorded as expenditure execution (transfer from the national government to a subnational government), is recorded as an "institutional transfer of item" in Peru, which corresponds to a budget modification.

In OECD countries, Congress must authorise all amendments to the Budget Law. However, in many countries, only the overall allocations per ministry/budget unit or programme are binding in the Budget Law. More detailed information on how each ministry/budget unit/programme's expenditures are broken down is given for information purposes only, and ministries/budget units/programmes can reallocate expenditures from one line to another within their budget allocation without requiring congressional authorisation. After the fiscal year, each entity issues accounts and reports on how it spent the money along with the results achieved.

The draft Budget Law does not present the levels of revenue and expenditure implemented in previous years

In most OECD countries, the draft budget bill and the Budget Law indicate the values of revenues and each allocation for the previous year (estimated) and for year t-2 (final values). This makes it possible to analyse the evolution of different expenditures during discussions and to verify whether this evolution is consistent with government priorities. Many countries also indicate the amounts foreseen in the medium-term budget framework for years t+1, t+2 and sometimes even t+3.

2.5.6. Recommendations for improving budget formulation and approval

Based on the analysis presented above, this report proposes the following recommendations (Table 2.12).

Table 2.12. Recommendations for improving budget formulation and approval in Peru

Findings	Implications	Recommendations
Peru's budget calendar has few binding dates.	It does not allow the different actors to anticipate workloads or plan their activities correctly.	Develop a detailed and binding timetable for the budget formulation process. Integrate it into the General Budget Law so that it is not modified every year.
The Multiannual Expenditure Programming Directive has no information on credible macroeconomic assumptions, fiscal targets or expenditure ceilings.	It does not allow the budget units to start planning their expenditure needs based on an estimate of revenue to be allocated to them.	Streamline the Budget Formulation Directive, analysing which elements are recurrent and could be put into a more general law. Set a binding and predictable date for the publication of this directive, which initiates the budgetary process. Develop an annual budget directive that includes information on macroeconomic assumptions, spending priorities and elements that allow budget units to begin planning their budget demands for the coming year.
Revenue estimation is very complex (it has to be done at a very micro level) because of the link between funding sources and expenditure allocations.	The more disaggregated the level of estimation, the higher the probability of errors.	Estimate revenue by source at the national level (not by budge unit). Remove the link between funding sources and expenditure (except in specific cases such as specific appropriations, etc.).
There are no mechanisms to control the quality of the assumptions used in the public budget.	Discrepancies between assumptions and realisations cannot be explained, which reduces confidence in the assumptions and the budget process. Stakeholders anticipate changes in assumptions that will result in budget changes. Reduces incentives to truthfully declare estimated income.	Establish mechanisms to control the quality of assumptions used in the public budget. For example: ask the Economic and Fiscal Council for an opinion on the assumptions publish inputs used for revenue calculations, assumptions and the methodology used. Produce and publish a report each year analysing and explaining the gaps between the assumptions used in the budget and the realisation of these indicators.
The "expenditure ceilings" communicated to the budget units at the beginning of the budget process are systematically raised during the budget support meetings and are therefore considered by all actors as the starting point of the discussion rather than as a binding ceiling.	This system involves time-consuming budget discussions. It reduces the quality of the budget units' budget proposals, as they do not know their final expenditure allocations when they have to prioritise their expenditures and activities. Ensuring fiscal sustainability is more difficult, as total spending results from the sum of individual budget agreements rather than being the starting point for discussions.	Short term: Budget units should receive information on their final expenditure allocations (binding ceilings) before starting their prioritisation and budget programming process. Medium to long term: Peru could consider reforming its budget system towards a top-down system and undertake an implementation study to design the new budget system, as well as the strategy and methodology for its implementation. This requires: Removing the link between funding sources and expenditures. Improving the quality and credibility of revenue estimates. Clearly presenting the deficit target and available fiscal

Findings	Implications	Recommendations
		space (difference between the revenue estimate plus accepted deficit, and committed expenditures – debt repayment, evolution of the existing wage bill, etc.). This represents a major reform and would require a special implementation study.
The Budget Law voted by Congress represents a spending floor and will be amended throughout the year without systematically going through Congress again.	Public resources cannot be allocated to expenditures according to government priorities. All actors anticipate budget increases, thus reducing planning capacity and the relevance of budget discussions and debate in Congress. It generates a continuous and exhausting process of discussion, which requires mobilising significant revenues in the Ministry of Economy and Finance.	Close the gap between the opening institutional budget and the modified institutional budget so that Congress approves a budget closer to the one that will be implemented, and the priorities established during the discussions and arbitrations made during the budget formulation phase (see details in the following section) are respected in implementation. This requires: Removing the link between funding sources and expenditures. Improving the quality and credibility of revenue estimates. Improving the instruments for monitoring budget execution. Strengthening budget units' capacity for efficient budget management. In the short term, modifications pre-authorised in the opening institutional budget could be inscribed in the budget units' opening institutional budgets, with conditionalities to be implemented. As a first step towards closing the gap between the opening institutional budget and the modified institutional budget, instead of making budget modifications throughout the year, specific times in the year when budget modifications are made (e.g. once per quarter in the beginning) could be established. In the longer term, a realistic estimate of the modified institutional budget should be voted, voted on the basis of a credible estimate of resources, and with efficient control instruments in place to ensure that implementation is in line with the budget and does not increase total expenditure during the year of implementation.
The draft Budget Law does not present the levels of revenue and expenditure implemented in previous years.	It reduces the transparency and quality of the debate as it is not possible to analyse the proposed evolution of individual expenditures according to government priorities.	Present in the draft budget and in the budget the values of revenues and each expenditure allocation for the previous year (estimated execution), and for year t-2 (realised execution). Countries with an efficient medium-term expenditure framework also present years t+1 and t+2.

2.6. Budget implementation and budget modifications

2.6.1. Opening institutional budget vs. modified institutional budget

Budgetary changes during the year are much more frequent and more than in other countries

An originality of the budget system in Peru is that the budget discussed and approved by Congress is called the "opening institutional budget" and is considered as a spending floor. All actors (the MEF, sectoral ministries, public entities, subnational governments, etc.) know and expect this opening budget to be modified during the year.

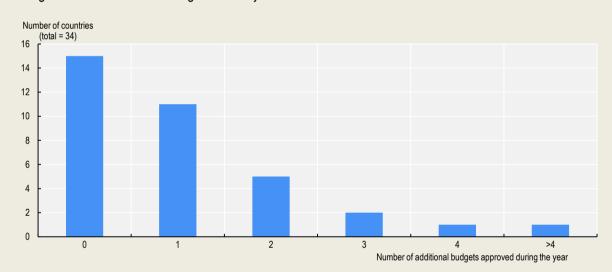
All countries must make adjustments and corrections to their budgets during the budget year (Box 2.10). The most frequent causes of budget modifications in OECD countries are: changes in economic forecasts (modifying revenue estimates, for example), increases in mandatory expenditures, implementation of fiscal stimulus measures, response to emergencies (e.g. natural disasters, COVID-19), funding of new policy initiatives or reallocations of funds without an increase in total spending (Figure 2.5).

Box 2.10. Budgetary changes in OECD countries

Most countries have a framework that indicates when changes can be made to the budget. For example, in European Union member countries, there are two times during the year when the budget under implementation is discussed again in Congress: one in the middle of the year to integrate eventual adjustments and one at the end of the year to correct the budget based on actual implementation and parameters of growth, revenues, etc. Most OECD countries have fewer than two additional budgets per year (Figure 2.4), and all but one have less than four.

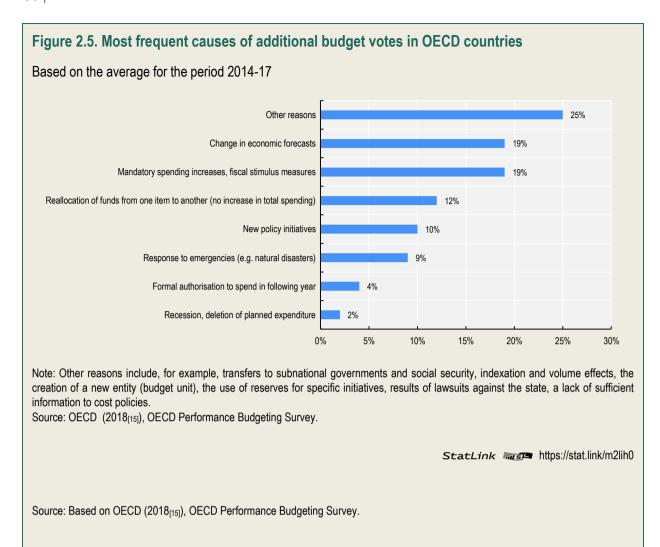
Figure 2.4. Number of additional budgets in OECD countries

Average number of additional budgets voted by OECD countries between 2014 and 2017



Note: Norway is the only OECD country that regularly has more than 4 additional budgets per year (usually between 20 and 30). Source: OECD (2018_[15]), OECD Performance Budgeting Survey.

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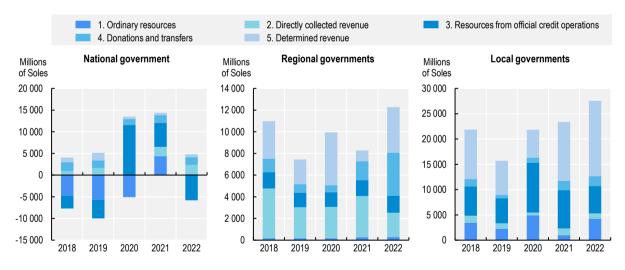
In Peru, modifications are larger and more frequent than in OECD countries. For the national government, 45 modifications to ordinary revenue made by supreme decrees were counted in 2018, for example. Adding up all sources of funding, the absolute value of the balance of modifications⁵ represents a net increase of 10% of the initial expenditure level for the national government (Table 2.13 and Figure 2.6). In addition to increasing total spending, budget modifications also change the composition of the budget and can change the weight of each sector in total public spending. A recent study by the Office of the Comptroller General shows that modifications made during budget execution represent a deviation of 54%, on average, from the amount approved for the period under evaluation (Shack and Rivera, 2022[16]).

Table 2.13. Budget modifications by funding source and level of government in Peru, 2018

Funding source (millions of soles)	National government PIA	National government amendments ¹	National government modifications as a % of the	Regional governments PIA	Regional governments changes (absolute	Regional governments modifications as a % of the	GL PIA	GL changes (absolute value)	GL modifications as a % of the PIA
Ordinary revenue	79 775	4 704	PIA 6%	22 284	value) 4 583	PIA 21%	640	3 459	540%
Directly collected revenue	9 787	1 004	10%	779		23%	2 986	1 374	46%
Resources from official credit operations	19 629	2 967	15%	622	4 584	737%	405	5 790	1 430%
Donations and transfers	203	1 996	983%	123	1 526	1 241%		1 475	753%
Determined revenue	5 987	1 063	18%	1 943	1 231	63%	11 799	9 767	83%
Total	115 381	11 734	10%	25 751	12 104	47%	16 026	21 865	136%

Note: PIA: Opening Institutional Budget; GL: Local government. Data are taken from 2018, because in 2019 there is no differentiation of resources determined by level of government. Numbers in red correspond to negative budget modification balances. The data available did not allow for the sum of all modifications, positive and negative, and therefore correspond to an underestimation of the size of budget modifications during the year.

Figure 2.6. Budget modifications by funding source, 2018-22



Source: Data provided by the Ministry of Economy and Finance.

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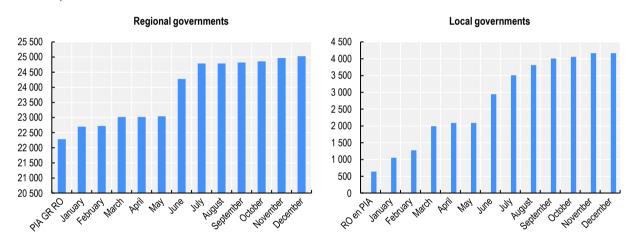
^{1.} The values shown for the national government correspond to the balance of all positive and negative modifications in absolute value. Source: MEF (2019_[17]), Global Evaluation of Budget Management 2018.

Budget modifications are even greater for subnational governments and occur until the last month of the year

An analysis of regional and local government budget modifications shows the following:

- In 2018, budget modifications accounted for almost half the initial budget for regional governments and more than the initial budget (136%) of local governments (see Table 2.13).
- For regional governments, about one-third of the modifications correspond to resources from official credit operations and another third to increases in ordinary revenue. Almost all of the increases in the ordinary revenue sources correspond to revenue transfers from the national government to the budget units. The most important transfers come from the Ministry of Education, the Ministry of Health, the Ministry of Transport and Communication, and the MEF.
- The dates of the supreme decrees authorising budget modifications show that as early as January-February there are modifications. Most of the modifications are then concentrated in July-August, but modifications are still being approved until December (Figure 2.7).

Figure 2.7. Monthly evolution of the modified institutional budget for the funding source ordinary revenue, 2018



Note: Calculated by adding the amounts in each of the executive decrees authorising the amendments. Source: Based on data from (MEF, 2019_[17]), Global Evaluation of Budget Management 2018.

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The important and systematic difference between the opening institutional budget and the modified institutional budget is problematic

1. Budget modifications are a factor that lowers expenditure execution levels – at least compared to the modified institutional budget, and especially for subnational governments

When comparing budget execution levels with the level of the last modified institutional budget, budget execution levels appear rather low, especially in regional and local governments (Figure 2.8). However, all levels of government execute budgets above their opening institutional budget. Indeed, subnational governments continue to receive additional resources in the last months of the year (Figure 2.8), which implies that it is almost impossible to execute these expenditures before 31 December. This is even more relevant for investment spending since executing an investment project takes time (see the discussion in Chapter 5 on infrastructure).

PIA PIM Implemented Consolidated Budget - Total Millions of Consolidated Budget - National Millions of Soles Soles 250 000 140 000 120 000 200 000 100 000 150 000 80 000 60 000 100 000 40 000 50 000 20 000 0 0 2017 2017 2018 2019 2018 Consolidated Budget - Regional Consolidated Budget - Local Millions of Millions of Soles Soles 45 000 40 000 40 000 35 000 35 000 30 000 30 000 25 000 25 000 20 000 20 000 15 000 15 000 10 000 10 000 5 000 5 000 0 0 2018 2019 2017 2018

Figure 2.8. Modified institutional budget, opening institutional budget and implementation by level of government, 2017-19

Note: 2017, 2018 and 2019 are used as 2020 is an outlier due to the impact of COVID-19. Sources: MEF (2018_[18]; 2019_[17]; 2021_[19]).

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2. Frequent budget changes do not allow for inclusive debate, decisions that reflect government priorities or strategic planning

The extensive and frequent use of budget modifications breaks several fundamental principles of good public budgeting practice (OECD, 2015[1]):

- Principle 1: Manage budgets within clear, credible and predictable limits for fiscal policy.
- Principle 2: Align budgets closely with the government's medium-term strategic priorities.
- Principle 5: Facilitate an inclusive, participatory and realistic debate on budget alternatives.

Indeed, the real spending limits are not known when discussing trade-offs between different sectors and spending areas, as the budget discussed and voted does not represent what will be spent; actual spending may not be closely aligned with the government's strategic priorities; and the political and parliamentary debate takes place on amounts that do not represent what will be spent. This can lead to revenue being spent on initiatives other than those prioritised in the initial budget.⁶

3. Not allocating the full resources at the beginning of the year does not allow for funding priorities that would require larger budgets than the opening budgets (100 + 10

Budgetary changes during the year modify not only the volume of total expenditure but also its composition. Indeed, annual budget planning is based on the opening institutional budget. But the opening institutional budget may be too small for certain priority expenditures, so that revenue is allocated to other, lower priority expenditures. Successive increases in spending may all be too small to finance that priority, so that all revenue is allocated to lower priority spending. However, it is possible that, at the end of the year, looking at the amended budget as a whole, it would have been sufficient to fund the initial priority. But by not having the full information from the formulation of the budget, it is impossible to finance some priority expenditures, despite having the resources.

4. Budget modifications generate a continuous budget negotiation process

Budget modifications must be reviewed and authorised by the MEF, and an entire team (DG Thematic Budget) is mobilised to carry out this work. This comes at a high cost and absorbs human resources that could be working on more strategic issues related, for example, to the quality of spending, its efficiency, etc.

5. Lack of transparency on the allocation of budget amendments

Finally, in many cases, the modalities of discussion and validation of budget modifications do not require further discussion and approval by Congress or the MEF. In particular, when it comes to directly collected revenue collected in excess of the budget, the allocation of spending is at the discretion of the head of the entity, which is not in line with principles of spending transparency.

Budgetary modifications in Peru: Modalities and causes

To close the gap between the opening institutional budget and the modified institutional budget, it is necessary to understand how budget modifications are generated.

There are several sources of budget modifications: large and systematic errors in the estimation of revenue, leading to actual revenue collection in excess of the estimates used in the voted budget; late incorporation of carry-overs; late incorporation of canon and royalties; and line item transfers. This section describes each of these sources of changes and proposes an explanation of why this occurs.

1. Incorporation of higher-than-estimated collection levels

There is a systematic bias in underestimating revenues in the opening institutional budget in Peru. Between 2016 and 2020, total revenues collected (the sum of all funding sources) were, on average, 20% higher than the revenues estimated in the opening institutional budget due to a significant underestimation of directly collected revenue (Figure 2.9). The difference between the estimate and the execution is smaller for ordinary revenue, and there is no systematic bias.

Total income Total revenue (collected) Total income (PIA) 250 000 200 000 150 000 100 000 50 000 0 2016 2017 2018 2020 Regular resources Directly collected resources RO (PIA) RO (collected) RDR (PIA) RDR (Collected) 140 000 140 000 120 000 120 000 100 000 100 000 80 000 80 000 60 000 60 000 40 000 40 000 20 000 20 000 0 0 2016 2017 2018 2020 2016 2017 2018 2019 2020

Figure 2.9. Opening institutional budget revenues vs. collected revenue

Source: MEF (2017_[20]; 2018_[18]; 2019_[17]; 2021_[19]; 2021_[21]).

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There are several explanations for this systematic bias:

- Part of the public revenues in Peru depends on exogenous elements, which are difficult to estimate, such as international prices of natural resources, terms of trade, etc.
- A very prudent estimation of revenue ensures the fiscal sustainability of the public sector. By not allocating resources before revenues actually enter the Treasury, the MEF ensures that the kind of crisis that Peru experienced in the 1980s is not repeated.
- Budget units have incentives to underestimate their directly collected revenue. Indeed, up to and
 including the 2022 Budget, directly collected revenue collected above the levels voted in the budget
 was freely available to the incumbent. This creates the risk of a misuse of resources, and allows
 entities to retain a higher level of resources, even if it is not necessarily aligned with the
 government's priorities.
- There is no mechanism to control the assumptions used in the budget preparation. The MEF (DGPP) receives information from the National Superintendency of Customs and Tax Administration, the Central Reserve Bank, budget units, subnational governments, etc., but no

alternative estimates to those made by the MEF are published. Peru has an independent fiscal institution, the Economic and Fiscal Council, but it is not within its competence to issue an opinion on the assumptions proposed by the MEF for the budget.

2. Late incorporation of revenue (canon, royalties, FONCOMUN, rewards for meeting targets)

Traditionally, the practice in Peru is to wait for definitive information on the amount of certain revenues before integrating them into the budget rather than using an estimate of them (as is done for other revenue).

Another source of resources whose amount is only known during the year are rewards for meeting targets: "budgetary programmes" have targets, and when a budget unit participating in one of these programmes meets its target, it is entitled to receive a reward. The practice in Peru today is that this award is paid the same year the target is met, therefore resulting in a budget modification.

The calculations made by the MEF to determine each municipality's FONCOMUN allocation are also made after the beginning of the year. Therefore, local governments receive information on the amount of FONCOMUN allocated to them during the current year and must make a budget modification to integrate them. As the subnational government budgets are consolidated in the public sector budget, this implies a budget modification of the public sector budget.

3. Transfers of items

As mentioned in previous sections, in OECD countries, subnational government budgets are not consolidated in the national government budget. Consolidation is an accounting exercise performed after the approval of the various budgets. When a national government budget unit wants to execute its expenditure by making a transfer to a subnational government, the transaction is booked as expenditure for the national government budget unit and as transfer revenue by the receiving subnational government. This transaction is then consolidated in the general government (or public sector) accounts, which consolidates all public revenues and expenditures cleaned up by transfers between levels of government so as not to artificially generate a higher level of expenditure than is economically appropriate. A consolidated budget can also be produced in the same way, cleaning up such transactions.

In Peru, the approved budget consolidates levels of government and public entities; unconsolidated national government budgets are not presented. Therefore, Peru uses a very unusual mechanism: "line item transfers". This consists of a budget modification that reduces the budget of one budget unit and increases the budget of another. This makes it possible to have a consolidated budget at all times instead of having to wait until the end of the year to consolidate the accounts to obtain consolidated information. This practice mixes two fundamental and distinct concepts: budget and budget execution.

These transfers of items occur for various reasons in Peru, including:

- Vote of a consolidated budget, which does not allow transfers between public entities to be recorded as budget execution.
- Lack of planning by line ministries: Line ministries do not plan their expenditures sufficiently in advance to include all of their transfers for the year in the opening institutional budget. This is partly due to a lack of planning capacity, but also because of the vicious circle of not having clear expenditure ceilings, which would define the limits for such planning.
- Used as an instrument to control the execution of expenditure: line item transfers are used by line ministries as an instrument to control the execution of expenditure by the receiving budget unit (in particular subnational governments): they are granted when the line ministry deems that certain necessary conditions are met.

The transfer of items in Peru generates two complications:

- As mentioned above, line item transfers constitute a confusion between the budget and execution, requiring the budget to be modified when in fact, it is simply being executed (in particular for modifications pre-authorised in the Budget Law).
- These transfers occur late in the year, which does not allow the receiving budget units to execute them correctly, thus creating carry-overs (see below).

4. Incorporation of carry-overs

Incorporating carry-overs is particularly important for local and regional governments. For example, in 2018, directly collected revenue increased by 23% compared to the initial budget (PEN 180 million [Peruvian soles]), of which more than 60% (PEN 109 million) corresponds to rolling forward the carry-overs (MEF, 2019_[17]).

As shown in Figure 2.9, budget execution is always higher than the opening institutional budget, but more often than not, it is lower than the modified institutional budget, which generates a carry-over. The main sources of budget increases during the year that contribute to generating balancing balances are the incorporation of additional resources throughout the year, incentives to generate balancing balances (because these are spent the following year "at the discretion of the Head of the Entity"), and the incorporation of balancing balances themselves.

The practice in Peru today is to wait for the final accounts with the exact information of the previous year's balance balances before modifying the budget to incorporate these balances. Indeed, it is very difficult to estimate balance sheet balances, given for example that revenues continue to increase until the last month of the year - and therefore, there is no information on the resources that are potentially not going to be executed. From 2019, a rule obliges pliegos to incorporate balance sheet balances in the first quarter of the year. The resources that are not incorporated by that deadline are transferred to the Treasury to finance the budget of the current fiscal year.

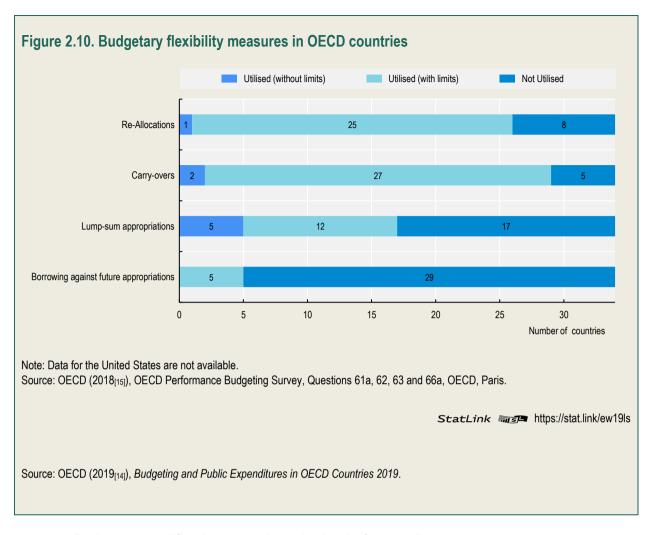
OECD countries tend to heavily regulate the carry-over of balance sheet balances. All OECD countries have rules that allow to some extent a "carry over" of unused funds to the following years. In general, there are limits on the possibilities for carry overs (Box 2.11).

Box 2.11. OECD practices on incorporating balance sheet carry-overs

The vast majority of OECD countries (29 countries) allow carry-overs. Only five countries (Belgium, Greece, Japan, Mexico and Slovenia) do not. The authorisation of carry-overs means that budget appropriations that could not be used in a given financial year can be incorporated into the following year's budget.

This practice can be authorised for all expenditures (13 countries) or restricted to some specific expenditures (generally investment).

Most countries impose very strict conditions on incorporating carry-overs: there is usually a maximum amount (generally between 1% and 10% of the initial allocation) that can be retained and incorporated into the following year's budget (the rest going back to the Treasury) and prior approval from the Budget Directorate is often required. For example, in Estonia, 100% of carry-overs can be incorporated into investment, but only 3% into current expenditure. In France, parliamentary authorisation is required when the amount is more than 3% of the initial budget. Ireland does not allow rolling forward carry-overs greater than 10% of the initial capital budget. Norway allows only 5% for current expenditure and all investment expenditure to be incorporated, up to two years later.



5. Budgetary modifications to reduce the level of expenditure

There are also budget modification mechanisms to reduce the level of expenditure in cases where the amount of revenues collected is lower than the projections used in the budget. So far, they have hardly ever had to be used. However, it is an important mechanism that could play a greater role if the bias to use revenue underestimation were reduced.

Recent improvements to narrow the gap between the opening institutional budget and the modified institutional budget

In recent years, two measures have been adopted to close the gap between the opening institutional budget and the modified institutional budget, and to modify the incentives for the actors involved in the budgetary process to increase transparency and efficiency. These are:

- From 2019, budget units are authorised to incorporate carry-overs up to the first quarter (DL 1441).
- From 2023 onwards, national government budget units' directly collected revenue are constituted in budgetary terms as ordinary revenue (DL 1441).

2.6.2. Budgetary implementation control instruments

Budgetary modifications are the main instrument for controlling budget execution in Peru

As detailed in the previous section, Peru makes significant use of budget modifications as an instrument to control budget execution and ensure that resources are sufficient to cover expenditures.

The MEF (DGPP) uses the annual commitment schedule to monitor budget execution

The annual commitment schedule is a short-term public expenditure programming instrument for all funding sources, which makes it possible to reconcile the cash programming of revenues and expenditures with the real financing capacity for the respective fiscal year, within the framework of the fiscal rules in force.⁷ The cash programming of revenues is provided by the General Directorate of Public Treasury, in compliance with fiscal rules and the multiannual macroeconomic framework.

This instrument is determined on 31 December of the year prior to the fiscal year and reviewed and updated on a quarterly basis by the DGPP based on information provided by the budget units.

The annual commitment schedule is a very simple document, which indicates the authorised expenditure ceilings for each budget unit of the national government, as well as for each of the regional and local governments. The annual commitment schedule indicates global amounts per budget unit without distinguishing between funding source or expenditure type.

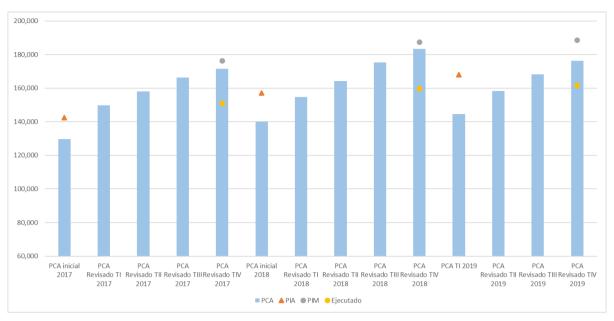
The initial annual commitment schedule is usually lower than the opening institutional budget amount, and amounts increase each quarter as the budget changes, always remaining below the modified institutional budget. Executed expenditure is systematically lower than the annual commitment schedule (Figure 2.11).

The methodology for calculating expenditure commitments in the annual commitment schedule lacks transparency, and the MEF does not provide an explanation of how the amounts in the annual commitment schedule relate to the amounts in the various documents (opening institutional budget, modified institutional budget, multiannual macroeconomic framework, etc.).

Currently, it is mainly used as an instrument to monitor spending commitments. However, this could be a very interesting instrument to control expenditure execution and ensure that commitments do not exceed the revenue collected.

Figure 2.11. Public sector expenditure by annual commitment schedule, opening institutional budget, modified institutional budget and executed budget

Millions of soles



Note: PCA: Programación de Compromisos Anual; PIA: Presupuesto Institucional de Apertura; PIM: Presupuesto Institucional Modificado Source: Annual commitment schedule, Ministry of Economy and Finance, various years.

OECD countries use a set of instruments to monitor expenditure implementation

The modern trend in OECD countries is for budgets voted by Congress to be relatively short, setting strict expenditure ceilings (to ensure fiscal sustainability), allocated at a high level (by sector/mission/ministry) and indicating the objectives to be achieved with those expenditures. The detailed breakdown of funds voted by Congress between different programmes and budget lines is often done by the executive (Ministry of Finance, Presidential Office, etc.). OECD countries use various types of instruments to monitor budget execution and ensure that targets are achieved and expenditure ceilings met (Box 2.12).

Box 2.12. Examples of budget execution control instruments in OECD countries

Precautionary reserve in France

In France, the 2001 Organic Budget Law (Loi Organique relative aux Lois de Finances) provides for a "precautionary reserve" (*réserve de précaution*) in each budget programme.¹ This means that a percentage of the budget allocation of each programme is "frozen" and can only be used (partially or totally) in case of emergency and after authorisation by the minister in charge of the budget. The frozen amount for each of the programmes in the budget is 0.5% of human resources expenditures and 3% on average for other expenditures. Programme co-ordinators should take this reserve into account in their initial budget programming.

Decrees transfers in France

France also allows budget allocations to be transferred between different ministries as long as they have the same purpose and do not result in a net increase in public expenditure. These transfers can neither increase the human resources budget nor create a new budget programme, nor make a transfer between the national government budget and annexed budgets (such as the social security budget or subnational governments' budgets).

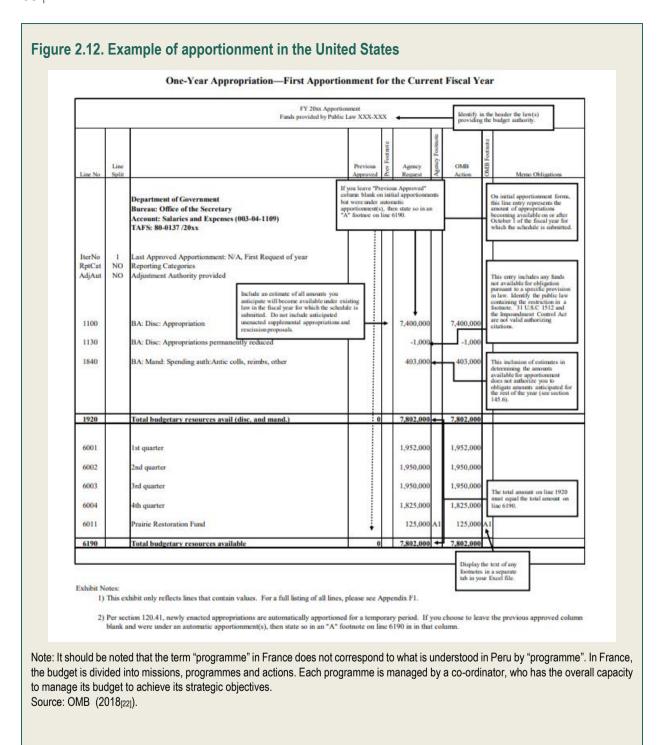
France's advance decrees

In case of urgency, the Council of State may issue an advance decree (*décret d'avance*) after consultation with the Finance Committees of Parliament (Congress and Senate). These are additional budgetary allocations that may not exceed 1% of the total amount of the initial budget and must be approved *ex post* by Congress in the following year's Budget Law.

Breakdowns (apportionments) made by the Office of Management and Budget in the United States

In the United States, there is a distinction between the amount "appropriated" by Congress in the budget (called appropriation) and the "breakdown" of these funds (called apportionment), which is approved by the Office of Management and Budget. The apportionments detail the amount of spending authorised, the time over which these funds are made available to the budget unit (called budget authorities in the United States) – typically, the apportionment specifies the amount available each quarter – and the use of the funds. The Office of Management and Budget may also add footnotes that indicate under which conditions the funds are available to the budget units (e.g. funds will be made available when the budget units have submitted a cost-benefit analysis, etc.). The breakdowns are a tool for treasury planning (as they give time-bound spending authorisations) and for ensuring the quality of spending (thanks to the conditions that can be set out in the footnotes).

The apportionments are legally binding and a government official who generates obligations over these amounts or for other uses can be punished. Agencies that receive apportionments must report quarterly to the Office of Budget Management, which monitors the execution of funds and the achievement of objectives.



Sources: French Ministry of Economy, Finances, and Industrial and Digital Sovereignty (2022_[23]); OMB (2018_[22]).

Sectoral budget offices of sectoral ministries are important partners of the Ministry of Finance in many OECD countries

Another important trend in OECD countries is to separate the payment authorisation functions (carried out by sectoral ministers) from the accounting and payment functions (carried out by a director of financial

services). This reform is sometimes described as the creation of "a small finance ministry in each sectoral ministry". In France, for example, each sectoral ministry has a public accountant responsible for the Service du Contrôle budgétaire et comptable ministeriel. In Greece, the creation of directorates general of financial services in line ministries is unanimously considered one of the major successes of recent reforms, having achieved its objectives: improving budgetary capacities, streamlining the payment process between ministries and improving communication with the Ministry of Finance. This reform is also considered essential for implementing another reform: top-down budgeting (Box 2.13).

Box 2.13. Examples of budget offices in sectoral ministries in OECD countries

General directorates of financial services in Greece

Prior to the 2010 reform, communication between the Greek budget office (the General Accounting Office) and line ministries during the budget formulation stage was often difficult, with unrealistic budget appropriation demands from ministries, an absence of clear fiscal policy, and very limited dialogue between line ministries and the budget office.

During budget execution, line ministries used to authorise expenditures without any control process over the sustainability of their authorisations. Controls were only carried out at the payment stage, under the responsibility of the Ministry of Finance: the fiscal audit offices, staffed with around 600 employees, processed all payment orders, which were then certified by the Court of Audit.

This process was cumbersome and ineffective in keeping spending within authorised levels in the budget because spending authorisations were not controlled, leading to bottlenecks at the payment stage, creating arrears and accounts payable.

To address these difficulties, Greece implemented a major reform of its General Budget Law in 2010. The reform transferred budget and financial management functions and responsibilities to sectoral ministries. This was in line with similar reforms in several OECD countries, which created "a small ministry of finance in each sectoral ministry".

This reform involved separating the authorising officer function, generally under the responsibility of the minister, from the financial management function, under the control of a chartered accountant.

General directorates of financial services

The general directorates of financial services are responsible for all operations carried out by line ministries:

- be sustainable (budgetary control)
- respect all rules, including public procurement rules (legality control)
- are recorded and paid on time (accounting function).

To achieve this, the general directorates of financial services are composed of four units:

- 1. Budget Unit, responsible for budget preparation, monitoring of authorisations, estimates of liquidity needs and accountability
- 2. Accounting Unit, responsible for making payments after all necessary checks have been made
- 3. Supervisory Unit, which oversees the entities attached to the ministry
- 4. Public Procurement Unit, responsible for public procurement.

Responsibilities of the director general of financial services

The director general of financial services in line ministries is selected through a process conducted by the Supreme Council for Civil Personnel Selection. The director general has personal responsibility for the financial management of the ministry. In particular, s/he is required to bring any conflict between the minister's instructions and his/her responsibilities to the minister's attention and to submit a written report, if necessary, to the minister and the General Accounting Office.

Challenges in implementing this reform

The reform was carried out between 2015 and 2017. One of the main difficulties was finding, certifying and recruiting staff with the required qualifications and developing new processes and an IT system to support the process.

Source: Moretti (2019_[3]), "Budgeting in Greece", OECD Journal on Budgeting, Vol. 2019/2.

2.6.3. Recommendations for improving budget execution mechanisms and closing the gap between the opening institutional budget and the modified institutional budget

Table 2.14 presents recommendations based on the analysis presented in the previous sections.

Table 2.14. Recommendations for reducing the gap between the opening institutional budget and the modified institutional budget in Peru

Findings	Implications	Recommendations
There is a systematic bias to underestimate income (in particular directly collected revenue) in the opening institutional budget.	This ensures the government's fiscal sustainability by not committing resources before they enter the Treasury. This implies frequent budget modifications, which does not allow for planning and prioritising annual expenditures based on a reliable level of resources.	Develop an instrument for the Ministry of Economy and Finance (MEF) to control expenditure and ensure fiscal sustainability without using revenue estimates and modified budgets as an instrument of expenditure control (see Table 2.15). Remove the link between expenditures and funding sources, and above all, base the allocation of revenue to entities on the needs, objectives and programmes, not on an estimate of their directly collected revenue. Limit the possibility of incorporating new revenue by modifying the budget during the year. For example, create an automatic allocation for deficit reduction, debt relief or feeding an emergency fund in case of higher-than-estimated revenues to eventually constitute resources to be distributed in the following year's budget. Authorise significant budget modifications only to respond to emergencies (natural disasters, pandemics, etc.) Make spending execution more flexible, giving more spending autonomy to budget units to reduce the incentives to resort to such mechanisms to finance their own priorities. Vote for a budget at a higher level of aggregation, with less detail on inputs and better monitoring and control of results. • Pre-requisite: have a mechanism in place to ensure control over the budget units' spending execution. For example, the creation of a budget unit in each budget unit, with a privileged link to the MEF (see Table 2.15). Improve the quality of revenue estimates.
For certain categories of revenue (determined revenue in particular), the government waits to know the level of collection before integrating them into the budget.	This ensures the government's fiscal sustainability by not committing resources before they enter the Treasury. This does not allow for planning and	Consider mechanisms for basing transfers in year t on revenu collected in year t-1 to remove uncertainty about the level of collection. For example: Integrate target achievement payments for year t into the budget of year t+1.

Findings	Implications	Recommendations	
	prioritising annual expenditures based on a reliable level of resources.	Transfer in year t the canon or royalty revenues collected in year t-1. Perform the FONCOMUN calculations of year t on the indicators of year t-1. This would have the additional advantage of having a counter-cyclical and stabilising effect.	
Transfers of items are used frequently, even late in the year. This results from a lack of cost planning on the part of the budget units. It reduces the usefulness of the budget as a tool for prioritising expenditure, as the opening institutional budget does not reflect the expenditure to be implemented. It reduces the expenditure execution levels of the budget units receiving the line item transfers, as this occurs late in the year (and therefore contributes to generating carry-overs).		Separate the concepts of budget and implementation. Do not allow transfers between budget units after a certain date (e.g. after July). This would allow the budget units receiving these resources to better programme and increase their level of execution. This implies improving line ministries' programming capacity so that they allocate their revenue earlier in the year or plan to allocate revenue for the following year. Develop an alternative expenditure control and authorisation instrument. For example, use a system that allows these expenditures to be included in the initial budgets, but with certain conditions that the budget units must meet to be authorised to use the resources (conditions that can be verified and authorisation granted by the budget unit issuing the transfer). Strengthen line ministries' planning and programming capacities. Reducing the use of earmarked transfers implies a greater expenditure programming effort than is currently the case. If unconsolidated national and subnational government budgets were presented, line item transfers could be recorded as simple transfers and would correspond to expenditure execution rather than budget modification.	
Carry-overs generated in previous years are incorporated after the beginning of the budget year.	This reduces the usefulness of the budget as a spending prioritisation tool, as the opening institutional budget does not reflect the totality of resources that will be available or the totality of expenditures to be implemented.	Improve the predictability of the budget to reduce carry-overs and include an estimate of carry-overs in the opening institutional budget. Improvements in accounting systems should allow for faster information on carry-overs.	

Table 2.15. Recommendations for improving the control of budget implementation in Peru

Findings	Implications	Recommendations
The Ministry of Economy and Finance (MEF) has few instruments to control expenditure execution. There is an annual commitment schedule, but it is a programming instrument and is not used to control expenditure execution.	Budget modifications are the main instrument used to control expenditure execution (level and quality).	Develop budget execution control instruments that ensure that no more expenditure can be authorised than the resources available but that allow an opening institutional budget to be made based on a more honest revenue estimate. Develop, for example, an instrument similar to the apportionment in the United States or the authorisations to commit funds in France.
Sectoral ministries do not have strong financial management offices closely linked to the MEF.	Budget co-ordination between the MEF and the line ministries is difficult; the MEF centralises decisions and controls that in other countries are the responsibility of line ministries.	Design a major reform of the institutional set-up of the budget process, creating – with strong support from the MEF – financial management units in sectoral ministries (and subnational governments) and decentralising some programming and budget execution control functions to these units. This represents a major reform and would require a special implementation study.

2.7. Specific challenges for subnational governments in the Peruvian budget process

2.7.1. Legal and constitutional framework of the budget process for subnational governments

According to the Constitution, subnational governments have political and economic autonomy, approve their own budgets, and have their own revenue

The 1993 Political Constitution of Peru states that regional governments, as well as provincial and district municipalities, have political, economic and administrative autonomy in matters within their competence (Articles 191 and 194). Their representatives (president of the region, vice-president and members of the regional council, mayors and councillors of local governments) are elected by direct suffrage (Articles 191 and 194) and are thus accountable to the citizens. The Constitution also establishes that regional and local governments approve their budget, formulate their development plans, and manage their assets and revenues (Articles 192 and 195). Finally, the Constitution indicates the subnational assets and revenues, which include specific transfers allocated to them by the annual Budget Law, certain taxes, certain resources allocated from the Regional/Municipal Compensation Fund, royalty revenues and resources from official credit operations (Articles 74, 193 and 196).

The Constitution also mentions that the public sector budget voted by the national Congress contains a section on decentralised bodies

According to the Peruvian Constitution, the economic and financial administration of the state is governed by the budget approved annually by Congress. The public sector budget contains two sections: the central government and decentralised bodies (a term that designates, among others, subnational governments) (Article 77).

A consolidated budget between national and subnational governments is formulated, discussed and voted on

As mentioned in the previous section, the budget discussed and voted on in the national Congress is consolidated between the national and subnational governments. No non-consolidated budgets are presented that clearly show the revenues of each level of government or the transfers between them. In particular, Peru's Budget Law considers all revenues as public sector revenues, without distinction between levels of government. Article 77 of the Constitution mentions that "the budget allocates public resources equitably, its programming and execution respond to the criteria of efficiency of basic social needs and decentralisation. The respective districts shall, in accordance with the law, receive a fair share of the total income and revenues obtained by the state from the exploitation of natural resources in each area as a canon". But it does not indicate how these concepts are measured or secured. Annex 4 of the annual Budget Law presents a breakdown of the expenditures for each regional and local government.

