

INTERNATIONAL MONETARY FUND

IMF Country Report No. 19/353

UKRAINE

November 2019

TECHNICAL ASSISTANCE REPORT—ENHANCING THE MEDIUM-TERM BUDGET FRAMEWORK AND PREPARING EXPENDITURE BASELINE

This Technical Assistance Paper on Ukraine was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in June 2019.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org

Price: \$18.00 per printed copy

International Monetary Fund Washington, D.C.

Ukraine

Enhancing the Medium-Term Budget Framework and Preparing Expenditure Baselines

Amanda Sayegh, Michelle Stone, Jason Allford, and Balazs Romhanyi



Technical Report

August 2019

CONTENTS

ACRONYMS	3
PREFACE	4
EXECUTIVE SUMMARY	5
I. MEDIUM-TERM BUDGET FRAMEWORK	
A. Progress to Date	8
B. Building on the MTBF C. Recommendations	
II. PREPARING EXPENDITURE BASELINES	_ 17
A. Defining Forward Baseline Estimates	
B. Role of Baselines in Supporting Budget Preparation	
C. Methodology for Preparing Baselines	
D. Recommendations	25
III. PREPARING BASELINES IN SELECT LINE MINISTRIES	_ 25
A. Ministry of Education and Science	
B. Ministry of Social Policy and Pension Fund	
C. Recommendations	29
BOXES	
1.1. Technical Adjustment Approaches in Selected Countries	11
1.2. 2019 Spending Review Process	15
2.1. Major Steps in Preparing Expenditure Baselines	
2.2. Illustrative Example of Applying Price and Volume Changes	
2.3. Examples for Determining Existing Government Policies	
2.4. Definition of New Policy: Albania	23
2.4. Potential Roles of MoF Line Departments in Supporting Baseline Forward Estimates and	
Medium-Term Budgeting	25
FIGURES	
2.1. Examples of Factors Affecting Prices and Volumes	18
2.2. Illustrative Comparison of Expenditure Baselines and Ceilings	19
TABLES	
0.1 Summary of Recommendations	7
1.1. Illustrative Aggregate Reconciliation Table	
ANNEXES	
I. Example Tools, Techniques and Approaches for Conducting Spending Analysis	30
II. Generic Outline of a Spending Review Report	
III. Progress in Implementing Budget Reforms	
IV. Budget of the Ministry of Education and Science	

ACRONYMS

BCU Budget Code of Ukraine CD Capacity Development

CMU Cabinet of Ministers of Ukraine

FAD Fiscal Affairs Department
IMF International Monetary Fund

KSU Key Spending Unit

LM Line Ministry

MEDT Ministry of Economic Development and Trade

MoF Ministry of Finance

MTBF Medium-term Budget Framework
PFM Public Financial Management

PREFACE

A team from the IMF's Fiscal Affairs Department (FAD) visited Kiev, Ukraine during June 5 to 17, 2019 to assist with strengthening budget preparation and preparation of expenditure baseline estimates. The FAD team consisted of Amanda Sayegh and Michelle Stone (both FAD), Jason Allford (FAD expert), and Balazs Romhanyi (the IMF's PFM resident advisor to Ukraine).

During the visit, the FAD team met with: Ms. Oksana Markarova (Finance Minister); Mr. Yuriy Dzhygir (Deputy Finance Minister); Mr. Volodimir Lozitskiy (State Budget Director); Ms. Oleksandra Betliy (Chief Economist); Mr. Mikhalo Bossak (Division Chief State Budget Planning); Mr. Oleksiy Zhak (Director General for Strategic Planning); Mr. Andrey Savenko (Head of the Fiscal Risk Management Division); Ms. Svetlana Rovachiuk (Deputy Director of the Department for Social Policy); Mr. Romanyi Yermoich (Head of Department of Humanitarian Expenditures); Mr. Serhiy Martsenyuk (Deputy Head of the Directorate of Local Government Planning) and other senior officials from the Ministry of Finance.

The FAD team also met: Mr. Pavlo Khobzey (Deputy Minister) and other senior officials of the Ministry of Education and Science; Mr. Mykola Shambir (Deputy Minister) and senior officials from the Ministry of Social Policy; and Ms. Lilia Pukhliy (Deputy Director) and Ms. Svitlana Galchyschak (Head of Planning, Projecting and Methodology) from the Pension Fund. In addition, the team met with representatives from the European Union Delegation to Ukraine and the World Bank.

The FAD team would like to thank the authorities and other participants for their collaboration during the mission. The team is also extremely grateful for the support given by staff at the IMF Office, in particular to Mr. Ihor Shpak for his excellent support in coordinating the mission. The team is also grateful to Ms. Lisa Snegireva, Mr. Serhiy Kolesnyk, and Mr. Viktor Verhun, for their excellent interpretation and translation efforts during the visit.