After the national Congress passes the public sector Budget Law (no later than 30 November), each subnational government must approve its opening institutional budget, which provides further details on the breakdown of subnational government expenditures. Subnational governments' opening institutional budgets must be approved by their assemblies by 31 December, which leaves very little time for discussions. In France, for example, the law stipulates that for all subnational governments with more than 3 500 inhabitants, a debate on the main orientations of the budget must be organised at least 8 weeks before the vote for the regions and 10 weeks before the vote for the municipalities (Box 2.16).

Public sector revenues are shared among the pliegos (in particular sub-national governments) during budget discussions with the MEF.

During the budget formulation process, the MEF and the budget units (including subnational governments) discuss the budget units "revenue estimates". These revenue estimates do not only refer to own revenues, but are a discussion between the MEF and the budget units on how regular resources are to be allocated among budget units. This is generally referred to as a discussion about the level of expenditures of the budget units (sub-national governments) and thus of transfers between the national and sub-national governments. In this case, the allocation of regular resources between government entities results from political discussions, and is not governed by a formula or process that guarantees equity, predictability and transparency.

OECD countries distinguish between national revenue and revenue constitutionally allocated to subnational governments

The structure of subnational government opening institutional budgets is similar to that of the public sector; in particular, subnational government budgets also link expenditures to funding sources, and revenues are not presented by revenue source (types of taxes, fees, etc.). In the budgets of OECD countries, for both national and subnational governments, there are two distinct sections: a section indicating the estimated revenue of the entity (national or subnational) and a section showing how these resources will be spent (Box 2.14).

Box 2.14. Revenue typology, revenue autonomy and expenditure autonomy of OECD subnational governments

OECD typology of subnational government revenues

OECD statistics classify subnational governments' income as follows:

- transfers and subsidies
- fees and charges
- property income
- social contributions
- taxes, which include:
 - o subnational governments' own taxes, e.g. often property tax
 - tax sharing, i.e. the subnational governments' share of certain taxes, according to a sharing formula that is more or less redistributive, e.g. a share of personal income tax or value-added tax, or the total transfer of the collection of certain excise duties in the respective territory.

Transfers are divided into two types:

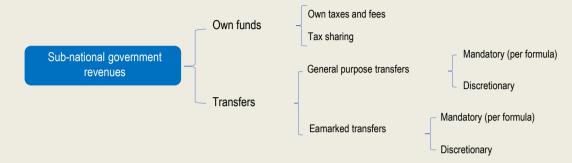
- freely available transfers (i.e. the subnational government can affect its priorities without consulting the national government)
- labelled or conditional transfers (i.e. the national government transfers revenue for a particular expenditure, e.g. a public investment, or a specific programme in health, education, etc.).

In both cases, such transfers can be mandatory or discretionary:

 Mandatory transfers are determined by a law that indicates the amount and nature of the transfers (typically this includes equalisation transfers, where subnational governments with lower

- revenue-raising capacity receive larger transfers to enable them to provide nationally determined basic public services).
- Discretionary transfers are those decided each year by line ministries, which fund programmes in regions and municipalities according to their own priorities.

Figure 2.13. OECD typology of subnational government revenues



Source: Authors.

Assessment of subnational governments' fiscal and expenditure autonomy

Based on the nature of subnational government revenues, the OECD establishes an index of subnational government "fiscal autonomy" that measures the ability of subnational governments to increase their revenue-raising effort to finance their expenditures by changing the rate or base of their taxes. The higher the proportion of transfers, the lower the fiscal autonomy (OECD, 2021_[24]).

The OECD also developed an index of subnational spending autonomy, which seeks to measure the capacity of subnational governments to decide on the levels and priorities for their spending (Kantorowicz and Van Grieken, 2019_[25]). Earmarked transfers represent the lowest degree of autonomy, but there are other limitations to subnational government autonomy, e.g. by forcing certain types of revenues to only finance investment expenditures, etc.

Source: Authors.

The general public sector Budget Law also applies to subnational governments

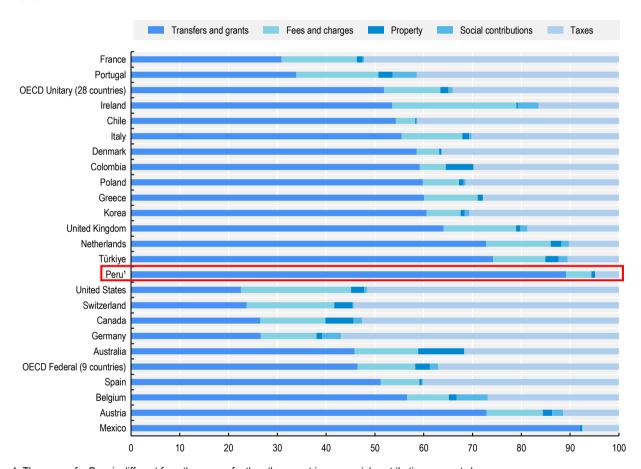
The Budget Law applies to subnational governments and has the advantage of ensuring the homogeneity of subnational government budget processes, but this decreases flexibility to tailor the process to the size and type of subnational government. In many countries, subnational budget formulation and approval processes vary across subnational governments (especially between states in federal countries). France, for example, undertook a far-reaching reform of its public budget system in 2001, implementing performance budgeting. However, the new Organic Budget Law does not apply to subnational governments. Many subnational governments have been inspired by the new national Organic Budget Law, but each has done so in its own way and at its own pace.

2.7.2. The fiscal and expenditure autonomy of subnational governments in Peru is well below that in OECD countries

The transfer ratio is higher than in OECD countries

Taxes collected by subnational governments represent less than 5% of subnational governments' revenues in Peru (WOFI, 2022_[26]). The average for unitary OECD countries is 34%; it is 37% for federal and quasi-federal countries. Transfers (most of ordinary revenue, donations and transfers, determined revenue) represent almost 90% of subnational government revenues in Peru, while they represent only 52% in unitary OECD countries and 46% in federal countries (Figure 2.14).

Figure 2.14. Nature of subnational governments' income in selected OECD countries and Peru, 2019



^{1.} The source for Peru is different from the source for the other countries, so social contributions are not shown. Sources: OECD (2019 $_{[27]}$); WOFI (2022 $_{[26]}$).

StatLink https://stat.link/75eb2t

An important part of local government transfers is free to use

The amounts of FONCOMUN/FONCOR and mining canon that correspond to each sub-national government is determined by a formula, and the resources directly collected depend on each entity. Other public resources (in particular ordinary revenues) are considered as public sector revenues, and are not allocated to a particular level of government following any predetermined formula or process.

The composition of regional and local government funding sources shows that unrestricted transfers (directly collected revenue + determined revenue) represent, on average, 8% of regional government funding sources but 70% for local governments (Figure 2.15).

Regular Resources
Resources from Official Credit Operations
Determined Resources

Regional governments

Local governments

14%

14%

14%

14%

Figure 2.15. Composition of regional and local government funding sources in Peru

Source: Public Budget Law of 2022, Annex 4.

2.7.3. The challenges identified in the public sector budget process are even more important for subnational governments

1. Linking expenditure to funding sources

As with the national government, the link between expenditures and funding sources makes the budget formulation process particularly complex. Many OECD countries prohibit earmarking funding sources for specific expenditures for both national and subnational governments (Box 2.15). In most countries, the "no earmarking rule" prohibits tying funding sources to specific expenditures. For example, many countries, such as France and Spain (Box 2.15), also have a "no contraction rule", which makes it mandatory to record all public sector revenues and expenditures, even if they balance. Therefore, the allocation of a revenue of national nature (such as the ordinary revenue in Peru) to an expenditure in a subnational government should be recorded, according to this principle, as an expenditure for the national government and as a transfer revenue for the subnational government. Accounting then consolidates these two transactions so that there is no double counting of the same expense.

Box 2.15. Principles, definitions and budgetary practices of subnational governments in France

Principle of universality of the budget

In France, all revenue must be used to finance all expenditure. This principle is broken down into two rules:

- **Non-affectation rule**, which prohibits specific income from being earmarked for specific expenditure.
- **Non-contraction rule** (règle de non-contraction), which requires all expenditure and all revenue to be entered in the budget, with no contraction between them.
 - In particular, this means that institutional transfers of budgets are prohibited, as this practice would not respect this rule.

Definition of the budget

The budget is an expenditure authorisation act voted by the regional/municipal council based on a revenue and expenditure forecast act drawn up by the executive.

Therefore, it is not "estimating" the budget, but "voting" the budget.

Source: Government of France (2022[28]), "Code Général des Collectivités Territoriales".

OECD countries present the different sources of revenue in their budgets, but there is no one-to-one link between a specific revenue source and a specific expenditure; rather, the sum of revenues plus authorised deficits must cover the sum of expenditures. Most countries present revenues and expenditures classified according to economic criteria, distinguishing current, capital (or investment) and financial expenditures and revenues. This classification also makes it possible to calculate the balances for current operations (gross savings), the balance of the non-financial budget, and the budget's borrowing capacity or need. This is also the classification most consistent with fiscal statistics; the non-financial budget balance, after adjustments, provides information on the net lending or borrowing, i.e. the deficit or surplus. In addition, the level of total government debt, and the amount to be issued if any, can be known (Figure 2.2).

In OECD countries, the concept that enables or authorises spending units to spend is the budget appropriation, spending appropriation or appropriation. Expenditure appropriations become spending appropriations once the budget bill is passed into law by the legislature. This is the concept that starts the chain of public expenditure, without the units to which the appropriation is attributed having to pay attention to how the particular expenditure is financed. As a general rule, spending appropriations are subject to three constraints: qualitative, quantitative and temporal, as they identify the destination of the expenditure, the amount and the year (calendar or fiscal) in which it is to be executed. Exceptionally, countries identify their own rules for modifying these appropriations, which are regulated in the organic budget law.

2. The formulation of the opening institutional budget is not based on a credible and comprehensive estimate of the resources that subnational governments will have during the year

During the budget formulation process, as for other budget units, the expenditure "ceilings" communicated at the beginning of the budget process are considered by all as a starting point for discussions, which will be increased. Subnational governments do not thus know the exact amount that will be allocated to them when planning and prioritising their expenditures for the coming year.

In addition, the opening institutional budget does not include the amounts of FONCOR and FONCOMUN (as they are only allocated after the regularisation of income tax in March/April of the year of execution), nor does it include the total carry-overs (as the exact amount is only known in March) or the mining royalties. Before 2020, mining royalties were only included when they were realised, i.e. in June/July of the year of execution. Since 2020, regional and local governments benefiting from mining royalties have been allowed to incorporate 50% of the estimates from the opening institutional budget (DL 1441). The opening institutional budget also does not include rewards for meeting targets, which are also made late in the year and are immediately incorporated into the budget.

The fact that the opening institutional budget does not include all of the resources that subnational governments will have available does not allow the budget to be an efficient instrument for prioritising and planning expenditures, which reduced the quality of spending.

2.7.4. Late determination of subnational governments' revenue is a challenge in many countries

In all countries, the late determination of subnational transfers is a challenge for subnational government budgeting. However, no OECD country has budget modifications as significant as Peru. Several countries have developed processes to ensure that the budget is a credible and realistic picture of what will be implemented. For example, Spain has a "two-year liquidation system": the subnational government budget indicates "revenues on account" (on account of the revenues expected to be collected during the year), and after two years a "liquidation" is carried out to correct the accounts according to the revenues actually collected. If these are higher than the "revenues on account", a balance is generated in favour of the subnational government. If these are lower, the subnational government must repay the money unduly collected. France has a system where subnational government budgets can be voted on up to 15 April of the budget year, with rules so that recurrent and investment expenditure can still be met (Box 2.16).

It is common for federal or decentralised OECD countries to have formalised co-ordination mechanisms so that the subnational governments are informed by the national government of the share of revenue or revenue transfers that they will be allocated. For example, in the case of Spain, the Organic Law on Financing of the Autonomous Communities (regions) created the Fiscal and Financial Policy Council in 1980 to adapt the co-ordination between the financial activity of the autonomous communities and the State Treasury.

Box 2.16. Budgetary calendar and budgetary modifications of subnational governments in France

Subnational budget voting is allowed until 15 April of the budget year

In principle, the subnational (regional or local) council must vote on the budget by 1 January. However, voting on subnational government budgets is authorised until 15 April of the budget year, in recognition that some of the elements necessary for the preparation of the budget must be transmitted by the central government, and that this may occur after the beginning of the fiscal year. In that case, the law stipulates that operational expenditures can be incurred and paid as in the previous year's budget. On the investment side, funds up to one-quarter of the previous year's budget allocations can be committed until the new budget is approved.

The subnational budget execution of year t is authorised until 31 January of year t+1

To avoid "December fever" and an accumulation of carry-overs, the execution of the subnational budget of year t is authorised until 31 January of year t+1.

Registration of compulsory expenditure

Notion of "compulsory expenditure" and "automatic registration of the appropriations necessary for the payment of compulsory expenditure" (inscription d'office des crédits nécessaires au paiement des dépenses obligatoires).

Mandatory expenditures are those expenditures that are necessary for the subnational government to meet its debts and expenditures assigned to it by law. For example: maintenance of the municipality building, payment of regional/municipal staff salaries, enforceable debts, etc. These expenses should automatically be entered in the subnational government budget. The central government representative in the subnational government is the guarantor that this is done.

Debate on budgetary orientation

For all subnational governments with more than 3 500 inhabitants, a debate on the main orientations of the budget must be organised at least two months (ten weeks for the regions) before the draft budget is submitted for vote to the regional/municipal council.

Source: Government of France (2022[28]), "Code Général des Collectivités Territoriales".

3. Major and frequent budget modifications

As discussed in Section 2.6, Figure 2.6, budget modifications are particularly important for subnational governments. The opening institutional budget is multiplied by 2 in regional governments and by eight in local governments. In such conditions, the budget cannot play its role in prioritising and planning expenditures.

All OECD countries have mechanisms to amend budgets during the year. However, they tend to accumulate several amendments and make amendments once or twice a year, when the amendments are significant or change expenditure ceilings and require legal approval (indeed, expenditure managers often have autonomy for internal reclassifications, which do not require legal approval). The changes made are also usually relatively small. For example, the additional budget of the Île-de-France Region in 2022 represented an increase of less than 1% of current revenues and expenditures and less than 10% of investment revenues and expenditures (despite the fact that the economic situation in 2022 was complex, with high inflation and lower than expected economic growth). Indeed, in the face of a 5.6% decrease in expected revenues, the region used part of its reserves to maintain its level of expenditure (and still comply with the balance rule).

Box 2.17. Budget modification mechanisms during budget implementation for subnational governments in France

Subnational governments in France have two mechanisms to modify their initial budgets (budgets primitifs):

- 1. The additional budget (budget supplémentaire). This is formulated in the second half of the year and generally adopted around October. This supplementary budget makes it possible to adjust revenue estimates (upwards or downwards) and to incorporate the balance of the previous year's execution (the previous year's accounts are presented on 30 June). The supplementary budget has the same structure as the initial budget (explanatory memorandum, amending revenue projections, expenditure allocations); it very clearly presents each amended line, showing the initial value, the modification (positive or negative) and the final value. The additional budget must be voted on by the regional/municipal council and sent to the central government representative in the region. This budget is subject to the same fiscal rules as the initial budget. In recent years, thanks to today's computer systems, information on balances is usually available more quickly and the need for additional budgets is no longer necessary.
- **2. The amending decision**. At any time, the regional/municipal council can also vote on an amending decision (*décision modificative*). These cannot incorporate carry-overs but can adjust revenue estimates and reallocate expenditures. Modifying decisions cannot be made after 1 November (except in cases of urgency).

Source: Government of France (2022_[28]), "Code Général des Collectivités Territoriales".

4. Capacity for fiscal and strategic management is limited

Subnational governments' strategic planning of revenues and expenditures within fiscally sustainable limits requires a high level of capacity. The OECD countries where subnational governments have the largest responsibilities (both as a percentage of total expenditure, revenue and expenditure autonomy, borrowing capacity, etc.) are also those where the overall capacity level of the public administration is the highest. In most OECD countries, subnational governments have difficulties attracting and retaining qualified staff. Indeed, subnational governments often pay lower salaries than the national government, so it is common for the most efficient employees, once trained, to move to work for the national government. Another frequent challenge is that the size of subnational governments would not require high-level capacity staff in large numbers (perhaps part-time would be sufficient) and does not offer staff attractive career prospects. To overcome this challenge, several countries are trying to create partnerships of municipalities for services (shared services), to attract qualified staff by offering higher salaries and sharing these resources among several subnational governments (Box 2.18).

Peru has the same challenge as most countries, with difficulties in attracting and retaining the skilled staff subnational governments need to manage their budgets strategically and sustainably.

Box 2.18. Shared local government services in Wales (United Kingdom)

There are a number of positive experiences among Welsh local authorities that have joined forces to co-operate on local public finance functions. For example, the Conwy and Denbighshire County Councils (which already share a joint Public Services Board) proposed jointly implementing and managing a financial ledger and other financial systems.

Other local authorities (e.g. Bridgend and Vale of Glamorgan, Rhondda Cynon Taff and Merthyr, and Monmouthshire and Newport) also share internal audit services. In addition, partnerships have been organised around contracting functions, such as a pilot project between Carmarthenshire and Pembrokeshire, a joint Director in Flintshire and Denbighshire, and also a regional contractor framework in South West Wales.

Source: OECD (2020_[29]), The Future of Regional Development and Public Investment in Wales, United Kingdom, OECD Multi-level Governance Studies.

2.7.5. Recommendations for improving the budget process for subnational governments in Peru

Table 2.16 presents the OECD's recommendations based on the analysis presented in the previous sections.

Table 2.16. Recommendations for improving the budget process for subnational governments in Peru

Findings	Implications	Recommendations
Subnational government budgets are intrinsically merged in the public sector budget. In particular, Peru does not use the "no contraction rule" for expenditure.	It is not possible to clearly identify transfers to subnational governments in the Budget Law. The budget formulation process is very complex due to the simultaneous determination of national expenditures (transfers to subnational governments) and subnational revenues/expenditures (corresponding to those transfers).	Provide for the possibility of presenting the public sector Budget Law in two separate sections (which would be in line with the Constitution): Presenting the national government budget on the one hand, and clearly indicating transfers to subnational governments as expenditure. Providing another section with the subnational budgets, clearly indicating the different funding sources and recording transfers received from the national government as revenue. The consolidated budget (i.e. cleaning up transfers made and transfers received) would then be presented as a separate document for information, but not as a legal document.
Transfers represent a higher percentage of subnational government revenues than in most OECD countries.	This is seen in many countries as an indicator of a low level of fiscal decentralisation and subnational autonomy.	It is beyond the scope of this study to analyse the fiscal decentralisation scheme, the responsibilities of each level of government and whether the resources allocated to each level of government are consistent with their responsibilities. This issue would merit further study to analyse the link between responsibilities, resources and capacities and provide recommendations to ensure that they are coherent and aligned.
Classifying subnational government revenues by funding source is not aligned with international statistics in the System of National Accounts.	It is difficult to compare Peru with other countries. Revenues of different natures are pooled under the same funding source. In particular, directly collected revenue includes own revenue (municipal taxes), shared revenue	Publishing the details of the different sources of revenue would increase budget transparency, facilitate revenue estimation and allow for international comparisons. It would facilitate international comparisons if Peru adopted the revenue classification of the International System of National Accounts and published revenues under that classification for each level of government.

Findings	Implications	Recommendations
	(canon, royalties, etc.), and social contributions and compulsory transfers (FONCOMUN, etc.). This makes revenue estimation very complex and not very transparent.	
Linking expenditure to funding sources is a challenge for subnational governments as well as for the national government.		Remove the link between expenditure and funding sources.
The resources available to subnational governments are determined late in the year. Budget modifications are significant and frequent.	This makes strategic planning and prioritisation of expenditures difficult (100+100+100+100+100≠400). It reduces the ability of representative assemblies to debate and approve broad spending orientations.	This is a challenge in all countries, and there is no perfect solution. Food for thought would be: To the extent possible, incorporate new resources into the following year's budget, and do not spend them in the same year by modifying budgets. In particular, rewards for meeting targets could be budgeted in the year following the achievement of the target. Transfers for natural resources could be based on the previous year's collection (put in the budget of year t+1 the collection made in year t). Set a cut-off date beyond which no new transfers or changes to budgets are permitted.
It is difficult to attract and retain qualified staff in subnational governments.	This limits the strategic and fiscally sustainable management capacities of subnational government budgets. It requires a high level of national government support and control.	Continue to invest in strengthening subnational governments' capacities. Continue to provide support. Develop guidelines for training new staff rapidly. Simplify some processes. In particular, clearly identify subnational government revenues, compulsory expenditures (e.g. earmarked transfers, debt repayments, salary payments, etc.) and the fiscal space available for new expenditures.

2.8. Link between budget expenditures and government priorities

2.8.1. Budget programmes vs. programme budgets

Peru introduced budget programmes in 2007

In 2007, Peru introduced "budget programmes" in its budget, according to a methodology developed by the MEF as part of the reform of the national budget system. This reform aimed to improve the effectiveness of public spending by aligning expenditures with government priorities and linking them to specific objectives. At the time, this reform constituted significant progress compared to previous practices, where resources were allocated by historical file without a clear assessment of needs or how to achieve the desired results.

In 2008, the budget comprised five budget programmes. The Articulated Nutrition Programme is one of the best known (Box 2.19). In the first years, the logic model was used to develop the programmes, which allowed taking into account actions between different ministries. However, the implementation of these programmes proved to be very complex and the logical framework, which is more operational but lacks the inter-sectoral dimension, was adopted. Today, the budget includes 88 budgetary programmes (of which 2 are multisectoral), representing 63% of public spending. The remaining resources are classified as budget allocations not linked to outputs or core activities (related to the management of equipment, human and financial resources).

Box 2.19. The Articulated Nutritional Programme (Programa Articulado Nutricional) in Peru

The first priority identified for implementing the "budget programme" was reducing chronic malnutrition, which led to the Articulated Nutrition Programme. This programme started with identifying a concrete objective: to reduce chronic undernutrition. The second step was to identify, based on evidence, the causes of chronic undernutrition, which define the objectives or intermediate results. Three key causes were identified: 1) a high incidence of respiratory infections and micronutrient deficiencies; 2) inadequate feeding of children under six months of age; and 3) low birth weight. The third step was to identify what activities were needed to influence intermediate outcomes. Finally, evidence-based research was used to identify the most cost-effective interventions (combination of inputs).

The multidimensionality of chronic malnutrition in Peru highlighted the need to structure programmes that involve more than one ministry or agency, breaking away from the traditional planning and programming approach. In this particular case, evidence showed that reducing malnutrition it was not achieved by providing more food to the population. To achieve this goal requires, for example, education policies (improving literacy, particularly for mothers), sanitation and water policies (installing water supply and latrine facilities, disinfecting and monitoring water quality), vaccination policies (vaccination against rotavirus and pneumococcus), among others.

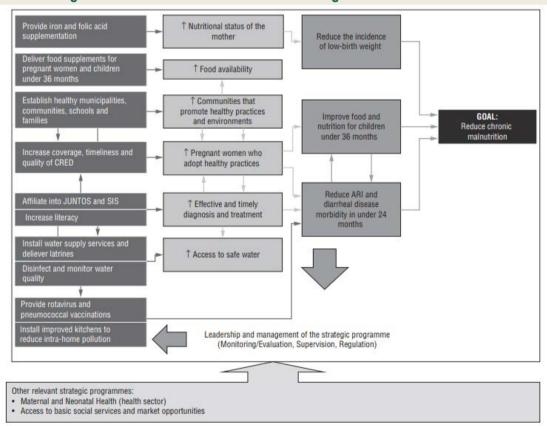


Figure 2.16. Logic model for the Articulated Nutrition Programme in Peru

Note: CRED: Growth and Development Monitoring Service; JUNTOS: National Direct Support Program for the Poorest; SIS: Comprehensive Health Insurance Plan; ARI: acute respiratory infections.

Source: Ministry of Economy and Finance, Peru.

Source: Vammalle et al. (2018[30]), "Financing and budgeting practices for health in Peru", OECD Journal on Budgeting, Vol. 2017/2.

The allocation of resources to budget programmes is based on a precise mix of inputs identified as necessary to meet physical targets

The allocation of resources to each budget programme during the budget formulation process is carried out using a very micro approach, starting from individuals to global aggregates. At the beginning of the process, each executing unit plans its needs in terms of budget programmes and extrabudgetary programmes, which it submits to the MEF. The budget programmes distinguish key interventions, activities and management. The budget for key interventions is defined according to a combination of inputs identified during the budget programme formulation process, which is not regularly reviewed. Implementing units use information on the characteristics of their population (e.g. for health programmes), regional priorities and coverage targets, and determine their "physical targets". These physical targets are entered into the system, which determines the quantities of each input needed at a very micro level of detail. The human resource needs are added to these combinations of inputs, as defined by the relevant directives. In health, for example, the Ministry of Health determines the number of nurses needed according to the expected number of patients, the characteristics of the health centre, etc.). The needs of each implementing unit are aggregated at the regional level and transmitted to the MEF, which allocates the necessary funds in the budget (Vammalle et al., 2018_[301]).

This focus on results in the budget process is an important step forward, as it introduces the notion of evidence-based policy making, with results objectives and monitoring of targets. In particular, the identification of government priorities is interesting. However, the way in which these budgetary programmes are managed and included in the budget is done at a very micro and rigid level, with very little autonomy for ministries and budget units to manage their funds. This methodology allows identifying the efficient mix of inputs to achieve results and somewhat replaces the "input budget" with an "input mix budget". But the budget is still input-based, with significant rigidities in moving funds from one line to another and adapting to fluctuating situations and challenges.

There is a trend in OECD countries to move away from input budgets towards programme budgeting

Most countries are moving away from budget practices based on detailed line items and inputs to develop budget processes that give greater autonomy to programme managers, executing units and line ministries. These reforms go hand-in-hand with efforts to strengthen line ministries' capacities and create the fiscal resource management directorates presented in Chapter 4. There are different practices for integrating results information into budgets and moving from input-based budgets to programme-based budgets (Box 2.20).

Box 2.20. The four approaches to performance budgeting according to the OECD

The OECD created a typology of performance budgeting approaches ranging from the most distant link between performance and budget allocations to the closest link. OECD countries are more or less equally distributed among the first three approaches, with no country presenting a direct link between budget and results (Figure 2.17).

Presentational performance budgeting

This shows outputs, outcomes and performance indicators separately from the main budget document. This is relatively easy to implement and is appropriate when the objective is limited to demonstrating that budget allocations and actual expenditures are responsive to the government's strategic objectives

and policy priorities. However, by separating performance and budget data, it is harder to relate the two.

Performance-informed budgeting

In this approach, the budget structure corresponds to budget programmes, which are linked to performance indicators. This approach is difficult to implement as it involves completely changing the budget structure to align it with government programmes and priorities. It, however, allows the budget to be used as an instrument to ensure that expenditures are linked to government priorities. This approach also implies a large decentralisation of functions and control to programme managers in line ministries. This is the form of performance budgeting that the most advanced OECD countries, such as France, the Netherlands and New Zealand, have adopted (Figure 2.17).

Managerial performance budgeting

This approach is a variant of performance-informed budgeting, with an important focus on the effects on management culture and functional organisation. This approach has as a prerequisite the existence of a culture of performance, which takes a long time to create when it does not exist.

Direct performance budgeting

Budgeting directly linked to results creates an automatic relationship between resources allocated and results achieved. This usually involves a contractual relationship that describes the budget response according to the degree to which objectives are met. No OECD country uses this approach.

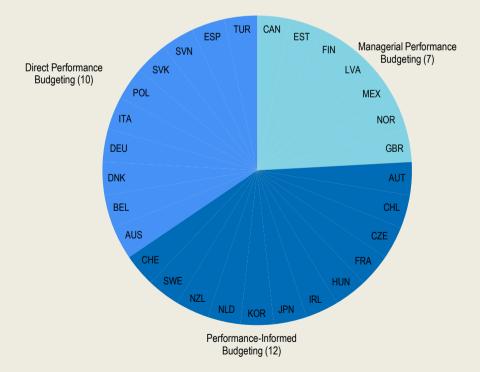


Figure 2.17. Performance budgeting approaches in OECD countries

Notes: Greece, Luxembourg and Portugal indicated not having a performance budgeting framework in place. Data for Israel and the United States are not available.

Source: OECD (2019[31]), Good Practices for Performance Budgeting.

It is necessary to distinguish between the identification of actions, inputs and outputs needed to achieve a goal and the allocation of revenue per input

To design a budget programme, we seek to use the best available evidence to identify causes and effects around the condition of interest, as well as the most efficient ways to achieve the desired results. To do this, we start by defining the "condition of interest", i.e. the problem or situation that we want to influence because it is of interest for sustainable development. Next, an explanatory model is created, which identifies and prioritises the causes and factors of the condition of interest, based on evidence. The next stage is to develop a prescriptive model, or set of evidence-based interventions that respond to the explanatory model. Finally, the Theory of Change is used and a graphical summary of interventions and outputs is produced to achieve outcomes.

This describes good practice for developing any public policy, widely used in OECD countries. It corresponds, for example, to the methodology developed in England in the *Green Book: Central Government Guidance on Appraisal and Evaluation* (HM Treasury, 2022_[32]). However, while OECD countries use this methodology to develop public policies, they do not use it to base budget allocations.

Indeed, basing budget allocations on the mix of actions and inputs identified in this methodology implies three fundamental implicit assumptions: 1) that the optimal mix of inputs is identical in all regions; 2) that it is identical whatever the scale of the intervention; and 3) that it does not vary over time. However, each of these assumptions is highly implausible; take the Articulated Nutritional Programme, for example. The main causes of undernutrition in children may differ between urban and rural, dry and wet regions, etc. Some investments may be cost-effective when developing a large-scale project but may not be justified for smaller project scales. Finally, the relative technologies and costs of different inputs vary over time so that the optimal mix at one point in time may not be optimal a few years later.

This is why in OECD countries that use programme budgets, the targets to be achieved by each programme manager and the overall pool of resources allocated to them are determined, but it is left to the discretion of each programme manager to implement their own logic model and determine the optimal mix of expenditures, depending on the targets and the resources available to them.

As mentioned above, this requires a high degree of administrative capacity in line ministries, executing units or subnational governments, and strong financial management directorates in ministries. Designing and developing a performance budgeting system is a long and difficult task, and in most countries is still an ongoing process. In particular, it is important to balance the efforts and costs involved with the benefits to be reaped. The OECD developed a guide to implementing performance budgeting, proposing good practices illustrated by concrete examples (Box 2.21). The OECD also regularly accompanies countries in designing their performance budgeting system and transitioning from the existing system to the new one.

Box 2.21. OECD good practices for implementing performance budgeting

- 1. The rationale and objectives of the results-based budget are clearly documented and reflect the interests of key stakeholders.
- 2. Performance budgeting aligns spending with the government's strategic objectives and priorities.
- 3. The performance budgeting system incorporates the flexibility to handle the varied nature of government activities and the complex relationships between spending and results.
- 4. The government invests in human resources, data and other infrastructure needed to support performance budgeting.
- 5. Performance budgeting facilitates systematic oversight by the legislature and civil society, strengthening the performance and accountability orientation of government.
- 6. Results-based budgeting complements other tools designed to improve results orientation, such as programme evaluation and spending reviews.
- 7. Incentives around the performance budgeting system encourage performance-oriented behaviour and learning.

Source: OECD (2019[31]), OECD Good Practices for Performance Budgeting.

2.8.2. Use of fiscal incentives to achieve results

Peru uses three types of fiscal incentives linked to budget programmes

Peru uses tools that grant additional resources to the budget units to help public entities achieve the objectives and results prioritised by the national government to improve the provision of public services. These incentives can be targeted at any actor in the results chain (budget units, regional or local governments). There are three types of programmes: the Budget Support Agreement, the Incentive Programme for the Improvement of Municipal Management and the Recognition of the Execution of Investments.

No OECD country uses a direct relationship between the achievement of results and resources allocated (see Box 2.20 and Figure 2.17).

2.8.3. Recommendations for improving the link between the expenditure budget and government priorities

Based on the analysis presented in the previous sections, this report proposes the following recommendations for improving the link between the expenditure budget and government priorities (Table 2.17).

Table 2.17. Recommendations for improving the link between the expenditure budget and government priorities in Peru

Findings	Implications	Recommendations
Budget programmes in Peru define a rigid combination of inputs, actions and outputs, resulting in an input-based budget allocation.	It generates rigidities in budget execution. It does not allow for changes in relative factor prices or technologies to be taken into account. It does not allow for regional specificities to be taken into account.	In the short term: Review existing budget programmes to ensure that they still correspond to government priorities, and optimal combinations of inputs, activities and outputs. Invest in administrative capacity building in the budget units, in particular in subnational governments. In the medium to long term: Develop a strategy to move from an input-based budget to a results-based budget. This type of strategy should be gradual and can be implemented asymmetrically, starting with one or two ministries with greater capacity and a history of trusting relationships with the Ministry of Economy and Finance. Peru could initiate a study to design this type of budget, more aligned with OECD best practices and foresee the modalities of transitioning from the existing budget framework to the new one. Pre-requisites: It is essential to have strong budget execution control instruments, in particular, financial management directorates in line ministries. It helps to have a top-down budgeting system to ensure the financial sustainability of the public sector.
Financial rewards for meeting targets are immediately integrated into the budget.	This generates a budget modification and does not allow optimising the use of additional resources according to strategic planning.	Integrate the resources from the target achievement awards in the opening institutional budget of the following year.

2.9. Accounting and control of public accounts

2.9.1. Accounting practices and control of public accounts in Peru

Peru uses accrual accounts following the IPSAS system

Peru was a pioneer in the region in terms of initiating the transition to accrual accounting based on the International Public Sector Accounting Standards (IPSAS). Peru translated IPSAS into national standards and made key adjustments to move to accrual accounting. This provides a solid basis for agreeing on the content of the financial statements and for productive work between the different institutions. Preparing complete financial statements based on international standards represents a good practice set out in the OECD recommendations. The General Directorate of Public Accounting is in the process of fully adopting IPSAS, which leads to the application of international standards in recording the entities' economic events (accrual accounting). To this end, it is important to establish the baseline of financial information through an ongoing process of accounting cleansing and reconciliation.

Another important issue to study to allow issuing financial statements based on international standards is related to revising the regulation of the Public Sector Financial Administration to improve the definition of the entities' managers' responsibilities.

The General Account of the Republic consolidates all public sector accounts

The published accounts (the General Account of the Republic) consolidate the entire public sector. They are published annually and sent to Congress. They are accompanied by an opinion from the supreme audit institution, the Comptroller General of the Republic (CGR). One of the strengths of the system is the

publication of consolidated financial statements, in accordance with known standards and subject to external audit. Congress approves a budget covering the entire public sector. Therefore, the General Account of the Republic covers all public sector institutions. The comprehensive character of the account increases its relevance. However, it also means that its accuracy depends on the quality of the work of numerous agents in many agencies. Providing these staff with sufficient and relevant training is a challenge. Ensuring that all major public sector bodies are subject to a high quality, constructive and independent annual audit would increase the assurance of the overall account. In this regard, it would be useful to assess the capacity of the audit firms to audit all entities under the scope of the National Accounting System, the technical level of the professionals charged with carrying out the review of the financial statements, and the capacity of the CGR to oversee the work carried out by the audit firms.

The General Account is a useful document that enhances accountability and supports congressional scrutiny of public finances. Ongoing work to improve the accounts by revamping standards, training staff and creating a body of professional accountants within the public sector has the potential to add value. This work must take into account the views of the CGR. Significant emphasis should be given to the professional training of agents with an accounting function.

The Office of the Comptroller General of the Republic generally issues a "qualified" opinion and recently refrained from issuing an opinion

Over the years, the CGR has issued a qualified opinion and more recently (COVID restrictions being a key factor) refrained from issuing an opinion. While it is common (e.g. in the European Union, France and the United Kingdom) for ambitious new accounting frameworks to require some years before all required information reaches a good level of assurance, this limited assurance from the external auditor reduces the confidence in public finances. The CGR has contributed to congressional decisions not to approve the General Account over the last eight years. While Congress has not approved the accounts in recent years, it has made use of them to provide a compelling document on the financial situation of the Peruvian public sector. It is important to establish and maintain a dialogue between the auditor and the comptroller in order to resolve, over time, the various observations on which their opinion is based. This would thus reduce the risk of non-approval by the Congressional Review Commission and give greater credibility to the quality of the information.

Accounting transactions are recorded in a Financial Administration System

The accounting transactions of the entire Peruvian public sector are recorded in the Financial Administration System (SIAF). Although the diagnosis and analysis in the framework of this project did not specifically cover the functioning of the system, it is understood that it does not provide real-time access to accounting information, even though, in principle, it is adapted for treasury and budget operations. A key operational problem has been the absence of regular bank reconciliations in some entities, which has contributed to qualified audit opinions. See more on this issue in Chapter 3. To generate timely, quality and decision-useful information, it is not only necessary to achieve full adoption of IPSAS, but also to implement online accounting, which will be achieved to a large extent through the implementation of an integrated IT tool that allows economic events to be recorded on line. In this regard, an institutional project is being developed that consists of designing, developing and implementing the SIAF-RP, where it will be essential to include the necessary guidelines that allow international standards to be applied and generate the information that facilitates entities' management and decision making.

The Office of the Comptroller General of the Republic does not have access to all the information it needs to issue its opinion

The Comptroller General's Office has highlighted incomplete information from taxation (in relation to its access to individual taxpayers' records) and incomplete information from the Ministry of Transport and

Communications (in particular on assets created through concessions). There are a number of cases around the world where supreme audit institutions have limitations in accessing taxpayer records. Many have identified mechanisms to avoid qualifying their opinion on the accounts as a result. Accounting for infrastructure assets needs to be consistent across the public sector.

The MEF's General Directorate of Public Accounting prepares the accounting standards and consolidates the accounting statements of the various Peruvian public sector bodies to produce the final account. The CGR is responsible for the audit. In practice, auditing is usually carried out by private auditing firms and does not cover all agencies in a given year. Therefore, a key factor for the successful production of the accounts is the provision of detailed guidance and training. The MEF is specifically considering mechanisms to create a corps of trained and certified financial managers (in line with proposals in some other areas).

The Comptroller General of the Republic plays the role of external auditor of the public sector and oversees internal auditing

The Comptroller General's Office has the role of external auditor for the Peruvian public sector. It also oversees internal audit. The CGR places a great emphasis on the role of "concurrent audit", on its anti-corruption function and, in general, on compliance auditing.

The approach to concurrent audit is not in line with international best practice (which tends to focus on independent and *ex post* audit). There seems to be a conflict between measures to introduce concurrent audits and measures to simplify procedures for projects (see Chapter 5). Problems of corruption and non-completion of projects may make the early involvement of an independent outsider seem attractive. However, this practice also creates the risk that completed projects are recorded as incomplete for a long time after the works have been completed and the supplier has been paid. In this sense, an advisory function, rather than an audit requirement, might be a better suited to achieve this.

A paper published by the CGR suggests that delivery times increase by an average of six weeks for projects subject to concurrent audits. Reducing the time projects remain open would improve the control environment, and measures to accelerate all phases of project implementation would improve delivery.

As noted in the section on the accounts, the CGR's work on the General Account results in a small number of issues leading to an appraisal of the accounts. Further bilateral contacts between the Comptroller and the MEF should identify ways to reduce the number of areas subject to qualification. This could involve, for example, clearer statements on the scope of consolidation of the General Account and on the audit opinion.

2.9.2. Recommendations for improving the accounting and control of public accounts

Based on the analysis presented in the previous sections, Table 2.18 presents the recommendations for improving the accounting and control of public accounts.

Table 2.18. Recommendations for improving the accounting and control of public accounts in Peru

Findings	Implications	Recommendations
The Comptroller General of the Republic generally issues a "qualified" opinion on public accounts.	This reduces confidence in public accounts and governance.	Further bilateral contacts between the Comptroller and the Ministry of Economy and Finance (MEF) should identify ways to reduce the number of areas subject to qualification. This could involve, for example, clearer statements on the scope of consolidation of the General Account and on the audit opinion.
By consolidating all public expenditure, the quality of the General Account of the Republic depends on the quality of the work of a large number of officials.	Trained staff is essential to ensure the quality of public accounts.	The MEF should invest in building capacity and a body of qualified and certified accountants. For this, it can provide courses, develop guidelines, standards, etc.

References

Contraloría General de la República (2022), Evaluación de la Credibilidad presupuestal del gasto público en el Perú,	[33]
https://cdn.www.gob.pe/uploads/document/file/3284646/Evaluaci%C3%B3n%20de%20la%20	
credibilidad%20presupuestal%20del%20ga.pdf (accessed on 26 November 2022).	
Department of Public Expenditure and Reform (2019), <i>Public Financial Procedures Booklet</i> , Department of Public Expenditures and Reform, https://www.gov.ie/en/publication/5268bd-government-accounting (accessed on 26 November 2022).	[9]
Downes, R. et al. (2017), "Strengthening budget institutions in Public Expenditure Management Peer Assisted Learning (PEMPAL) countries: Results of the 2013-14 OECD PEMPAL Budget Practices and Procedures Survey", OECD Journal on Budgeting, https://doi.org/10.1787/budget-16-5jfq810f35vc .	[2]
French Ministry of Economy, Finances, and Industrial and Digital Sovereignty (2022), Website of the French Ministry of Economy, Finances, and Industrial and Digital Sovereignty, https://www.budget.gouv.fr (accessed on 26 November 2022).	[23]
Government of France (2022), Code général des collectivités territoriales, https://www.legifrance.gouv.fr/codes/id/LEGITEXT000006070633 (accessed on 14 November 2022).	[28]
HM Treasury (2022), <i>Green Book: Central Government Guidance on Appraisal and Evaluation</i> , UK Government, London, https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent .	[32]
Kantorowicz, J. and B. Van Grieken (2019), 5th Annual Meeting of the Network on Fiscal Relations Across Levels of Government Spending Autonomy of Sub-central Governments: Conceptualisation and Measurement, background paper, https://www.oecd.org/tax/federalism/spending-autonomy-of-sub-central-governments-conceptualisation-and-measurement-background-paper.pdf .	[25]
MEF (2022), <i>Plataforma digital única del Estado Peruano</i> , Ministry of Economy and Finance, Lima, https://www.gob.pe/mef (accessed on 26 November 2022).	[12]
MEF (2021), <i>Informe Global de la Gestión Presupuestaria 2019</i> , Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/presu publ/presu sect/Evaluacion Global 2019.pdf.	[19]
https://www.mer.gob.percontendos/presu_publ/presu_sect/Evaluación_Global_2019.pui.	
MEF (2021), <i>Informe Global de la Gestión Presupuestaria 2020</i> , Ministry of Economy and Finance, Lima,	[21]
https://www.mef.gob.pe/contenidos/presu_publ/presu_sect/Evaluacion_Global_2020.pdf.	
MEF (2020), Clasificador de Fuentes de Financiamiento y Rubros para el Año Fiscal, Ministry of Economy and Finance, Lima.	[5]
MEF (2019), Evaluación Global de la Gestión Presupuestaria 2018, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/presu publ/presu sect/Evaluación Global 2018.pdf.	[17]

MEF (2018), Evaluación Global de la Gestión Presupuestaria 2017, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/presu publ/presu sect/Evaluacion Global 2017.pdf.	[18]
nttps://www.mer.gob.pe/contenidos/presu_pub//presu_sect/Evaluacion_Global_2017.pul.	
MEF (2017), Evaluación Global de la Gestión Presupuestaria 2016, Ministry of Economy and Finance, Lima,	[20]
https://www.mef.gob.pe/contenidos/presu_publ/presu_sect/Evaluacion_Global_2016.pdf.	
Moretti, D. (2019), "Budgeting in Greece", <i>OECD Journal on Budgeting</i> , Vol. 2019/2, https://doi.org/10.1787/2f5e7d7a-en .	[3]
OECD (2021), Fiscal Federalism 2022: Making Decentralisation Work, OECD Publishing, Paris, https://doi.org/10.1787/201c75b6-en .	[24]
OECD (2020), <i>The Future of Regional Development and Public Investment in Wales, United Kingdom</i> , OECD Multi-level Governance Studies, OECD Publishing, Paris, https://doi.org/10.1787/e6f5201d-en .	[29]
OECD (2019), <i>Budgeting and Public Expenditures in OECD Countries 2019</i> , OECD Publishing, Paris, https://doi.org/10.1787/9789264307957-en .	[14]
OECD (2019), <i>Government at a Glance 2019</i> , OECD Publishing, Paris, https://doi.org/10.1787/8ccf5c38-en .	[7]
OECD (2019), OECD Fiscal Decentralisation Database, https://www.oecd.org/tax/federalism/fiscal-decentralisation-database (accessed on 14 November 2022).	[27]
OECD (2019), <i>OECD Good Practices for Performance Budgeting</i> , OECD Publishing, Paris, https://doi.org/10.1787/c90b0305-en .	[31]
OECD (2018), OECD Performance Budgeting Survey, OECD, Paris.	[15]
OECD (2015), "Recommendation of the Council on Budgetary Governance", OECD Legal Instruments, OECD/LEGAL/0410, OECD, Paris, https://www.oecd.org/gov/budgeting/Recommendation-of-the-Council-on-Budgetary-Governance.pdf .	[1]
OECD (2015), Recommendation of the Council on Budgetary Governance, OECD, Paris, https://www.oecd.org/gov/budgeting/Recommendation-of-the-Council-on-Budgetary-Governance.pdf .	[6]
OECD (2014), <i>Budgeting Practices and Procedures in OECD Countries</i> , OECD Publishing, Paris, https://doi.org/10.1787/9789264059696-en .	[8]
OECD (forthcoming), OECD Spending Better Framework.	[13]
OMB (2018), "Section 120 – Apportionment process", <i>OMB Circular No. A–11 (2022</i>), Office of Management and Budget, Washington, DC, https://www.whitehouse.gov/wp-content/uploads/2018/06/s120.pdf .	[22]

- Ortiz, M. and D. Winkelried (eds.) (2022), *Hitos de la Reforma Macroeconómica en el Perú*1990-2020: La Recompensa de los Tamías, Universidad del Pacífico,
 https://repositorio.up.edu.pe/bitstream/handle/11354/3337/OrtizWinkelried2022Cap9.pdf
 (accessed on 27 November 2022).

 Schmidt-Hebbel, K. (2022), "Política y reglas fiscales: evaluación y propuestas de reforma para el Perú", http://www.schmidt-hebbel.com/assets/politica-y-reglas-fiscales----ksh-(1).pdf
 (accessed on 27 November 2022).
- Shack, N. and R. Rivera (2022), "Evaluación de la credibilidad presupuestal del gasto público en el Perú", *Documento de Política en Control Gubernamental*, Office of the Comptroller General, Lima, https://cdn.www.gob.pe/uploads/document/file/3284646/Evaluaci%C3%B3n%20de%20la%20credibilidad%20presupuestal%20del%20ga.pdf.
- Vammalle, C. and I. Bambalaite (2021), "Fiscal rules for subnational governments: The devil's in the details", *OECD Working Papers on Fiscal Federalism*, No. 35, OECD Publishing, Paris, https://doi.org/10.1787/531da6f9-en.
- Vammalle, C. et al. (2018), "Financing and budgeting practices for health in Peru", *OECD Journal on Budgeting*, https://doi.org/10.1787/budget-17-5j8v16g3czth.
- WOFI (2022), World Observatory on Subnational Government Finance and Investment website, https://www.sng-wofi.org (accessed on 14 November 2022).

Notes

- ¹ It was decreed by Law No. 30823, which grants power to the executive branch to legislate in terms of economic management and paragraph a.2) of Section 5 of Article 2 of Law No. 30823, which establishes that the executive branch has the power to legislate on the modernisation of the budget, following Article 104 of the Constitution, which grants the executive branch the power to legislate through legislative decrees.
- ² A budget line is the most detailed level of expenditure voted in the Budget Law. It can refer to a particular input (e.g. salaries) or be more aggregated to programme or budgeting unit level.
- ³ The calculation of some transfers takes into account the revenues or revenue-generating capacity of subnational governments, but the outcome of present collections will influence the formula and future transfers, not those of the current year.
- ⁴ The non-financial public sector is defined as all non-financial public sector entities, i.e. general government sector and non-financial public enterprises.
- ⁵ The values shown for the national government correspond to the balance of all positive and negative changes in absolute value. The data available did not allow for the sum of all changes, positive and negative, and therefore correspond to an underestimation of the size of the changes.
- ⁶ The CRG (2022_[33]) study comes to the same conclusion.
- ⁷ Legislative Decree No. 1440, Article 37.1.
- ⁸ Data for 2022 provided by the MEF.
- ⁹ Opinion of the Budget and Accounting Committee of the Republic, Lima, 13 October 2021.

Modernising treasury and cash management systems in Peru

This chapter presents the main findings and recommendations for modernising Peru's General Directorate of Public Treasury's functions. The chapter is composed of six sections: (i) regulatory and institutional framework; (ii) financial planning and cash flow projection; (iii) expenditure execution process and treasury single account; (iv) comprehensive asset and liability management; (v) supporting factors; and (vi) fiscal risks.

Key findings and recommendations

- Cash planning would benefit from greater integration with the budget directorate and the entities
 responsible for estimating public revenue. Deviation analysis should be carried out in order to
 improve the calculation of future projections.
- The great challenge for treasury modernization is to achieve full fungibility of the funds. For this, it
 is essential to expand the coverage of the TSA and make cash management more efficient,
 eliminating the rigidities of cash management derived from the effects of expenses on their sources
 of financing.
- Asset and liability management moves towards better integration and search of greater profitability.
 There is still room to favor integration and make placements at the level of needs, as well as to
 strengthen the local market and reduce risks in order to achieve greater profitability. The link with
 fiscal policy should also be strengthened so that the objectives are aligned.
- The modernisation of the DGTP requires quality information in real time. The reform of the financial information system (SIAF-RP) and the development of online accounting are essential to record the traceability of expenditure and have complete accounting records.
- Proper measurement and management of fiscal risks are essential to inform various phases of the budget cycle and adopt risk mitigation mechanisms. The existing line management must advance in risk mapping, development of measurement methodologies and mechanisms to collect information, in order to prepare reports that can guide decisions throughout the budget cycle.

3.1. Regulatory and institutional framework

3.1.1. A brief overview of recent reforms

Treasuries in OECD countries fulfil functions beyond the traditional ones linked to processing payments, cash management and public debt. In recent decades, the importance of a country's Treasury in the entire public financial management cycle has been growing. Modern treasuries, in addition to the full integration of the debt and treasury areas, also have functions such as defining the debt strategy linked to economic and budgetary policy, supervising the budget execution process, ordering payments, ensuring the availability of funds and providing legal security to the system, and optimising the use of idle resources, among others.

This modernisation process is also underway in Peru. In 2011, the Directorates General of Treasury and Indebtedness were merged into the General Directorate of Public Treasury. Since then, a series of progressive reforms have been implemented to achieve full integration, including:

- Updating the regulatory framework through the approval of Legislative Decree (*Decreto Legislative*, DL) 1437 of the National System of Public Indebtedness and DL 1441 of the National Treasury System.
- Progressing towards the overall management of financial assets and liabilities, including the
 establishment of the second liquidity reserve, updating the regulations of the Fiscal Stabilisation
 Fund, authorisation to execute repurchase operations and sell its own securities, and the
 establishment of policies and guidelines for managing the assets and liabilities of non-financial
 public entities and enterprises.
- Including the DGTP in the Cash Committee and creating an Assets and Liabilities Committee, currently replaced by the Fiscal Affairs Committee.
- Progress in financial risks assessment: liquidity risk, interest rate risk, exchange rate risk, central government concentration risk.
- Regulatory changes related to financial instruments, such as the Repo Transactions Law, Treasury Bill Regulations, the Market Maker Program and the Bond Issuance Program.

• The progressive increase in the coverage of the TSA and in the resources comprising the public Treasury.

The Peruvian authorities are aware that challenges remain to modernise the Treasury, including fully integrating the treasury and debt systems and the Treasury with the other administrative systems under the stewardship of the MEF; advancing in the fungibility of funds; improving cash management; implementing an online accounting system; and assessing and disseminating fiscal risks, among others. All these issues are addressed later in this chapter.

3.1.2. General principles of the Peruvian treasury system

Economic control and stability are deeply rooted in the philosophy of the MEF, as the development of the public budget system has shown. This possibly has its origins in the 1990s, when Peru contracted a debt of USD 950 million with the International Monetary Fund. In that period, the high dependence of the Peruvian economy on commodities, together with the rise in interest rates in 1980, led to a period of hyperinflation and a deep recession. As an important part of the economic growth was linked to the extraction of natural resources with prices determined on international markets, a declining pattern of these prices over prolonged periods weakened the economy and reduced government revenues. In turn, given the international context, external credit to the government became more expensive, discouraging public investment. Private investment was also affected by increased uncertainty and the mining sector was weakened due to lower revenue prospects (Aggarwal, 2009[1]).

Economic growth began again in the mid-1990s and was consolidated in the 2000s. Since then, the government has introduced a set of very rigid control mechanisms in public finances due to a fear of deficits and excessive indebtedness. These controls are sometimes counterproductive as they distort financial activity and entail high associated costs.

The most disruptive element of public sector financial activity is linking expenditures to their funding sources. This link goes so far as to control the origin of the source of each payment made by the Treasury, violating the principle of the fungibility of funds, which is essential for efficient treasury management in three areas: 1) forecasting; 2) execution; and 3) profitability. This despite the fact that the legislation itself recognises the principle of fungibility of money as one of the fundamental principles of the National Treasury System (Box 3.1).

Box 3.1. Principles of Peru's National Treasury System

- 1. Efficiency and prudence: The management and disposal of public funds, optimising their use and minimising the costs associated with their administration, subject to a prudent degree of risk.
- 2. Fungibility: The use of public funds managed in the treasury single account, regardless of their funding source, to provide overdraft for temporary cash shortfalls, ensuring the continuity of the public administration in accordance with Principle 3.
- 3. Timeliness: The collection and allocation of public funds within the corresponding deadlines to ensure they are available when and where they need to be.
- 4. Cash unity: The centralised administration of all public funds, regardless of their origin and purpose, respecting the ownership and register that corresponds to the entity responsible for collecting them.
- 5. Truthfulness: The authorisation and processing of transactions are carried out on the assumption that the information recorded by the entity is supported by documentary evidence of legally and executed administrative acts and events.

Source: Legislative Decree 1441 of the National Treasury System.

3.1.3. Organisation of the General Directorate of Public Treasury

The DGTP reports to the Vice-Ministry of Finance of the MEF and is comprised of two administrative systems: the National Treasury System and the National Debt System.

National Treasury System

DL 1441 defines the National Treasury System's principles, processes, rules, procedures, techniques and instruments through which the cash flow management is executed, including the structuring of the financing of the public sector budget, the management of non-financial public sector financial assets and the fiscal risks of the public sector.

There are two main models of treasury systems in OECD countries:

- 1. centralised, where all treasury functions, including payment and control functions, are carried out by the Treasury, which reports to the MEF (e.g. France)
- 2. decentralised, where operational functions (usually payment processing and controls) are decentralised to line ministries, but central policy and oversight are carried out by the Ministry of Finance (United Kingdom) or an independent agency (Ireland, Scandinavian countries).

Peru's national treasury system is decentralised, with a central level, the DGTP, and a decentralised level, which performs some operational functions. The DGTP is the governing body and approves the regulations and implements and executes the corresponding procedures and operations within its remit. The decentralised level is made up of the spending agencies of national and regional governments, local governments, subnational government enterprises and entities, non-financial public enterprises, financial public enterprises, and other non-financial organisational forms that manage public funds. The decentralised or operational level is responsible for the administration of public funds, falling to the general directors of administration or the finance manager, and the Treasurer, or those acting in their stead, who must inform the DGTP of their designation.

The National Treasury System comprises financial planning, integrated management of financial assets and liabilities of the non-financial public sector, treasury management, and fiscal risk management.

National Debt System

Operational decentralisation is also observed with respect to the National Public Debt System. According to Article 6 of DL 1437, the functions of the spending agencies are to: "(i) manage public funds from public indebtedness; (ii) determine and collect revenues; (iii) contract commitments, accrue expenditures and order payments, under applicable legislation; (iv) record information generated by actions and operations carried out; (v) report on the progress and/or fulfilment of goals; and (vi) receive and execute disbursements of debt operations."

Organisational structure of the General Directorate of Public Treasury

The DGTP's current structure is comprised of seven line directorates. Six have treasury and debt functions. The seventh, the Fiscal Risks Directorate, carries out broader tasks than treasury alone and, as will be discussed below, should have functional autonomy and become an independent unit. The seven line directorates are:

1. The Directorate of Normativity is the organic unit in charge of elaborating the norms of the National Debt System and the National Treasury System, articulated to the public sector's financial administration.

- 2. The Directorate of Financial Planning and Strategy is in charge of proposing guidelines and standards related to financial planning and the strategy for the integrated management of financial assets and liabilities, debt operations, debt management, and investment of public financial assets.
- 3. The Credit Directorate proposes guidelines and regulations and manages public sector credit operations. It administers and manages Peru's membership in multilateral financial organisations.
- 4. The Directorate of Financial Investment Management and Capital Markets is an organisational unit that proposes guidelines and regulations related to financial investment management and capital markets.
- 5. The Directorate of Treasury Operations proposes guidelines and regulations related to the National Treasury System and executes the system's procedures and operations.
- 6. The Directorate of Debt Management, Accounting and Statistics records obligations arising from public sector borrowing operations and compiles public debt statistics.
- 7. The Fiscal Risk Directorate formulates guidelines, methodologies, models and regulations for the identification, measurement, mitigation and monitoring of fiscal risks.

Following the merger of the Directorates General of Treasury and Indebtedness, the directorate's functions were allocated to differentiate between the front, middle and back offices, which is a typical distinction in treasuries in OECD countries.

The staff of the DGTP is characterised by low turnover at the managerial level, with some stability at director and middle management level.

3.2. Financial planning and cash flow projections

3.2.1. Adequate cash flow forecasting makes it easier to identify the government's funding needs

The overall objective of cash flow forecasting is to anticipate the government's funding needs by monitoring the spending agencies' incoming and outgoing cash flows. The review framework should be comprehensive and focused on cash flows rather than on the point in time when contractual obligations arise or accounting accruals occur.

Effective cash management requires the ability to forecast daily cash flows from the TSA, facilitating the orderly achievement of budget targets, ensuring that expenditures are funded smoothly, and designing strategies that smooth the cash flow profile. Smoother cash flow means:

- lower average cash balances
- reduced borrowing costs, as the interest on cash balances is always lower than the interest on marginal loans
- reduced pressure on central bank's monetary policy operations.

An efficient cash flow forecasting system is capable of formulating reasonably reliable projections of cash inflows and outflows in the short to medium term. Ideally, these forecasts should be broken down into daily balances and cover 3-12 months, so that a cash curve and a cash receipts and payments journal can be drawn up. Good cash flow forecasts are also the basis for active cash management. Advanced countries have rolling forecasts of daily cash flows through the TSA for at least the next three months, including the end of the fiscal year, complemented by the possibility to monitor actual changes in the aggregate balance of the TSA's main account in real time (Pessoa and Williams, 2012_[2]).

The TSA records most cash receipts and payments, thereby consolidating government cash balances and generating information efficiently. However, while TSA flows in countries with advanced practices are the

focus of forecasting, they must also be complemented by practices and tools that take into account past history and experience.

The credibility of projections is essential for the effective and efficient management of public resources. Consistent, coherent and accurate integration of the government's various projections ensures predictability, with acceptable degrees of uncertainty, for decision making in the management of public resources, from revenue collection to payment or borrowing.

Forecasting capacity depends on the quality, availability and classification of the information provided by the collection agencies and payment commitments, hence the necessary coordination of the various actors involved. Often the basis is a daily projection for the next month, weekly for the following two months and monthly for the rest of the fiscal year. The planning horizon; the incorporation of technological innovations; greater co-ordination efforts, in particular with tax administration agencies; and the inclusion of simulation techniques and econometric models are some of the factors that have had an impact on improved cash planning in recent years in OECD countries.

3.2.2. Revenue estimates in Peru are heavily influenced by the existence of different funding sources

The existence of different funding sources and items (*rubros*) has a strong impact on the govenrment's revenue estimates, as different entities are responsible for collecting information on the different types of revenues. This has an impact on the General Directorate of Macroeconomic Policy and Fiscal Decentralisation's calculation of expenditure ceilings, the General Directorate of Public Budget's budget formulation, and the DGTP's revenue planning. Table 3.1 shows the entities involved in revenue programming for each of the funding sources.

Table 3.1. Entities responsible for revenue programming by funding source in Peru

Source/Item	Responsible
Ordinary revenue	General Directorate for Macroeconomic Policy and Fiscal Decentralisation/National Superintendency of Customs and Tax Administration
Directly collected revenue	Budget unit (pliego)1
Resources from official credit operations (recursos por operaciones oficiales de crédito)	
External debt and domestic debt with national government guarantee	General Directorate of Public Treasury
Debt operations not guaranteed by the national government	Subnational Governments
Donations and transfers	Budget unit (pliego)
Determined revenue	
Contributions to funds	Budget unit (pliego)
Municipal Compensation Fund	General Directorate for Macroeconomic Policy and Fiscal Decentralisation
Municipal tax	Local Governments
Canon and over canon, royalties, customs revenue and participations	General Directorate for Public Budget/General Directorate for Macroeconomic Policy and Fiscal Decentralisation
Carry-forward budget by all sources and items (except ordinary revenue)	Budget unit (pliego)

^{1.} A pliego is a "public sector entity to which a budget allocation has been approved under the annual budget law" (Ricardo Quiroz Mejía, 2022[3]).

Ordinary revenue represents, on average, 1 62% of total annual budget revenues and are the Treasury's single most important source of funding. SUNAT is the main collection agency and provides information to the MEF. Traditionally, SUNAT presented monthly information only for a three-month horizon and the DGTP made the annual projection based on models. Since 2019, closer collaboration has been

established between the Treasury, the General Directorate of Macroeconomic Policy and Fiscal Decentralisation, the General Directorate for Public Budget, and SUNAT to improve the quality of information and make information on public revenue available promptly.

The Cash Committee² meets every month with the participation of the General Manager of the Bank of the Nation (Banco de la Nación), the General Manager of the Central Reserve Bank of Peru (Banco Central de Reserva del Perú) and the MEF (Vice-Minister of Finance, Director General of the DGTP and Director General of Budgets). SUNAT is invited to present short-term and the previous month's revenue and expenditure projections, with work is underway to complete the extended 12-month information. Revenue projections are adjusted whenever the macro variables projections change. Currently, work is underway to improve the projections, and specifically to update the best way to project the refunds of the general sales tax for companies, which significantly alters the ordinary revenue because exports are not subject to this tax.

The budget units (*pliegos*) do not share their revenue projections of directly collected revenue with the DGTP, so the DGTP must estimate them. In a recent legal amendment of 2022, the national government's directly collected revenue – fees, non-tax revenues and fines – will become part of the Treasury's resources from 2023, which will undoubtedly complement the DGTP's information.

Weaknesses also exist with respect to the other funding sources, as some of the information is neither recorded nor shared with the DGTP. Hence, improved methods for providing the necessary information and ensuring the capture of all resources by the TSA can improve the availability of data and, thus, planning.

It is also relevant to highlight the importance of measuring uncertainty. In the case of Peru, this task is entrusted to the General Directorate of Macroeconomic Policy and Fiscal Decentralisation, but the DGTP is one of the main users of such information. Since the COVID-19 pandemic, which has seen greater volatility and significant changes in revenue collection, measuring uncertainty has become even more relevant. Uncertainty also exists at other times of less change, for example when new taxation is adopted or improved revenue collection procedures implemented (for example, the use of electronic invoicing had a positive effect on revenue collection). Its measurement is taken into account in the calculation of the macroeconomic and budget ceilings. It is a very relevant factor for the DGTP, which may be inclined to update its cash projections depending on events that may occur.

3.2.3. Expenditure estimates are adjusted when the institutional opening budget is modified

Estimates of payment schedules are essential for predicting expenditure flows, and thus fulfil the main objective of cash management, which is to ensure that the government can execute its budget in a smooth and timely manner and meet its payment obligations, giving legal certainty to the system. Only by knowing the payment schedule can active cash management be carried out, drawing on financing mechanisms when resources are needed and investing surpluses to avoid idle resources.

Expenditure estimates are mainly obtained from the Integrated Financial Administration System (Sistema Integrado de Administración Financiera, SIAF). The first data are from the opening institutional budget, but these vary as changes occur, resulting in a modified institutional budget (*presupuesto institucional modificado*). Compared to OECD countries, the amount of these variations is very high and has an impact on the updating of expenditure projections.

The DGTP would benefit from having access to information the spending agencies' expenditure projections, at least of the most relevant ones, which are privy to this information. As in the case of revenues, the information should be updated on an annual, monthly, weekly and daily basis, and the timing of major payments should always be reported. In some OECD countries, such as Australia, entities that fail to provide this information are penalised with a lower budget allocation the following year.

Some systems have relevant information, but it is not yet integrated into the SIAF, and the information is not always up to date with the exact schedule of payments.

The General Directorate for Public Budget has an instrument called Annual Commitment Programming (*Programación de Compromisos Anuales*), which includes the scheduling of the spending agencies' commitments and changes as the modified institutional budget changes, but this tool does not replace the cash plan. The objective of the Annual Commitment Programming is to make the cash flow compatible with the expenses of the Public Sector within the parameters of the established fiscal rules. It is controlled and updated quarterly by the General Directorate for Public Budget, which by resolution establishes the criteria for its determination, review and update by the budget units and the spending agencies. Compared to the cash plan, it suffers from inaccuracies in the flow estimates (once it is compared with budget execution), as it is more of a forecasting tool. It also does not include information on payment schedules for supply contracts, public investments or even some payrolls.

3.2.4. Peru's cash programming is closely linked to the level of liquidity reserves required to meet its cash requirements

Treasury cash programming is a process that, based on information and estimates of revenue and expenditure flows, presents one or more cash flow projection scenarios. The annual projection is disaggregated at a monthly level for a 12-month period and the monthly projection is disaggregated at a daily level for the next 90 days. The cash plan allows the members of the Cash Committee to approve the levels of income and expenditure for a given month and allows monitoring the liquidity in the TSA and, in case of a lack of liquidity, to ration the execution of public expenditure.

The cash flow projection methodology is carried out by the Directorate of Financial Planning and Strategy of the DGTP using an econometric model developed by the directorate which is based on input provided by various entities. The available data are used to estimate income and expenditure flows, based on directorate's own experience, in addition to information from the spending agencies. The DGTP has refined the calculation mechanisms for forecasting revenues through historical monitoring of actual execution, identification and analysis of errors, and adjustments to the methodology.

Measuring slippage in cash planning allows the Treasury to improve the quality of revenue and expenditure projections and anticipate funding needs, which controls financial programming risks. So far, the recorded slippage has been variable (around 5% in ordinary revenue before COVID, higher during the pandemic), which prompted the authorities to increase the secondary liquidity buffer (explained later in this section). Measuring errors is essential to map and help measure deviations. In recent years, the largest errors have been seen in ordinary revenue, as many years have been underestimated, with variations as much as 20-30%. Variations in other revenue sources are not as significant.

Finally, it should be noted that one of the biggest challenges in building the Treasury yield curve has been the lack of full fungibility of the TSA's resources. Although this practice has been improving, the revenues that are integrated into the TSA are still collected through some bank sub-accounts. The multiplicity of sub-accounts adds unnecessary complexity to the government's revenue management. The MEF should replace this model with one based on virtual accounts in the SIAF, so that the different allocations and ownership of resources are done through SIAF records. This issue will be discussed in the next section.

The Cash Committee approves the cash plan, monitors its implementation and updates it regularly

The Cash Committee was created by Supreme Decree No. 227-90 and ratified by the Annual Budget Law for the period 1991. Since its creation more than 30 years ago, its composition has been enlarged by a few additional members, but its functions have practically remained the same, with an emphasis on the management of short-term funds available and the monitoring of budget execution in relation to the cash

budget. While initially the director of the National Treasury was not a full member of the committee, the director general of the DGTP participates as a full member of the committee since 2016.

The Cash Committee is chaired by the vice-minister of finance, and composed of the vice-minister of economy, the general directors of the public treasury and public budget, and the general managers of the Bank of the Nation and of the Central Reserve Bank of Peru. The General Directorate of Macroeconomic Policy and Fiscal Decentralisation and SUNAT are also invited. The committee meets monthly and its functions include:

- 1. approving the annual cash budget
- 2. co-ordinating and agreeing on the actions necessary for the execution of the cash budget
- 3. carrying out comprehensive monthly monitoring of the implementation of public expenditure
- 4. evaluating the execution of the cash budget for the preceding month.

At the monthly meetings, SUNAT presents updated monthly collection data, updated forecasts for the rest of the year and an explanation of any deviations.

The Cash Committee analyses the execution of financial and non-financial expenditure and the future prospects presented by the General Directorate for Public Budget with respect to accrued expenditure: the execution of the previous month, the projections for the following month, the annual projection up to December of the current year and the forecast for the year-end. With these data, the General Directorate of Macroeconomic Policy and Fiscal Decentralisation also monitors and updates the multiannual macroeconomic framework; the DGTP does the same for the cash plan.

There are limitations to the scope of the analysis that are due, again, to the existence of the different funding sources. SUNAT's information refers to ordinary revenue. The DGTP has information on ROOCs, but for the remaining resources, the information is very aggregated because the data available to the director generals of the MEF are not complete. The recent regulatory change that converts national government directly collected revenue to Treasury resources is likely to improve programming in this area. Challenges remain in the subnational governments' directly collected revenue, and primarily determined revenue.

The DGTP's implementation of provisions and mechanisms to ensure liquidity

Once information on revenue and expenditure flows is available, the DGTP must manage the data. The cash managers' database must be under their control (not in the SIAF), be flexible, allow analysing the different scenarios and contain performance information for analytical purposes. Excel is often used for this purpose, as is the case in OECD countries. The cash flow curve is based on the forecasts.

At this point, there is a close relationship between the National Treasury System and National Debt System, closely linked to the concept of "smoothing" net cash flows, which distinguishes:

- "Rough tuning": issuing Treasury bills (or other short-term instruments) in a way designed to offset the impact on the banking sector of net cash flows in and out of government, i.e. to smooth out changes in the TSA.
- "Fine tuning": more active policies, a wider range of instruments, to smooth the Treasury balance more comprehensively. This is technically more demanding.

Temporary liquidity support mechanisms ensure that the Treasury can meet payments even if unexpected needs arise

Liquidity management guarantees the availability of the public funds collected or collected for the timely payment of the obligations contracted in accordance with the law by the authorised entities. To this end, the DGTP is empowered to use temporary financial support mechanisms using the funds in the TSA, the

Secondary Liquidity Reserve and the balances from the placement of public Treasury bills. Box 3.2 defines the liquidity reserve and its determinants in OECD countries.

Box 3.2. The liquidity reserve and its determinants in OECD countries

As there is no standard model of optimal cash balance, the Treasury must cover its liquidity needs by identifying the reserve or "liquidity cushion". This is a temporary saving in anticipation of a potential period of illiquidity. The factors that determine the cash buffer vary. For example:

- · projection of historical, estimated and observed cash flow programming data
- the volatility of daily cash flows
- the ability to forecast these cash flows (the standard deviation of the forecast errors should be much smaller than the standard deviation of the results)
- the extent to which unforeseen fluctuations can be managed and the time frame within which they can be managed, depending on the speed of issuing more Treasury bills (or other short-term instruments)
- the existence of safety nets, including emergency credit facilities or reserves of funds; end-ofday lending from commercial banks; and short-term lending from the central bank.

The composition of the stock of funds varies from country to country. For example, several northern European countries operate with central bank cash balances of less than 0.1% of annual central government spending, thanks to liquid money markets and sophisticated active cash management. It is common for countries to be able to increase reserves in times of crisis and heightened uncertainty in the pursuit of prudence, as was the case in the 2009 crisis and currently in the wake of COVID-19.

In Peru, the Primary Liquidity Reserve is held at the Bank of the Nation and amounts to a fixed amount of 250 million Peruvian soles (PEN). It is intended to cover day-to-day payments in the event of unforeseen needs. If the balance is higher, resources are accumulated in the Central Reserve Bank of Peru; if it is lower, resources are taken from the Central Reserve Bank of Peru. Before the pandemic the Primary Liquidity Reserve amounted to PEN 50 million, but due to the uncertainty of the pandemic it was increased because a higher security threshold was necessary.

The Secondary Liquidity Reserve is made up of the Treasury's freely available resources at the close of each fiscal year to cover seasonal mismatches or cash deficits, the cumulative amount of which does not exceed 1.5% of the nominal GDP of the corresponding year. The reserve is fed by the annual surpluses of ordinary revenues, as well as the resources that are legally determined. It was created to provide financing for the execution of the payment of the DGTP's obligations, in extraordinary circumstances in which less revenue is received than foreseen in the Public Sector Budget Law.

It should be noted that the Secondary Liquidity Reserve can only be used to finance the expenditures foreseen in the public sector budget, for ordinary revenue and ROOC, in the event of a possible drop in the amount of these funding sources. There was no need to use it in 2021.

There are also contingent lines that the MEF maintains with some multilateral organisations, loans or contingent credit lines to be used in certain specific circumstances, as established in the relevant contracts. At the end of 2021, for example, there was a contingent line exclusively for financial risk, others for natural disasters, and others for economic crises and disasters.

The Fiscal Stabilisation Fund functions as a closure mechanism for the system, with resources that can be used in exceptional situations

The Fiscal Stabilisation Fund is managed by the MEF and administered by a board of directors composed of the MEF, which chairs it, the president of the Central Reserve Bank of Peru and a representative appointed by the president of the Council of Ministers. The fund's resources are invested in term deposits at the Central Reserve Bank of Peru under the investment guidelines approved by the board of directors, at the proposal of the technical secretariat, which is the DGTP. This fund can be used when public revenues are expected to fall or when exceptional situations such as natural disasters threaten the economic viability of the country. When the amount in the fundexceeds 4% of GDP, the excess can be used to reduce public debt. This fund is made up of the fiscal surpluses that have arisen since 2006. Since its creation and until the third quarter of 2021, the Fiscal Stabilisation Fund had received revenues of USD 10 099.89 million, while its expenditures had totalled USD 10 096.98 million. Due to the pandemic, USD 5 471 million was spent, bringing its balance to USD 1.05 million at the end of 2020, as shown in Figure 3.1.

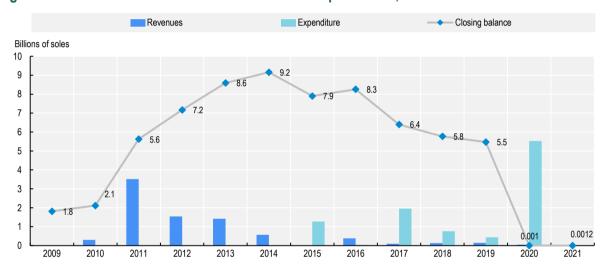


Figure 3.1. Fiscal Stabilisation Fund revenues and expenditures, 2008-21

Source: MEF (2021_[4]), Fiscal Stabilisation Fund, Third Quarter Report 2021, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/tesoro-pub/fef/informe-IIITrim2021 FEF.pdf.

StatLink https://stat.link/hikuxp

3.2.5. Recommendations

Table 3.2. Recommendations for financial planning and cash flow projections

Problem	Main finding	Recommendations	
Cash flow projections could be made more efficient by improving the quality and reliability of information received onpayments and revenues.	Information on the daily balances of the treasury single account (TSA) is not sufficient to make cash flow projections, and must be completed with information from other entities,	1. In the short term, map what information can be accessed from the TSA and what can not, and analyse its quality by identifying who is responsible for improving it (e.g. directly collected revenue of subnational governments) (General Directorate of Public Treasury, DGTP).	
	mainly the National Superintendency of Customs and Tax Administration (SUNAT) and spending agencies . To have a more comprehensive payment journal, the coverage of the	2. In the short term, design collaboration mechanisms to obtain the necessary information for treasury management. In the case of SUNAT, there is a working group for ordinary revenue, and similar formulas should also be sought for other relevant units (DGTP, SUNAT, General Directorate of Macroeconomic Policy and Fiscal Decentralisation, etc.).	

Problem	Main finding	Recommendations
	TSA should be extended. Until then, rules and mechanisms for sharing relevant information can be followed (see the following section). Rules preventing full fungibility of funds and linking payments to funding sources hinder the availability of daily forecasts of a large part of the cash receipts and payments to be made in the TSA. (Recommendations on this point are included in the following section.)	3. In the short and medium terms, move forward with the reform of online accounting and integrating the available information into the information system. An application in the SIAF-RP capable of including information on cash and debt management would help automate the effective control of daily liquidity and payments, among other issues (collaboration between the DGTP and the Directorate General of Public Accounts).
The cash flow projection methodology could be complemented by variance analysis and updated revenue	There is room to reinforce the analysis carried out by the Cash Committee, including the percentage	 In the short term, build a structured database covering cash flow programming and implementation that allows for more accurate projections (DGTP).
scenarios in order for cash forecasts to be considered reasonably reliable.	of inaccuracy in the cash flow forecasts of past periods, as well as the discussion of changes in future revenue forecasts that are managed	Once the database is set up, systematise the analysis of estimation errors and deviations, identifying the most relevant factors that require further attention; take this analysis to the Cash Committee (DGTP).
	outside the Ministry of Economy and Finance.	6. In the medium term, intensify the analysis of the medium- term cash flow in the Cash Committee, together with the monthly analysis already carried out to reduce the error rate. Devise mechanisms to be able to complete the analysis with scenarios from entities outside the Ministry of Economy and Finance (DGTP).
Revenue and expenditure planning needs to be further integrated with various entities.	As the DGTP does not have relevant information on income and expenditure, mechanisms need to be put in place to facilitate the availability and reliability of the information.	7. In the short term, improve the information provided by SUNAT regarding ordinary revenue (move forward in formalising what is already being done by SUNAT (DGTP and General Directorate of Macroeconomic Policy and Fiscal Decentralisation Working Group).
		8. In the short term, continue identifying the units with the most significant directly collected revenue and start requesting cash flow projection information to extend the inclusion of directly collected revenue in the TSA that has already begun (DGTP).
		9. In the short to medium terms, devise mechanisms for spending agencies to schedule their payments and make this information available to the DGTP, updating it on a weekly or at least monthly basis. Treasury management measures can be developed progressively to group payments and facilitate the recurrent sending of relevant information (DGTP, treasury units of the spending agencies).
		10. In the short to medium terms, establish mechanisms for reporting and making large payments on specific days and the thresholds that define them, analyse the seasonality of payments through cash curve analysis (DGTP, treasury units of the spending agencies).
The resources in the Secondary Liquidity Reserve were updated at the time of the pandemic and have been maintained since.	Assess whether resources are efficient to ensure liquidity or can be adjusted to improve the profitability of idle resources.	11. The limit set to be maintained in the Secondary Liquidity Reserve (DGTP) can be reviewed relatively frequently.

3.3. Budget execution process and treasury single account

3.3.1. The role of treasuries in OECD countries in the budget execution process

Budget execution is the process that ensures the economic and efficient implementation of budgetary decisions, optimising the use of available budgetary resources, and promoting integrity and legality in the management of public funds, financial responsibility, transparency and accountability.

An orderly implementation process prevents unauthorised expenditure and payment delays, enhances the credibility of the budget, promotes financial integrity, and helps identify opportunities for more effective budget interventions and better value for money.

In OECD countries where the implementation process meets these characteristics, there are fewer payment delays and in general more efficient payment authorisation processes. There is also a separation of functions that ensures adequate control, as well as a documentation procedure that allows the expenditure to be traced so that audits and controls can be carried out. The areas where control is most relevant are in commitment, accrual and payment, to observe, on the one hand, that there are resources in the budget for a given purpose, and on the other, that there are effective procedures for receiving and verifying goods and supplies according to orders and clear procedures for issuing payment orders to the identified beneficiary within reasonable deadlines.

Relationship between budget management and treasury management in Peru

In Peru, the budget execution process begins on 1 January and ends on 31 December of each fiscal year, during which time public revenues are collected and expenditure obligations are met in accordance with the budget appropriations authorised in the annual public sector budget laws and their amendments.

Budget execution comprises the stages of authorisation, commitment, accrual and payment. For treasury purposes, the most relevant stages are: accrual, which generates a payment order once the creditor's right has been verified based on a previously formalised and registered commitment; and payment, which is the act by which the amount of the recognised obligation is extinguished, partially or totally. No payment may be made for unearned obligations. From the Treasury's point of view, payment management involves the handling of the payment of obligations from the funds centralised in the TSA in accordance with procedures that will be discussed in the following section.

The SIAF-SP incorporates some controls in the budget execution chain, such as financial allocations. These are funds available to the entities that can be used for the payment of their previously disbursed and committed obligations. If the Treasury were in an illiquid financial situation, no commitments would be allowed above the expenditure ceiling set by the Annual Commitment Programme, and the system would not allow these operations to be recorded. The controls help to avoid the generation of arrears, at least as long as the spending agencies registers the whole chain promptly. The DGTP approves the financial allocations and their cumulative amount is the limit for the recording of accruals.

Accruals formalised and recorded on 31 December of each fiscal year can be paid until 31 January of the following year, which is considered good practice in OECD countries.

The stages of revenue implementation include estimation, determination and collection. The DGTP must analyse the actual revenue collection flows and compare them with the cash flows to inform the Cash Committee of the evolution of the financing and update the curve if necessary.

3.3.2. The treasury single account, an instrument to improve the efficiency and control of public funds

Peru's TSA was created to make all government funds available for treasury management, thus contributing to the efficient use of resources and facilitating their control. It also contributes to the implementation of the principles of cash unity and fungibility of funds, thereby reducing the cost of capturing public funds by financial operators; it rationalises financial stocks by ensuring that the state's financial inflows and outflows are efficiently managed by the Treasury; and it helps support the implementation of monetary policy.

Since its creation in 2008, the coverage of the treasury single account has progressively increased

The TSA was created in 2008.³ The strategy for implementing it was developed on the basis of:

- progressivity in terms of entities and funding sources
- the use of already consolidated elements or means, with which the entities were familiar and with which the change did not represent a major impact for them to assimilate
- an adequate level of response to their queries, as well as requests for attention from representatives of user entities, both on operational, registration and regulatory issues.

It began by incorporating in one account funds from determined revenue (*recursos determinados*), with respect to resources related to royalties and surcharges, customs revenues, and spending agencies' and municipalities' shares. Subsequently, funds from other sources of financing have been centralised in this account, including, for example, resources from indebtedness with multilateral organisations. The latest incorporation is that of the directly collected revenue of the legislative, executive and judicial branches, which will be registered as ordinary revenue, by virtue of a regulation approved in 2022. Currently, approximately 100% of the above-mentioned resource categories are in the TSA (Table 3.3).

Table 3.3. Public funds in the treasury single account

MIP as of 31 May 2022, in PEN (Peruvian soles)

Source of funding/level of government	Millions of Soles	In percentage %
Regular revenue	120 744	55.13%
- National government	85 528	
- Regional governments	30 703	
- Local governments	4 513	
Directly collected revenue	14 786	6.75%
- National government	10 546	
- Regional governments	582	
- Local governments	3 659	
Resources from official credit operations	38 557	17.60%
- National government	31 792	
- Regional governments	2 662	
- Local governments	4 103	
Donations and transfers	3 584	1.64%
- National government	1 487	
- Regional governments	1 027	
- Local governments	1 070	
Determined revenue	41 349	18.88%

Source of funding/level of government	Millions of Soles	In percentage %
- Taxes, surcharge, royalties, customs duties and participations	24 032	
- Contributions to funds	4 931	
- Municipal Compensation Fund	8 637	
- Municipal taxes	3 749	
Total	219 020	100.00%

Source: Information provided by the DGTP, MEF.

The TSA comprises all the financial resources of the public Treasury, including those received by the entities of the non-financial public sector, through the spending agencies of national and regional government entities and of the provincial and district municipalities. In addition to the funding sources described in Table 3.3, the TSA includes loan disbursements for projects and borrowing via bonds. It also includes some extra-budgetary funds, for example, the Armed Forces Extra-budgetary Fund, which is funded by royalties (determined revenue).

Outside the TSA are:

- Trusts: these are very ad hoc. Some are authorised by the DGTP, as part of debt operations with
 multilaterals or for financial support programmes or through guarantees to companies, generally
 under the responsibility of the Development Finance Corporation (COFIDE) in its capacity as a
 second-tier state financial institution. Others are set up, without authorisation, by some
 municipalities, using their own revenue.
- Donations.
- Certain resources directly collected from subnational governments and other municipality taxes, including their carry-forward budgets.
- EsSALUD funds administered by the Social Health Insurance Institute, resources of the social health insurance (the resources of the National Pension System and other pension funds, under the responsibility of the National Office of Pension Standardisation, if the National Office of Pension Standardisation has provided for them in its budget [funding source determined revenue]).
- Internal credits (for municipalities), not yet incorporated into the TSA.

In addition, there are entities at all levels of government that continue to have their own bank accounts outside the TSA. SUNAT, for example, maintains a separate bank account from the tax collection assigned to it as own resources. These funds generate carry-forward budgets, which can be earmarked for a specific purpose at the request of the MEF.⁴ From 2023, all these SUNAT resources will be registered as ordinary resources, including their carry-forward budget.

The cash collected by SUNAT in the banks as ordinary revenue, once reconciled, is transferred to the Bank of the Nation to be credited to the TSA within 24 hours. The amount collected by cheque has to go through the clearing house for certification and is then credited as indicated. SUNAT receives a 1.5% commission, from which it in turn pays the banks with which it has an agreement.

These assets outside the TSA represent 11% of the total in the case of entities that are part of the budget and 42% if all financial assets of the non-financial public sector are considered.⁵

Peru has a unique system, as there is a Bank of the Nation and a central bank, both of which affect the TSA's operating system

The TSA consists of a DGTP bank account at the Bank of the Nation, with collecting and paying bank sub-accounts at the same bank. Each spending agencies (approximately 3 000) has a paying sub-account at the Bank of the Nation. The sub-accounts do not maintain balances, and therefore cannot have savings,

as the amounts received through the collecting accounts are transferred at the end of each day to the TSA. The amounts of payments ordered by each government body and entity are recorded in their respective payable accounts and at the end of each day, the total paid is affected to the single account in the Bank of the Nation.