EXECUTIVE SUMMARY

Ukraine has made good progress over the past three years in implementing reforms to strengthen medium-term budget planning and improve the quality of public spending. Following amendments to the Budget Code in late 2018, a medium-term budget framework (MTBF) has been adopted. A Budget Declaration, covering 2020 to 2022 was submitted to Cabinet, outlining medium-term fiscal prospects and expenditure ceilings for key spending units. To strengthen accountability and spending outcomes, multi-year performance targets for programs were included in the Budget Declaration and spending reviews have been initiated in five ministries. Still, there are several technical aspects of MTBF implementation that, if not handled carefully, have the potential to undermine the effectiveness of these important reforms.

Supporting an Effective Medium-term Budget Framework

There is a need to clarify the circumstances under which technical adjustments to expenditure ceilings will be permitted. It may not be realistic to expect that line ministries will be able to absorb all deviations in macroeconomic parameters in all circumstances. Clarifying the process and limiting the technical adjustments that will be permitted, will help bolster credibility and ensure line ministries are better able to plan their budgets and comply with their ceilings. The report sets out some principles for adopting technical adjustments in Ukraine and provides examples of approaches followed in other countries.

While the inclusion of a contingency provision (termed fiscal space) in the budget is prudent, it will be important that it is well communicated and strongly defended. There is a risk that the provision will be seen as a general policy reserve, which can undermine budget discipline and disincentivize medium-term planning. To guard against this, the Ministry of Finance should clearly communicate that the provision is not available for allocation to new proposals as part of the annual budget process and will only be used to accommodate technical adjustments and unforeseen and unavoidable expenditures that are not able to be absorbed by line ministries.

There is also a need to strengthen the information base for budget decision making. The updated 2020 budget instructions prepared by the Ministry of Finance are a good start and should be strengthened in future years. In particular, line ministries should be required to separately identify in their budget proposals those changes that are due to movements in baseline expenditures from new policy requests.

The Budget Declaration submitted to the Cabinet is a significant step forward and contains many sound elements of a medium-term budget document. The Ministry of Finance should continue to expand its content in future years to better explain the basis of fiscal plans and improve transparency. Key enhancements include providing greater explanation on the main drivers of the medium-term macroeconomic and fiscal projections, reporting on compliance with fiscal rules, and further expanding the fiscal risk statement.

Medium-term budget planning is being complemented by an annual spending review process. The approach adopted for the 2019 reviews incorporates many good elements. Importantly, it envisages a stronger role for the Ministry of Finance in steering the process, more diversity in the composition of working groups, utilization of independent expertise, and a minimum requirement for presentation of reform options. To ensure tangible results are realized, it will be important that working groups specify detailed work plans with clear milestones for delivery and agree the format for final reports. Ministerial coordination meetings should also take place at key stages in the process to monitor progress and ensure that policy options being developed are of an appropriate level of ambition.

Developing Forward Baseline Expenditure Estimates

Forward expenditure baseline estimates are a key tool to support medium-term budgeting. Expenditure baselines are bottom-up estimates, prepared by each ministry, of the future costs of delivering existing policies. They help: inform how much room is available for new policies or the size of adjustments required to comply with fiscal rules and expenditure ceilings; serve as benchmarks against which to measure the fiscal impact of new policies; identify sources of fiscal pressure; and facilitate budget negotiations, in part by focusing discussions on policy changes.

Credible and robust expenditure baselines will take time to develop and the Ministry of Finance will need to play a central role. Preparation of a Ministry of Finance instruction outlining the approach to developing expenditure baselines would help develop capability and understanding across government and ensure consistency in approach.

The FAD team worked with two spending units—the Ministry of Education and Science and the Pension Fund within the Ministry of Social Policy—to review and refine the approach to developing expenditure baselines in select areas. The two ministries appear to have the capability to prepare expenditure baselines with the right instructions. This baseline information should be used to assess the affordability of their spending plans within the budget ceilings. There is also further work that can be done on validating and developing expenditure projection models.

Table 0.1 contains a summary of recommendations and indicative timeframes for their implementation.

Table 0.1 Ukraine: Summary of Recommendations

No.	Recommendation	Timeframe	Responsibility
1.1	Enhance the MTBF by: (a) clarifying the approach for technical adjustments; (b) defining the purpose of 'fiscal space'; and (c) updating budget instructions.	Mar-2020 Immediate Jan-2021	MoF, BD
1.2	Further improve the content of the Budget Declaration.	Jun-2020	MoF, BD, FRMD
1.3	Enhance the spending review guidelines.	End-2019	BD
2.1	Prepare guidelines for the preparation of forward baseline estimates that support the development of a consistent approach.	Jul-2020	BD, MoF Line Departments and LMs
3.1	The Ministry of Education and Science should further develop forward estimates to allow for regular assessment of the affordability of its programs and subventions within budget ceilings.	Ongoing	MES
3.2	The Ministry of Education and Science and the Ministry of Social Policy should analyze the sources of errors in their projections.	Ongoing	MES and MSP
3.3	The Ministry of Education and Science and the Ministry of Social Policy should increase their use of demographic data and projections, including for periodic longer-term modelling of pension expenditure.	End-2021	MES and MSP

Note: MoF-Ministry of Finance; BD-Budget Department; FRMD-Fiscal Risk Management Division; LMs-Line Ministries; MES-Ministry of Education and Science; MSP-Ministry of Social Policy.