At the end of each day the balance of the TSA is transferred from the Bank of the Nation to the Central Reserve Bank of Peru. A minimum liquidity reserve is held at the Bank of the Nation each day, as indicated in the previous section.

Surpluses in the Central Reserve Bank of Peru do receive remuneration, in accordance with the guidelines set out in the remuneration policy approved by an agreement between the MEF and the Central Reserve Bank of Peru; the interest rate is not a market rate. The Directorate of Financial Planning and Strategy establishes a schedule with the projection of surpluses available for deposits in terms of term and amount; likewise, demand accounts are left with a balance to ensure liquidity.

The existence of sources of funding is also a constraint for optimising the return on treasury. Only ordinary revenue and resources derived from borrowing can be invested by placing securities. Very rigid rules limit the operational capacity of the Treasury.

3.3.3. Payment process

Payment authorisation and execution are the responsibility of the directors general/managers and the spending agencies to which they report

The director general of administration or finance manager, or those acting in their stead, authorises the recognition of the accrual. The corresponding spending agencies makes the payment obligation, charged to public funds centralised in the TSA.

There are rules on the authorisation and means of payments

Peru has some regulated payment criteria and treasury management practices, such as the delay to provide authorisation (seven days from receipt of an asset), to register the accrual (three days), to draw (five days) and to pay (the next day). There are also rules governing petty cash.

While the average supplier payment period is not defined, in practice there is a mechanism for the lapse for events that have not registered a draft within 30 days. There are also rules regarding liability for late payment.

The recognised means of payment are:

- 1. electronic transfers on a mandatory basis, such as payroll and pensions and other related obligations and to suppliers and creditors of the state
- 2. cash payments, per the modalities under the regulations of the National Treasury System (petty cash and advances).

Electronic payment to suppliers is mandatory for the national and regional governments, and is being extended extensively to local governments. Cash payment is allowed when technical capacities make it difficult to make electronic or account payments. Cheque payments are being replaced by electronic means, as they can generate operational risk⁶ and are susceptible to manipulation. Some spending agencies sign cheques. A modern treasury management system should not allow this type of payment, except for duly justified exceptions. In addition, cheques can be cashed or debited, which may require a higher buffer. Advanced OECD countries do not use cash payments, except for some in petty cash equivalents. For example, Box 3.3 shows the payment process in Spain.

Box 3.3. Payment process in Spain

In Spain, to ensure electronic payment, payees must have their bank details included in the so-called "central third-party file" (*fichero central de terceros*).

The process starts with a payment proposal from a management centre, which arrives via the SIAF equivalent (SIC3). The Treasury checks that the account exists in the central third-party file and verifies that there is no seizure order by Social Security or the tax collection body. Once verified, the payment is ordered as per the payment order criteria (which, for example, define the deadlines), and provided that there are available funds under the current monetary budget (including the appropriate timing of payments, the estimation of borrowing needs to ensure that there is always a balance available). The payment is executed from the treasury single account of the Bank of Spain and may pass through an operational account until it reaches the final recipient.

Source: Directorate-General for the Treasury, Ministry of Economy and Business, Spain.

Depending on the type of beneficiary, payments can be made to accounts in private banks or to the Bank of the Nation. For example, most public sector employees in Peru (teachers, police, doctors, paramedics) and pensioners have an account with the Bank of the Nation, which is not a common practice in OECD countries. These cases also reveal weaknesses in the system, for example for deceased persons, particularly those without a national identity card. These are isolated cases, but the Treasury makes efforts to mitigate these practices, such as controls in conjunction with the Bank of the Nation or the monitoring of accounts which have not had any movements for at least six months.

Various expenditures are made using petty cash, mainly in institutions or by means that do not allow transfers or cash payment (e.g. hotel reservations in the case of official travel are increasingly common). To reduce the use of this type of payment, OECD countries, and increasingly Latin American countries, are resorting to the use of credit cards. Argentina was one of the first countries to use corporate credit cards in the region (Box 3.4).

Box 3.4. Use of the corporate purchasing card in Argentina

The use of credit cards in the public sector arose from the interest in increasing transparency and efficiency in the use of public funds, reinforcing expenditure control measures within the revolving funds regime, and making it possible to replace the use of cash and cheques in favour of electronic means of payment. In Argentina, agencies may set up revolving funds, internal revolving funds and petty cash exclusively to meet urgent and duly justified expenses that do not allow for the routine processing of a payment order.

The use of corporate purchase cards involves channelling funds from the current account associated with the main revolving fund of each agency to a main virtual card account at the Banco de la Nación Argentina, from which funds are distributed to each of the cards associated with the main revolving fund, internal revolving funds and petty cash, as well as to the cards of each of the officials authorised to carry out official missions.

The corporate purchasing card, as the preferred means of payment for the payment of expenses channelled through this scheme, also includes payment of expenses made during duly authorised official missions within the country and abroad. This enables officials to pay their expenses with a highly secure payment means that is accepted locally and internationally, thus avoiding the transfer of sums in cash.

Using the corporate purchasing card decreased the prevalence of cheques and cash payments, bringing security and control to government units' payment system.

Source: FOTEGAL.

The execution of spending agencies' payment operations is carried out through sub-accounts in the Bank of the Nation authorised by the DGTP

For the execution of payment operations, the spending agencies have so-called bank sub-accounts in the Bank of the Nation authorised by the DGTP, which are dependent on the TSA. Although the TSA's constituent accounts are held at the Bank of the Nation, the MEF's procedures allow for payments from public funds (whether from the payroll of active and retired staff or suppliers) to be made both to personal or corporate accounts as well as to other institutions of the national financial system.

The bank sub-accounts depend on the TSA. They do not receive credits or deposits. They only record debits for the payment of cheques, order letters and electronic transfers authorised by the DGTP through the SIAF and maintain a zero balance at the close of each day.

Although they maintain a zero balance at the end of the day, the use of such sub-accounts generates transactions that do not add value to the system, and which engender risks and inefficiencies. Modern treasury systems lack such sub-accounts.

The System of Register Accounts records and tracks the TSA's movements and balances

The System of Registration Accounts records and monitors the movements and balances of the funds held in the TSA. It includes detailed information by concept and/or entity holding the funds. In Peru, there is a tendency for the spending agencies to consider themselves the "owners" of their revenue. This system tries to find the link between this "ownership" that each unit or municipality exercises with respect to the revenue they generate or which, by law, "corresponds to them", and the fungibility of the funds in the TSA. The System of Register Accounts is a system of scriptural accounts in the SIAF-SP, which is the only means of recording information on the financial execution of revenues and expenditures from public funds, guaranteeing a link between the funding source and the type of expenditure.

As discussed previously, the existence of funding sources undermines the effectiveness of the public financial management system and distances it from the public financial management systems of OECD countries. In particular, in the case of Peru, it undermines compliance with the principle of fungibility.

Treasury single account management indicators are mainly for internal use

OECD countries such as France, along with Chile and Mexico in the region, have developed and publish management indicators. These indicators generally seek to assess that available balances are as low as possible and that the daily surplus has been invested in financial instruments. Payment-related indicators include the percentage of payments made electronically, the volume of transactions to subnational governments above a certain amount reported in advance, dates on which amounts paid by cheque are cashed, or interest earned on deposits with primary repo loans.

The indicators are adjusted to the country's needs; for example, if electronic payments are encouraged, special monitoring of their evolution should be carried out. If there are arrears, calculating the average supplier payment period is relevant. Spain reports these monthly to combat the problems of late payments that resulted from the 2009 crisis.

Peru has indicators for internal use. Peru is encouraged to publish this type of information, as it increases transparency and promotes the achievement of better results.

3.3.4. Recommendations

Table 3.4. Recommendations for the budget execution process and treasury single account

Problem	Main finding	Recommendations
The fungibility principle is not applied in practice because of the association or link between the funding source and the type of expenditure, which conditions the payment process.	The association between the funding sources and the expenditure allocation means that there is no full operational capacity for managing the treasury single account's (TSA) resources.	A structural reform decoupling the funding source from the types of expenditure would benefit the Treasury side and the budgetary side. The appropriation should only be allowed in specific cases, such as loans or donations (Ministry of Economy and Finance, Vice-Ministry of Finance).
A considerable amount of revenue is outside the Treasury, and therefore outside the TSA, in separate spending agencies 'accounts.	Revenue in non-Treasury accounts are idle resources that create inefficiencies in calculating liquidity needs. Some units do not integrate the revenue	In the short term, continue progressively incorporating the public revenue that remains outside the TSA (General Directorate of Public Treasury, DGTP).
	because it seems that the constitutionally recognised ownership would be lost in some cases, but both cases are compatible. Integrating funds into the TSA does not jeopardise the ownership and disposal of these funds. A study could be carried out on the possibility of establishing a mechanism for the cash return from the TSA by all the owners of funds.	3. In the short and medium terms, seek mechanisms so that integration into the TSA does not imply the transfer of "ownership" of the spending agencies (DGTP, spending agencies).
The payment process could be modernised.	The existence of sub-accounts makes the process rigid and the system cannot provide fully reliable information.	4. In the short term, replace the sub-accounts with a system of virtual accounts in the SIAF-RP, and have all revenue paid directly from the TSA to the beneficiaries without the need to go through the sub-accounts (DGTP). For example, SUNAT is already working in this direction, and what it has done can be replicated in other entities.
		5. In the short term, continue the process of introducing electronic payments so that it becomes the only possible means of payment (DGTP).
	Means of payment are not fully electronic, which creates operational risks.	6. In the short term, automate the payment processes that allow electronic payments and initiate the use of credit cards in the public sector, starting with the national government (DGTP).
		7. In the medium term, formally establish TSA management indicator bulletins for the Cash Committee, Ministry of Economy and Finance, and the general public (DGTP).

3.4. Comprehensive asset and liability management

Comprehensive asset and liability management is the integrated management of the non-financial public sector's financial assets and liabilities in accordance with financial planning guidelines. It aims to manage them efficiently, seeking to maximise the return on assets and minimise the cost of liabilities while assuming prudent risk. Comprehensive asset and liability management is achieved only through the full integration of the treasury and debt areas.

3.4.1. Integrated asset and liability management has begun in Peru, although there is room for improvement

Comprehensive financial asset and liability management was introduced in Peru following the merger of the Directorates General of Treasury and Indebtedness. It was formalised in 2013 with the Global Asset and Liability Management Strategy 2013-2016, then in 2014 with the creation of the Assets and Liabilities Committee. The predecessor to the first strategy, the Annual Debt and Debt Management Programme,

was prepared by the Ministry of Economy and Finance from 2005 to 2012 and focused on public debt and debt management.

The DGTP annually formulates the Strategy for the Integrated Management of Financial Assets and Liabilities of the Non-Financial Public Sector, which is approved by ministerial resolution of the MEF and published to create awareness. The strategy observes the country's financial policy guidelines. For example, it determines the debt financing structure and debt sustainability, among others.

The strategy covers four years and guides the management of the non-financial public service's financial assets and liabilities. Its objective is to strengthen public finances under a medium- and long-term vision, following principles, objectives and goals more relevant to the financial strategy of debt, savings and treasury. The Comprehensive Asset and Liability Management Strategy contains seven guidelines (Box 3.5) that have been renewed since 2019, which are intended to guide non-financial public service entities in managing their financial assets and liabilities. The Fiscal Affairs Committee, which replaced the Assets and Liabilities Committee (Box 3.5), defines the guidelines.

Box 3.5. The Peruvian Committee on Fiscal Affairs

The Ministerial Resolution of the Ministry of Economy and Finance of 29 December 2021 approved the regulations for the development of the Fiscal Affairs Committee, which was already provided for in DL 1436 Framework Legislative Decree of the Public Sector Financial Administration. The Fiscal Affairs Committee replaced the Assets and Liabilities Committee and establishes guidelines and strategies on fiscal risk management and the management of financial assets and liabilities. It is chaired by the Minister of Economy and Finance and composed of the Deputy Ministers of Economy and Finance. The technical secretariat is provided by the director general of the public Treasury. The committee's functions include:

- leading the management of tax risks and the comprehensive management of financial assets and liabilities
- approving the guidelines, strategies and other instruments submitted for its consideration, necessary to optimise fiscal risk management and the comprehensive management of financial assets and liabilities
- approving target exposure levels for fiscal risks
- approving the reference structure of the Treasury's financial assets and liabilities.

It is foreseen to meet twice a year, and when necessary on an extraordinary basis. The preparatory work is all attributed to the General Directorate of Public Treasury.

The management of assets and liabilities is directly related to certain risks

According to the Comprehensive Asset and Liability Management Strategy, the analysis of the risks of the financial assets and liabilities that make up the non-financial public sector's balance sheet is based on the three main groups of risks that define them: market, credit and liquidity risks (Box 3.6).

Box 3.6. Main risks identified in the Comprehensive Asset and Liability Management Strategy 2022-2025

Asset risks

- Market risk: Financial assets are mainly concentrated in the very short term, reflecting the
 Treasury's conservative management and the need for immediate liquidity in the face of
 financing requirements. Likewise, the public Treasury has been managing its assets, prioritising
 capital preservation; in this sense, its return alternatives are reduced to term deposits in the
 Central Reserve Bank of Peru and the financial sector (through auctions of its temporary liquidity
 surpluses).
- <u>Credit risk</u>: The principal counterparty of Peru's financial instruments is the Central Reserve Bank of Peru, which accounts for 53.2% of the non-financial public service's total assets due to the centralisation of resources in the treasury single account and the balances of the Fiscal Stabilisation Fund. Investments by counterparty of public funds are mainly held by the government (68% end-2020), most of which are deposited in the Central Reserve Bank of Peru, showing limited asset diversification.

Liabilities risks

In particular, there has been an increase in fundraising in the domestic market, in Peruvian soles as opposed to other currencies. In this context, identified risks include:

- Market risk: One of the objectives of the non-financial public service's gross public debt
 management is to mitigate payment pressures in the medium term through debt management
 operations. The debt service profile (principal and interest) is 18% and the average maturity has
 been extended to 13.2 years. As a result, the weighted average rate of return is at rock bottom.
- <u>Credit risk</u>: Episodes of volatility have led to an increase in Peru's risk; between March and July 2021, there were rapid and widespread increases in sovereign risk. This increase is estimated to be a response to recent conjunctural events.
- <u>Liquidity risk</u>: Trading volume has increased steadily since 2015. The hedging ratio averaged around 2.6 times in the period 2015-19 due to increased demand for financial instruments issued by the state and the growing development of the local debt market. However, from 2019 onwards, the coverage ratio for medium- and long-term benchmarks increased between five and sevenfold in response to changes in the auction schedule and investor demand at Treasury auctions.
- Other risks: The composition of sovereign bond investor holdings has been reformed several
 times since the beginning of 2021, when non-resident investors started to reduce their share
 from a high of 51.7% in January 2021 to a low of 44.5% in May 2021. It has subsequently
 stabilised at around 50.0%; the reduction in the share of this type of investor is related to the
 trend of global fixed income asset sales.

Analysis of the net position

• Exchange rate: The structure of the non-financial public service's net public debt by currency has the local currency (19.5% as of September 2020) and the US dollar (69.2% as of September 2020) as its main components. The level of the dollar is due to the large amount of liabilities denominated in this currency and the reduction in assets.

• <u>Liquidity gap</u>: There is a positive gap the first year and a negative gap the remaining years. The cumulative gap is positive for three years and negative for the next seven years of the period under study.

Source: MEF (2021_[5]), Comprehensive Asset and Liability Management Strategy 2022-2025, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/tesoro_pub/gestion_act_pas/EGIAP_2022_2025.pdf.

The risk analysis is complemented by a scenario analysis and various indicators of the public debt position.

The Comprehensive Asset and Liability Management Strategy highlights the most relevant developments and measures to combat the identified risks. For example, strengthening treasury management, with alternatives to make resources profitable, will positively affect liquidity and market risk. In addition, the streamlined handling of cash operations will result in lower resource requirements.

The DGTP has identified the most relevant asset and liability management reforms, and their publication reflects its commitment to them.

An assessment of the implementation of the Comprehensive Asset and Liability Management Strategy is published annually around May in the Annual Debt Report. This report also includes information on risks. By publishing both documents, the Comprehensive Asset and Liability Management Strategy in November and the Annual Debt Report in May, the most relevant risks and indicators are made public at least semiannually.

3.4.2. The link between cash planning, debt management and fiscal policy

Financial institutions may face short- and long-term lending risks when their planning and management are not well integrated. Governments must avoid taking on long-term debt to meet short-term needs.

Cash planning is essential to identify short-term needs that can be covered by short-term credits. Ideally, only structural deficits should be covered by long-term financing instruments. Only adequately prepared planning will be able to identify these needs.

Moreover, the government's decision on its financial assets and liabilities will have a profound impact on monetary policy and capital market development, including indirectly through the availability of resources for credit expansion by the Bank of the Nation or the central bank, as the case may be.

The integration of cash and debt has been positive but is insufficient

Integrating the treasury and debt areas into a single organisation does not per se resolve the difficulties of aligning cash and debt management objectives. There are still examples of unconsolidated integrated management of assets and liabilities. There are placements above the real needs for resources as a result of the pre-financing some spending agencies have been carrying out to provision and ensure the payment of the public debt service for the following fiscal year (considering obtaining resources at a lower financial cost given the market reading), which is perceived as keeping resources temporarily idle. Public institutions also place funds in the financial system at the same time as the DGTP.

Co-ordination needs to be strengthened so that the functions of the Cash and Fiscal Affairs Committees complement and support each other, and so that information flows and dependencies between the decisions of the two committees can be established. For example, the Cash Committee conducts short-term and liquidity analysis, but this analysis must also be put in the context of issuance and borrowing needs, thus aligning cash and borrowing with budget execution, fiscal policy and economic conditions. Uncertainty about interest and exchange rates, and current commodity price volatility, make it particularly important to understand this relationship, identify risks and design alternative courses of action that directly

affect Treasury borrowing policy. This could be entrusted to a Fiscal Policy Committee or the role of the Fiscal Affairs Committee could be expanded to include directors general as members.

The Rules of Procedure of the Fiscal Affairs Committee were adopted in December 2021 and are of a very high standard. The aim is to find an instrument to present data on planned execution and the proposed adoption of measures to comply with fiscal rules. It should focus on analysing monthly cash and budget projections until the end of the year and updating them every month, with the support of DGTP, the General Directorate of Macroeconomic Policy and Fiscal Decentralisation and with inputs from the spending agencies and SUNAT. This analysis is complementary to that carried out by the Fiscal Affairs Committee.

3.4.3. Public indebtedness and debt sustainability

Economic crises hit quite frequently, bringing in their wake rapid increases in public debt in excess of macroeconomic projections. This is the case in OECD countries as a repercussion of the COVID-19 crisis, and Peru has not been immune to it.

A country's level of indebtedness, as well as its debt management, have medium- and long-term consequences for its economy. Hence, indebtedness should not be alien to the concept of fiscal sustainability and should play an active and integrated role in fiscal policy.

There is nothing intrinsically harmful about borrowing. Incurring public debt can be a necessary component of fiscal policy to support growth and development. Countries can resort to domestic savings or international borrowing, depending on the conjuncture. External borrowing may be necessary not only to secure financing but also to obtain the necessary expertise and investment.

The critical issues in a country's debt policy are to analyse:

- the effectiveness with which the borrowed funds are applied
- the costs, including the terms of borrowing versus other options, if any, such as using reserves
- the sustainability of debt service costs, which means understanding what is a manageable interest burden for the state.

Fiscal sustainability is defined as a situation in which the government is capable of servicing public debt in the short, medium and long terms without the need for economically or politically unlikely policy adjustments, without defaulting on its payment obligations or incurring renegotiations, and given the financing conditions and costs it faces. Excessive debt or debt overhang is not conducive to growth and development. And an increasing share of revenues devoted to debt service payments weakens a government's ability to implement its desired policies.

In short, debt strategy and management is a very important area for countries, and should be fully integrated with public financial management, particularly macroeconomic planning, budget planning and execution, and treasury. However, like all other areas of public financial management, debt can only be well managed when there is full accountability and transparency. At a more technical level, an active strategy between cash management and debt management is essential.

The integrated debt management system registers and manages all public debt

In Peru, a debt analysis is carried out and published in the Annual Debt Report. The Integrated Debt Management System (Sistema Integrado de Administración de Deuda) is a tool that includes the public debt. It is not part of the SIAF-SP but execution of the payment of debt is reported in this system.

This system covers operations with internal and external debt securities and loans from international financial institutions and other entities. The "Simulation" module was designed to calculate and analyse, from the gross debt payable database, at a given cut-off date, different indicators associated with public indebtedness, as well as to determine debt flows in different scenarios, considering macroeconomic and

financial variables as inputs. The module also assesses debt sustainability in financing or payment strategy scenarios and stress situations.

To move towards comprehensive management of financial assets and liabilities, it is necessary to assess the possibility of creating a new simulation module for structural balance sheet risk, considering all the information on the Treasury's financial assets and liabilities and, in due course, of the entire central government, where the necessary changes to implement such a process are outlined.

In addition, the Integrated Debt Management System supports debt management, although the operational processes are still paper-based and a lot of data are entered manually, making the system insecure. Debt management is carried out by the Debt Management Unit, and for a loan repayment for example, about five signatures are necessary to proceed with the repayment. This system will be absorbed in the reform of the new SIAF-RP.

Public debt is mainly made up of bonds

Public debt management is the process of establishing and executing a public debt management strategy to obtain the necessary amount of financing at the lowest possible cost over the medium to long term consistent with a prudent degree of risk and often to achieve secondary objectives such as the development of domestic debt markets.

Once the global strategy has been agreed upon, it is necessary to study the different possible instruments and materialise the debt policy with one of the instruments. According to the latest Debt Report, at the end of 2021, external debt prevailed over domestic debt. In 2020, there was a notable increase compared to 2019, especially in direct external government debt (Figure 3.2).

External debt Internal debt **Bonds** Multilaterals Paris Club Other Billions of soles Paris Club, 2% Other, 2% 350 Multilaterals. 300 11% 250 133 200 128 150 127 100 182 Bonds, 85% 118 50 75 0 2019 2020 2021

Figure 3.2. Type of public debt 2021 and balance owed by source of finance

Source: MEF (2021_[6]), *Annual Debt Report 2021*, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/deuda_publ/documentos/Informe_Deuda_Publica_2021.pdf.

StatLink https://stat.link/nljb94

The cost of servicing public debt has an impact on public policies, i.e. crowding out other expenditures. Moreover, the structure of the debt portfolio can aggravate or contribute to crises. For example, a large stock of short-term debt increases the risk of a liquidity crisis (inability to roll over debt), and a large stock of foreign currency debt prevents the use of currency devaluation to adjust to shocks.

Developing the domestic capital market is also desirable, as it enhances a country's financial stability. However, throughout 2021, local borrowing decisions remained cautious, mainly due to the approval of the fifth partial withdrawal of pension funds and the unfolding presidential elections, which usually adds volatility to markets.

The size of the local government bond market declined from 17.2% of GDP in 2020 to 14.7% at the end of 2021.

There is also a two-way relationship between debt management and the macroeconomic environment. Good debt management enables the effective implementation of macroeconomic policies. Inappropriate macroeconomic policies generate uncertainty in financial markets (higher risk premia, higher exposure to rollover and currency risk). Thus, there is a strong need for a high degree of co-ordination between debt managers and macroeconomic policy makers, i.e. between the DGTP and the General Directorate of Macroeconomic Policy and Fiscal Decentralisation.

The Annual Debt Report also includes an analysis of the structural balance sheet risk, composed of liquidity, interest rate, exchange rate and concentration risk. It also has an assessment of the Comprehensive Asset and Liability Management Strategy, pointing out the most relevant actions in the seven guidelines.

3.4.4. Recommendations

Table 3.5. Recommendations for comprehensive asset and liability management

Problem	Main finding	Recommendations
Asset and liability management is not yet fully integrated and could be more cost-effective.	Evidence that integration is not full includes placements in excess of needs and traditionally passive management through investment in the Central Reserve Bank of Peru at below-market rates.	In the short and medium terms, make public funds profitable and reduce the cost of revenue in the short term by carrying out more specific simulation analyses (General Directorate of Public Treasury, DGTP).
		2. In the short and medium terms, optimise the portfolio of assets and liabilities by emphasising the analysis of the risk-return ratio of the alternatives (DGTP).
The link with fiscal policy is not yet fully established and there is no formal body where this relationship is discussed.	is no management and fiscal policy needs to be	3. In the short term, complete the role of the Fiscal Affairs Committee to review fiscal policy on a regular basis and its impact on asset and liability management (Ministry of Economy and Finance).
		4. In the medium term, as more information on fiscal risks becomes available, analyse the impact on the DGTP and mitigate its effect (DGTP).
Public debt can explore new options and strengthen the market to reduce risks.	and a risk-reducing maturity profile achieved. the local market a reduces risks (DG 6. In the short ten and long-term fixe rate risks (DGTP) 7. In the medium	5. In the medium term, implement formulas to strengthen the local market and achieve a maturity profile that reduces risks (DGTP).
		6. In the short term, enhance the issuance of medium- and long-term fixed rate bonds to mitigate current interest rate risks (DGTP).
		7. In the medium term, move towards new instruments, such as green bonds, as the market allows (DGTP).

3.5. Supporting factors

Such modernisation as highlighted above requires a number of supporting factors to improve the integration of systems and the flow of information, which are themselves undergoing reform. These are the SIAF and online accounting, both of which are also closely related.

3.5.1. The reform of the SIAF can contribute to improving the information available to the DGTP

Integrated systems play a crucial role in recording information, and can also bring benefits to financial control. However, it must be stressed that the system is a support factor, a tool for the general directorates of the MEF, which must carry out the modernisation process.

During the 1980s, there was a significant development of integrated financial management systems in Latin America. In the case of Peru, the system began to be used by the government and was extended to the spending agencies as the technical and material infrastructures (purchase of equipment, training) were developed. The development of the SIAF has been in continuous movement. In 1999, it became an official system for recording the spending agencies' expenditure and revenue operations, replacing various records and reports that until then were scattered and came from the General Directorate for Public Budget, the DGTP and the National Public Accountant's Office.

However, there are still databases in the entities that are not connected to the SIAF, so that the loading of data generates a risk of creating inconsistencies since the institutions' information is not validated on line against the central databases. In addition, the security system is weak because at the central level it is not possible to identify which users carry out transactions in the entities. The architecture can have high costs because the institutions must have the technical staff to maintain the applications and operate the systems, and have tools and servers with sufficient capacity.

Specifically in the Treasury, the SIAF does not allow information on debt and cash holdings to be obtained in real time, but with a time lag, and there is no guarantee that the information is accurate.

The MEF has recently signed a loan with the Inter-American Development Bank to develop a new SIAF.

3.5.2. E-accounting and accounting regulatory reform will contribute to improved forecasting

Timely and reliable financial information is essential for sound financial management, and accounting is a fundamental tool for this purpose. Accounting, through the timely records that different public entities keep, provides the necessary information to produce the best projections for cash flow management and fiscal risk management based on the timely records made in a decentralised way by different public entities that interact in the process.

Peru's accounting system is based on the budgetary approach to recording transactions (modified cash basis), and the desire to adopt IPSAS has been expressed numerous times. Implementing IPSAS requires a detailed adaptation of IPSAS, where the basis of accounting is budget execution. Given that the government is committed to developing a new SIAF, it is essential that all IPSAS requirements be taken into account in the definition of its conceptual and technological model and that the functional, technological and executing areas of the MEF participate jointly in its development.

No operational manuals have been prepared setting out the information flows necessary for recording all accounting transactions in accordance with IPSAS. Operational manuals could identify the transactions to be recorded in accordance with IPSAS, the offices to which they should be recorded, as well as the time of recording of each transaction and its measurement in both accrual and budgetary accounting, which in many cases can be very different.

Regarding the recording of treasury and debt operations, the DGTP is interested in having timely and relevant information for treasury management. The implementation of accrual accounting following international standards (IPSAS) will allow meeting these information needs for the efficient management of public funds.

The DGTP is working on a process for cleaning up the application of IPSAS, which allows for a self-assessment to identify accounting problems in the different areas and to share them with the DGCP. The aim is to clean up the information in order to train staff in IPSAS, then to proceed with implementation. For the time being, debt operations more than 20 years old and old accounts receivable are still recorded in the financial statements. It appears that assets are being overstated. There are also differences in the cash account, with balances that do not cross-check with the applications, mainly in the case of regular revenue float, which creates uncertainty. The balances drawn pending payment cannot be distinguished from the floating balances because the application does not allow this. In addition, the lack of online accounting does not allow the Bank of the Nation and the Central Reserve Bank of Peru to see the actual cash position.

Implementation of IPSAS is not yet underway. Full adoption can be challenging; ideally, countries should adopt the standards gradually according to their priorities, current situation and possibilities. For example, in the DGTP, no provisions are recorded, except for outstanding receivables, and the provision for national government guarantees is calculated but not recorded.

At the central government level, ministries are considered as accounting entities. This is not in line with the most widespread accounting practices. Furthermore, it leads to financial statements that are not very meaningful and far from giving a true and fair view of the units to which they refer. For example, the financial statements of the Debt spending agency contain on the liabilities side of its balance sheet all the debt issued by the state, which constitutes a liability of the central government as a whole and not of that spending agencies. Another example is the Treasury, which appears as an asset in the Treasury's financial statements, and constitutes an asset of the central government.

The spending agencies does not qualify as an institutional unit of government. An institutional unit must have the power to hold assets, incur liabilities and transact business in its own right. Therefore, in general, all entities funded by appropriations under a budget controlled by the legislature must be merged into a single institutional entity.

3.5.3. Recommendations

Although the reforms in these areas are more closely linked to other areas of the MEF, the DGTP will contribute to their success.

Table 3.6. Recommendations for supporting factors

Problem	Main finding	Recommendations
The SIAF-RP could benefit from more streamlined processes to allow the traceability of expenditure.	Identifying the traceability of operations is key to automating processes.	In the short term, identify failures and risks in payment processes in order to be able to track expenditure effectively.
		In the medium term, integrate the Integrated Debt Management System into the SIAF-RP to make it more efficient and include a scenario simulation module.
Current accounting records do not meet the information needs for the efficient and modern management of public funds.	tion needs for the efficient and modern information would have a positive impact on all	
	Treasury.	4. In the medium term, modernise the records of financial transactions in line with IPSAS (in co ordination with the Directorate General for Public Accounting).

3.6. Fiscal risks

3.6.1. Introduction: Tax risk analysis today

Fiscal risk management is a key part of public financial management in OECD countries. For example, all EU member states must present a risk analysis in their annual Stability Programme submitted to the European Commission. Other countries such as Australia, Canada, Colombia and the United States have also made significant developments in this area. Promoting risk management requires investment in training and the development of new reports and specialised areas within the ministries of economy and finance and other units that have the necessary information and may be more exposed to the different sources of risk.

In recent years, the MEF has also shown interest in developing this area. Institutionally, the DGTP has a Fiscal Risk Directorate, created in 2011 to analyse operational, contingent and financial risks. Following the change in the organisational structure of the MEF in 2018, resulting from the development of the rules on the modernisation of the financial management system, part of the directorate's functions were transferred to the Directorate of Institutional Integrity and Operational Risks, and part to the Directorate of Financial Planning and Strategy. Currently, the directorate is responsible for fiscal risk management and the analysis of contingent risks associated with public-private partnerships; to implement these functions, it is progressively working on developing guidelines and methodologies for managing fiscal risks established by DL 1441.

Peru has identified fiscal risks that should be assessed and mitigated, and there is a commitment on the part of the authorities to make them transparent. At the moment, though, there is still limited information and insufficient capacity to do so. In principle this role would be assumed by the line management of the DGTP; however, this is not considered to be a role to be assumed by the DGTP. This should be reconsidered. In OECD countries, often there is not one directorate in charge of studying all risks in depth, due to their high number and diversity, but rather risks calculated by several entities are co-ordinated, with some of the being calculated. In some OECD countries, this function is attributed to the Directorate General of Macroeconomic Analysis; in others, it is decentralised. Others have created a specific Risk Coordination and Management Unit.

In Peru, the MMM includes information on structural revenue and expenditure risks, which are calculated by the General Directorate of Macroeconomic Policy and Fiscal Decentralisation, part of the Vice-Ministry of Economy. Internal reports (annual and periodic) on fiscal risk management are prepared by the DGTP's Fiscal Risk Directorate. Likewise, information on explicit contingent liabilities has been reported in the multiannual macroeconomic framework.

Fiscal risks within the framework of DL 1441

The approval of DL 1441 of 2018 seeks to achieve a comprehensive view of fiscal risks. The DGTP's functions explicitly include proposing guidelines, methodologies, models and complementary regulations for the identification, measurement, mitigation and monitoring of fiscal risks, as well as preparing the annual report on fiscal risks and the periodic and follow-up reports.

According to DL 1441, fiscal risk management should comprise the identification, measurement or valuation, mitigation, and monitoring of risks, defined in Box 3.7. Such tasks are attributed to the DGTP.

Box 3.7. Activities covered by fiscal risk management in Peru

- 1. Identification: This consists of determining the nature of the risk and its characteristics, including internal and external events, activities, or systems that may have an impact on fiscal policy objectives.
- 2. Measurement or valuation of the fiscal risk: This involves estimating the levels of exposure to the identified risk. This is done by indicating the level of probability and impact.
- 3. Mitigation: This involves formulating and selecting actions to address the risk, planning and implementing the risk treatment, and evaluating its effectiveness.
- 4. Monitoring: This consists of the follow-up of the implementation of measures to be adopted to avoid, reduce, transfer or retain the risk and actions aimed at preventing or reducing the probability or severity of the consequences of the fiscal risk.

Source: Legislative Decree 1441.

Work to advance these activities has slowed down due to the pandemic, so the most developed step so far is the identification of risk sources. Risk management staff are undergoing training and upskilling to develop assessment and measurement methods. The mitigation and monitoring phases have, for their part, not yet begun to be developed.

Some fiscal risk reports have been produced, but only internally within the DGTP, the Vice-Ministry of Finance and the Vice-Ministry pf Economy, and have not been circulated to other stakeholders. There are currently two such reports per year. There are difficulties in collecting and aggregating all the available information and the Treasury line directorate does not have the authority or mechanisms to collect it from other directorates or units.

3.6.2. Identification and measurement of tax risk categories

The main objective of fiscal risk management is to adopt measures to mitigate the impact of events that generate differences between fiscal results and expected results. To this end, countries must identify the vulnerabilities that each risk can produce.

DL 1441 classifies fiscal risks into three categories and identifies the entities in charge of reporting the information:

- Macroeconomic risks, referring to the exposure of public finances to changes in macroeconomic parameters such as economic growth, commodity prices, interest rates and exchange rates, considering the analysis of different economic scenarios and their impact on fiscal accounts and public debt sustainability. They are provided by the General Directorate of Macroeconomic Policy and Fiscal Decentralisation.
- 2. Specific risks, which are further subdivided into:
 - Contingent risks of judicial and arbitration proceedings, registered by the Public Prosecutor's Offices that make up the State Legal Defence System, supplied by the DGCP.
 - Risks related to possible financial crises, provided by the General Directorate of Financial Markets and Private Pensions of the MEF.
 - Risks assumed by Licensor, provided by the General Directorate of Private Investment Promotion Policy of the MEF.
 - Risks arising from the implementation of investment projects, provided by the General Directorate for Multiannual Investment Programming.

- Pension risks of the public sector entities under its scope of action, provided by the Directorate General for the Fiscal Management of Human Resources.
- Risks arising from the execution of existing contracts, provided by the General Directorate for Supply.
- Risks of Financial and Non-Financial Public Sector enterprises, provided by FONAFE (National Fund for Financing State Business Activity).
- o Natural disaster risks, provided by the Presidency of the Council of Ministers.
- 3. Structural and institutional risks. They stem, for example, from the structure of public revenues (mining), rigidities in public spending, lack of institutional capacity, etc. These are currently referred to in the MMM.

Difficulties and possible improvements

Although responsibilities are clearly delimited, in practice, there are difficulties for a line management of the DGTP to receive information from the subjects identified. Furthermore, there are no mechanisms to identify the formulas for collaboration or the scope and frequency of the provision of information. It is necessary to convey the importance of risk management, which is not yet internalised by the entities. Many lack the knowledge to be able to develop an assessment, and a joint and integrated co-ordination and development effort would be necessary.

The international situation and events that have taken place in Peru highlight the importance of measuring risks and defining strategies to mitigate and control them. For example, variations in the price of raw materials, natural disasters derived from global warming, and problems in subnational governments, among others, are all significantly impacting the budget and fiscal policy. The MEF's task is to foster a culture of measurement and to design formulas for sharing and processing information so that risks can be mitigated.

So far, the risks most worked on by the DGTP management are those associated with debt, particularly guarantees, public-private partnerships and debts with public companies. The management is organised into two teams: six staff to analyse public-private partnership contracts and four to analyse other risks, which is insufficient.

For its part, the General Directorate of Macroeconomic Policy and Fiscal Decentralisation has functions in respect of explicit contingencies and macroeconomic risks. The assessment of these is already well established.

3.6.3. Recommendations

Table 3.7. Recommendations for fiscal risks

Problem	Main finding	Recommendations
culture that integrates fiscal risk management as a tool to be considered for fiscal policy decisions. in the Ministry of Economy are that manages to include input units involved and that is come developing measurement methodologies. The lack of publicity of the report of contribute to generating and the manages to include input units involved and that is come developing measurement methodologies.	, ,	In the short and medium terms, work on identifying those responsible and form working groups between entities to make progress in risk measurement. The development of specific methodologies following a sequence adapted to the resources available would be optimal (DGTP-Risk Unit-Vice-Ministry of Finance).
	The lack of publicity of the reports does not contribute to generating a culture of	In the medium term, agree on preparing regular fiscal risk reports to be submitted to the Council of Ministers and published to generate awareness (DGTP-Risk Unit).
	risk analysis and the design of mitigation strategies.	3. In the medium term, incorporate fiscal risk analysis into the budget formulation and approval process and in the financial asset and liability management strategy (General Directorate for Public Budget-DGTP).

Problem	Main finding	Recommendations	
Fiscal risk management is developed from a line directorate of the General Directorate of Public Treasury (DGTP).	This line directorate lacks sufficient rank and autonomy to implement collaboration mechanisms with other units within and outside the Ministry of Economy and Finance, and to give the required visibility to fiscal risk management.	4. In the short term, the possibility of setting up an independen unit within the Vice-Ministry of Finance could be considered, even if it retains the same rank in the initial phases. This independent unit would be responsible for co-ordinating the types of risks, developing methodologies in co-operation with other directorates or units, and producing the reports (without prejudice to the MMM maintaining the information it already publishes on macroeconomic risks, as the two are compatible) (Vice-Ministry of Finance -DGTP-Risk Unit).	
		5. In parallel with the previous recommendation, reform DL 1441 to stop attributing these functions to the DGTP and develop appropriate regulations to provide the new risk co-ordination unit with functional autonomy (DGTP, Vice-Ministry of Finance).	
		6. In the new structure, identify all necessary areas, and assign staff to carry out all mandated functions, prioritising the identification phase and assessment methods, working in co-ordination with those who have the information (risk unit).	
The phases of fiscal risk management as set out in DL 1441 (identification, measurement, mitigation and monitoring) are not complied with.	been made in the first. Further work is needed on assessment methods, selecting formulas, and actions to mitigate each risk and monitoring measure once adopted. data and information to measure all risks (Risk Unit). 8. In the short term, begin the process of training so assessment techniques and methods (Risk Unit). 9. Progress in the mitigation and monitoring phase made as certain risks are effectively measured. For ideal to start by identifying those with the highest in the country (e.g. natural disasters should be a prior	7. In the medium term, design mechanisms for the provision of data and information to measure all risks (Risk Unit).	
		8. In the short term, begin the process of training staff in risk assessment techniques and methods (Risk Unit).	
		9. Progress in the mitigation and monitoring phases can only be made as certain risks are effectively measured. For this, it is ideal to start by identifying those with the highest incidence in the country (e.g. natural disasters should be a priority because they require mitigation measures), combining priority with accessibility to information.	

References

[1] Aggarwal, V. (2009), "The politics of confrontation: Peruvian debt rescheduling in the 1980s and 1990s", in Debt Games: Strategic Interaction in International Debt Scheduling, pp. 376-408, Cambridge University Press, https://doi.org/10.1017/cbo9780511609282.014. [6] MEF (2021), Annual Debt Report 2021, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/deuda publ/documentos/Informe Deuda Publica 2021.p df. [5] MEF (2021), Comprehensive Asset and Liability Management Strategy 2022-2025, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/tesoro_pub/gestion_act_pas/EGIAP_2022_2025.pdf. [4] MEF (2021), Fiscal Stabilisation Fund, Third Quarter Report 2021, Ministry of Economy and Finance, Lima, https://www.mef.gob.pe/contenidos/tesoro_pub/fef/informe_IIITrim2021_FEF.pdf. [2] Pessoa, M. and M. Williams (2012), Government Cash Management: Relationship between the Treasury and the Central Bank, International Monetary Fund, Washington, DC, https://www.imf.org/external/pubs/ft/tnm/2012/tnm1202.pdf. [3] Ricardo Quiroz Mejía, J. (2022), "Level of management performance of the provincial municipality of Chota: A methodology for local governments", Revista Industrial Data, Vol. 25/1, pp. 79-102, http://www.scielo.org.pe/pdf/idata/v25n1/en 1810-9993-idata-25-01-79.

Notes

¹ Five-year average: 2018-22.

² The Cash Committee was created in 1991 and reformed in 2016 (thereafter the Director General of the DGTP was recognised as a full member). Its functions include approving the cash budget, co-ordinating its implementation, and evaluating and monitoring its execution.

³ Before the creation of the TSA, there were more than 14 000 accounts at the Bank of the Nation.

⁴ This is one of the cases of an entity whose funds (registered as directly collected revenue) will become ordinary revenue from 2023.

⁵ Data provided by the DGTP in August 2022.

⁶ The concept of operational risk includes a number of different types of risks, such as inadequacies or failures in internal controls or systems and services; reputational risk; legal risk from security breaches; and natural disasters affecting the business.

⁷ https://www.mef.gob.pe/en/?option=com_content&language=en-GB<emid=100789&view=article&catid=234&id=749&lang=en-GB

Ensuring a fiscally sustainable, competitive pay regime for the public service in Peru

This chapter begins with an overview of the regulatory and institutional framework for human resource management and the public sector wage bill in Peru. It then presents the budgetary process of human resource management expenditure in Peru and analyses the main associated challenges. It concludes with a series of recommendations for improving fiscal human resource management in Peru.

Civil servants' competencies, motivations and values have a direct impact on the quality of governance processes, and thus on the quality of the services they provide, economic growth and citizens' well-being. The government of Peru is actively working to improve the capacity of the public administration by attracting and managing a professional workforce through public employment institutions and evidence-based legal frameworks.

As in most countries, the public sector in Peru is a major employer, and public employment accounts for a significant share of the country's total public expenditure and gross domestic product (GDP). Public employment accounted for only 8.4% of total employment in Peru in 2018, lower than the average of 12% for Latin America and the Caribbean (LAC) (OECD, 2020[1]) and 18% in OECD countries (OECD, 2021[2]). However, the public sector wage bill represents 29% of public spending in Peru, higher than the average of 27% in LAC and 24% in the OECD (OECD, 2020[1]). The public sector wage bill represents 5% of GDP in Peru, 8% in LAC and 9% in the OECD.

Given this high expenditure on public employment, the public administration must ensure the best value for money to promote a professional and quality public service.

This chapter examines budgetary and financial management practices regarding the remuneration of public employees in Peru and presents recommendations for maintaining fiscal sustainability while ensuring a competitive labour regime that attracts the best talent to the public sector.

4.1. Regulatory and institutional framework for human resources management and the public sector wage bill in Peru

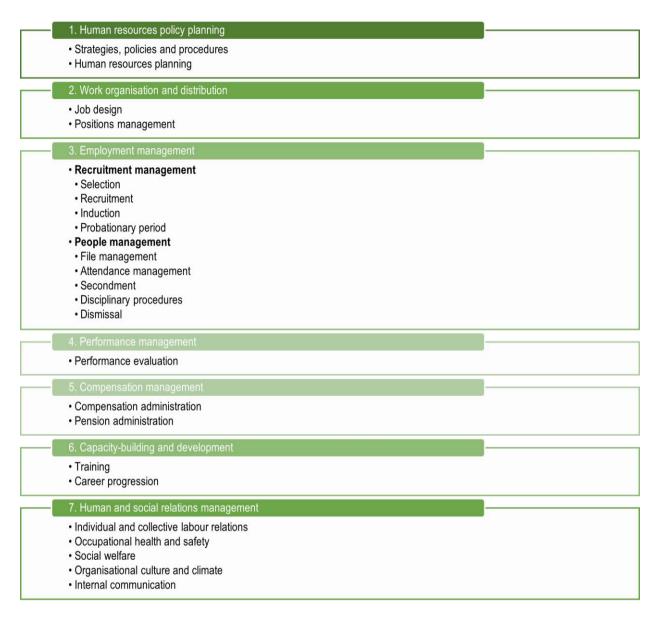
4.1.1. The Administrative System of Human Resources Management in Peru

In Peru, the Administrative System of Human Resources Management (SAGRH) establishes, develops and executes the state's policy on public service. The SAGRH comprises the set of rules, principles, resources, methods, procedures and techniques used by public sector entities to manage human resources (SERVIR, n.d.[3]). It is made up of the National Civil Service Authority (SERVIR), the General Directorate of Fiscal Management of Human Resources (DGGFRH) of the Ministry of Finance (MEF), and the human resources offices of the state entities and companies.

The SAGRH is composed of seven civil service management sub-systems (Figure 4.1):

- 1. human resources policy planning
- 2. work organisation and distribution
- 3. employment management
- 4. performance management
- 5. compensation management
- 6. capacity-building and development
- 7. human and social relations management.

Figure 4.1. Sub-systems and processes of the Administrative System of Human Resources Management



Source: SERVIR (n.d.[3]).

4.1.2. SERVIR as the governing body of the Administrative System of Human Resources Management

SERVIR, created in June 2008, is the governing body of the SAGRH. It is a specialised technical body that reports to the Presidency of the Council of Ministers. SERVIR has authority over all three levels of government and all three employment regimes (see below) of the Peruvian public administration. Its mission is to continuously and comprehensively improve the civil service to best serve the citizens. It issues guidelines for all public administration entities and formulates national policies, issues binding technical opinions, dictates norms, supervises compliance and resolves civil servants' conflicts with their public employer.

The Civil Service Court is an integral body of SERVIR responsible for resolving individual disputes within the SAGRH. SERVIR also includes the National School of Public Administration, which is responsible for providing training for civil servants and managers.

The human resources offices of line ministries and agencies, at both the central and subnational levels, also implement the SAGRH's statutes, principles, methods, procedures and techniques.

4.1.3. The General Directorate of Fiscal Management of Human Resources exercises an oversight function

The DGGFRH is a body of the MEF responsible for the financial management of the public service, in line with the principles of fiscal sustainability and fiscal responsibility. Its main responsibilities include²:

- · conducting financial and technical analysis of staff pay policies
- proposing measures and evaluating sectoral proposals for the public sector wage bill in accordance with the respective laws, including issuing an opinion on each public sector entity's analytical personnel budget and entity positions chart
- supervising the Single Public Sector Payroll computer application managed through the Integrated application for the central registration of human resources data and workforce for the public sector (Aplicativo Integrado para el Registro Centralizado de Planillas y de Datos de los Recursos Humanos del Sector Público, AIRHSP)
- reporting for approval of the salary scales of active personnel.

4.1.4. Issue binding opinions on the remuneration of public servants' active staff employment schemes

Employment regimes for active staff

Public servants in Peru are governed by different labour regimes (Figure 4.2). There are currently 3 main labour regimes, accounting for a total of approximately 590 000 employees:

- 1. the civil service regime under Legislative Decree No. 276, frozen since 1992: 24% of civil servants
- 2. the private activity regime under Legislative Decree No. 728: 19% of public servants
- 3. the administrative service contracting (CAS) under Legislative Decree No. 1057 a special temporary contracting regime with some employment benefits: 56% of public servants.

In addition, there are a number of specialised careers, for example in the health and education sectors. These are often in subnational governments and do not appear in official registers.

The coexistence of these employment regimes has created a system which is difficult to manage. The civil service regime has been frozen since 1992,³ when the national government restricted selection procedures through budget regulations. Entry into this regime is thus only possible when a currently occupied position becomes vacant due to age limit and/or retirement, resignation, death, dismissal, or career progression. Given that the civil service regime is frozen and the growth of posts is restricted in the private activity regime due to the limitations of the Budget Law, staff growth has mainly been under the CAS regime (OECD, 2016_[4]).

Figure 4.2. Main labour regimes in the Peruvian civil service

General	Civil service regime	Administrative (Legislative Decree 276-1985)
	Labour law regimes	Private activity regime (Legislative Decree 728-1991)
		Administrative Service Contracting (CAS) (Legislative Decree 1057-2008 and modified 2011)
Special careers		Professors and teachers (Law 24029-1984 and Law 29062-2007)
		University teachers (Law 23733-1983)
		Healthcare professionals (Law 23536-1982)
		Healthcare workers (Law 28561-2005)
		Magistrates (Law 29277-2008)
		Prosecutors (Legislative Decree 052-1981 and modified 2010)
		Diplomats (Law 28091-2003 and modified 2005)
		Penitentiary employees (Law 29709-2011)
Other	Labour law regimes	Public managers (Legislative Decree 1024-2008)
	Regimes with civil link	Administrative agreements with the United Nations Development Programme
		Management Support Fund (Legislative Decree 25650-1992)

Source: R&C Consulting (n.d.[5]).

4.1.5. Pension scheme

The pension system is another key element to consider when analysing the financial management of public sector HR. There are three main pension regimes in Peru today (Table 4.1). Only the costs of public employees (active and pensioners) associated with Law No. 25030 have a direct impact on the budget and should be considered in the budget formulation process.

Table 4.1. Main pension schemes in Peru

Regulatory framework	Detail	Number of members/contributors (as of 17 February 2021)
Decree-Law No. 19990	This scheme is administered by the Social Security Normalisation Office (ONP), which is responsible for providing the budget necessary to finance the payment of pensions. This pension scheme has the highest number of public employees. Any worker, whether in the public or private sector, can join this scheme.	4 725 272 members, of which 1 474 945 contribute
Decree-Law No. 20530	In this scheme, each entity of national, regional and local government is responsible for paying pensions. In the case of national and regional governments, more than 90% of expenditure is financed from the public treasury. In the case of local governments, subnational governments finance their pension schemes from their own resources. This pension scheme is constitutionally closed.	2 908
Decree-Law No. 19846	There are two groups of pensioners: one is administered by the Ministry of Defence and the Ministry of Interior (Montepío), the other is administered by the Military and Police Pension Fund (CPMP). The CPMP is not a budgetary fund, so transfers for pension payments are made through the Ministry of Defence and the Ministry of Interior. The beneficiaries are those who belonged to the Peruvian Armed Forces and National Police.	107 614
Law No. 1133	Exclusively for military and police personnel. Administered by the CPMP.	83 878

Source: General Directorate of Fiscal Management of Human Resources (2022[6]).

4.2. Budget process for human resources expenditure

4.2.1. The General Directorate of Fiscal Management of Human Resources determines the baseline human resources expenditure from the micro information collected in AIRHSP

In the budget programming phase, the General Directorate for Public Budget calculates the financial needs for personnel costs at the central and regional levels based on estimates provided by the DGGFRH. To make these estimates, the DGGFRH aggregates each entity's staffing needs, at both the national and regional levels, based on previous years' expenditures and current employee records using AIRHSP database. The estimates of human resources expenditure baselines are then transmitted to each entity and form part of the amount of expenditure that the MEF transmits to the spending agencies so that they can make their budget requests (see Chapter 2 for a discussion on budget processes).

4.2.2. The DGGFRH monitors budget execution based on the information registered in AIRSHP

Staff expenditure figures vary little between the opening institutional budget, the modified institutional budget and the implemented budget (see Chapter 2 for a discussion of the differences between these three types of budget).

During the budget execution phase, the DGGFRH is responsible for monitoring the public sector's compensation costs at the national and regional levels. It verifies the budget availability and legality of the remuneration types and approves the new registers subject to the regulatory and budgetary framework

and the corresponding remuneration types at both national and regional levels. To do so, it again uses AIRHSP.

Contrary to the central and regional governments, municipal authorities have the autonomy to set their personnel budget following the rules in force related to the employment regimes and the necessary control measures on the execution of their staff budgets.

The entities' control units ensure that payroll payments are calculated correctly and verify whether civil servants are active, among other tasks.

The Comptroller General of the Republic (CGR) can conduct pay audits.

4.2.3. The General Directorate of Public Treasury manages salary and pension disbursements

The MEF's General Directorate of Public Treasury makes salary payments through the Payroll Payment Control Module (Módulo de Control de Pago de Planillas), which is part of the Integrated System for the Financial Administration of the Public Sector (SIAF-SP). Entities register the personal and employment data of active staff and pensioners in the Payroll Payment Control Module for all Treasury operations, including payments to individual bank accounts, password delivery, electronic transfers, among others, which require validation of staff data. The Payroll Payment Control Module is under the responsibility of the General Directorate of Public Treasury. It is planned that, starting in 2023, the above-mentioned data will be provided through a solution incorporated in the Computer Application for the centralised Registration of Payroll and Human Resources Data of the Public Sector (AIRHSP) under the responsibility of the Directorate-General for Fiscal Management of Human Resources.

4.2.4. Peru's public sector human resources management model centralises more responsibilities in the Ministry of Economy and Finance than in most OECD countries

Peru's SAGRH is based on a clear separation between personnel management exercised by SERVIR and budgetary control exercised by the MEF's DGGFRH. This makes it possible to take advantage of SERVIR's specific expertise in personnel management and, at the same time, the MEF's experience in the financial management of personnel expenditure, as well as to ensure that the budget/expenditure controls are in line with the budget cycle.

The link between SERVIR and the DGGFRH through the SAGRH allows for close co-ordination where the fiscal management of human resources has implications for civil service management control and vice versa, such as the organisation of line ministries, job creation or salary structures.

In most OECD countries, budget control of personnel expenditures is organized in a more decentralized way and is not the responsibility of a specific unit within the Ministry of Finance, but is delegated to the entities. The Ministry of Finance, through the budget law, indicates the maximum amount of expenditure on human resources in each public sector entity. The managers of these entities have the ability, within the framework established by the law, to choose the optimal mix of human resources, so that the total expenditure on human resources is below the allocated ceiling. This is the case for example in France (Box 4.1). However, some countries such as Spain also have a separate unit in the Ministry of Finance responsible exclusively for personnel expenditure (Box 4.1).

Box 4.1. Examples of public sector human resources management organisation in OECD countries

Spain

In Spain, the Directorate General of Personnel Costs of the Ministry of Finance is responsible for the management, analysis and control of public sector staff remuneration measures and the job structure of state administration staff. It is also responsible for authorising the recruitment and remuneration of state public sector staff, including management staff. Whenever foreseen, any of these responsibilities should be co-ordinated with the Directorate General of Public Administration of the Ministry of Finance, which is responsible for civil service management.

France

In France, each public entity has a programme manager who allocates the budget of its programme among the different actions and supervises their implementation. Each entity also has a manager who oversees the implementation of personnel expenditure, co-ordinating with the operational implementation units responsible for the specific actions of the programme. Thus, the responsibility for the human resources budget is highly decentralised and organised by hierarchical level. There is thus a bottom-up responsibility for budget execution, where each hierarchical level is free to use its resources according to its needs, but is accountable for their use.

Sources: https://www.sepg.pap.hacienda.gob.es/sitios/sepg/es-ES/ClnSEPG/Paginas/dgcpypp.aspx; Debrinski (2022_[7]).

4.3. Challenge #1: Reducing the complexity of the public employment system and building capacity for a competent public administration

Peru has more than 500 public employment rules, more than 400 salary criteria, no standardised job and recruitment criteria, and limited payroll planning. The combination of these factors makes the administration of the system in the entities and the financial control from the DGGFRH difficult. This situation complicates the budget formulation and execution of public sector compensation, as well as any medium- and long-term projection of personnel costs.

4.3.1. The multitude of employment regimes

The development of a competitive and fiscally sustainable pay regime for public servants ultimately depends on the design of the employment system. While the Peruvian civil service has made considerable strides towards a public service system more consistent with the design of the SAGRH, the multiple regimes make it highly complex. This makes it difficult to properly plan and execute the HR budget, especially with a more medium-term perspective, and to adopt more strategic planning of the organisations' payroll.

Government entities and agencies may establish their own HR policies aligned with the regulatory framework. This makes monitoring compliance with merit and transparency standards difficult. In the CAS or private regime that is mainly used, the specific terms and conditions are set by the most senior person at the level of the entity. This makes public servants hired under these regimes highly dependent on their superior (OECD, 2016_[4]).

4.3.2. A job classification system could help simplify public employment regimes

Currently, the complexity of the public employment system means that job classifications are complex and not standardised across public sector organisations and subnational levels of government.

Objective of a job classification

Job classification can contribute considerably to the standardisation of public management processes. During the recruitment process, job classifications help to draft job descriptions that identify the profiles necessary to perform the job. They are also used in promotions, career development and the performance appraisal process. Job classifications can be very useful in strategic HR planning and identifying training needs.

An effective job classification should combine flexibility and consistency. On the one hand, it should be flexible to adapt to the changing needs of the organisation and the skills available in the labour market. On the other, it must be consistent and stable over time to support the management of the civil service in areas such as promotions, training needs and implementing strategic planning. It also provides employees with transparency and predictability in relation to their pay and career progress, and is therefore an essential component of the attractiveness of public employment (OECD, 2021[8]).

Introducing a job classification system can help simplify employment schemes and reduce the number of regimes. In France, the number of bodies in the state administration more than halved between 2005 and 2018 (Ministry of Public Sector Transformation and the Civil Service, 2009[9]; Ministry of Action and Public Accounts, 2019[10]). This was done through the merger and suppression of corps at the proposal of the various ministries, as well as through the creation of inter-ministerial, or cross-cutting, careers. In Portugal, before 2008, there were more than 1 000 public sector careers. An administrative reform reduced them to three and put an end to automatic career progression based on seniority (Penido, 2019[11]).

Peru does not have an adequate implementation of job classification in the public sector.

Currently, Peru does not have a job classification in the public sector. The transition to the Civil Service Regime under Law 30057 provides for the elaboration of the Manual of Job Profiles for each entity based on the Standard Job Manual. This is a step towards the standardisation of job classification in the administration, but does not yet include the other regimes. Also, only a few entities have undergone the transition process, which means that it is not a widespread process. The Standard Post Manual is also not used in a standardised way in public employment management processes in the public sector.

4.3.3. The remuneration system is highly complex in Peru

Peru's public sector compensation system suffers from several weaknesses compared to standard practices in OECD countries (Box 4.2):

- There is no real job classification system in the Peruvian public employment system and a multitude of public employment regimes and types are used (see above).
- The wide variety of public employment regimes gives rise to a large number of different remuneration types, some of which are not regulated. Indeed, it seems relatively common, particularly at subnational levels, for entities to use remuneration types that are not formally regulated, either due to a lack of awareness or to attract staff.

The DGGFRH has been working on regulating these concepts through the Catalogue of Revenue Concepts corresponding to Public Sector Human Resources (CUC). In addition, efforts are being made to ensure that the information recorded in the Payroll Payment Control Module needed to make the payment in the SIAF-SP is validated with the information in AIRHSP.

• The wages of the regime under Legislative Decree No. 276 have been largely frozen over the last decade. This has led to a situation where the wage structure of the 276 scheme relies heavily on bonuses to effectively increase the wage (in 2022, 77% of the total wage consists of bonuses).

A study of the public employment and remuneration system in Peru is beyond the scope of this study, but the OECD could, if requested by Peru, conduct a comprehensive study on this topic and propose recommendations to improve the strategic and fiscally sustainable management of human resources in the public sector. Such a study could, for example, analyse the salary structure, to ensure that it is able to attract competent civil servants and compete with the private sector. This would be accompanied by analysis and recommendations for a fiscally sustainable and attractive remuneration policy for talent, rationalising the relationship between salaries and bonuses, and creating greater transparency and pay equity across all entities.

Box 4.2. Common features of public sector pay systems in OECD countries

A key element of any employment system is the remuneration system and the salary structure. In general, the salary structure in the public sector can be differentiated between the managerial and the financial components. The managerial component takes into account several factors. For example, the job position, including the level of responsibility, education and experience, may dictate the level of compensation. Job variables such as hardship factors and working hours may also be taken into account. The personal qualifications and performance of the person hired for the job may also influence pay. Finally, labour supply and union strength can also affect pay. These components of the salary structure and the determination of their appropriate categorisation (e.g. job classification or job description) are usually not managed by the budget authorities, but by central personnel management offices.

Most OECD countries structure the remuneration of public employees so that the basic salary constitutes the most significant possible proportion, allowing some additional payments to compensate for special characteristics of some jobs and some level of flexibility in pay scales on an exceptional basis. This reinforces the transparency and fairness of the pay system and facilitates its management. Nevertheless, additional payments can constitute a considerable part of the public sector wage bill. For example, in the central public administrations of France, Italy and Spain, additional payments can represent up to 30% of gross salary, and sometimes 50%, especially in the case of senior or high-level managerial positions.

Source: OECD (2021_[8]), The Public Sector Pay System in Israel.

4.3.4. An independent pay review body could support the implementation of a pay policy

Many countries have an independent pay review body to guide the setting of pay policy and make pay recommendations based on strategic priorities (Box 4.3). The creation of such a body and taking into consideration its recommendations could also contribute to building trust between employers, employees and trade unions. Peru does not have such an institution.

Box 4.3. Independent wage review bodies

Ireland: In 2016, the Irish government approved the establishment of an independent Public Service Pay Commission to advise the government on public service pay. The commission consists of a chairman and seven members, all of whom are appointed by the Minister for Public Expenditure and Reform. The commission produces a series of reports making recommendations to the government on a range of issues relating to the influence of pay on attractiveness, recruitment and retention.

United Kingdom: The Office of Manpower Economics provides an independent secretariat to the following eight pay review bodies which make recommendations affecting 2.5 million workers (about 45% of public sector staff) and a pay bill of GBP 100 billion: Armed Forces Pay Review Body; Review Body on Doctors' and Dentists' Remuneration; National Health Service Pay Review Body; Prison Service Pay Review Body; School Teachers' Review Body; Senior Salaries Review Body; Police Remuneration Review Body; and National Crime Agency Remuneration Review Body.

United States: Under the Federal Employees Pay Comparability Act of 1990, the Federal Wage Council makes recommendations on federal pay. In 2019, these recommendations covered estimated locality rates; the establishment or modification of pay localities; the coverage of wage surveys conducted by the Bureau of Labor Statistics for use in the Locality Pay Program; the level of comparability payments; and the process of comparing General Schedule pay with non-federal pay.

Source: OECD (2021[8]), The Public Sector Pay System in Israel.

4.3.5. The transition to the civil service regime is confusing and time-consuming

The new Civil Service Law (of 2013)

To simplify the public employment regime, Peru set out an ambitious reform agenda associated with the implementation of the new Civil Service Law (Law 30057). As analysed in the *OECD Public Governance Review of Peru* (2016_[4]), the new Civil Service Law has been designed in line with OECD best practice and, once implemented, could address some of the shortcomings described above.

The new Civil Service Law aims to restructure and professionalise the management of civil servants, strengthen merit-based standards and develop more strategic HRM processes with respect to recruitment, salary structure, competency and performance management, and workforce planning in line with the evolving needs of government at all three levels of the administration. The potential impact of these reforms is significant, given the scope of the issues the reforms are intended to address (OECD, 2016_[4]).

The new Civil Service Law establishes a single and exclusive regime for civil servants at national, regional and local levels, articulating a strategic policy rationale for civil service reform, with an emphasis on merit and professionalism. The law is designed to consolidate the three existing employment regimes. Along with its secondary legislation, it provides a broad framework for a comprehensive and integrated merit-based civil service, with SERVIR as the lead agency. In addition, it regulates HRM practices by establishing a common standard for open and transparent merit-based recruitment processes, development and training, and performance management, and standardises terms and conditions of employment, including working time, holidays, health and social security (OECD, 2016[4]).

Challenges for the implementation of the new Civil Service Law

The law envisaged a six-year implementation horizon, so it should have been implemented from 2020. However, in June 2022, the Entity Post Table of only 14 entities was approved, which is a condition for an entity to be considered as having transitioned to the new regime.

The implementation of the new Civil Service Law is quite complicated and burdensome. It has two interrelated components. First, all entities must undertake an organisational realignment, according to the following steps:

- 1. analysis of its human resources and the development of their functions
- 2. proposed reorganisation of the human resources structure
- 3. valorisation of the entity's job descriptions based on a new job profile system (OECD, 2016_[4]).

Second, civil servants have to make the transition to the new regime. To do so, civil servants must apply for positions in the new regime through a competitive process. They cannot be forced into the new regime, but must choose the transition. Civil servants who do not want to transition to the new regime remain in their post under the old regime.

This explains why the transition is a long-term commitment. By 2022, only 0.3% of civil servants had transitioned. There are no explicit incentives to transition to the new regime.

While the establishment of the new Civil Service Law is a commendable step towards a more mature civil service system and towards standardisation and harmonisation of the employment system, it will only produce the desired results if it is well implemented. Given the low degree of implementation so far, it might be appropriate to launch a dialogue on how to update the process to ensure implementation. This would also ensure that the law is up to date and takes into account the latest developments and knowledge. The OECD is at Peru's disposal if it wishes to conduct an in-depth study on the Civil Service Law and its implementation, and to facilitate co-ordination between the different institutions that should collaborate on this objective, such as SERVIR and the DGGFRH in particular.

4.4. Challenge #2: Capacities are weak for strategic personnel management, internal human resources and financial controls, especially at subnational levels

In OECD countries, human resources units within organisations often play an important role, and therefore need to have a high level of capacity.

The new Civil Service Law greatly strengthens the role of HR units within the entities. First, HR units play a key role in driving the transition process and the reorganisation of the entities. Second, once the transition is completed, HR units assume greater responsibilities in the implementation of the seven SAGRH sub-systems: 1) human resources policy planning; 2) work organisation and its distribution; 3) employment management; 4) performance management; 5) compensation management; 6) capacity-building and development; 7) human and social relations management.

4.4.1. The low management capacity of the Peruvian civil service has a direct impact on the quality of the services it provides

Public administration in Peru is characterised by high staff turnover. As assessed in the OECD Survey of Public Governance in Peru, this high level of turnover has a negative impact on the capacity of the Peruvian public administration to develop new services or improve existing ones. In this way, the Peruvian civil service's low management capacity directly impacts the quality of the services it provides to citizens (OECD, 2016_[4]). This makes it challenging to build a professional civil service and to strengthen knowledge and capacities through experience building or training. As seen in Figure 4.3, there is room for

improvement in terms of knowledge of public budgeting, strategic planning and the modernisation of public management at the regional level. From the interviews, it is to be expected that this will be reflected at the national level and probably be extended to the local level.

85-100% Very high 0-50% Low 71-85% High 51-70% Intermediate **Public budget** Strategic planning Public management and modernisation Fast 42 39 East 61 East 59 South 43 28 South 42 48 South 47 Centre 45 32 Centre 53 Centre 55 19 45 30 39 46 45 46 North North 12 North Lima 15 47 32 31 37 Lima 19 Lima 20 0 50 100 0 50 100 50 100 0

Figure 4.3. Assessment of the distribution of knowledge of the Peruvian civil service across regions

Source: OECD (2016_[4]), OECD Public Governance Reviews: Peru: Integrated Governance for Inclusive Growth.

4.4.2. Financial and human resources management is essential to assess budgetary needs to develop the right workforce for the future

Weaknesses in strategic planning have an impact on HRM, in particular strategic workforce planning. Limited skills weaken forward workforce planning, which aims to recruit and build the skills needed in the medium and long term. Given the complexity of the employment system, administrative processes absorb most of the HR units' time. This has an impact on their ability to plan strategically and to assessing the current situation and the future needs to be met.

It also has consequences on financial planning, which means that HR budget requirements are often based on immediate needs without considering future workforce needs and developments. This is partly due to restrictive recruitment practices and the limitation of authorised new vacancies. When there are opportunities for new vacancies, entities try to take advantage of them without necessarily planning if and how they are needed. There is, thus, no strategic workforce planning.

The limited capacities in HRM and public budgeting, as shown in Figure 4.3, mean that the DGGFRH receives a large number of requests for advice and clarification from HR units on the legality of the public employment regimes and/or remuneration types. This is also due to the complexity of the employment regimes and types. Consequently, this has become one of the DGGFRH's main tasks, which in turn takes resources away from strategic planning within the DGGFRH.

To mitigate these weaknesses, there is a need to develop a strategic approach to human resources planning at the public sector and entity level to strengthen financial and HR management capacities across government. Responsibility would lie with SERVIR in coordination with DGGFRH in the area of fiscal management.

4.4.3. High staff turnover makes it very difficult to build human resource management capacity and to professionalise the human resources function

The DGGFRH has conducted regular capacity-building seminars with employees in HR units; however, given the high staff turnover, the long-term impact of these trainings is relatively limited. Newly trained HR staff may not stay in post long enough to get the most out of their training, and training may have to be repeated frequently to train new incoming staff. Capacity building in this context needs to focus on avenues that can have an impact in an unstable environment

This is a frequent challenge in all countries, especially at sub-national levels. It is beyond the scope of this report to analyse this challenge and propose recommendations, but the OECD has supported other countries in this type of analysis. Some solutions implemented in countries are for example:

- Develop detailed guides, manuals and checklists for HR units on the different financial processes
 to support their work in a context of high turnover. These guides for new employees detail step-bystep all the processes they need to follow.
- These guides are sometimes supported by an online help tool, such as an automated chatbot and the most common problems encountered.
- The national government may have teams of people to support the HR teams in the entities.
- At the sub-national government level, some countries provide incentives for sub-national governments to pool and share services, such as having financial or HR services shared among several sub-national governments, which allows hiring people with higher capacities, giving them more responsibilities and sharing costs.
- Professionalisation of the HR function is common, both for HR officials responsible for HR
 management and for finance officials responsible for HR financial management. The establishment
 of an HR profession helps to mitigate high staff turnover by ensuring a minimum level of
 qualification and potentially attracting more candidates with the opportunity to rotate through
 various entities.

4.5. Challenge # 3: Internal control system still insufficient

4.5.1. Peruvian National Control System

In addition to administrative and financial HR management, risk management and internal control are crucial to ensure operational effectiveness and efficiency; reliability of financial reporting; and compliance with HR laws, regulations and policies. The basic pillars of the Peruvian National Control System are Law 27.785 (Law of the National Control System and the Office of the Comptroller General of the Republic and its amendments) and Law 28.716 (Law of Internal Control of State Entities). The Office of the Comptroller General of the Republic is the leading entity, supported by the institutional control bodies responsible for control and internal audit in the entities (OECD, 2017_[12]).

According to the Institute of Internal Auditors, there should be three levels of control for the proper functioning of organisations. The first line is management control and supervision. The second line is internal controls, e.g. through an entity's own financial control or HRM unit. Internal control units and ministry officials are designed to monitor compliance with financial and HRM rules, as well as to control staff costs. They are best placed to guide and support managers in complying with these rules. The third line of assurance includes the internal audit function, which ensures that the first two lines are working effectively. This is complemented by external monitoring and control. In the case of budget execution control in Peru, this would consist of the MEF, the Comptroller General's Office, the central HRM agency (SERVIR), etc. (OECD, 2017_[13]).

4.5.2. Weaknesses of the internal control system in Peru

The OECD Survey on Integrity in Peru (2017_[12]) identified several weaknesses in internal control processes at all levels of government. Internal control is perceived as an administrative, box-ticking exercise, carried out in a rather restrictive and isolated manner, without integration into the management cycle. Similarly, risk management processes are weak. At the subnational level, entities struggle to produce robust data on policy performance and service delivery, which undermines forward-looking planning and policy prioritisation. These factors result in an environment where effective controls and safeguards are very weak, which can create opportunities for corrupt employment practices and weaken the public administration's capacities (OECD, 2017_[12]).

4.5.3. The development of external controls to compensate for insufficient internal controls

This limited capacity and knowledge within the HR units and the weaknesses of the institutional control body to implement effective risk management and internal control processes have also led to a situation where SERVIR and the DGGFRH have implemented additional control mechanisms to ensure that the regimes are correctly applied *ex ante*.

- The DGGFRH issues a prior opinion for the approval of the Analytical Personnel Budget⁴ to ensure that the staff positions to be filled are duly financed with the correct amounts according to the income policy⁵ determined for each employment regime.
- Likewise, the DGGFRH and the General Directorate for Public Budget control that the necessary budget is available and that the public employment regime used is in line with those defined in the Catalogue of Revenue Concepts corresponding to the Human Resources of the Public Sector.

Despite the efforts of the DGGFRH, it seems that it is still quite common to use public employment concepts that are not formally regulated and have to be validated by a court ruling a posteriori.

The OECD countries have stronger internal controls, which allows them to have weaker external controls. OECD countries generally use the three-line model (Box 4.4). This of course requires a high level of capacity in the human resources units of the entities.

Box 4.4. The Institute of Internal Auditors' three-line model

The model followed in many OECD countries is that ministries have flexibility to recruit and manage their human resources within very strict and unchangeable limits set in the budget.

According to the three-line model, managerial control and supervision (first line), internal control through HR offices and the financial control unit (second line), and internal audit (third line) ensure the correct implementation of concepts and the availability of financial resources.

Source: Authors.

4.5.4. The role of external audit in human resources is limited in Peru

Many OECD countries have thematic external audit mechanisms that support the financial management of human resources. OECD countries have conducted human resources audits on a variety of topics, such as cost efficiency, recruitment practices, payroll planning and skills in the civil service or similar. For example, in 2015, the UK National Audit Office conducted a report on central government staff costs and analysed the extent to which bodies have reduced civil service staff costs as a result of the government's financial policy of cutting staff costs to help reduce the deficit (Comptroller and Auditor General, 2015_[14]) The report concludes with clear recommendations for both entities and the centre of government.

4.6. Challenge #4: Underdeveloped fiscal framework for collective bargaining reduces predictability of human resource expenditures

4.6.1. The fiscal framework for collective bargaining

From a public financial management point of view, collective bargaining in the public sector has different characteristics than it does in the private sector. In relation to the budget, collective bargaining in the public sector has a unique position, as there is no real affordability constraint. In the private sector, union demands are constrained by the available budget, as unions have no interest in negotiating an unsustainable wage level that threatens to put the company out of business and put its members out of work. In the public sector, this constraint is less palpable, as governments can finance wage increases through tax increases, the reallocation of funds or deficit spending/debt. Given the magnitude of public sector pay (30% of general government pay in Peru), unions can have a significant impact on the public budget (OECD, 2021[8]).

The Peruvian Constitution guarantees the right to collective bargaining for public and private sector workers at central and decentralised levels. However, the right to negotiate terms and conditions of work and employment, including remuneration and other working conditions with economic consequences, through collective bargaining has only been regulated since 2021. In this respect, Peru is in line with the evolution of many OECD countries in the first years after the 2008 financial crisis, which have implemented reforms to strengthen collective bargaining (Box 4.5).

Box 4.5. Collective bargaining reforms during the global financial crisis

France, Greece, Portugal and Spain passed sweeping labour market reforms during or after the global financial crisis that changed the way collective bargaining works.

In Greece, the collective bargaining system was completely overhauled during the crisis. The principle of favourability¹ was suspended, giving priority to company-level agreements. In addition, new provisions allowed "associations of persons" (i.e. associations of workers, not necessarily affiliated with a trade union) to sign company-level agreements over trade unions. Extensions of collective agreements to non-signatory companies were also suspended and limits on the duration and ultra-activity² of collective agreements were introduced. Finally, the system of unilateral recourse to arbitration was abolished. Since Greece has exited the European Stability Mechanism's stability support programme (i.e. the financial support programme set up during the crisis) in September 2018, the principle of favourability and the possibility to extend sectoral collective agreements signed by the representative parties have been reintroduced. Since September 2018, 12 sectoral or local collective agreements have been extended, covering more than 200 000 workers. Unilateral recourse to arbitration was also reinstated by a Council of State ruling in 2014, but some incentives for a consensual solution have been introduced. The Greek government elected in June 2019 has expressed its intention to again limit unilateral recourse to arbitration and the use of extensions, as well as to introduce opt-out mechanisms for sectoral agreements.

In Spain, the 2012 reform reversed the principle of favourability by giving priority to company-level agreements over sectoral or regional agreements. The reform also made it easier for companies to opt out of higher level or company-level agreements, either by agreement with workers' representatives or by unilaterally referring the matter to arbitration by a tripartite public body. So far, Spanish companies do not seem to have made significant use of these new provisions.

In Portugal, successive reforms between 2011 and 2015 initially froze collective agreement extensions and then granted them only if the signatory employers' organisations met specific criteria. The duration

and ultra-activity of collective agreements were reduced. Works councils in companies with at least 150 employees (as opposed to 500) were allowed to negotiate company-level agreements at the mandate of the trade unions and the possibility for employers to temporarily suspend a collective agreement in case of crisis was introduced. Since 2015, these reforms have been partly reversed: in 2017, a tripartite pact removed the representativeness criteria for extensions and set a 35-day limit for their issuance to avoid the usual long pre-reform delays. The limits on ultra-activity were suspended for 18 months between 2017 and 2018 to create stability for negotiating a tripartite agreement to amend the Labour Code. Sectoral bargaining has now resumed. However, although the new provisions have remained valid, there has been very limited acceptance of the possibility of negotiating at company level.

In France, there have been two main reforms in recent years. In 2016, the Labour Law (Loi El Khomri) strengthened the role of company-level agreements in defining working time, holidays and rest period. The reforms included raising the threshold for defining which unions are representative and authorised to sign company-level agreements and introduced the possibility of approving agreements through an internal referendum. In addition, opt-out clauses have been introduced in case of economic hardship, with the aim of ring-fencing employment (but not wages). In 2018, the Law ratifying the Ordinances of September 2017 encouraged company-level bargaining by allowing bargaining even in the absence of a trade union in companies with less than 50 employees. Additionally, in companies with fewer than 20 workers, the employer can submit a collective agreement proposal directly to an internal referendum. The reform also sought to make extensions of sectoral agreements less automatic by making them conditional on the presence of different provisions depending on the size of the company and by introducing the possibility of blocking them for public interest considerations (in particular if an agreement is used as an anti-competitive instrument against non-signatory companies) on the basis of an assessment by an ad hoc group of experts. However, by 2020 no request for an extension has been rejected and no agreement has included different provisions for large and small companies. The reform of the ordinances also merged and streamlined different workers' representative bodies at the company level into one to simplify the dialogue at the company level.

- 1. Principle governing the relationship between a collective agreement and the individual employment contract: if the terms of the individual contract are more favourable to the worker than the provisions of the relevant collective agreement, the former prevail. The normative provisions of collective agreements are intended to serve as minimum standards of protection.
- 2. Ultra activity means that a collective agreement will continue to apply beyond its expiry or termination date if a new collective agreement has not been reached.

Sources: (OECD, 2019[15]) (OECD, 2021[8]).

In Peru, Law 31188 of 2021 allowed for centralised and decentralised collective bargaining in the public sector on terms and conditions of work and employment, including remuneration and other conditions of work with economic consequences, as well as all aspects of employer-worker relations, and relations between employers' and workers' organisations. At the central level, the bargaining process took place for the first time in 2022 between the 21 most representative public sector trade unions and the 21 employer representatives appointed by the Presidency of the Council of Ministers (PCM). At least four representatives have to be chosen from the PCM and the MEF, while the other representatives can be chosen depending on the subject under negotiation.

4.6.2. The role of the Ministry of Finance and Economy in wage negotiations in the OECD and Peru

In OECD countries, the Ministry of Finance usually represents the government in all matters. In this way, it can oversee and authorise agreements and ensure fiscal sustainability. This also means that centralisation is a prominent feature of the negotiation process. Decentrally negotiated issues are usually

more limited than centrally negotiated ones. At the central level, collective bargaining usually concerns base pay, wage costs and overall working conditions. Decentralised bargaining tends to focus on new management tools and pay for performance (OECD, 2021[8]). Where pay negotiations are decentralised, managers have more discretion to design pay to reward high performers or attract specific profiles (Box 4.6).

In Peru, decentralised negotiations can include pay as long as it covers the respective area and does not cover the subject matter agreed upon at the central level.

Box 4.6. Decentralisation of bargaining in the public sector in Sweden and the United Kingdom

Sweden's resilience to the economic crisis of 2008 can be partly explained by the strong social dialogue system and the active involvement of the social partners. The Swedish bargaining system is a centralised two-tier system – bargaining first takes place at sectoral level, then at the organisational level – and there has been a clear trend towards decentralising wage determination and other issues to the organisational level.

Swedish public sector employees are subject to the same labour market regulations as private employees. Therefore, all employees have legally guaranteed rights to bargaining and industrial action. There is a single labour law for all workers (except in very specific cases such as judges).

SAGE, the Swedish Agency for Government Employers, has 250 member bodies and 240 000 employees in the central government sector. At the local government level, the Swedish Association of Local Authorities and Regions is the employers' organisation, and represents 290 municipalities and 20 regions.

Due to the high level of social conflict in the Swedish labour market, a central national agreement was established in 1938 to support the value of collective agreements for both employers and workers. The agreement stated that social conflicts were not allowed during the period of validity of collective agreements at the national or sectoral level. In 1974, this rule was included in Swedish labour market legislation.

An "Industry Agreement" on co-operation in industrial development and wage formation, established in 1997, is still in force. It is the basis for wage revisions in the Swedish labour market. The agreement stipulates that wage negotiations must start in the industry sector, as this sector is internationally competitive. The other sectoral agreements are to be negotiated afterwards, and with reference to the industry agreement. This harmonisation has made the period of wage negotiations much more peaceful, without generating social conflicts. Social agreements are binding, but legal acts are not necessary. The agreements complement labour market legislation, such as pension and occupational safety agreements.

In the **United Kingdom**, under the delegated pay framework, negotiation with unions on pay is conducted at departmental (ministerial) level. Departments are encouraged to work constructively with unions in developing their overall pay and reward strategies. Departments should also engage constructively with unions for pay purposes, both in terms of annual pay competitions and the development of pay flexibility cases. Departments can enter into formal negotiations with trade unions once the relevant secretary of state has approved their terms of reference.

When it works well, decentralised bargaining can lead to win-win situations through the collective bargaining agreement. At its best, the organisation – in this case each department – evaluates payroll reforms to improve efficiency, productivity and public service improvement. This may be a mix of eliminating obsolete pay and practices, longer and more flexible working arrangements for the payroll, and so on. The savings identified from these improvements are offered as "benefit-sharing"

arrangements to unions/employees as a higher wage to be given if a collective agreement is reached to reform contracts, conditions and working arrangements. The result is a more transparent wage system, better retention and recruitment of skilled workers, better public services, more motivated employees, and better industrial relations. However, it is not a simple process. It requires time and skill to design agreements that work well for all three participants (unions/employees, public/finance/treasury and organisations).

Source: OECD (2021_[8]), The Public Sector Pay System in Israel.

The challenge for collective bargaining is distinguishing between the budget domain and the collective bargaining domain. This distinction is crucial to be transparent in the available fiscal space while protecting the government's right to allocate public expenditure in line with its political priorities. In OECD countries, this is done, for example, through decentralisation that allocates "lump sum" appropriations to entities. This can help set transparent limits on what is available and limit spillover to other sectors. Affordability constraints can also be created by separating budget and employment functions. For example, in Canada, where negotiations are centralised, the Treasury Board Secretariat, not the Department of Finance, is the employer and manages all wage negotiations. Finally, another option is to set affordability constraints in national framework agreements, taking into account macroeconomic data, and using that agreement to constrain agreements accordingly (OECD, 2021_[8]).

In Peru, both wage bargaining and budgeting at the central level are carried out by the MEF (in addition to other employer representatives in the negotiations). To ensure budgetary feasibility, Law 31188 regulated by Supreme Decree 008-2022-PCM establishes that the employers' representatives must prepare a report detailing the cost of implementing the draft collective agreement and the available budget. Before issuing the report, the employer is requested to take into account the MEF's Final Situation Report on the Financial Administration of the Public Sector, which determines the fiscal space for the implementation of centralised and decentralised collective bargaining processes. Before issuing the report, the MEF submits the proposed situation report to the PCM. On this basis, the PCM makes recommendations to determine the available fiscal space. The DGGFRH prepares the progress report in co-ordination with the MEF's line bodies. In this way, fiscal space can be clearly established and act as a kind of affordability clause.

A related challenge is to consider the outcome of the negotiations in the budget formulation process, given that the decision must be reached before 30 June and therefore during the final stages of the budget formulation process. To better project costs, the DGGFRH, in co-ordination with the General Directorate for Public Budget, could calculate the budget based on the fiscal space available and the initial proposal received from the workers' representatives. The DGGFRH has created a module to register all proposals from the central and decentralised levels, which is a useful step to be able to assess the possible budgetary impact and plan accordingly.

4.6.3. An independent entity responsible for preparing the fiscal situation report could increase confidence in the process

To build trust and a common understanding among all stakeholders, Peru could consider commissioning an independent entity to conduct this analysis, which could help inform framework agreements, which could in turn set ceilings. This could help reinforce the perception of neutrality regarding the availability of fiscal space and help to avoid conflicts. Joint data collection and research between government, social partners and third parties, such as independent research bodies, helps to build shared values, common analysis and trust (Box 4.7).

Box 4.7. United Kingdom: Wage reviews and data collection

In the United Kingdom, eight different pay review bodies make recommendations on pay adjustments for 2.5 million workers (representing about 45% of the public sector workforce). Each body collects data from employers and trade unions and submits a recommendation to the government on pay reforms. The recommendations are not binding; it is up to the government to decide how to use the information. Nevertheless, an independent and public review helps to ensure that pay reforms are justified and can inform public opinion. In the United Kingdom, pay reviews help to bring different actors together to agree on a description of the reality and, consequently, on solutions to address shortcomings in the pay system. Pay review bodies have replaced collective bargaining for employees working as school teachers, health workers, correctional officers and in the armed forces.

Source: OECD (2021_[8]), The Public Sector Pay System in Israel.

4.6.4. Dispute resolution mechanisms are in line with international standards

In terms of dispute resolution mechanisms, in cases where collective bargaining processes have ended without agreement, mediation or, in a second step, arbitration may be options. In general, mediation consists of the choice of an independent authority that attempts to arbitrate between the parties' positions. However, it lacks enforcement power and, in the case of a difficult dispute, only serves to delay the resolution of the dispute. Arbitration involves a third party that examines the dispute or negotiation process, provides data and recommendations, and exerts political pressure to negotiate. Here, too, the arbitrator cannot force the parties to accept the resolution. In addition, arbitration may encourage the parties to adopt extreme positions rather than moving towards a compromise, as the third party is likely to propose a middle ground (OECD, 2021_[8]).

Dispute resolution mechanisms in Peru are largely in line with international standards. The law provides for mediation involving a specialised technical body appointed by the Ministry of Labour and Employment Promotion. In case of failure to reach an agreement, either party may request the initiation of an optional arbitration process. The arbitrator's binding decision may consider one of the parties' final proposals or an alternative that takes into account the parties' proposals. The final decision cannot include different, additional or greater concessions than those expressly requested by the union in the draft collective agreement.

4.7. Challenge #5: The process of formulating staff costs is based on a micro approach where entities submit their demands to the MEF without a credible maximum allocation for human resources

4.7.1. Peru's human resources budget formulation process lacks credible spending ceilings

In Peru, the formulation of personnel expenditures is based on the micro-level estimate of the baseline rather than on macro-level estimates and ceilings compatible with fiscal sustainability objectives. The General Directorate for Public Budget calculates the baseline personnel expenditure for each public entity based on an analysis performed by the DGGFRH. The DGGFRH analyses each entitiy's personnel expenditure based on the employment information recorded in AIRHSP.

Based on this, the General Directorate for Public Budget prepares what it calls a "staff expenditure and staff numbers ceiling" for each entity at the national and regional level (local governments have greater autonomy and can programme their budget independently of the national level).

According to OECD terminology, this does not correspond to an "expenditure ceiling" but to a "baseline calculation". Effectively, it is, in practice, a "floor" of expenditure rather than a maximum expenditure since each entity then prepares its staffing needs, which may exceed the previously allocated "ceiling".

As mentioned in Chapter 2, discussions with the pliegos take place before setting a maximum amount of spending that the MEF would determine based on fiscal space and its fiscal sustainability objective. Therefore, there is a risk that the sum of the demands received by the MEF is greater than the state's financial capacity. This type of system where the discussion between the MEF and the pliegos is initiated by the pliegos' demands and not by maximum spending amounts determined by the MEF was prevalent in many OECD countries until recently. However, many OECD countries have moved (and others are still moving) towards systems where the formulation of the budget (and the human resources budget as well) is initiated by the maximum (and credible) amounts set by the MEF, and not by the demands of the entities. As mentioned in the previous section, OECD countries then use different mechanisms to control total human resources spending. It is noteworthy that OECD countries do not perform these controls at the micro level (of the payroll), but at the macro level (total expenditure on human resources of the entity, total number of employees, etc.).

4.7.2. The micro approach does not allow for strategic management of personnel expenditures or human resources and creates rigidities

In Peru, personnel expenditures are formulated with a detailed micro-level approach rather than a high-level aggregation of costs. The records of each employee are thus considered in the budget formulation.

This creates a number of difficulties:

- The difficulty with this micro-level approach is that it does not provide entities with any flexibility to structure their staff costs according to their needs: they are relatively limited on how they can use the allocated staff costs. Both the initial analysis developed by the DGGFRH and the entities' budget presentations are based on line-by-line financial needs. Entities receive very little guidance on preparing their overall staff expenditure limits.
- This bottom-up approach can lead entities to overstate their needs, putting upward pressure on spending. By having a spending floor rather than a maximum staff expenditure, entities could calculate their spending generously to ensure that a certain percentage of their calculations are earmarked funds.
- There is no incentive for entities to strategically structure their payrolls to identify savings opportunities in certain programme areas to reallocate as needed. Staff ceilings have several drawbacks.
- The headcount ceiling is an ineffective measure on its own unless it is implemented in a more
 precise way that recognises different categories of employees. A standard job classification system
 can help to structure the different categories.
- Ccontrolling the number of employees at such a micro level at the central level is an onerous administrative burden.

4.7.3. Despite very strong MEF monitoring of inputs, there are still slippages

Finally, it is also not a fully effective system, entities may hire consultants or external staff to circumvent staff ceilings, which still leads to increased staff costs. This has also sometimes been the case in Peru, where the CAS regime has been used to circumvent the freezing of various employment regimes.

Today, the MEF exercises a high degree of control over the execution of the budget as far as personnel expenditures are concerned. Civil servants can only be recruited once the MEF has validated the public employment regime and budget availability. All public employment regimes must be registered in AIRHSP to be paid. In addition, introducing the Catalogue of Revenue Concepts corresponding to Public Sector Human Resources has led to more and more public employment regimes being formally regulated. However, despite the MEF's strong control, entity-specific public employment regimes are still used which have not been regulated and therefore do not initially appear in the budget. The budget for these unregulated regimes often has to be disbursed over and above the budget already allocated at the end of the budget year due to court decisions obliging the payment of these regimes.

4.7.4. Peru has no alternative instruments to guarantee the fiscal sustainability of personnel spending

Mechanisms used in OECD countries to ensure fiscal sustainability of personnel spending.

Given the magnitude of the public sector wage bill, budgeting and controlling these expenditures is one of the main tasks of any government to ensure fiscal sustainability in the short and long term. There are a number of fiscal human resource management tools used by OECD countries in the budget formulation and execution phases.

Tools used during the budget formulation phase.

- Analysis of sectoral policies and programmes: Throughout budget formulation, budgetary
 control can be exercised by analysing sectoral policies and programmes. This means a thorough
 and operational review of public expenditures in relation to staff costs and an assessment of the
 need and scope of staff with regard to the entities' responsibilities. This can help identify where
 more resources are needed or can be reduced.
- Ceilings on the number of public employees: In some of the OECD countries, the Ministry of Finance may also use ceilings on the number of public employees pre-determined at the entity level based on sectoral analysis. Ceilings are usually stated in the form of the number of full-time equivalent positions that the Ministry of Finance will consider for funding.
- Staff expenditure ceilings: The staff expenditure ceilings throughout the budget formulation phase are another tool for controlling staff expenditure. They can give greater flexibility to entities in how they structure their staffing within the pre-determined spending limit. Staff expenditure ceilings should be subject to transparent controls and higher levels of capacity and trust throughout the system. Even so, and regardless of the level of control, there is a risk of hiring outside employment regimes in less transparent processes (consultants) to circumvent regulations. Mature risk management processes must be implemented to mitigate this risk (Box 4.8).

In most of OECD countries, when preparing their budgets, institutions must respect these ceilings without additional funding options for HR costs.

Box 4.8. Staff numbers and expenditure ceilings in OECD countries

OECD countries that use staff ceilings base them on the number of full-time equivalent staff or on consumption or expenditure, which gives entities more flexibility.

Australia uses Average Staffing Level (ASL) data, which counts staff by the time they work. Full-time employees are counted as 1.0 ASL, while part-time staff working for 2.5 days are counted as 0.5 ASL.

In France, the staff ceiling shows the annual limit of a budget programme and is calculated as an average of the consumption, or the equivalent of the salary payment.

It is also common to use staff expenditure ceilings. The United Kingdom has a fairly advanced model for managing staff costs. The traditional model of government operation in the United Kingdom has been one of departmental autonomy, within an overall spending framework set by the Treasury. The Treasury defines departmental budgets and departments work within those budgets with autonomy over how to allocate the detailed breakdown of the budget.

Source: Comptroller and Auditor General (2015[14]).

Throughout budget execution, Ministries of Finance in OECD countries also use different tools to control staff expenditure.

Tools used in the budget implementation phase:

• Regulations prohibiting the transfer of non-staff costs to staff costs: Many countries also have regulations prohibiting the transfer of non-staff costs to staff costs (or vice versa) during budget execution. While the possibility of transferring funds within the entity throughout budget execution may provide entities with more flexibility, it may also reduce oversight and control.

4.8. Challenge #6: Difficulties in developing reliable medium-term projections of staff costs

Within its HR financial management mandate, the DGGFRH has responsibilities related to the multiannual financial framework, specifically concerning HR expenditure. In this regard, the Directorate of Human Resources Fiscal Management Programming is responsible for:

- formulating and proposing directives and guidelines for the multiannual programming of staff revenue and the effective financial management of human resources revenue
- developing economic and financial statistics on active staff and retirees in the public sector that contribute to better analysis, programming and costing of public sector compensation.

Economic and financial statistics and multiannual programming guidelines are used to develop a multiannual macroeconomic framework for forecasting payroll developments, as well as a baseline within the budget formulation process.

However, the DGGFRH uses an approach based on spreadsheet and micro data to make macro projections. This methodology is very difficult to implement and yields unreliable projections.⁶

4.8.1. Challenges in producing reliable forecasts

The DGGFRH has expressed several challenges in developing reliable forecasts for staff costs, given a number of hard-to-predict liabilities.

- First, the multitude of pension systems raises the question of when to account for pension liabilities throughout the formulation of the personnel budget. Countries that use accrual accounting, such as New Zealand, account for unfunded pension costs and schemes within the budgetary limits of each entity (Pimenta and Seco, 2021[16]).
- Second, although the DGGFRH has made a considerable efforts to regularise all the employment regimes, as stated above, there are still a significant number of regimes, both remuneration and bonuses, at the entity level that are neither included in the CUC nor recorded in AIRHSP. This means the DGGFRH does not have a concrete framework for projecting the possible liabilities arising from these regimes, which are not usually included throughout the budget formulation process, given that the information available through the information systems is limited.
- Third, the financial impact of implementing the transition process to the new Civil Service Law is
 complex to project given the duration in the absence of a predictable implementation schedule.
 Civil servants can choose between joining the new civil service regime or remaining in their original
 employment regime. In most cases, the new civil service regime would imply a salary increase.
 This further compounds the difficulty of projecting how much and when the budgetary obligations
 arising from the transition would materialise.
- Fourth, the DGGFRH has expressed difficulties in assessing the outcome of the collective bargaining process and its impact on staff expenditure, especially in the medium and long terms.

4.8.2. Establish contingency funds to ensure fiscal sustainability in the medium term

While no tool can perfectly project the evolution of staff costs over the medium and long term, projections can approximate costs. Budget projections support the development of a strategic approach to human resources planning, build policy and ensure fiscal sustainability. HR expenditure is the result of active planning.

Many OECD countries create contingency reserves to ensure the fiscal sustainability of their human resources expenditures in the medium term. This consists of leaving a percentage of the funds under the budget ceilings unallocated, within each entity, which can be mobilised in case of unforeseen events (such as the outcome of court cases). In such cases, Ministries of Finance can release these additional resources during budget execution to address urgent priorities without breaching the macroeconomic constraint (International Monetary Fund, n.d.[17]).

For example, in France, the 2014 programming law stipulated that for each year of the programming period and for all expenditure subject to limiting authorisation, at least 0.5% of payment authorisations should be set aside for staff costs (Moretti and Kraan, 2018_[18]).

4.9. Challenge #7: The potential of AIRHSP as a strategic tool for planning and fiscal management of human resources by entities is not fully exploited.

4.9.1. Key features of payroll systems in OECD countries

Administrative payroll systems in the public sector can provide useful information on employee spending. They centralise employee information on pay, financial information, job tracking and the number of occupied positions. Well-managed payroll systems can also help facilitate budget preparation and monitoring, as well as the evaluation of HR policies.

Payroll systems can be structured in a centralised or decentralised manner, depending on the ecosystem. A lead agency oversees the administrative system and provides a single information system to manage and record information in a centralised system. Consolidating the management of the payroll information system in a single entity can save costs and improve efficiency, transparency and control, as well as

standardise processes. The lead agency usually bears the costs of developing and maintaining the information system, and the use of the system is often mandated by law. Most countries in Latin America have designated government bodies to oversee the administrative system, such as human resources, procurement, budget or similar. This is rooted in the countries' ecosystem, which is characterised by a high degree of centralisation.

In a decentralised system, payroll systems are structured so that each entity manages and records its payroll data through the HR unit. The data are reported to the Ministry of Finance for budget formulation and execution. While the decentralised system allows greater flexibility for entities to design a system according to individual needs, it is more complex to monitor, with fewer tools to identify fraud and higher costs. It can also be difficult to enforce data and quality standards.

4.9.2. The Peruvian payroll system is moving from partially centralised to centralised

In Peru, the system can be characterised as partially centralised. The *compensation management* component of the SAGRH is supported by a computer system with characteristics defined by the MEF, and a decentralised model of payroll systems is in place, in which each ministry or entity developed or acquired its own payroll system, sometimes following certain functional and interface guidelines previously defined with the SIAF. However, in recent years, the MEF has proposed to move to a centralised system, AIRHSP administered by the DGGFRH, which is, in effect, more aligned with the governing body approach adopted in the country.

4.9.3. The objective of AIRHSP is not clearly defined to take advantage of the available data

AIRHSP is a step towards an integrated system for financing human resources at the national and regional levels. However, its purpose needs to be defined.

It currently serves as a baseline for staff expenditure at the budget formulation stage and for monitoring staff expenditure. However, AIRHSP micro data are not useful for formulating the budget based on headcount, as changing circumstances cannot be taken into account in a pre-emptive manner with such a precise figure. As mentioned above, OECD countries usually formulate their budgets based on macro projections and maximum expenditure amounts for human resources determined on the basis of the evolution of the baseline and available fiscal space.

The AIRHSP provides extensive information on the employment and remuneration concepts used in the entities, as well as the posts allocated. In this way, it could serve as an input for salary disbursement and as a strategic tool for planning and fiscal management of human resources by the entities.

Today, the deployment of the AIRHSP in national and regional government bodies is helping to make the items of income (remuneration) that have a legal basis transparent, thereby ensuring that the State's expenditure on personnel is duly substantiated. The above, together with the work to update the CUC, are tools that should be shared with the entities so that they can use this information to help them in their fiscal management of human resources. In the meantime, entities have little incentive to integrate their data into AIRHSP.

4.9.4. The lack of interoperability between AIRHSP and the Integrated Public Resource Financial Management System requires additional efforts for entities to integrate their information

The DGGFRH has already successfully undertaken efforts to ensure interoperability with key information systems such as RENIEC, MINSA and SERVIR. However, there are still some interoperability problems internally in the MEF. AIRHSP is not automatically interoperable with the Payroll Payment Control Module

or the Integrated System of Financial Management of Public Resources (SIAF-RP) in general. This involves a rather cumbersome process for entities to register data in the different systems.

Ensuring greater interoperability with other IT systems would facilitate data recording and, ideally, automate it.

To this end, Peru has initiated the development of the new Integrated System for the Financial Administration of Public Resources, which aims to support all the processes of the Financial Administration of the Public Sector, including those of fiscal management of human resources, guaranteeing the integration of information.

4.9.5. Audits of the information registered in AIRHSP could mitigate the risk of incorrect data

As discussed above, public sector pay is vulnerable to inefficiency and corruption. Strong payroll system controls can help ensure data accuracy and mitigate risks of corruption and fraud. For example, in Brazil, automated audits of the centralised payroll database generated annual financial savings of 1-2% in the total cost of the federal government payroll (Pimenta and Seco, 2021_[16]) (Box 4.9). Currently, Peru conducts few regular or systematic audits of AIRHSP data. The audit mechanisms only include storing the date of creation and modification of the registration, deregistration and modification operations on AIRHSP records.

The DGGFRH, as the body responsible for AIRHSP, could consider introducing the following basic audits:

- checking employee lists, pay rates and hours worked
- confirming details of pay and hours worked
- reconciling payroll records with tax forms or other records
- identifying areas for improvement in the payroll process (e.g. payroll deductions)
- ensuring compliance with labour legislation and relevant registrations
- reviewing beneficiaries' bank accounts (Lasker, 2021[19]; Pimenta and Seco, 2021[16]).

Box 4.9. Integrated database for personnel administration in Brazil

The Integrated Human Resources Administration System (SIAPE), an online database, is the main tool for managing civilian personnel in the federal administration in Brazil. The Ministry of Economy administers it.

SIAPE was implemented throughout the federal public sector in the 1990s, with federal universities being the last to join the system in 1996 due to strong political resistance. The federal government went so far as to not pay civil servants to agree to be included in SIAPE and to send the required information digitally.

Following the establishment of a single payroll database, a number of mechanisms for data validation and correct application of adjustments to legislation were put in place, eliminating a number of undue expenditures. By the end of the 1990s, automated audits of this centralised payroll database generated 1-2% cuts and financial savings by identifying officials who were improperly accumulating positions, obtaining benefits and other improper payments, or exceeding the maximum allowable salary ceiling in the federal administration.

SIAPE currently processes the pay of some 2 million active staff, retired staff and dependants of deceased staff in 231 organisations, including the federal administration, federal educational

organisations, former federal territories, agencies (autarchies), foundations, public enterprises and mixed-economy companies. It does not include the Public Prosecutor's Office, the Central Bank of Brazil, public enterprises and mixed-economy companies that do not receive money from the Treasury to pay their staff, or embassy staff.

The system is audited by the local and national audit units (Office of the Comptroller General of the Union) through automatic, systematic and ad hoc processes. The Office of the Comptroller General of the Union creates audit trails that would indicate irregularities in the payroll. Data cross-checks and compilations in the SIAPE data warehouse (which includes other sources of information) are used. In addition to traditional audits, there are automated pre-audits, which try to detect possible fraud or inconsistencies before the payment is made.

SIAPE data are published monthly in the Painel Estatístico de Pessoal (statistical personnel panel).¹ Both the latest and previous figures can be downloaded on line. The publication is organised in sections with data on payroll expenditure, the number of people on the payroll, pay levels for each cadre, competitions and retired staff.

1. https://www.gov.br/economia/pt-br/acesso-a-informacao/servidores/servidores-publicos/painel-estatistico-de-pessoal. Sources: (OECD, 2010[20]); (Pimenta and Seco, 2021[16]).

4.10. Recommendations to ensure a competitive and fiscally sustainable salary regime for the Peruvian civil service

Based on the analysis presented in the previous sections, this report proposes the following recommendations (Table 4.2).

Table 4.2. Recommendations to ensure a competitive and fiscally sustainable salary regime for the Peruvian civil service

Problems	Implications	Recommendations	
The complexity of the public employment system reduces the possibilities for strategic planning and makes fiscal control of human resources difficult.	There are a multitude of employment regimes Peru does not have a well-implemented job classification system to simplify public employment regimes.	In the short term:: Continue its efforts to formalise employment an remuneration concepts through the Single Catalogue of Income Concepts (remuneration) for Public Sector Human Resources (CUC).	
	Peru's remuneration system is very complex Peru does not have an independent pay review body capable of supporting the implementation of a remuneration policy. The process of transition to the Civil Service Regime is confusing and time-consuming	In the medium term:: Establishing an independent pay review body could support the implementation of a remuneration policy.	
Human resource management and fiscal human resource management capacities in service has a direct impact on the quality of the services it provides. The low management capacity of the Peruvian civil service has a direct impact on the quality of the services it provides. Low financial and human resource management capacity in entities impacts human resource planning to reflect the specific needs of the entity and assess its budgetary impact.		In the short term:: Strengthen financial management capacities at all levels to improve financial planning and capabilities Develop detailed guidelines for human resources units for the different processes (administrative and financial) to support	

Problems	Implications	Recommendations		
	High staff turnover makes it very difficult to build human resource management capacity and professionalise the human resources function.	In the medium term:: Conduct a study on public employment conditions in sectors and sub-national governments, analyse the profile of employees and causes of high staff turnover, in order to identify and implement measures to build public employee loyalty and reduce high turnover		
Internal control system still insufficient	An inefficient internal control system, more focused on processes than on results. The development of external controls to compensate for insufficient internal controls. The role of external audit in human resources is limited in Peru.	In the short term:: Strengthen accountability by reinforcing internal control processes to separate more clearly the role of each actor. Strengthen the role of external controls and audits (role of the Office of the Comptroller General of the Republic).		
Lack of development of the fiscal framework for collective bargaining reduces the predictability of human resources expenditures.	Peru does not have an independent entity responsible for preparing a Fiscal Situation Report. Resolution mechanisms are in line with international standards.	In the short term:: Establish an independent body to conduct a status report that establishes fiscal space and analyses the current level of wages compared to the private sector for comparable functions. Consider creating short-term contingency reserves. In the short and medium term: Establish an independent wage review mechanism to provide independent guidance on wage negotiations, and would strengthen transparency.		
The process of formulating staff costs is based on a micro approach where entities submit their demands to the MEF without a credible maximum allocation for human resources.	Peru's human resources budget formulation process lacks credible spending ceilings The micro approach and the lack of credible human resources expenditure ceilings has several negative consequences in Peru Despite very strong MEF oversight of inputs, slippages still exist. Peru lacks efficient instruments to ensure fiscal sustainability of personnel spending	 In the short term:: Continue efforts to regularise employment concepts Consider the present "staff cost and headcount ceilings" as the baseline estimate, and set human resources expenditure limits per entity from the beginning of the budget process (see chapter 2). In the medium-long term:: A study could be undertaken on how the system could be reformed to move from input-based oversight to full expenditure-based control, implementing strict human resources expenditure ceilings per entity, in exchange for allowing entities greater flexibility to structure their staffing according to their needs. This study could be supported by pilot exercises. Analyse what types of controls are needed, which institutions would be most efficient in exercising them, what pre-requisites should be developed (capacities, systems, etc.) and the accountability mechanisms that should be implemented to ensure the fiscal sustainability of public spending on human resources. In long term: As capacities are built and human resources expenditure ceilings respected, and alternative control mechanisms (results-based, etc.) are 		

Problems	Implications	Recommendations
		expenditure and results-based controls.
Difficulties in developing reliable medium-term projections of staff costs	There are a number of challenges in producing reliable forecasts Peru does not have contingency reserves to ensure medium-term fiscal sustainability.	In short term: Reinforce the concept that budget projections support the development of a strategic approach to human resource planning, build policy and ensure fiscal sustainability; human resource spending is the result of active planning. In the medium term: Assess the possibilities of establishing a planning or contingency reserve that is not earmarked in the budget ceilings allocated to each entity.
The potential of AIRHSP as a strategic human resources planning and fiscal management tool for entities is not fully exploited.	The Peruvian payroll system is moving from partially centralised to centralised. AIRHSP is not optimised to take advantage of available data. There is no interoperability between AIRHSP and the Integrated Public Sector Financial Management System, resulting in additional efforts for entities to integrate their information. DGGFRH does not perform quality checks on the information recorded in AIRHSP to mitigate the risk of incorrect data.	In a short term: Continue the process of formalising employment concepts with a view to moving towards a single, integrated human resources system at national level (AIRHSP). Initiate a discussion to broaden the use and objectives of AIRHSP beyond expenditure control. Strengthen interoperability between AIRHSP and other IT systems for the validation of the spreadsheet with the information registered in AIRHSP. Reinforce (automatic) quality control of the recorded information to verify the accuracy of the data Conduct audits of the AIRHSP through the Comptroller General of the Republic. Initiate a communication campaign to clearly state the advantages of joining AIRHSP for the entities. In the medium term: Increase the use of AIRSHP for strategic workforce planning at the entity level.

References

Comptroller and Auditor General (2015), Central government staff costs, National Audit Office, https://www.nao.org.uk/wp-content/uploads/2015/06/Central-government-staff-costs.pdf (accessed on 22 June 2022).	[14]
Debrinski, A. (2022), "General overview of HR budget cycle and organisation in France: The example of local state administration", PowerPoint presentation.	[7]
DGGFRH (2022), "Pension Management Directorate", PowerPoint presentation, General Directorate of Fiscal Management of Human Resources.	[6]
International Monetary Fund (n.d.), <i>Guidelines for Public Expenditure Management-Section 3:</i> Budget Preparation, https://www.imf.org/external/pubs/ft/expend/guide3.htm (accessed on 21 June 2022).	[17]
Lasker, R. (2021), 9 Tasks to Put on Your Payroll Audit Checklist. The blueprint., https://www.fool.com/the-ascent/small-business/payroll/articles/payroll-audit/ (accessed on 13 July 2022).	[19]

Lequiller, F. and D. Blades (2018), <i>Comprendiendo las Cuentas Nacionales: Segunda Edición</i> , OECD Publishing, Paris, https://doi.org/10.1787/9789264299023-es .	[21]
Ministry of Action and Public Accounts (2019), <i>Projets annuels de performances, Annexe au Projet de Loi de Finances pour 2020</i> , Ministry of Action and Public Accounts, Paris, https://www.budget.gouv.fr/files/uploads/extract/2019/PLR/BG/PGM/148/FR_2019_PLR_BG_PGM_148_PERF.html (accessed on 3 February 2022).	[10]
Ministry of Public Sector Transformation and the Civil Service (2009), <i>Bilan du programme de la fusion des corps dans la fonction publique</i> , Ministry of Public Sector Transformation and the Civil Service, Paris.	[9]
Moretti, D. and D. Kraan (2018), "Budgeting in France", <i>OECD Journal on Budgeting</i> , Vol. 2018/2, pp. 8-72, https://doi.org/10.1787/budget-18-5j8jt0pt4c0q .	[18]
OECD (2021), Government at a Glance 2021, OECD Publishing, Paris, https://doi.org/10.1787/1c258f55-en .	[2]
OECD (2021), <i>The Public Sector Pay System in Israel</i> , OECD Publishing, Paris, https://doi.org/10.1787/3b6ad37f-en .	[8]
OECD (2020), Government at a Glance: Latin America and the Caribbean 2020, OECD Publishing, Paris, https://doi.org/10.1787/13130fbb-en .	[1]
OECD (2019), Negotiating Our Way Up: Collective Bargaining in a Changing World of Work, OECD Publishing, Paris, https://doi.org/10.1787/1fd2da34-en .	[15]
OECD (2017), OECD Integrity Review of Mexico: Taking a Stronger Stance Against Corruption, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264273207-en .	[13]
OECD (2017), OECD Integrity Review of Peru: Enhancing Public Sector Integrity for Inclusive Growth, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264271029-en .	[12]
OECD (2016), OECD Public Governance Reviews: Peru: Integrated Governance for Inclusive Growth, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264265172-en .	[4]
OECD (2010), OECD Reviews of Human Resource Management in Government: Brazil 2010: Federal Government, OECD Reviews of Human Resource Management in Government, OECD Publishing, Paris, https://doi.org/10.1787/9789264082229-en .	[20]
Penido, C. (2019), "As budgets bleed, Brazil looks to downsize government", <i>Apolitical</i> , https://apolitical.co/solution-articles/en/as-budgets-bleed-brazil-looks-to-downsize-government .	[11]
Pimenta, C. and A. Seco (2021), Los sistemas de pago de la nómina de personal en el sector público y la experiencia internacional, Inter-American Development Bank, Washington, D. C., https://doi.org/10.18235/0003882 .	[16]
R&C Consulting (n.d.), "Servicio civil peruano: ¿Qué es y cuál es su situación actual?", web page, https://rc-consulting.org/blog/2016/08/servicio-civil-peruano (accessed on 29 June 2022).	[5]

SERVIR (n.d.), "El Sistema Administrativo de Gestión de Recursos Humanos – SAGRH", web page, https://www.servir.gob.pe/gestores-de-rrhh/gestores-de-rrhh-2/gestores-de-rrhh (accessed on 24 June 2022).

Notes

- ¹ Note that the System of National Accounts used in most countries classifies government expenditures into: intermediate consumption, compensation of employees, subsidies, property income, social benefits, grants and other expenditures. In the System of National Accounts, the term "revenue" designates "all resources acquired by the government", such as taxes, social contributions, current revenues, capital transfers receivable (Lequiller and Blades, 2018_[21]). In Peru, the term "revenues" is used to designate income paid by the public sector and received by public employees. This is what is referred to as "remunerations" in the System of National Accounts. This report uses the term "remuneration of public employees" when referring to OECD countries, but uses the term "personnel income (remuneration of public employees)" to describe the Peruvian system.
- ² The enabling framework is defined by Article 15 of Legislative Decree No. 1436, Framework Legislative Decree on the Financial Administration of the Public Sector, published on 16 September 2018, and Legislative Decree No. 1442, Legislative Decree on the Fiscal Management of Human Resources in the Public Sector. These provisions, upon the repeal of Legislative Decree No. 1442 (through Law No. 31188, Law on Collective Bargaining in the State Sector), were established through Emergency Decree No. 044-2021, and provided for their permanent validity through Article 30 of Law No. 31538.
- ³ Except for subsequent authorisations for the appointment of personnel in some sectors, for example, Law No. 28560, which authorised the Ministry of Health to appoint technical and administrative personnel, service personnel, and auxiliary personnel who, at the date of entry into force of the law, are providing services as contracted personnel under any modality. Likewise, the 2009 and 2010 budget laws, as well as the 2019 budget law and the Emergency Decree No. 016-2020, authorised the appointment of personnel of Legislative Decree No. 276.
- ⁴ The Analytical Personnel Budget is an institutional management document whose purpose is to systematise the budget of vacant or occupied positions, which corresponds to the personnel income (remuneration of public employees) received by the public servant on a permanent, periodic, exceptional or occasional basis, including the contributions that by law are included in the institutional budget of the Entities that have an approved budget appropriation.
- ⁵ La OCDE suele utilizar el término "política de remuneraciones" para designar lo que en Perú se llama "política de ingresos"
- ⁶ By the law of large numbers, the margin of error of projections based on macro elements will always be smaller than the margin of error of projections based on micro inputs, since errors are compensated in the macro approach while they are added in the micro approach.

5 Public infrastructure programming, budgeting and management in Peru

This chapter analyses the process of programming, formulation, modification and execution of the investment budget in Peru, and provides recommendations for aligning practices in Peru with OECD best practices.

5.1. Overview of public investment in Peru

Before looking at the regulatory and institutional framework of the Peruvian public investment administrative system (hereafter, the investment system), it is useful to specify some particular characteristics and recent trends in public investment in Peru, as well as the economic impact of the COVID-19 pandemic in the country. Indeed, these particularities are important to understand the evolution of the Peruvian investment system in recent years, its importance in the Peruvian economy, and its development at the national and territorial levels. The year 2020 will be taken into account for the comparative analysis, even though it represents a period of crisis generated by the spread of COVID-19 across the globe, which had adverse effects on economic activity.

5.1.1. Public investment has remained constant despite the economic impact of the pandemic

The crisis resulting from the COVID-19 pandemic had a considerable impact on the Peruvian economy. In 2020, gross domestic product (GDP) declined by 11% annually and poverty rates, based on the latest comparable international estimates, increased by more than 6 percentage points compared to the year before the pandemic. This increase is particularly significant given that poverty rates in the Latin America and Caribbean (LAC) region increased by less than five percentage points (OECD et al., 2021[1]). Nevertheless, Peru has registered a rapid economic recovery compared to its regional peers. Since May 2020, economic recovery has taken off quickly and public investment has been an important lever for the recovery of the job market (MEF, 2021[2]).

Average investment expenditure is 3% of GDP in OECD countries. By 2019, Brazil's public investment spending was 1.7% of GDP, Chile's 2%, Colombia's 3.5%, Mexico's 1.3% and Peru's 6% (OECD, 2020_[3]; 2021_[4]). In recent years, public investment in Peru has represented 6-7% of total GDP (INEI, 2022_[5]). This percentage has been relatively stable over the last ten years. The sectors with the highest public investment are transport and communications; education; agriculture; housing, construction and sanitation; and health (Figure 5.1). In particular, the transport and communications and education sectors accounted for 58% of the national government's modified institutional budget (MIB) for investment in 2020.

Others
11%

Interior
3%

Presidency Council of Ministers
3%

Defense
4%

Transport and communications
42%

Health
5%

Housing, construction and sanitation
7%

Agriculture
9%

Education
16%

Figure 5.1. Modified institutional budget for public investment in Peru by sector, 2020

Source: Adapted from MEF (2021[2]).

StatLink https://stat.link/3wlpr4

5.1.2. Subnational governments account for a high share of total public investment

Regional and local governments play a key role in a country's economic and social development, assuming important responsibilities, especially in public investment and the provision of essential public services such as health and education. In Peru, subnational governments made 62% of total public investment in 2019. This is above the OECD average (55%) (OECD/UCLG, 2022_[6]). Except for Spain (65%) and Japan (68%), countries with a higher or similar percentage of subnational investment to Peru are federal countries such as Australia (75%), Belgium (78%), Canada (84%), Mexico (70%) and Switzerland (67%) (Figure 5.2). The percentage in Peru is abovmore than that of itse regional peers such as Chile (11%), Costa Rica (21%) and Colombia (48%).

It is important to note that a large part of subnational public investment occurs at the local level and, to a lesser extent, at the regional level. For example, in 2020, 46% of the MIP for public investment was concentrated in local governments, 34% in the national government and 20% in regional governments (MEF, 2021_[2]).

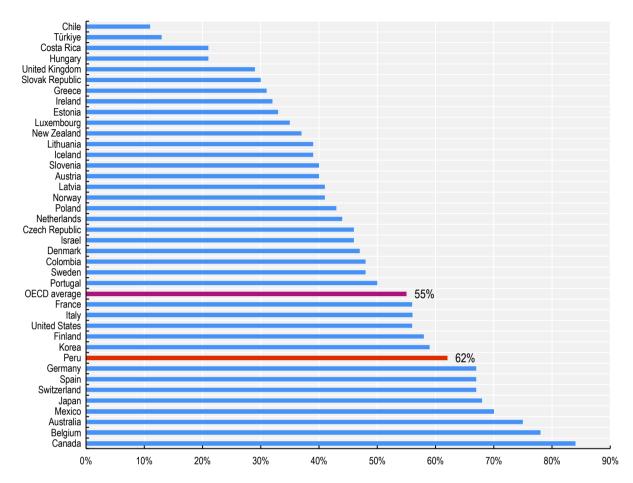


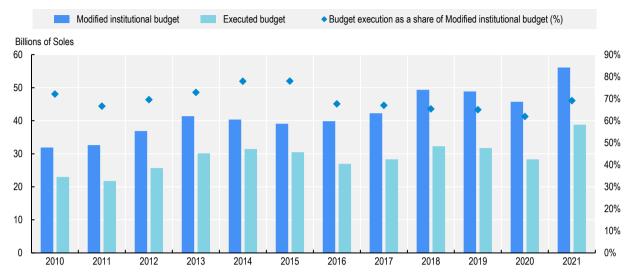
Figure 5.2. Percentage of public investment at the subnational level, 2019

Source: Author's elaboration based on SNGWOFI (2022[7]).

5.1.3. Investment budget execution remains a major challenge and is reflected in low levels of quality

Low public investment budget execution is a structural problem in Peru. The execution rate over the last decade has averaged below 70%, generally between 65% and 75% (Figure 5.3). It is important to highlight that this problem is particularly relevant in the case of local government public investment, where execution with respect to the MIP has averaged 63% in the last 10 years.

Figure 5.3. Evolution of the public investment Modified Institutional Budget and its execution, 2010-22



Source: MEF (2021[2]).

StatLink https://stat.link/dvcazp

The quality of infrastructure is also a significant challenge in Peru. Infrastructure quality in Peru is below the OECD average and even below regional peers, such as Chile, Colombia and Mexico (Figure 5.4) (Schwab, 2019_[8]). The quality of infrastructure investment is critical to ensure that infrastructure fulfils its potential as a catalyst for growth and development.

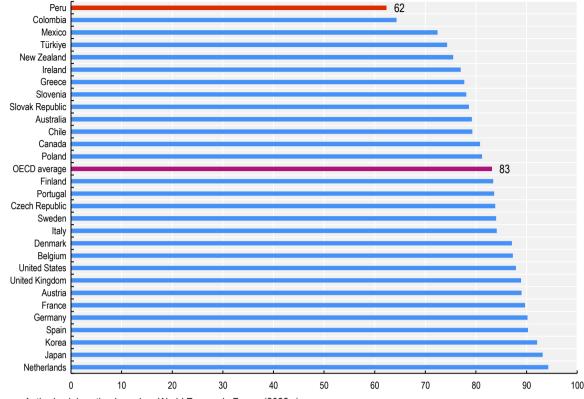


Figure 5.4. World Economic Forum Infrastructure Quality Index, Peru vs. OECD countries

Source: Author's elaboration based on World Economic Forum (2022_[9]).

StatLink https://stat.link/c1yld2

Some of the criteria used to measure the quality and development of infrastructure are the state of road connectivity, the quality of road infrastructure, rail density and airport connectivity, among others (Schwab, 2019[8]). Peru ranks 110th out of 141 countires in road infrastructure quality, 79th in infrastructure utility and 97th in transport infrastructure (*Ibid.*).

5.2. From the National Public Investment System to Invierte.pe: an investment system that has matured and evolved over time

5.2.1. The beginnings of the public investment administrative system and its first reforms

Since its creation in 2000, the Peruvian public investment administrative system has been reformed to adapt to the country's changing context and international standards (OECD, 2016_[10]). At the beginning of the millennium, the need for a comprehensive system bringing together the institutional competencies relevant to the country's public investments, and which could be part of the state's administrative systems, began to be discussed. Since its creation with Law No. 27293 of 2000, the National Public Investment System (SNIP) has sought to optimise the use of public resources allocated to investment, improving the quality of the project life cycle, especially with regard to project formulation and evaluation. It is in this context that an investment system was created, establishing principles, processes, methodologies and technical standards aimed at certifying the quality of public investment projects (Ministry of Economy and Finance, 2014_[11]).

The main objective of SNIP was to enhance its systemic component, spending public resources earmarked for investment more efficiently. The system sought to ensure that projects were efficient, sustainable and

cost-effective. All of the national and subnational governments' public investment projects under SNIP would be subject to study and analysis.

The system regulated three phases of the public investment project (PIP): pre-investment, investment and post-investment.

- Pre-investment: At this stage, initial studies, called pre-investment studies (profiling, including
 pre-feasibility studies and feasibility studies), were carried out to determine the relevance, social
 profitability and sustainability of the PIP, criteria that underpin the feasibility statement. This was a
 critical phase, as it established whether or not a PIP should be carried out and if it was necessary
 to continue with the following stages. The Formulation Unit formulated the pre-investment studies
 and registered them in the system's Project Bank. They were then passed on for evaluation by the
 responsible programming and investment offices.
- Investment: the definitive studies (or technical dossier or equivalent documents) were then carried
 out and the PIP was executed. The spending agency was responsible for this phase and was in
 charge of preparing and registering the studies in the Project Bank, implmenting the project, closure
 and transfer of the PIP to the entity responsible for operation and maintenance.
- Post-investment: this phase comprised the operation and maintenance of the implemented PIP, as well as the ex post evaluation of the project.

All projects had to be declared viable before moving to the investment phase. To be approved, projects had to be socially profitable, sustainable and framed with the respective planning documents. The diagnosis considered the problem the project was intended to solve, its causes and the expected effect of the investment. The analysis also took into account size and cost elements in order to make an overall cost-benefit analysis and ultimately assess the social profitability of the project (OECD, 2016[12]).

From the initial design of SNIP, the aim was to foster dialogue between the central government and subnational governments to respond to the specific needs of each regional government. Although there were a number of decentralised bodies in SNIP, the Ministry of Economy and Finance (MEF), through the General Directorate of Public Investment (DGIP), was the system's highest technical and regulatory authority. This was where the pre-investment studies of the projects arrived with amounts determined for their evaluation and viability; likewise, the verification of the project's viability was registered when the cost of implementing the project exceeded certain percentages with respect to the amount declared viable.

The MEF was responsible for developing the rules for the functioning of SNIP, regulating processes and procedures, issuing the technical standards to be met by projects, declaring the feasibility of projects requiring state borrowing or guarantees, ensuring that approved projects complied with technical and legal requirements, ensuring during the investment phase that projects complied with the approved conditions and parameters, and conducting the sample evaluation on the quality of feasibility approvals granted by the competent SNIP bodies (OECD, 2016_[12]).

The first years of SNIP were accompanied by the territorial decentralisation process carried out in the 1990s and 2000s. This process sought to give more autonomy to territorial entities (Box 5.1). The launch of the investment system coincided with the creation of regional governments and their new political structure, which assigned new competences within a system of devolution of powers (Serrano and Acosta, 2011[13]).

As part of the decentralisation process, regional governments were created in 2002, giving them political powers, functional and regulatory responsibilities, and powers of territorial planning (*Ibid.*). From that year on, the MEF began delegating powers for making projects viable within SNIP. By 2007, any project could be evaluated and declared viable by the investment programming office of each sector, local or regional government, according to its competencies and without any limit on the amount. Only projects with internal indebtedness and whose investment amount exceeded a certain threshold had to be evaluated by the MEF (Ministry of Economy and Finance, 2019_[14]).

Box 5.1. Territorial decentralisation in Peru

The decentralisation process in Peru was implemented in different stages. This box gives a summary of the process.

- In 1989, the first Law on the Bases of Decentralisation was enacted, grouping the 24 departments into 12 "regions". These regions were given sectoral powers with corresponding budgetary allocations. The central government retained supervisory and regulatory functions.
- In 1992, transitional councils of regional administration were created in each department. They
 functioned as agencies under the Presidency of the Council of Ministers and were in charge of
 executing central government decisions. They were active until 2001.
- In 2001, a process of decentralisation was initiated, which came to fruition in 2002 with the Organic Law of Regional Governments, which sets out the decentralised competences and functions of the regional governments.
- In 2002, the president, seven political parties and civil society organisations signed a National Accord to commit to state policy guidelines, including decentralisation.
- Between 2002 and 2004, several laws were enacted to facilitate regional elections and define legal provisions for territorial organisation, regional and municipal government, participatory budgeting, decentralised investment, fiscal decentralisation, and the accreditation and integration of regional and local governments. These include the Law on the Bases of Decentralisation.
- In 2004, the government established a three-stage process to transfer 16 functions and 124 competencies. The central government began transferring funds directly to regional governments.
- In 2006, the transfer process was accelerated to meet the deadline of December 2007. This deadline was met, except for Metropolitan Lima and Callao. However, not all transferred functions had an accompanying budget in 2007.
- From 2007 onwards, the decentralisation process also incorporated the National Public Investment System, in that it was decreed that subnational governments and national sectors could declare the feasibility of projects under their jurisdiction without the need to go through the Ministry of Economy and Finance, as had been the case until then.
- In 2008, the central government took the final steps to finalise the decentralisation process, which was completed in 2009.
- In 2017, the national government decided to support regional and local governments to promote
 economic potential and social capital in their territories with the creation of the regional
 development agencies, which were initially created in three pilot regions (Apurímac, Piura and
 San Martín) before being implemented in all regions.
- In 2018, the national government created the Multisectoral and Intergovernmental Commission for the Strengthening of Decentralisation to propose articulated intersectoral and intergovernmental management guidelines. These guidelines seek to promote and strengthen decentralisation and an Action Plan 2018-2021. "Plan 2021" is a management tool for the Secretariat for Decentralisation, which allows it to guide its actions, with strategic actions in different thematic areas, to be implemented in an articulated and concerted manner between the three levels of government.

Sources: Vammalle, et al. (2018_[15]), "Financing and budgeting practices for health in Peru"; OECD (2019_[16]), *Multi-dimensional Review of Peru: Volume 3. From Analysis to Action*; Presidency of the Republic (2002_[17]), Ley de Bases de la Descentralización; Presidency of the Council of Ministers (2018_[18]), Anexo: Plan Anual de Transferencia de Competencias Sectoriales a los Gobiernos Regionales y Locales 2021.

Although the initiative behind SNIP was to create a more decentralised system, some of its phases, especially the pre-investment phase, were perceived as creating an obstacle to participating in decision making. As a result, after more than a decade of using SNIP, local and regional governments demanded greater autonomy and easier access to and participation in public investment decisions, which led to a restructuring of the investment system.

5.2.2. Invierte.pe as a more flexible system to prioritise budget execution to close gaps

Despite the advances of made with SNIP, the system was criticised for its lack of flexibility and for supposedly making the pre-investment process too complex. Sectors, regions and local governments perceived it as an inflexible process, difficult to access and prioritising central decisions (Secretaría Descentralización, 2022[19]). That is why, in 2016, it was decided to make a structural reform to the system by creating the National System of Multiannual Programming and Investment Management, better known as Invierte.pe.

In the change from SNIP to Invierte.pe, different functions were attributed to the bodies that make up the system so that there would be greater autonomy, dialogue and relationships between the MEF, the sectors, local and regional governments, and the public companies subject to using the system. Likewise, through multiannual programming and the prioritisation of investments based on gap diagnosis, the aim is to establish a better link between the investment portfolio and the long-term development visions at the sectoral and territorial levels. In particular, the new system aims to streamline the investment planning and approval process, promote investment to close priority infrastructure or service access gaps, and better articulate with long-term strategic objectives (Box 5.2).

Box 5.2. Main changes and improvement objectives of Invierte.pe

- Includes the multiannual investment programming phase in the investment cycle.
- Links the investment portfolio to long-term development visions at sectoral and territorial levels.
- Greater flexibility, decision-making possibilities and accountability for subnational sectors and governments.
- Simplifies procedures relating to the formulation and appraisal of investment projects.
- Eliminates cost escalation thresholds or limits.
- Creates optimisation, marginal expansion, rehabilitation and replacement investments allowing, for example, the replacement of an acquired asset to be treated as an investment under the optimisation, marginal expansion, rehabilitation and replacement investments category by registering a token without the need for a social assessment and the formulation of a preinvestment study.
- Creates standard factsheets for the formulation and evaluation phase.
- Creates annual asset reports.

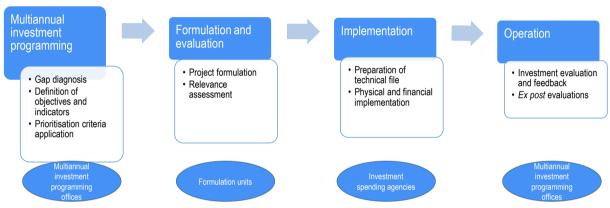
Source: Based on Ministry of Economy and Finance (2017[20]), El Nuevo Sistema de Inversión Pública.

Likewise, since 2019, the adoption of Buliding Information Modelling (BIM) was initiated for its progressive application in public investment as a collaborative work methodology for the information management of a public investment, which makes use of an information model created by the parties involved, to facilitate the multiannual programming, formulation, design, construction, operation and maintenance of public infrastructure, ensuring a reliable basis for decision making.

To date, the Implementation Plan and Roadmap of the BIM Peru Plan have been approved, as well as the "Technical Note on BIM Introduction: Adoption in Public Investment" and the "National BIM Guide: Information Management for investments developed with BIM". In addition, BIM is being implemented in ten pilot projects in the Formulation and Evaluation and Execution phases and the BIM curriculum in three public universities.

One of the objectives of Invierte.pe is to articulate long-term strategic planning with the allocation of resources in the public budget through medium-term strategic programming. In this sense, the multiannual investment programming stage seeks to establish a portfolio of investments to close gaps in infrastructure or access to previously identified priority services. The cycle continues with the formulation and evaluation phase, where ideas are matured and decisions are taken on the suitability of investment projects. The cycle continues with the implementation phase and ends with the operational phase of the investments. Physical and financial monitoring is also carried out through the investment monitoring system.

Figure 5.5. Phases of Invierte.pe



Source: Ministry of Economy and Finance (2017[20]).

The aim of Invierte.pe is to have more detailed projects that reflect the specific reality of the country's different territories, with the formulation units of the line ministries, regional governments and local governments granting the viability of the investment projects they formulate. Unlike SNIP, with Invierte.pe it is expected that each prioritised investment project will have a guaranteed budget, at least to launch the work. However, as will be discussed in Section 5.4, in practice, the system allows investments to be prioritised and even implemented without a budget available for the full implementation of the project.

As part of the modernisation of the investment system, the process of integrating the investment system with the state's other administrative systems has also begun. Multiannual programming and the gap closure approach are aimed at correctly allocating public resources. They are expected to be articulated with other systems such as strategic planning and the budget and supply administrative systems. Interoperability is sought between the systems to achieve more coherent actions on the part of the state and provide more concrete and accurate information. Likewise, the aim is to standardise information management by integrating the permanent updating of the Integrated Financial Administration System (SIAF) with the Invierte.pe Investment Bank. Various initiatives were launched in 2018 to integrate the investment system into the SIAF. Despite these initiatives, cross-system integration is a constant challenge at the operational level.

5.2.3. Transfer of competences and institutional reforms of Invierte.pe

According to the OECD Recommendation of the Council on the Governance of Infrastructure (OECD, 2020_[21]), governments should have an institutional framework that is clear, transparent, coherent,

predictable and legitimate. Institutions should have precise functions, competent authorities, and be endowed with adequate financial and human resources to carry out their functions.

Public investment often involves different levels of government at some stages of the investment cycle, either because competences are shared or because of joint financing arrangements. For this reason, sound public infrastructure policy needs robust co-ordination mechanisms within and between levels of government. These mechanisms should foster a balance between a whole-of-government perspective and the different sectoral and regional viewpoints (OECD, 2016_[22]).

As mentioned at the beginning of this chapter, Peru is one of the countries where subnational governments, and in particular local governments, participate more in public investment. With the new investment system, Invierte.pe, certain aspects were modified regarding institutional design and the functions of each body involved.

Invierte.pe has five main bodies: the MEF, through the General Directorate of Multiannual Investment Programming (DGPMI), which acts as the governing body; and each entity at the different levels of government has a resolution body, a multiannual investment programming office, a formulation unit and investment spending agencies (Figure 5.6). In Invierte.Pe's new investment cycle, the functions of the investment programming offices were transferred to the formulation unit. In this sense, the same body formulates and evaluates the investment projects.

The MEF continues to be the governing body of the system through the General Directorate of Multiannual Investment Programming, which provides technical assistance, issues directives and guidelines, and establishes methodologies and general parameters for formulating and evaluating projects. Although the MEF maintains decision-making functions in the investment cycle, these have been reduced and its competencies have been delimited. In SNIP, the MEF was involved in almost all phases of investment decision making; in Invierte.pe, its powers have been decentralised to provide decision-making and action spaces for public entities in the formulation, evaluation, feasibility and implementation of projects (Ministry of Economy and Finance, 2017_[20]).

In Invierte.pe, the sectors and regional and local governments now have their own decision-making bodies. Each has a resolution body, a multiannual investment programming office, a formulation unit and an investment spending unit.

Figure 5.6. Bodies and functions in Invierte.pe

General Directorate of Multiannual Investment Programming	Resolution body	Multiannual investment programming office	Formulation unit	Investment spending unit
Governing body of the system Prepares multiannual investment programming Approves sector methodologies Establishes ex ante and ex post evaluation methodologies	Approves the MIP of their sector, regional or local government Approves the gaps and criteria Authorises the preparation of technical files	Responsible for the programming phase within its level Prepares the MIP for its sector, regional or local government Proposes the investment portfolio prioritisation criteria to the respective resolution body Monitors implementation progress Performs ex post evaluations of investment projects	Responsible for the formulation and evaluation phase of the investment cycle Applies the methodologies approved by the General Directorate of Multiannual Investment Programming or the sectors Registers in the Investment Bank Declares the feasibility of investment projects	Responsible for the implementation phase Prepares the technical file or equivalent Responsible for the physical and financial execution of the investments Maintains the information updated in the Investment Bank

Source: Ministry of Economy and Finance (2017[20]).

The changes introduced by Invierte.pe require greater responsibility, commitment and capacity from sectors and subnational governments. In the framework of the implementation of Invierte.pe, capacity-

building and technical assistance are availble from officials from the General Directorate of Multiannual Investment Programming and public investment specialists in the territories (virtual and face-to-face). However, there are high levels of turnover among the officials in charge of implementing the system, thus the knowledge acquired in the field is lost.

5.3. The role of long-term strategic planning for investment

Long-term strategic planning is essential for the effective and efficient investment of public resources. Appropriate planning helps to ensure that investment decisions take into account, holistically, both long-term development needs and objectives and that their development is transparent, inclusive and participatory. According to the OECD *Recommendation of the Council on the Governance of Infrastructure* (OECD, 2020_[21]), the strategic vision should be based on both national and subnational development objectives, and should aim to improve the economic, natural, social and human capital that underpins well-being, sustainable and inclusive growth, competitiveness, and public service delivery (OECD, 2017_[23]).

The choice of what to build should be framed by a vision for the country's future that is articulated through an explicit statement of long-term development goals. To ensure the overall coherence of investments across sectors, centralised guidance is essential on the objectives and priorities to be pursued by infrastructure policies and the prioritisation of investments. Thus, infrastructure strategies should not only take into account the specific needs of a sector, but also ensure that investment plans contribute to wider long-term development objectives (OECD, 2020[24]).

5.3.1. Peru still lacks a medium- and long-term infrastructure policy

Most OECD countries have comprehensive plans for infrastructure investment

The growing trend of comprehensive plans for infrastructure investment aims to articulate infrastructure investment more coherently and promote synergies and complementarities in investment across different sectors (Figure 5.7). For example, the United Kingdom was one of the first countries to develop long-term strategic plans and to create a specialised body for this function. Similarly, Ireland, through its National Development Plan, sets out a comprehensive ten-year public investment strategy (Box 5.3).

Figure 5.7. Existence of global infrastructure plans, 2020

Source: OECD (2020), Infrastructure Governance Survey.

StatLink https://stat.link/j7thix

Box 5.3. Long-term strategic infrastructure plans for Ireland and the United Kingdom

United Kingdom

Infrastructure planning in the United Kingdom has historically been based on medium-term sectoral plans for specific sectors (e.g. energy, water, railways and highways). The relative stability and predictability of the United Kingdom's approach to sector-based infrastructure planning and regulation was criticised when it came to developing strategic and nationally significant infrastructure projects.

The London School of Economics Growth Commission (2013) first proposed the creation of a new institutional framework to govern infrastructure strategy, delivery and financing. Subsequently, the Armitt Review looked at what structures would best support long-term strategic decision making and how to forge the cross-party consensus needed to take those decisions. The review concluded with the creation of a National Infrastructure Commission, with statutory independence.

The first National Infrastructure Commission was established in 2015 to identify the United Kingdom's strategic infrastructure needs over the medium to long term and propose solutions to the most pressing infrastructure challenges. The National Infrastructure Commission's mandate also recognised the role

of infrastructure in promoting sustainable economic growth, improving competitiveness and providing security for investors.

In 2018, the National Infrastructure Commission published the first National Infrastructure Assessment for the United Kingdom, making recommendations on how the United Kingdom's identified infrastructure needs and priorities should be addressed. The UK government formally responded to the recommendations through a National Infrastructure Strategy published alongside the Budget in 2020.

By bringing together expertise in the financing, delivery and assurance of major projects into a single unit, the United Kingdom seeks to draw on good practices from across sectors and improve the way government delivers projects and programmes.

Ireland

As part of Project Ireland 2040, the National Development Plan 2021-2030 sets out the overall investment strategy to make Ireland a better country for all and build a more resilient and sustainable future. It is the largest and greenest national development plan ever presented in the country's history, focusing on priority solutions to strengthen housing, climate ambitions, transport, health, job growth in all regions and economic renewal for the next decade. This National Development Plan sets a ten-year outlook of the country's infrastructure performance.

Sources: OECD (2020_[24]); Department of Public Expenditure and Reform (2021_[25]).

SINEPLAN is not designed to develop a medium- or long-term strategic infrastructure vision

Unlike most OECD countries, Peru does not have a medium- or long-term infrastructure vision and the existing planning mechanisms within the framework of the National Strategic Planning System (SINAPLAN) are not useful for achieving this objective.

SINAPLAN is the articulated and integrated set of bodies, subsystems and functional relationships whose purpose is to co-ordinate and make viable the national strategic planning process to promote and guide the harmonious and sustained development of the country, articulating the different proposals to elaborate the National Strategic Development Plan and the sectoral, institutional and subnational plans (ECLAC, 2018_[26]). Its governing, guiding and co-ordinating body is the National Strategic Planning Centre (CEPLAN), which is in charge of monitoring and evaluating plans, policies, programmes, objectives and projects within the strategic planning framework.

Beyond the theoretical and methodological planning exercise carried out by SINAPLAN, there are currently no centralised strategic planning guidelines, where the linkage and articulation between sectors in infrastructure matters are collected and reaffirmed. The National Infrastructure Plan for Competitiveness is the first effort to define a vision and objectives for closing Peru's infrastructure gaps (Box 5.4). Although it is an interesting example of how to articulate the needs of sectors in a long-term plan, the plan is limited in scope and coverage.

Box 5.4. The National Infrastructure Plan for Competitiveness

The National Infrastructure Plan for Competitiveness was drafted in July 2019 to increase productivity and competitiveness. It represents the first effort to define a vision and objectives for closing infrastructure gaps in Peru. The plan is, however, limited in its coverage. Its main emphasis is on the private sector and its portfolio is limited, leaving out sectors of great relevance, such as health.

To prepare the plan, the Ministry of Economy and Finance applied a project prioritisation methodology based on the criteria of transversality, productive potential, social impact and state resources, and short-term impact. It resulted in the identification of 52 investment projects distributed among the following sectors: transport (26), electricity (8), communications (5), agriculture (4), sanitation (4), hydrocarbons (3) and environment (2).

The National Infrastructure Plan is currently being updated to broaden its vision to incorporate social, environmental, institutional and economic dimensions. It also seeks to incorporate an approach based on sustainable development and to update project goals and objectives for the period 2022-25.

Sources: Ministry of Economy and Finance (2019_[27]); PeruCompite (2022_[28]).

5.3.2. The vast majority of OECD countries also have long-term plans at the sectoral level

These long-term plans (Figure 5.8) seek to identify current and future needs in a specific sector as well as the resources available, and design a long-term vision that can be implemented in stages and monitored over time. They should be aligned with medium-term budgets, organising and structuring budget allocations in a way that easily corresponds to national objectives. In the case of transport infrastructure planning, in Germany (Box 5.5), fiscally sustainable long-term plans are linked to budget allocations and are aligned with medium-term expenditures.

There are no sectoral infrastructure plans (13%)**FSP** TUR PRT Longer than 10 years (56%) LUX Shorter than 10 years (31%) LTU Ι \/Δ JPN. RFI CHE SVN NOR

Figure 5.8. Existence of sectoral infrastructure plans in OECD countries, 2020

Source: OECD (2020), Infrastructure Governance Survey.

StatLink https://stat.link/1cd8ye

Box 5.5. Budget allocations and clear prioritisation: Germany's Federal Plan for Transport Infrastructure 2030

The Federal Transport Infrastructure Plan (PFIT) is a comprehensive strategy for developing the federal government's transport infrastructure, with a total investment of EUR 269.6 billion for the implementation of all top priority projects within the time frame of the PFIT 2030.

The PFIT is the federal government's most important transport infrastructure planning tool. One of its main objectives is to achieve a realistic and bankable overall strategy for the structural maintenance and construction of German infrastructure. The German authorities emphasise linking the funds to be invested to the projects, so that all first priority projects can be implemented within the time frame set for the PFIT 2030.

The latest PFIT was published in 2003. The previous one was adopted in 1992 after the reunification of Germany. The current plan (PFIT 2030) lays the foundations for transport policy for the planning horizon up to 2030. According to the Basic Law, the federal government is responsible for financing the construction and structural maintenance of the federal transport infrastructure, which is the focus of the PFIT. This infrastructure includes federal highways and federal roads (together referred to as federal highways), federal railways, and federal waterways.

The PFIT comprises the investments necessary for capital maintenance and replacement infrastructure investment as well as improvement and new construction projects. The foreseen needs for maintenance and replacement of structures have been included in the plan as a total amount for each mode of transport. In assessing project-specific improvement and new construction works, the PFIT focuses on projects that significantly impact large areas and that develop a significant capacity and/or quality improvement impact.

Sources: OECD (2020_[24]); Federal Ministry of Transport and Digital Infrastructure (2016_[29]).

Peru does not have a tradition of long-term strategic planning at the sectoral level

Despite being a widespread practice in OECD countries, Peru does not have a tradition of long-term strategic planning at the sectoral level. The sectoral planning mechanisms or initiatives developed within the SINAPLAN framework are not interrelated and do not support or link to the MIP. Although the elaboration of the MIP should take into account prioritisation criteria originating in entities' plans, there is no long-term vision for infrastructure. This limits the link between closing the gaps and a more general long-term vision of the country, thus restricting the strategic capacity within the investment system.

There are some isolated cases where initiatives have been launched to develop a strategic vision for infrastructure in the education sector. In particular, the National Education Infrastructure Plan to 2025 establishes for the first time a proposal for long-term educational infrastructure planning for the improvement, rehabilitation, expansion, construction, replacement, reinforcement and management of existing infrastructure, as well as planning for new infrastructure (Box 5.6).

Box 5.6. Peru's National Education Infrastructure Plan to 2025

The National Education Infrastructure Plan (PNIE) was conceived as the central planning instrument for educational infrastructure in Peru up to 2025. Educational infrastructure covers all educational institutions of basic education (at all levels and modalities); higher pedagogical and technological education; and technical-productive education. The objective of the PNIE to 2025 is to improve

satisfaction with the educational service, enhancing the condition, capacity, management and sustainability of the public education infrastructure to achieve a quality education for all.

It proposes long-term educational infrastructure planning for the improvement, rehabilitation, expansion, construction, replacement, reinforcement and management of existing infrastructure, as well as planning for the provision of new infrastructure. It sets four objectives related to the safety and functionality, capacity, management, and sustainability of the infrastructure. Based on existing information, it also strives to elaborate a diagnosis of the physical state of the country's public education infrastructure.

One of the positive factors identified in the PNIE is that it has been the basis and has allowed programmes such as the National Education Infrastructure Programme to prioritise and execute infrastructure projects with a high impact on closing gaps.

Sources: Ministry of Education (2017_[30]); Diario oficial del Bicentenario (2021_[31]).

Contrary to many OECD countries, Peru does not have the tools to update its plans

This planning exercise in education infrastructure can serve as an example to inspire similar initiatives in other sectors. However, it is important to bear in mind that this plan has had some challenges in its implementation, review and monitoring. Most OECD countries have tools to update their initial plans (Figure 5.9). This allows the vision to be systematically reviewed, adjusted and corrected, rather than becoming a static exercise that cannot respond to the needs of the population and avoid it from being completely replaced following a change in government.

The infrastructure strategic vision is not regularly updated (13%)MEX PRT There is a regular TUR review process (58%)AUT BEL The vision can be revised based on political KOR demand/economic or social need (29%)

Figure 5.9. Update/revision of the 2020 infrastructure vision

Source: OECD (2020), Infrastructure Governance Survey.

5.3.3. The identification of gaps has strengthened the programming process but could be broader in scope and have a more longer term perspective

Territorial inequality, coupled with the COVID-19 crisis, accentuates the need to close gaps in infrastructure or access to services and to enhance territorial development in Peru. Infrastructure has a great impact on communities and can boost the country's long-term growth and social well-being, for example in the provision of public services such as schools and hospitals. An analysis should be carried out to identify and quantify the country's needs in view of developing a strategic vision (OECD, 2020[3]).

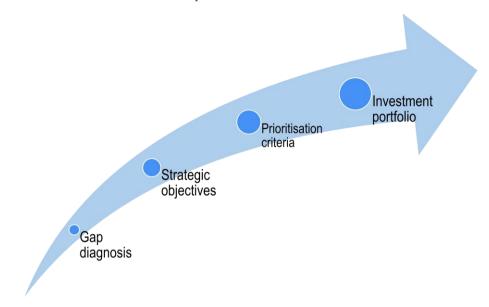
In a context of needs such as Peru's, prioritisation of investments is more difficult, but this is when strategic planning is most important. It is important to avoid falling into the practice of executing investment projects without having a clear general guideline that goes beyond the immediacy of the need to be satisfied. The most challenging challenge in Peru's investment system is to be able to generate strategies with a longterm perspective, prioritising investments with technical sense. In this sense, it must be guaranteed that all projects included in the MIP meet sufficient quality and maturity standards and that the projects prioritised are those that provide the greatest value for money, taking into account economic, social and environmental objectives. The completion of ongoing projects should be an objective to avoid delays and to ensure that assets can be completed and provide an adequate service to citizens. However, it should be ensured that only those investments that have adequate budgetary funds for their full implementation are started and that they are those projects that provide the best value for money as mentioned above. Peru has high territorial inequalities; it must therefore promote investment in infrastructure to cover basic needs, improve citizens' quality of life and help close the territorial gaps. The current system proposes development and territorial governance as useful tools to reduce the inequalities between the centre of the country and the less urbanised outskirt (Secretaría Descentralización, 2022[19]). Respect for territories and national diversity has been the basis of the decentralisation process, whose life cycle has parallelled the evolution of the investment system. Public services and the provision of goods must follow a territorial approach, where their provision is optimised by local and regional governments, seeking to satisfy the needs and expectations of citizens, and avoiding overlap and duplication between levels of government (Secretaría Descentralización, 2022[19]).

Annual investment programming should follow the gap closure objectives

New criteria for approving and financing investments are introduced in Invierte.pe. Closing priority gaps is designed as a necessary step to strengthen the country's decentralisation process. This concept seeks to ensure that PIPs aim to generate a social impact, improving the living conditions of the population in each territory. Territorial development and closing gaps have been two main elements for the investment system to help reduce regional inequalities.

In the framework of Invierte.pe, each year sectors and subnational governments must carry out multiannual investment programming with the primary objective of closing priority gaps (Figure 5.10). In the process, the sectors conceptualise, define, update, approve and publish indicators of infrastructure gaps or access to services used by the sectors, regional governments and local governments for the preparation, approval and publication of the diagnosis of infrastructure gaps or access to services. Based on this diagnosis, entities determine their prioritisation criteria, which are used to select and prioritise the investments to be registered in the multiannual investment programme's (MIP) investment portfolio. Gaps are defined as the difference between the optimised available supply of infrastructure and/or access to services and the demand, at a given date and specific geographic scope.

Figure 5.10. Peru's investment selection process



Source: Author's elaboration based on InviertePe.

The established gap closure targets must have a minimum three-year horizon. These indicators are quantitative expressions of the gaps in infrastructure and/or access to services, which are elaborated based on a variable or set of interrelated variables that allow their measurement for a given time or period (Ministry of Environment, 2019_[32]).

Conducting an annual gap diagnosis is time-consuming and can become a routine exercise, and the data used are not always reliable

The implementation of Invierte.pe has brought about improvements in identifying needs, generating indicators, and defining criteria for prioritising and selecting investments. Despite this, and given the lack of time and resources for elaborating the gap diagnoses each year, the exercise runs the risk of being used in a mechanical and routine manner. Carrying out an annual gap diagnosis and indicator definition, as is currently done, may represent wear and tear for civil servants, and be an inefficient use of the public resources invested. In many cases, they may not even represent the solution to the cross-sectoral problems in Peru. Some actors state that the data and information with which the indicators are constructed have gaps or are incomplete, as they are not built jointly between sectors. In addition, there is no accurate sectoral diagnosis and programming is based on a current diagnosis of the service to be provided.

The assessment of current and future infrastructure needs is usually carried out through a comprehensive data collection to provide the executing agency with information for long-term planning. This is a resource-intensive and human capital-intensive process that provides quality information for the long term. For example, in 2015, the Colombian Ministry of Transport conducted a comprehensive analysis of the density and quality of existing transport infrastructure, growth trends in cities and regions, and current traffic flows to formulate an Intermodal Transport Master Plan that would respond to the country's needs for the next 20 years (Box 5.7).

Box 5.7. Identifying gaps: Colombia's Intermodal Transport Master Plan

To address infrastructure needs for the next 20 years, in 2015, the Colombian Ministry of Transport adopted an Intermodal Transport Master Plan. The plan was the product of a joint effort between different national level entities and agencies.

The plan has three key objectives: 1) boost foreign trade by reducing transport costs and times; 2) enhance regional development by improving the quality of networks for accessibility purposes; and 3) integrate the territory by increasing the presence of the state.

To this end, two initial goals were defined: 1) consolidate a list of priority projects to start structuring them in good time; and 2) develop a competitive transport network adapted to the country's needs until 2035.

The Intermodal Transport Master Plan was based on data on the density and quality of existing transport infrastructure, growth trends in cities and regions, and current traffic flows. Based on these data, the Colombian government forecasted local and regional economic growth that will drive future transport infrastructure demand in the country over a 20-year period.

The results of the strategic foresight analysis informed the lines of work included in the Intermodal Transport Master Plan. They served as a basis for the design of transport policies such as the 4G toll road concession programme.

Source: National Infrastructure Agency (2015[33])

Similarly, some OECD countries have adopted a bottom-up perspective to guide decision makers in designing strategies for infrastructure investment. For example, the Australian Infrastructure Audit created a database to analyse the country's infrastructure challenges (Box 5.8).

Box 5.8. Contextual analysis for infrastructure investment in Australia

In 2015, the Australian Infrastructure Audit created a database to analyse Australia's infrastructure challenges. Extensive data were collected on major capital cities and population, and numerous congestion models were developed. The Australian Infrastructure Audit undertook a national roadshow to raise the audit's issues and solicit proposals to address the problems identified. It also consulted widely on the policy and reform component of the Australian Infrastructure Plan. It received submissions from a diverse group of stakeholders while working closely with the independent Council. The evidence base collected and stakeholder input provided a bottom-up planning perspective.

The first Australian Infrastructure Audit process was conducted in 2015 and a second exercise was carried out in 2019. In both cases, a three-stage methodology, informed by strategic foresight methods, was applied to understand Australia's infrastructure needs over the next 15 years. Stage 1 involved horizon scanning to understand the national and global forces likely to shape Australia in the coming years and decades. These trends focus on the changes that are likely to transform the way Australians live and, consequently, what they will need from infrastructure. Phase 2 applied these trends to the transport, water, energy, telecommunications and social infrastructure sectors to understand the likely future impacts and needs of these sectors. Based on this analysis, Stage 3 of the audit identified a set of sectoral and cross-sectoral challenges and opportunities, which are issues, gaps, problems and

untapped potential where infrastructure can play a role in improving the lives of Australians and economic growth.

The Australian Infrastructure Plan and the Infrastructure Priority List are further underpinned by a detailed "place-based" analysis to provide a top-down planning perspective. The analysis projected the current and future demographic and economic characteristics for 73 regions of the country. The Australian Infrastructure Audit also estimates the direct economic contribution and gross value-added measures for each region. The regions with the most significant increases in direct economic contribution over time are identified as "hot spots", and an attempt is made to assess what type of investment will help drive the greatest economic impact in these regions. The hot spots are Sydney, Melbourne, Brisbane and Perth, where three-quarters of Australia's population growth is expected to occur between 2011 and 2031. Infrastructure Audit's Infrastructure Priority List aims to provide structured guidance to decision makers and was created using both "top-down" and "bottom-up" approaches. See Box 5.14 for a detailed discussion on the framework for assessing initiatives and projects to be included on Australia's Infrastructure Priority List.

Source: Infrastructure Australia (2018_[34]); OECD/ITF (2017_[35])

Finally, it is important to note that OECD countries are increasingly adopting "strategic foresight" planning methods beyond simply identifying current gaps and extrapolating past trends to forecast future needs. For example, the UK governments Intelligent Infrastructure Futures project studied how, over a 50-year period, science and technology can be applied to the design and implementation of intelligent infrastructure for robust, sustainable and safe transport and its alternatives (Box 5.9).

Box 5.9. The United Kingdom's Intelligent Infrastructure Futures

The UK government's Intelligent Infrastructure Futures project looked at how, over a 50-year period, science and technology can be applied to design and implement intelligent infrastructure for robust, sustainable and safe transport and its alternatives. The project involved nearly 300 people at national, regional and local levels and commissioned leading researchers to examine transport challenges in the United Kingdom.

The project sought:

- smart design, minimising the need to travel, through urban design, integration and management of public transport, and local provision of production and services
- a system capable of providing intelligence, with sensors and data mining providing information to support the decisions of individuals and service providers
- an intelligent infrastructure, capable of processing the vast amount of information that is collected and that can adapt in real time to provide the most efficient services.

Researchers from different areas focused on exploring and describing the state of the art in various areas of science, including psychology, physical sciences and technology, to determine what these could offer in terms of infrastructure in the coming years. The project covered diverse areas such as artificial intelligence, data mining and travel psychology.

The objectives are to develop:

- a technology vision for the future to review existing road maps for technology development and implementation
- a set of scenarios that provide a set of credible and coherent pictures of what technology could be invested in and how society might react to those investments.

Nearly 300 people participated in these exercises, ranging from research experts to service providers to policy and investment decision makers at national, regional and local levels.

Source: Foresight Directorate (2006[36]),

5.3.4. Multiannual programming has been unrealistic and cannot provide a long-term vision

Multiannual investment programming is characterised by prioritising the pre-investment process and strategic visioning as an early part of the investment cycle

The MIP's guidelines emphasise that it is a collective process of technical analysis and decision making on the priorities to be given to the objectives and goals that the entity plans for achieving its expected social and economic outcomes for citizens. It concentrates the responsibility for the financial estimation of revenues and authorisation of expenditures for a given period to match existing resources and investment resources (Government of Peru, 2022[37]).

While MIP has made great strides in identifying needs and how these can inform the investment process, some limitations hinder its ultimate goal.

Programming is not binding and is not yet fully based on credible budget ceilings

Without linkage, programming ended up being an open-ended exercise of identifying needs and projects; the capacity to effectively programme investment is limited.

For there to be adequate programming in line with international best practices, this instrument must be binding so that projects that reach this programming stage can receive resources, and the link between the National Public Budget System and multiannual investment programming can be made effective.

Until 2021, the multiannual investment programming did not have budget ceilings, which led to needs estimates being made based on demands without taking into account the capacity to finance these needs. This has been identified as one of the most notorious shortcomings of the system, and pilot tests have been carried out to incorporate budget ceilings. From 2022 onwards, the ceilings are intended to limit and prevent entities from proposing portfolios that exceed the existing actual budget. In the process of maturing the investment system, looser ceilings have been implemented in conjunction with regional governments, local governments and sectors, allowing for much more realistic investment portfolios to be programmed. Using ceilings during programming is a good practice that allows for a more structured exercise.

The MIP should be both a long-term planning instrument and a programming tool that informs the annual budget process

In the long term, the MIP is designed to link the planning process (led by CEPLAN) with the annual and multiannual budget. It is in charge of: defining the gap indicators; carrying out multiannual investment programming based on the identified gaps; establishing the investment portfolio. These responsibilities are too complex to be handled by a single tool. In reality, the functions overwhelm the implementation and operational capacity of the MIP, which needs to be complemented and supported by a long-term infrastructure planning process.

5.4. Formulation and prioritisation: For an accurate diagnosis and implementation

As the resources available for infrastructure investment are limited, prioritisation is essential to ensure that these resources are invested in the right projects (OECD, 2017_[23]). It is essential to have:

- A clear and transparent prioritisation process, aligned with the fiscal planning framework to ensure that investments deliver the expected social and economic benefits, while contributing to the country's long-term strategic objectives.
- A budgeting process that reflects prioritised projects in the budget.
- An implementation process that also respects established prioritisation.

OECD good practice suggests that countries should have rigorous project formulation and selection processes that focus on socio-economic efficiency (taking into account economic, social, environmental and climate costs and benefits) and consider the entire project cycle (OECD, 2020_[21]).

5.4.1. The pre-investment phase places a greater emphasis on quantity than quality

Lack of a methodology to evaluate infrastructure projects affects project quality

Most OECD countries have different methodologies for evaluating infrastructure projects, with cost-benefit analysis and multi-criteria analysis being the most commonly used techniques (Figure 5.11). For example, one of the strengths of the Chilean model is its social cost-benefit evaluation system, which imposes a considerable degree of rigour on the project formulation and selection process. The social evaluation methodology ensures that only projects that generate a minimum social return receive funding (Box 5.10).

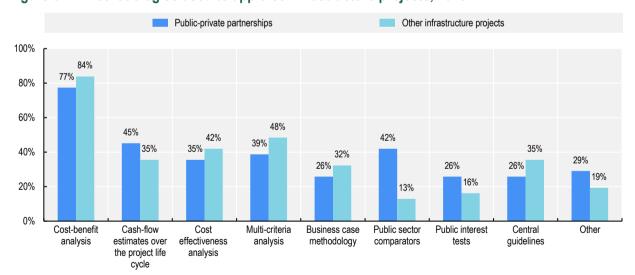


Figure 5.11. Methodologies used to appraise infrastructure projects, 2020

Source: OECD (2020), Infrastructure Governance Survey.

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Box 5.10. Socio-economic evaluation in Chile

The socio-economic evaluation of proposed infrastructure projects follows a rigorous process in Chile. All major projects are evaluated within the framework of the National Investment Evaluation System (NIS), overseen by the Ministry of Social Development. The NIS provides a methodology for assessing the costs and benefits of each type of infrastructure based on years of accumulated experience in each sector and international best practices. For the rail sector, the official methodology was updated in 2016. It provides guidelines to project developers concerning asset life, discount rates, rates of return, etc. The NIS also points out the importance of establishing a link between *ex ante* and *ex post* evaluation. In particular, it advises project promoters to develop performance indicators (financial, operational and socio-economic) that can inform mid-term and *ex post* evaluations of the project in question.

This framework offers a number of advantages:

- 1. First, it ensures that a uniform and consistent methodology is available for all infrastructure projects, allowing a comparison to be made between the different alternatives.
- 2. Second, it assigns clear responsibilities to project development (regions, sectoral ministries), evaluation (Ministry of Social Development) and approval (Ministry of Finance).
- 3. Third, it introduces a high degree of transparency because all inputs and outputs are made public on the Ministry of Social Development's website.

However, the OECD has also identified some shortcomings of the NIS system. The requirement to have a socio-economic assessment is not binding, and the Ministry of Social Development may instead authorise the use of least-cost analysis for most projects. In addition, the system does not integrate environmental impacts into the assessment. The NIS also imposes considerable requirements on project developers. Smaller and poorer regions may not have sufficient resources to carry out a detailed and convincing ex ante analysis.

Sources: OECD (2017[38]).

Invierte.pe aims to facilitate and streamline the formulation and evaluation phase with tools such as standardised technical sheets (Box 5.11) for recurrent projects whose technical and economic variables are easy to understand. Procedures were simplified to streamline the investment process. Likewise, as mentioned at the beginning of this chapter, the same body that formulates the project also evaluates it and decides on its viability. While this makes the process more agile, it also weakens the quality control process during project formulation.

Box 5.11. Invierte.pe tools and formats

Standardised data sheets

Among the most relevant aspects of the formulation and evaluation phase, the phase in which the pre-investment analysis is carried out, is the creation of standardised technical sheets. The sheets are used for the most recurrent and replicable projects, leaving the profile level studies only for the most complex projects. The sheets are pre-determined standardised formats with data for the main variables for project sizing and costing. The bodies responsible for recommending the types of projects to be standardised are the line ministries' multiannual investment programming offices (MIPO).

The Formulation Unit evaluates these sheets and carries out the pre-investment studies. It is also responsible for registering the projects in the Investment Bank as well as the results of the evaluation of the projects.

This phase, like the other phases of the investment cycle, is decentralised, and it is the responsibility of each formulating unit of the three levels of government to formulate, evaluate and declare the feasibility of their investment projects. However, for investment projects requiring issuing of external debt above one year maturity, the DGPMI of the MEF must issue a favourable opinion prior to the viability, in order to ensure compliance with the methodologies, technical standards and quality compliance of these projects.

Formats and information systems

The new investment system, Invierte.pe, a product of the registration carried out by operators, provides formats with data and variables of investment projects, providing technical and economic information in a clearer and more precise manner. It has also developed its information systems, incorporating in its design a technological information portal (Investment Bank) that facilitates access to relevant information by the actors involved and the general public. The system has supplementary information and formats that guide the investment process of sectors and municipal governments.

Source: Ministry of Economy and Finance (2017[20]).

There are no quality assurance processes for large investment projects

The Peruvian system does not provide for special quality assurance processes for large infrastructure projects. Given the importance of large infrastructure projects in the provision of public services and the potential impact they can have on public accounts, many OECD countries have special quality assurance processes for large infrastructure projects. Best practice suggests that for projects above a high investment threshold, it is particularly important to provide for an independent function to check project costing, risk management and project governance, as is the case in Norway (Box 5.12). The United Kingdom has set up a central agency to support the governance of large projects (Box 5.13). In these cases, special approval and/or support processes (e.g. through an independent approval body) are needed to provide adequate quality assurance and control for large infrastructure projects.

Box 5.12. The two-phase quality assurance process for large projects in Norway

In Norway, projects with estimated costs above NOK 750 million (EUR 72 million)¹ are subject to additional scrutiny through a two-stage quality assurance (QA) process. The process includes input from independent reviews and was initially introduced to combat cost overruns.

- QA1 focuses on quality assurance of the choice of concept. It is carried out before the government cabinet selects the projects to be included in the National Transport Plan. The central objective of this analysis is to check, at a relatively early stage, that the project has undergone a "fair and rational" choice process. It is carried out by the responsible ministry or government agency and includes an investigation of alternative solutions, socio-economic impacts and the project's relevance to transport needs. Emphasis is placed on environmental and social impacts, land-use implications and regional development. This assessment should, among other things, include a "business as usual" option ("zero option") and at least two alternative and conceptually different options. The external reviewers' role includes analysing and reviewing the documents.
- QA2 focuses on quality assurance of the management basis and cost. It applies to projects included in the National Transport Plan but not yet submitted to parliament for approval and funding. The objective is to check the quality of inputs to decisions, including cost estimates and uncertainties associated with the project, before it is submitted to parliament for a decision on the allocation of funds. It includes the assessment of cost estimates derived from the basic engineering work and the evaluation of at least two alternative procurement strategies. However, QA2 does not include the review and update of the cost-benefit analysis carried out in QA1, unless the project appears to have changed significantly from the option chosen in QA1. In addition, QA2 focuses on project management in the implementation phase. The Norwegian project evaluation and selection process includes considerable consultation and discussion in the initial phase between agencies and lower levels of administration, as well as with other stakeholders.

1. NOK 1 = EUR 0.096 (exchange rate as of 10 October 2022). Source: OECD (2020_[24])

Box 5.13. Central agency involvement in the governance of major projects in the United Kingdom

The UK Infrastructure and Projects Authority has set up a Major Projects Review Group (MPRG), a group of experts from which panels are formed to examine the largest and most complex government projects. It is co-chaired by the Director-General of the Civil Service and the Second Permanent Secretary to the Treasury. MPRG panels challenge projects on their feasibility, affordability and value for money at key points in the project life cycle.

Projects are selected for review by the MPRG according to the following criteria:

- projects with a total lifetime cost of more than GBP 1 billion (EUR 1.140 billion)¹
- high-risk and complex projects in terms of obtaining and delivering benefits
- projects that set a precedent or are highly innovative
- other projects "of interest" (as agreed by the Chairman of the MPRG, may be recommended by HM Treasury or the Infrastructure and Projects Authority).

Major departmental projects are periodically reviewed to determine if they meet the above criteria and approval is sought from the MPRG Chair to add the identified projects to the calendar.

- The MPRG timetable is flexible, and the MPRG can meet at any time if a project is of "concern". However, projects will generally be reviewed at the following key stages:
 - o strategic feasibility study stage
 - o feasibility study stage before the project is put out to tender
 - o full business case stage: after receipt of tenders but before contract award, or in the case of competitive dialogue, before closing the dialogue.

Once a project has been reviewed at any stage by the MPRG, the MPRG Panel will decide if and when the project should return to the MPRG.

The MPRG may also review departmental project portfolios and/or departmental programmes.

1. GBP 1 = EUR 1.14 (exchange rate as of 10 October 2022). Sources: OECD ($2020_{[24]}$); HM Treasury ($2011_{[39]}$).

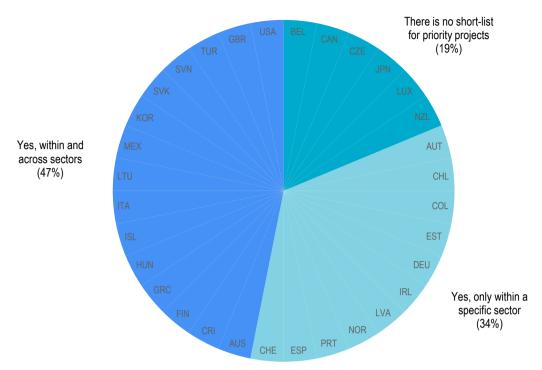
There is no process for identifying a short list of priority projects

One of the objectives of the multiannual investment programming in Invierte.pe is to provide prioritisation criteria. It is up to each sector to approve the gap indicators in their area of responsibility.

Unlike most OECD countries, Peru does not have a process to identify a short list of priority projects. There is no medium-term planning tool to link multiannual strategic planning with the annual or semi-annual execution of investment projects, nor is there a short portfolio to help predict fiscal limits and their relationship to the long-term strategy.

45% of OECD countries have a short list of priority projects at the national level (Figure 5.12). This allows countries to standardise the criteria to prioritise investment projects and set medium-term objectives. Such instruments not only help to guide public investment strategy, they also clarify national investment priorities and identify synergies and complementarities between projects (ECLAC, 2021_[40]). Some countries, such as Australia, have a clearly defined process for prioritising projects and preparing short lists (Box 5.14).

Figure 5.12. Prioritisation of projects at national level



Source: OECD (2020), Infrastructure Governance Survey.

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Box 5.14. Framework for assessing initiatives and projects to be included on Australia's Infrastructure Priority List

Infrastructure Australia, an independent body with a mandate to prioritise and advance infrastructure of national importance, aims to provide independent research and advice to all levels of government, investors and infrastructure owners on the projects and reforms Australia needs to support economic growth and quality of life, and to substantially improve national productivity in all infrastructure sectors.

It is responsible for strategically auditing nationally significant infrastructure and developing 15-year rolling infrastructure plans that specify priorities at the national and state level. It works collaboratively at an early stage with proponents of potential infrastructure solutions to help them define infrastructure problems and support them in developing initiatives, and ultimately business cases, that address those problems.

One of its tasks is to draw up the Infrastructure Priority List (IPL). The IPL represents potential infrastructure solutions at two different stages of development: initiatives and projects. Most projects are first identified as initiatives and then converted into full business cases for assessment by Infrastructure Australia.

For initiatives and projects to be included on the IPL, the process is as follows:

- the proponent submits an initiative or business case and other supporting information to Infrastructure Australia for consideration in the IPL
- each proposal is evaluated by an Infrastructure Australia evaluator

- the assessment is reviewed by Infrastructure Australia's Assessment Panel
- the evaluation group, through the executive director, makes a recommendation to Infrastructure Australia's board of directors
- Infrastructure Australia's board of directors takes the final decision to include an initiative or project on the IPL.

The Assessment Framework sets out the analysis parameters Infrastructure Australia uses to consider initiatives and projects for inclusion on the IPL. The framework facilitates the development of evidence-based infrastructure projects and sets out a five-stage process, as follows:

1. Problem identification and prioritisation: A collaborative process between proponents and Infrastructure Australia to identify and prioritise evidence-based problems and opportunities of national significance.

Infrastructure Australia develops a consensus list of issues and opportunities of national significance and opportunities that will serve as the basis for identifying initiatives.

Problems and opportunities of national importance arise from one of these sources:

- Australian Infrastructure Audit
- strategic planning exercises carried out by service providers, such as transport master plans or water plans
- state infrastructure strategies.

Problems and opportunities of national significance should be expressed in the form of direct statements linked to jurisdictional goals and objectives, such as improving Australia's productivity. These statements should clarify how the problem (opportunity) could impede (support) the achievement of these goals and objectives, today and in the future.

In addition to understanding and measuring the problem, proponents should demonstrate how the problem or opportunity aligns with government priorities, as well as with other problems, programmes and projects.

- 2. Identification of initiatives and development of options: Proponents develop options that address the issues and opportunities identified in Stage 1 and evaluate these options to select those that are the most likely to benefit the Australian community. Infrastructure Australia assesses whether the range of options is appropriate and the assessment of options robust.
- 3. Business case development: Proponents develop a comprehensive business case that objectively considers the short list of options available to address the problems and opportunities identified in Step 1.
- 4. Business case assessment: Infrastructure Australia conducts a business case assessment and works with the proponent to clarify the content of the business case and seek supplementary information where necessary.
- 5. Subsequent review: This phase takes place once the project has been delivered and is operating. Working with the proponent and other stakeholders, Infrastructure Australia will seek to understand the outcomes of the project as well as the project delivery, whether the benefits have been realised as expected, whether the cost estimates were correct, and what lessons can be learnt.

See Box 5.8 for a detailed discussion on the contextual analysis for infrastructure investment in Australia.

Sources: OECD (2020_[24]); Infrastructure Australia (2018_[34]).

In most OECD countries, the most important element for projects to be short-listed is a good cost-benefit analysis, followed by the project being part of the long-term strategic plan and having strong political backing (Figure 5.13). Other important criteria are the functional fit of the project with other infrastructure and its importance for the development of a particular sector.

A strong cost/benefit analysis result
Part of the long-term strategic plan
Strong political backing
Functional fit with other assets
Developing a particular sector
Strong popular backing
Strong private sector interest
Strong market failures in the sector

External funding
Other

1.3

Figure 5.13. Project prioritisation and approval criteria, 2018

Note: 1 = least important, 10 = most important. The graph reflects the average number of ranking points. Source: OECD (2018_[41]), Survey of Capital Budgeting and Infrastructure Question 12.

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5.4.2. Formulation of the investment budget: The approved budget does not reflect the prioritisation made

The investment budget is voted at a very micro level, indicating each of the investments to be financed (Annex 5 of the Budget Law)

In Peru, the budget does not only indicate the overall amount for investment per entity, or possibly some detail on the most important investments (either by size or strategic character), but presents the complete list of all investment projects to be financed during the year (Annex 5 of the Budget Law).

OECD countries tend to vote investment budgets at a more aggregated level usually by sectoral ministry or by mission or programme for countries that have programme budgets. In Australia, for example, each sectoral ministry develops a capital management plan where they prioritise their projects. The discussion of resource allocation is based on the various plans submitted by the sectoral ministries, and each entity is allocated capital expenditure ceilings. Based on these ceilings, banks decide which investments to initiate. Entities have two opportunities per year to submit updates of their capital plans (in February and October). Each year, entities must submit a capital budget execution report, comparing what they had budgeted with the execution and justifying any differences. This implementation report must include a capital budget statement, which shows the financing of planned asset allocations compared to budgeted capital expenditure in the current, budget and next year's estimates, as well as an asset movement table, a capital movement table and the cash flow statement.

The initial investment budget (Annex 5) is modified upon arrival in Congress

Once the multiannual programming offices of the sectors and subnational governments prioritise the projects to be integrated into the project portfolio in the multiannual investment programme, a modification stage begins. These modifications take place in the first half of the year and their revision is more about guaranteeing the prioritisation criteria, that they are aimed at closing mature portfolios and that the projects of the sectors and subnational governments are harmonised (Conversations with the DGPMI).

Once the adjustments have been made, the MIP is included in the Draft Budget Law and sent to Congress for discussion and approval. At this stage, all projects are included in Annex 5, which is the binding document for the implementation of investment projects (i.e. whatever is in this document will receive funding).

Congress has no spending initiative, but it does have the power to revise and redistribute the budget. Thus, in this revision stage, projects are added, mostly new ones, which were not programmed in Annex 5. At this point, Annex 5 has undergone significant modifications, and most of the new projects do not follow the MIP criteria, nor do they have a clear continuity with previous projects. This results in a loss of quality for new projects included in Annex 5. In addition to modifying the composition of Annex 5, it is usual to add additional amounts and increase the initial investment budget, which had been defined under the criteria of the sectoral and sub-national governments' MIPs.

5.4.3. Implementation: The initial budget approved by Congress is modified during implementation, with fewer controls on the quality of the projects added

About half of the projects implemented were in the opening institutional budget, and just over half of the projects in the opening institutional budget are implemented

Once the Budget Law has been passed, after the amendments and discussions on Annex 5, additional demands for resources are usually processed. In other words, once the Budget Law has been approved, it is usually amended by adding projects (see Chapter 2, analysis of budget amendments). Again, the projects added in budget amendments during budget execution have not followed the same quality control mechanism as the projects initially prioritised in the MIP.

There is a big difference between the initial budget, the modified budget and the executed budget for public investments in Peru. In other words, not only is not everything that is initially programmed executed, but also investments are added during the year that will be executed (or at least initiated). Of the projects included in the opening institutional budget, only 58% are executed on average, and of the total executed, only 55% were included in the initial budget (Table 5.1).

Table 5.1. Initial, Modified and Executed Public Investment Budget (2017-2021)

Millions of soles	Budgeted opening institutional budget	Executed opening institutional budget	Budgeted modified institutional budget	Executed of new investments	Final executed
2017	24 057	14 337	42 260	13 970	28 307
2018	26 599	15 337	49 334	16 736	32 273
2019	30 678	19 757	48 849	11 995	31 752
2020	32 147	15 438	45 744	12 892	28 330
2021	38 988	23 106	56 100	15 996	39 102
Average	30 494	17 595	48 457	143 178	319 523

Source: Prepared by the authors with data from the MEF and the Comptroller General's Office (2022[42]).

Table 5.2. Initial, Modified and Executed Public Investment Budget Ratios (2017-2021)

	Opening institutional budget budgeted/ executed	Opening institutional budget executed / total executed	Modified institutional budget budgeted / executed of new investments
2017	60%	51%	33%
2018	58%	48%	34%
2019	64%	62%	25%
2020	48%	54%	28%
2021	59%	59%	29%
Average	58%	55%	30%

Source: Prepared by the authors with data from the MEF and the Comptroller General's Office (2022[42]).

Atomization of new projects. New projects added to the initial budget are generally small projects compared to those initially approved

In Peru, some 7 800 projects are initially approved for public investment in the opening institutional budget. The average size of each project is almost 4 millions Soles. Once modifications are made and new investment projects to be implemented are included, an average of 45 000 projects are implemented, for an average amount of 31 billion Peruvian Soles. This means that the average size of the executed projects is 707 000 Soles (i.e. almost six times smaller than the initial projects) (Contraloría General de la República, $2022_{[42]}$). This is evidence of an atomization of projects, where more projects are implemented with less scope or value.

Table 5.3. Size of initial and executed investment

	Number of investments in the Opening institutional budget	Total amount of investments Opening institutional budget (millons of soles)	Average size of an investment in the Opening institutional budget (millons of soles)	Total number of investments executed	Total accrued amount (millions of soles)	Average size of an executed investment (millions of soles)
2017	5740	24057	4	38097	28307	0.74
2018	6631	26599	4	41883	32273	0.77
2019	8955	30678	3	44569	31752	0.71
2020	7826	32147	4	48678	28330	0.58
2021	9846	38988	4	52846	39102	0.74
Promedio	7800	30494	4	45215	31953	0.71

Source: Prepared by the authors with data from the MEF and the Comptroller General's Office (2022_[42]).

5.4.4. All investments, including those already approved and initiated, must be rediscussed in Congress every year, and there is no guarantee that resources will be allocated to complete them

Most infrastructure investments are made over several years, therefore, it is necessary to have a system in place to ensure the financing of the entire investment project. In Peru, each investment must be resubmitted to the prioritisation exercise, integrated in Annex 5, and approved by Congress every year until its completion.

Although Inverte.pe stipulates an order of priority for prioritising projects in execution, as discussed above, the initial prioritisation of projects in the draft Annex 5 is not binding, and projects in execution may not be re-approved - or they may be used to obtain increases in the amount initially allocated for public investment.

This has a number of negative consequences:

- It reduces predictability and creates difficulties for planning: without medium-term visibility on the availability of budgetary resources, infrastructure planners find it difficult to develop a project pipeline.
- The financing stage is confused with the prioritisation stage. By confusing these two stages, the strategic prioritisation of investment is put at risk, as projects are prioritised to meet execution and expenditure targets and not on technical grounds, aiming at short, medium and long term objectives.
- The absence of a guarantee of availability of funds for the entire investment implementation phase creates uncertainty for both the contracting authority and the contractor.

There are two main reasons for the lack of guarantee that investments under implementation have the resources to be completed. The first is that the new projects added both in the budget discussion phase and in the execution phase have not been subject to fiscal controls on the availability of resources. The second is that Peru does not have a budgetary instrument to commit resources over several years. All OECD countries, like Peru, have annual budgets, but use a variety of ways to finance multi-year capital projects (Figure 5.14 and Box 5.15). While some countries request funding for the entire cost of the multi-year project upfront, others request funding incrementally each year until the project is completed, and others use different types of budgeting approaches (OECD, 2020[24]).

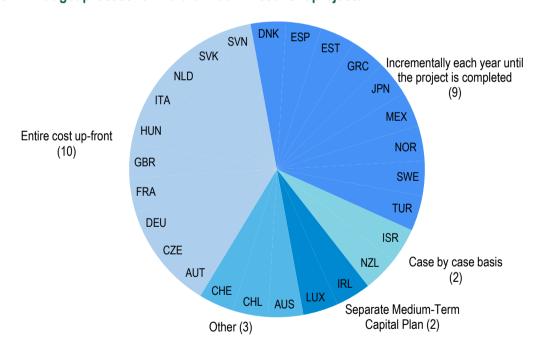


Figure 5.14. Budget process for multi-annual investment projects

Note: In Norway the budget requests funding incrementally each year, but the system includes authorization for the executive to plan and implement large capital projects on a full cost-ahead basis. Data for Belgium, Canada, Finland, Iceland, Korea, Latvia, Poland, Portugal and the United States not available.

Source: OECD (2018), OECD Survey of Capital Budgeting and Infrastructure Governance, Question 5a, OECD, Paris.

StatLink https://stat.link/ycvqb3

Box 5.15. Examples of instruments for committing funds over several years

Colombia: Future Vigencies

Future vigencies are authorisations from the assemblies or councils that empower the governor or mayor to enter into commitments that affect the budgets of subsequent fiscal years. They may be ordinary (they affect the budget of the current fiscal year) or exceptional (they affect the budget of future fiscal years and do not have an appropriation in the budget of the fiscal year in which the authorisation is granted). Future fiscal years are operations that essentially affect the expenditure budget and are understood as a commitment that is assumed in a fiscally determined year, charged to the expenditure budget or appropriations law of a subsequent fiscal year. They play a role of harmonisation in time, between public expenditure and its financing when the special conditions of the good or service mean that the budget execution exceeds a single fiscal year.

These mechanisms constitute an alternative in the programming and execution of the budget, in those cases where the obligation to pay for a good or service of a public entity is known in advance, but is not completed within the term of the fiscal year. Similarly, when the nature of the good or service to be received implies the execution in stages over several financial years, at the end of which the implementation of the good or service is fully configured. This is the case, for example, of road infrastructure contracts such as the construction of tunnels or dual carriageways.

United States: No-year appropriation

In the United States, appropriations are part of the Act of Congress that gives agencies budget authority. This allows agencies to incur obligations and make payments from the Treasury for specific purposes. Earmarks can be final (a specific sum of money) or indefinite (an amount for "such sums as may be necessary"). The US Congress passes 12 annual appropriations acts each year, as well as supplemental appropriations acts.

There are several types of assignments based on the duration or time of assignment:

- Annual or single-year allowance:
 - Annual credits (also called one-year credits) are made for a specific tax year and are available for obligation only during the tax year for which they are made. The funds expire after one year and are no longer available to incur new obligations;
 - Annual appropriations retain the identity of the fiscal year and remain available to record, adjust and liquidate existing obligations and previously incurred liabilities;
 - Funds are cancelled two years after expiration and are no longer available for obligation or expenditure for any purpose and are returned to the U.S. Treasury.

Multi-annual allocation

- Multi-annual appropriations are available for obligation for a defined period exceeding one fiscal year. The Chamber has multi-year funding of 15, 18 and 27 months. The funds expire based on the extended period of availability and are no longer available to incur new obligations;
- Multiple appropriations retain the identity of the fiscal year for the extended period and remain available to record, adjust and liquidate existing obligations and previously incurred liabilities;
- Funds are cancelled two years after expiration and are no longer available for obligation or expenditure for any purpose and are returned to the U.S. Treasury.

- Appropriations without year
 - These are credits that are available for obligations for an indefinite period of time with no fiscal year limitation. One of their main characteristics is that they are available until exhausted.
 - The no-year appropriation will close if there are no disbursements against it during the fiscal years, and if the head of the agency or the president determines that the purposes for which the appropriation was made have been carried out.
 - For example, in the United States there is a revolving fund called the Federal Library and Information Network of the Library of Congress. Funds that were withdrawn from other agencies' appropriations and credited to that fund did not assume the temporary nature of the fund, it was proposed to retain in the fund fiscal year amounts of money advanced by other agencies in previous fiscal years when requests were made. To the extent that the advances were not needed to cover the costs of the orders, excess amounts could be applied to new orders placed in subsequent fiscal years.

France: commitment authorisations and payment appropriations

The 2001 Organic Law on Budget Laws (Loi Organique relative aux Lois de Finance, LOLF) gave the French Parliament greater control over public finances. All state spending is subject to a double parliamentary authorisation that sets a ceiling on appropriations and frames the spending chain.

- Commitment authorisations (CA): these are the maximum limit of expenditure that can be committed. They are fully consumed at the time the expenditure is incurred, i.e. when the legal act committing the State expenditure is signed. Commitment authorisations are the basis for committing expenditure that can be spread over several years, e.g. for investments, the execution and payment of which can be spread over several years. The total investment is executed in the same year it was received.
- Payment appropriations (PA): are the ceiling of expenditure that can be authorised or paid during the financial year to cover commitments made under commitment authorisations. They are the means of settling expenditure committed in advance. In the case of a legal commitment spread over several financial years, the consumption of payment appropriations is staggered over several financial years until the total of the initial commitment authorisations is reached. The entire investment expenditure is booked in year n, but the execution of the expenditure is authorised over several years, e.g. 50% in year 1 and 50% in year 2.

For example, if you have a total contract of €100 over two years, in the first year (year n) 100 will be given if it is a payment authorisation, and 50 if it is a payment appropriation. For the following year (n+1) in the commitment authorisations you receive nothing (as the expenditure was fully committed in the first year), and for payment appropriation you give 50 (corresponding to the payment of the second instalment). In year n+1 more credit is opened to payment appropriation, but in the end the same amount is spent in both ways (€100).

Source: United States Government Accountability Office (2019_[43]); United States House of Representatives (2021_[44]); Cesar et al; (2009_[45]); Ministère de l'Économie (2022_[46]); Procuraduría General de la Nación (2013_[47]).

5.5. Towards better monitoring of investments and the implementation of the new ex post evaluation process

Ensuring quality infrastructure performance throughout the asset life cycle² is a significant challenge for countries. In its guide for "Infrastructure performance throughout the asset life cycle", the OECD suggests that good governance tools should be present at all stages of the asset life cycle, from planning and prioritisation to operation, maintenance and decommissioning (OECD, 2019_[48]). However, governments tend to focus more on infrastructure development and less on monitoring and evaluating the life cycle of investment projects.

Focusing on the performance of the asset over its lifetime strengthens the public interest and the accountability of service providers. Similarly, monitoring the commissioning and operation of assets is crucial to ensure they serve their purpose without excessive delays and costs. OECD good practices to achieve this include the systematic collection, storage and management of relevant data throughout the asset's life cycle, as well as the creation of specialised asset monitoring units and tools (OECD, 2020_[21]).

The monitoring of the implementation of an infrastructure project, once completed and commissioned, continues throughout its operation and eventual decommissioning. The obligation to monitor throughout the life of the project usually rests with the ministry responsible for the project as does reporting on the delivery of the public services generated by the infrastructure. This obligation is supported by the external oversight of the government's audit function. Monitoring the performance of an asset throughout its useful life is crucial to ensure that the asset fulfils its purpose. Measuring the condition, use and functionality of assets helps to inform the maintenance required to ensure that the delivery of public services is effective, safe and accessible. For example, France has implemented mandatory *ex post* assessments of major transport projects (Box 5.16).

Box 5.16. Ex post evaluation of public infrastructure investments in France

Governments should make sure that infrastructure assets perform throughout their useful life by ensuring effective monitoring, operation and maintenance. Adequate monitoring of asset performance should be carried out, including a periodic review of asset value and depreciation and its impact on the accounts, as well as *ex post* value for money assessments to be used in future decision-making processes.

France provides an example of *ex post* evaluations in OECD countries. These *ex post* evaluations of major transport projects became mandatory with the adoption of the National Transport Planning Act in December 1982. In 2010, this obligation was reiterated and detailed in a new "transport code". France has a coherent methodological framework for the economic evaluation methods of transport projects (January 2015), a reference for evaluation based on the principle of multi-criteria analysis. In this framework, projects' socio-economic and environmental assessments are carried out prior to any financing agreement and several years after implementation during the *ex post* evaluation.

Among the objectives of *ex post* evaluations are informing the public of the conditions of project implementation to account for the use of public funds and providing feedback on experiences to improve the methods of *ex post* evaluation of projects.

One of the many lessons learnt from *ex post* evaluations is, for example, a case study conducted in 2005, which presented the "economic histories" of selected rural interstate highways. *Ex post* studies and case studies show significant changes in territorial and economic development in some areas, but not others. Where changes have been found, the most notable are an inward investment and the relocation of warehouses to allow for more efficient regional distribution.

Sources: OECD (2020[24]).

The Peruvian investment system does not allow for monitoring once the investment project is completed

Peru is not far from this trend, where infrastructure development is prioritised and focused on over the follow-up or monitoring of the entire life cycle of the asset. In the Peruvian investment system, efforts were made to incorporate initiatives such as Geolnvierte, which provides geo-referenced information linked to investment management. However, beyond the recent physical and financial tracking by the Investment Tracking System, which is a publicly accessible IT tool designed to track public investments, there have not been any other initiatives within Invierte.pe. Similarly, despite some efforts to develop an evaluation methodology, no *ex post* evaluation exercise has been carried out to date.

Asset management in Invierte.pe consists of knowing the current status of assets through a computerised register and linking them to the budget allocation process for maintenance and reinvestment. To date, work is being done to link the investment register with a standardised catalogue of assets with the supply system that will allow the traceability of assets in the operating phase and guarantee their life cycle, avoiding early reinvestment. On the other hand, short-term *ex post* evaluation methodologies and its implementation have been approved and are currently in the pilot testing phase. This type of evaluation will make it possible to identify deviations in cost, execution times and physical targets for investments and assets in particular.

5.6. Conclusions and recommendations

5.6.1. Develop a medium- and long-term strategic vision for infrastructure

Medium- and long-term strategic planning is crucial for adequately and effectively implementing the investment portfolio that Peru needs to meet the basic needs of its population and achieve previously defined development objectives. The permanent disynchrony between the long-term nature of infrastructure investment and the short-term vision brought about by political cycles requires institutionalised mechanisms to provide continuity, efficiency and effectiveness to the investment.

Peru does not currently have a long-term infrastructure vision at the sectoral or cross-sectoral level that would allow a clear prioritisation path to be established based on an estimation of available resources and a rigorous assessment of current and future infrastructure needs. In this sense, it is essential for Invierte.pe to have a strategic vision that goes beyond multi-year programming. In particular, some of the key elements for the development of this strategy include:

- Strengthen, resource and institutionalise the infrastructure planning process at the sectoral level. The systematic development of long-term sectoral plans will allow Peru to identify current and future needs and available resources in each sector. In line with OECD good practice, this vision should be anchored in realistic expenditure estimates, be the product of political consensus, be forward-looking with a territorial emphasis, and be aligned with development and sustainability objectives (OECD, 2020_[21]). The experience of the National Education Infrastructure Plan (see Box 5.4), as well as international experiences in transport infrastructure (see Box 5.5 and Box 5.7 on experiences in Germany and Colombia) can serve as an example and inspire future planning initiatives at the sectoral level.
- The infrastructure planning process requires adequate mechanisms for stakeholder participation. Generating information, participation and monitoring mechanisms is crucial for the long-term strategic vision to become a real planning instrument and not a theoretical exercise detached from the investment process. It is, therefore, important to avoid the participation process from becoming a list of unlimited requests for the realisation of specific infrastructure projects that will not be implemented due to budgetary constraints. On the contrary, the stakeholder participation process requires a framework for its implementation, which should include a process for identifying the most relevant stakeholders and underrepresented groups, as well as mechanisms for publicising and responding to comments received.

- The long-term vision must have a prospective or territorial approach. This is vital given the prominent role of subnational governments in Peruvian public investment. A detailed context analysis is needed to identify the type of investment that can help drive the greatest economic, social and environmental impact in each region. The case of Australia (see Box 5.8) can serve as an example to create a long-term vision that provides structured guidance to decision makers from both a "top-down" and a "bottom-up" approach.
- A comprehensive long-term vision for infrastructure could be developed based on a more robust sectoral planning process. This would allow for a more coherent articulation of investment, promoting synergies in investment across different sectors. It is important to clarify that it is not a matter of replicating or grouping in a single document the different initiatives previously established at sectoral level, but of developing a vision that establishes the country's long-term priorities. An example is the second version of the National Sustainable Infrastructure Plan for Competitiveness 2022-2025, which seeks to improve and complement aspects of the National Infrastructure Plan for Competitiveness 2019, and to incorporate an approach in which the state achieves inclusive and sustainable development in terms of infrastructure.
- Strategic planning should have a clear process for review, updating and monitoring. It is recommended integrating a tool into the Peruvian investment system to monitor and update the initial plans. This would allow the long-term or medium-term strategically designed vision to be monitored, reviewed and adjusted systematically. This would dynamise the investment system, make it possible to estimate the levels of progress against initially planned goals and prevent it from becoming a static exercise or one that is absorbed by electoral cycles.
- Strategic planning should be based on known expenditure allocations. The quality of strategic
 plans and the capacity for strategic prioritisation would benefit from having at least annual, ideally
 multi-annual expenditure ceilings for investment per entity. Indeed, there are always several ways
 to close a gap. Knowing the resources that will be available for investment would allow for the
 development and selection of projects with the greatest impact, taking into account the resources
 available.

5.6.2. Strengthen needs assessment

According to the OECD *Recommendation of the Council on the Governance of Infrastructure* (OECD, 2020_[21]), infrastructure decision making should be based on evidence and the collection of relevant data. Governments need to establish systems for the systematic collection of relevant data and ensure that responsibility for analysis, dissemination and learning from such data rests at the institutional level. In particular, the long-term strategic vision should be informed by a rigorous assessment of current and future infrastructure needs at national and subnational levels. It should present a plan for how these needs should be prioritised and addressed (OECD, 2020_[21]).

As explained at the beginning of this chapter, Invierte.pe has made great progress in putting the needs of the population (gaps) at the centre of the investment cycle; however, there are great opportunities for improvement to strengthen the diagnostic process. In particular, the Peruvian system could consider the following actions:

• Conduct a less regular but more rigorous needs assessment exercise. In particular, it is recommended to move from an annual gap assessment to a medium- or long-term needs assessment that allows the investment system to carry out voluntary and premeditated planning, not just for the sake of routine and obligation. This would enhance the strategic capacity of the system, strengthening the relationship between gap closure and the broader long-term vision of the country. By incorporating a longer term strategic vision, the indicators that measure infrastructure gaps would also become more forward-looking. This would avoid, among other things, information gaps between sectors.

- Invest in data quality and establish baselines at sectoral level. It is suggested to assess current
 and future needs through exhaustive data collection that serves for long-term planning. Human
 capital and physical resources should be provided in order to have quality information. In particular,
 the diagnostic process could benefit from greater investment in information sources at the district
 and town levels.
- The diagnosis should not only identify current needs, but also allow for an estimation of future needs. The current gap quantification system assumes a static analysis of infrastructure needs that are by nature changeable. It is important to have "strategic foresight" planning methods that go beyond simply identifying current gaps and extrapolating past trends to forecast future needs.
- Take into account the life cycle of the infrastructure when carrying out the needs
 assessment. Needs require not only new investment projects, but also the proper development
 and operation of infrastructure after the investment project is completed, which requires
 maintenance, rehabilitation and sometimes decommissioning of existing infrastructure. The
 monitoring and evaluation stages are also a fundamental part of the cycle of assets that were
 prioritised to meet some kind of need.

5.6.3. Improve the pre-investment process and ensure that the programming process is realistic

OECD good practice suggests that countries should have rigorous project appraisal and selection processes that focus on socio-economic efficiency (taking into account economic, social, environmental and climate costs and benefits) and take into account the full project cycle (OECD, 2020_[21]).

Efforts should be directed towards continuing with the idea of a multi-year system that allows for developing a robust and articulated investment portfolio with a long-term vision. In particular, Peru could benefit from:

- Strengthening capacities at sectoral and subnational levels for project preparation and formulation. Regardless of the development of training for the use of Invierte.pe, the entities must have analytical capacities for the formulation and prioritisation of projects.
- Ensuring that the declaration of feasibility is technically rigorous and fiscally responsible in the medium and long term. When declaring the feasibility of a project, it is necessary not only to have an adequate formulation from a technical point of view, but also to have the respective budgetary viability to fully implement the project. This recommendation is expected to ensure that prioritised projects start and complete implementation within a fiscal sustainability framework. The separation between the agency that formulates the project and the one that makes its implementation feasible is an effective tool to strengthen this process.
- Considering specific processes for mega-projects. As is the case in a wide range of OECD countries, it is recommended to consider the possibility of creating formulation and appraisal instruments that are adapted to the characteristics of high-impact investment projects. This differentiation could be key at the time of the feasibility declaration.
- Making use of expenditure ceilings for multiannual programming. This would make the programming exercise more realistic

5.6.4. Bridging the gap between prioritisation, formulation and execution of public investment budgets

The investment budget in Peru is voted at an unusually micro and detailed level, since it indicates every single investment project (some with amounts of less than 5000 soles, or 1200 euros). However, not all projects initially prioritised in the Multiannual Investment Programming and in the draft budget submitted to Congress remain in the initial approved investment budget (Annex 5). Not all projects that are in the

initial approved investment budget are implemented. And many projects that are implemented were neither in the initial approved budget nor in the Multiannual Investment Programming. This means that, de facto, the detail of the investment budget law does not help to control neither the quantity nor the quality of investment spending.

In OECD countries, budgets are voted at more aggregate levels, but investment spending ceilings are strict and respected, and quality controls rigorous.

- Consider modifying the way the capital budget is discussed, approved and executed. For
 example, this could take the form of allocations per ministry/per NSG for investment, with very strict
 rules for project selection by entities, accountability obligations and strict monitoring of execution
 (level of spending and quality of execution). Developing this type of system would require further
 in-depth studies to design the most adapted system for Peru, and also to design a strategy to
 implement this reform, making sure that each of the actors has sufficient incentives to accept this
 change of process.
- Develop instruments to commit expenditures over several years, as exist in most OECD countries.

5.6.5. Enhance the prioritisation process and separate it from the implementation process

The prioritisation process is key to ensuring that investment goes to projects that have the potential to generate the greatest benefits for the population and contribute to the government's strategic objectives. This process should therefore guarantee that only the most efficient projects are selected and fully implemented, ensuring they can close the country's inequality gaps. Each prioritised investment should have a clear and functional budget allocation within the timeframe of the investment. In particular, the following measures can contribute to strengthening the prioritisation process:

- Prioritisation criteria should guide the selection of investments to be implemented. The
 entities in charge of setting the prioritisation criteria should carry out this exercise with a long-term
 and a medium-term vision, overcoming the immediacy of these criteria. Clear limits must be placed
 on the tools available to sectors and subnational governments to select projects that are not part
 of the prioritisation process. In particular, clear limits must be set on the inclusion of
 unplanned expenditures.
- Investments under implementation should not be part of the prioritisation process. Investments being implemented should have sufficient budgetary capacity to be fully implemented, and should not have to be prioritised in future portfolios. This could lead to the prioritising entities having more responsibility when approving and selecting investments, as well as decongesting the list of investments to be implemented. Similarly, by avoiding the need to reprioritise investments each year, it is possible to know the real resources available for the execution of public investment, not just fragmented information.
- Consider the use of short lists of priority investments at the sectoral level. Such instruments
 not only help to guide public investment strategy, but will allow the Peruvian investment system to
 clarify national investment priorities and identify synergies and complementarities between
 investments.
- Delve deeper into the causes of the low execution of public investment to provide a structural response to the problem. In addition to the monitoring and accompaniment currently carried out by the MEF, it is necessary to study the causes in depth and propose options for improving the structural problems that lead to the low execution of investment. On the other hand, preventive, corrective and reductive risk management actions can be strengthened and

implemented. The OECD could accompany this process to enhance the investment contracting and execution process.

5.6.6. Create a targeted ex post evaluation system

The monitoring of the implementation of an infrastructure project, once completed and commissioned, continues during operation and eventual decommissioning. The obligation to monitor the entire lifetime of a project usually falls on the ministry responsible for the project as does reporting on the provision of the public services generated by the infrastructure. It is therefore recommended to:

- Monitor the operation and maintenance of infrastructure assets to protect the value of the
 assets over time. This monitoring should provide tools and standards to establish infrastructure
 projects and influence the policy environment, creating confidence in the market.
- Introduce a systematic approach to reporting on the effectiveness of infrastructure investment. This requires putting in place a system that ensures the systematic collection, storage and management of relevant data throughout the life cycle of the infrastructure asset. This information can enable the monitoring of asset performance against pre-defined service delivery targets and expected outcomes (OECD, 2020_[21]). In terms of *ex post* evaluation, it is recommended to start by identifying a prioritised list of investments to be evaluated so that a more focused and effective evaluation can be made, which can then be replicated.

5.6.7. Summary of recommendations

Based on the analysis presented in the previous sections, this report proposes the following recommendations (Table 5.4).

Table 5.4. Recommendations for improving public investment planning, programming and management

Challenges	Implications	Recommendations
Peru still lacks a medium- and long-term strategic vision for infrastructure.	Multi-annual programming (MIP) has been unrealistic and cannot give a long-term vision.	Strengthen, resource and institutionalise the infrastructure planning process at the global and sectoral levels.
	The MIP is not binding and is not yet based on credible ceilings.	Develop appropriate stakeholder participation mechanisms
	Not having a credible cost allocation for programming does not allow for designing or selecting the investment with the	Ensure that the long-term vision has a prospective or territorial approach.
	greatest impact on the gap, within the available resources.	Build on a more robust sectoral planning process to develop a comprehensive long-term vision for infrastructure.
		Ensure that strategic planning has a clear process for review, updating and monitoring.
		Strategic planning should be based on known cost allocations.
		Allocate investment expenditure ceilings by sector (or by institution)

Challenges	Implications	Recommendations
Needs assessment could be strengthened by better quality data and predictable cost allocation.	Conducting an annual gap diagnosis is time-consuming and can become a routine exercise, and the data used is not always reliable.	Conduct a less regular but more rigorous needs assessment exercise. Investing in data quality and building baselines at the sectoral level The diagnosis should not only identify current needs, but also allow for an estimation of future needs. Consider the life cycle of the infrastructure when making the needs assessment.
The pre-investment phase places greater emphasis on quantity over quality of projects and is unrealistic.	Lack of evaluation methodologies for infrastructure projects affects project quality	Strengthen capacities at sectoral and sub-national levels for project preparation and formulation. Ensure that the declaration of viability meets minimum standards of technical rigor and fiscal responsibility in the medium and long term. Consider specific processes for mega-projects Making use of expenditure ceilings for multiannual programming Consider making a separation between the agency that formulates the project and the agency that makes its implementation feasible.
There is a gap between prioritisation, formulation and execution of the public investment budget.	The current process where modifications to the investment budget do not follow the same rigorous prioritisation process reduces the quality of investment. The lack of an instrument to commit expenditure over several years until completion of implementation means that all investments, including those already approved and initiated, have to be rediscussed in Congress every year, and there is no guarantee that resources will be allocated to complete them.	Peru could consider allocating budgets per ministry/per NSG for investment, with very strict rules for project selection by entities, accountability obligations and strict monitoring of execution (level of spending and quality of execution). A first step would be to develop such a system, which would require more in-depth studies to design the most suitable system for Peru, and also to create sufficient incentives for the different actors to accept the reform.
The project prioritisation process is not robust and is confused with the implementation process.	Prioritised projects are not all implemented. Some implemented projects have not met the PMI prioritisation criteria. There are no processes in place to ensure the quality of major projects, nor to identify a short list of priority projects.	Prioritisation criteria should guide the selection of investments to be implemented. In particular, it is crucial that clear limits are set for the inclusion of unplanned expenditures. Investments under implementation should not be part of the prioritisation process. The initiation of an investment project should commit the entity to its completion. Prioritisation should be done on additional resources once the budget has been committed to complete ongoing processes.

Challenges	Implications	Recommendations
		Consider the use of short lists of priority investments at sectoral level.
		To look deeper into the causes of the low implementation of public investment in order to provide a structural response to the problem.
Monitoring of investments is limited and the recently created ex-post evaluation	The Peruvian investment system does not allow for infrastructure monitoring once the investment project is completed.	Monitor the operation and maintenance of infrastructure assets to protect the value of the assets over time.
process has not yet been implemented.		Introduce a systematic approach to reporting on the effectiveness of infrastructure investment

References

César, J. et al. (2009), "Las vigencias futuras en el Presupuesto General de la Nación", https://observatoriofiscal.contraloria.gov.co/Publicaciones/Las%20vigencias%20futuras%20en%20el%20Presupuesto%20General%20de%20la%20Naci%C3%B3n.pdf (accessed on 29 November 2022).	[45]
Contraloría General de la República (2022), Evaluación de la Credibilidad presupuestal del gasto público en el Perú, https://cdn.www.gob.pe/uploads/document/file/3284646/Evaluaci%C3%B3n%20de%20la%20credibilidad%20presupuestal%20del%20ga.pdf (accessed on 26 November 2022).	[42]
Department of Public Expenditure and Reform (2021), <i>National Development Plan 2021-2030</i> , Government of Ireland, Dublin, https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030 (accessed on 8 July 2022).	[25]
Diario Oficial del Bicentenario (2021), "Se amplía el plazo de vigencia del PRONIED", https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-amplia-el-plazo-de-vigencia-del-programa-decreto-supremo-n-008-2021-minedu-1954764-7/.	[31]
ECLAC (2021), "Los planes nacionales de inversión pública en América Latina y el Caribe", <i>Nota de Planificación para el Desarrollo</i> , No. 11, Regional Observatory for Development Planning for Latin America and the Caribbean, https://observatorioplanificacion.cepal.org/es/nota/los-planes-nacionales-de-inversion-publica-en-america-latina-y-el-caribe (accessed on 11 July 2022).	[40]
ECLAC (2018), Sistema Nacional de Planeamiento Estratégico de Perú, Regional Observatory for Development Planning for Latin America and the Caribbean, https://observatorioplanificacion.cepal.org/es/sistemas-planificacion/sistema-nacional-de-planeamiento-estrategico-de-peru (accessed on 21 April 2022).	[26]
Federal Ministry of Transport and Digital Infrastructure (2016), <i>The 2030 Federal Transport Infrastructure Plan</i> , Federal Ministry of Transport and Digital Infrastructure, Berlin, https://www.bmvi.de/SharedDocs/EN/publications/2030-federal-transport-infrastructure-plan.pdf blob=publicationFile (accessed on 8 July 2022).	[29]
Foresight Directorate (2006), <i>Intelligent Infrastructure Futures Project Overview</i> , https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/300334/06-522-intelligent-infrastructure-overview.pdf .	[36]
Government of Peru (2022), "Sistema Nacional de Programación Multianual y Gestión de Inversiones – INVIERTE.PE", web page, https://www.gob.pe/852-sistema-nacional-de-programacion-multianual-y-gestion-de-inversiones-invierte-pe .	[37]
HM Treasury (2011), <i>Major Project Approval and Assurance Guidance</i> , HM Treasury, London, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/179763/major_projects_approvals_assurance_guidance.PDF.pdf .	[39]
INEI (2022), <i>Economic Statistics (database)</i> , National Institute of Statistics and Informatics, https://www.inei.gob.pe/estadisticas/indice-tematico/economia (accessed on 1 July 2022).	[5]

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OECD (2019), "Infrastructure performance over the asset life cycle", web page, https://www.oecd.org/gov/infrastructure-governance/performance (accessed on 17 May 2022).	[48]
OECD (2019), <i>Multi-dimensional Review of Peru: Volume 3. From Analysis to Action</i> , OECD Development Pathways, OECD Publishing, Paris, https://doi.org/10.1787/c6c23d2c-en .	[16]
OECD (2018), Survey of Capital Budgeting and Infrastructure, OECD, Paris, https://qdd.oecd.org/subject.aspx?Subject=CAP_2018 (accessed on 17 November 2022).	[41]
OECD (2017), Gaps and Governance Standards of Public Infrastructure in Chile: Infrastructure Governance Review, OECD Publishing, Paris, https://doi.org/10.1787/9789264278875-en .	[38]
OECD (2017), <i>Getting Infrastructure Right: A Framework for Better Governance</i> , OECD Publishing, Paris, https://doi.org/10.1787/9789264272453-en .	[23]
OECD (2016), Hacia Infraestructuras Exitosas: Diez Retos Clave para la Gobernanza y Opciones de Política, OECD, Paris, https://www.oecd.org/gov/budgeting/hacia-infraestructuras-exitosas.pdf .	[22]
OECD (2016), OECD Public Governance Reviews: Peru: Integrated Governance for Inclusive Growth, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264265172-en .	[10]
OECD (2016), <i>OECD Territorial Reviews: Peru 2016</i> , OECD Territorial Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264262904-en .	[12]
OECD et al. (2021), Latin American Economic Outlook 2021: Working Together for a Better Recovery, OECD Publishing, Paris, https://doi.org/10.1787/5fedabe5-en .	[1]
OECD/ITF (2017), Strategic Infrastructure Planning-International Best Practice, https://www.itf-oecd.org/sites/default/files/docs/strategic-infrastructure-planning.pdf (accessed on 29 November 2022).	[35]
OECD/UCLG (2022), "Country and territory profiles", World Observatory on Subnational Government Finance and Investment, https://www.sng-wofi.org/country-profiles .	[6]
PeruCompite (2022), "El Plan Nacional de Infraestructura se actualizará en julio, ¿Se acelerará su ejecución?", Private Competitiveness Council, https://www.compite.pe/noticia/el-plan-nacional-de-infraestructura-se-actualizara-en-julio-se-acelerara-su-ejecucion (accessed on 8 July 2022).	[28]
Presidency of the Council of Ministers (2018), <i>Anexo: Plan Anual de Transferencia de Competencias Sectoriales a los Gobiernos Regionales y Locales 2021</i> , Presidency of the Council of Ministers, Lima, https://cdn.www.gob.pe/uploads/document/file/3611783/Plan%20Anual%20de%20Transferencias%202021.pdf .	[18]
Presidency of the Republic (2002), <i>Ley de Bases de la Descentralización</i> , Presidency of the Republic, Lima, <a (accessed="" 2022).<="" 6="" href="https://www.mef.gob.pe/es/normatividad/por-temas/descentralizacion/6833-ley-n-27783-3/file#:~:text=LEY%20N%C2%BA%2027783,-CONCORDANCIAS%3A%20D.U.%20N&text=%2D%20Objeto%20La%20presente%20Ley%20org%C3%A1nica,Gobiernos%20Regionales%20y%20Gobiernos%20Locales." july="" on="" td=""><td>[17]</td>	[17]

Procuraduría General de la Nación (2013), <i>Guía Disciplinaria de la Procuraduría General de la Nación [DIRECTIVA_DOCUMENTO_IUS2013127769IUCD2013792604455]</i> , https://apps.procuraduria.gov.co/gd/docs/ius2013127769iucd2013792604455.html (accessed on 29 November 2022).	[47]
Schwab, K. (ed.) (2019), <i>The Global Competitiveness Report 2019</i> , World Economic Forum, Geneva, https://www3.weforum.org/docs/WEF TheGlobalCompetitivenessReport2019.pdf.	[8]
Secretaría Descentralización (2022), Conversación con Secretaría Descentralización.	[19]
Serrano, C. and P. Acosta (2011), <i>El Proceso de Descentralización en Perú: Proyecto Gobernanza Subnacional para el Desarrollo Territoril en los Andes</i> , RIMISP (Latin American Centre for Rural Development), https://www.rimisp.org/wp-content/files_mf/135965726911.pdf .	[13]
SNGWOFI (2022), Compare Your Country, World Observatory on Subnational Government Finance and Investment, https://www.compareyourcountry.org/subnational-government-finance-and-investment (accessed on 28 June 2022).	[7]
United States Government Accountability Office (2019), "GAO-16-464SP, Principles of Federal Appropriations Law: Fourth Edition, Chapter 2", http://www.gao.gov/legal/redbook/redbook.html . (accessed on 29 November 2022).	[43]
United States House of Representatives (2021), Glossary of Terms house.gov, https://www.house.gov/the-house-explained/open-government/statement-of-disbursements/glossary-of-terms (accessed on 29 November 2022).	[44]
Vammalle, C. et al. (2018), "Financing and budgeting practices for health in Peru", <i>OECD Journal on Budgeting</i> , https://doi.org/10.1787/budget-17-5j8v16g3czth .	[15]
World Economic Forum (2022), Infrastructure Quality Index.	[9]

Notes

¹ The data were obtained from the SNG-WOFI portal, updated in 2022. For the case of Peru, subnational MIP (local governments and regional governments) is taken into account over the total public investment MIP for 2019.

² Public infrastructure life cycle means the set of phases that make up the life of an infrastructure asset, from planning, prioritisation and financing to design, tendering, construction, operation, maintenance and decommissioning (OECD, 2020_[21]).

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