I. MEDIUM-TERM BUDGET FRAMEWORK

A. Progress to Date

- 1. A medium-term budget framework (MTBF) was adopted by the Government in 2019. Following amendments to the Budget Code of Ukraine (BCU) in December 2018, the Government has begun implementation of a three-year MTBF. New budget instructions were developed and issued to line ministries (LMs) in January 2019, along with revised templates for submitting requests for additional budget funding. A 2020 Budget Declaration has been prepared setting out the medium-term macroeconomic and fiscal projections, expenditure ceilings (for both their general and special funds) and key performance objectives for key spending units (KSUs). The Budget Declaration was submitted to the Cabinet of Ministers of Ukraine (CMU) in June but had not yet been discussed at the time of the FAD mission.
- 2. With a view to improving budget performance, the government has also defined performance indicators and medium-term targets for programs. The draft Budget Declaration details the main policy objectives to be achieved under each major spending area and sets out key performance indicators for government programs, which KSUs will be asked to report against. For each indicator, specific targets are set for the budget and forward years. There are around one to four indicators for most programs, which are generally a mix of inputs and outputs, although some programs also have outcome indicators. Although the system of performance indicators is not new in Ukraine, it is a novelty to plan specific targets for each of these over a multi-year horizon.
- 3. The Government has also initiated a second round of spending reviews aimed at improving the quality of public expenditure. The December 2018 amendments to the BCU mandate annual spending reviews. For 2019, these have been established in five ministries—education, health, energy, social policy and agriculture. Sub-components of expenditure have been identified for each area, covering around one-fifth of total government expenditure. The stated objective of the reviews is to improve the efficiency and effectiveness of expenditure, with any savings identified to be redistributed within the spending area under review. The Ministry of Finance (MoF) has also developed organizational and methodological principles (henceforth 'guidelines') to help guide the conduct of the spending reviews. Working groups have been established and are due to submit their final reports by December 1, 2019.

B. Building on the MTBF

Strategic Phase of the Budget Preparation Process

4. The strategic phase of the 2020 budget process was constrained by several factors. Some of these are because this is the first year of implementing the full-fledged MTBF. For

¹ CMU, No. 211 of March 2019.

example, the Budget Directorate was engaged in developing new instructions and guidelines while also implementing the budget process in parallel. And LMs are still grappling with what it means to prepare a medium-term budget. Partly as a result, budget submissions were not always of a sufficient quality to meet the requirements of the MTBF. Further, several key parameters, including decisions on projections for the minimum wage, were finalized late in the process and a lot of time was spent reconciling the central forecast scenario. As a result, there was limited time to discuss and negotiate ceilings prior to their finalization and inclusion in the Budget Declaration, with those discussions that did take place largely occurring at the technical level.

- 5. Budget preparation is largely taking place in the absence of upfront strategic guidance on the government's priorities and objectives. As discussed in the January 2019 FAD technical report, the strategic planning process is not well integrated with the budget process. This will take time to address. While the Budget Declaration is intended to be consistent with key strategic and program documents, a strategic discussion on priorities amongst ministers at the outset of the budget process may help to better guide negotiations on expenditure ceilings.
- **6. Further, strengthening the information provided in budget submissions could better support budget decision making.** KSUs do not distinguish between additional funding requests to meet the costs of delivering existing programs at current service levels, and those that expand the scope of existing programs. This distinction is essential to effectively manage the MTBF and would better support strategic resource allocation decisions. Ideally, budget submission templates would require KSUs to present, for each program, the reductions or increases in funding that are required to:
- Meet the costs of delivering current programs at existing service levels, setting out the
 parameters on which those were based and an explanation of the drivers (e.g. changes in
 beneficiary numbers from previous estimates);
- Take account of legislative changes to existing programs or legislation introducing new programs; and
- Meet the costs of new policy proposals being put forward by the KSU for consideration that either change the scope or design of current programs or introduce new policies, along with a description of their policy rationale and expected outcomes.
- 7. Formally requiring this information would ensure that it is provided and prepared on a consistent basis. Some parts of the MoF are already seeking this type of information, but not all have strong and cooperative relationships with LMs that make obtaining this information straightforward. Including the requirement in budget forms would also ensure that a consistent approach is being taken across government.
- 8. Significant effort has gone into defining medium-term performance targets at the program level, and there is merit in formalizing this process. Performance targets have been

agreed at the technical level between the MoF and each KSU. The MoF intends to formalize the process in future years to underpin accountability. As part of this process, the MoF has a role in ensuring indicators are measurable, relate to the capacities of the program, and that the system of indicators is coherent. The spending reviews will also provide an opportunity to review targets of the spending areas selected. Future budget forms will also need to be amended to capture the changes to targets that would result from any new proposals in LM budget submissions.

Technical Adjustments to Expenditure Ceilings

- **9. Further clarity is required in coming months on the circumstances under which technical adjustments to expenditure ceilings will be permitted.** The BCU (Article 33) permits changes in expenditure ceilings to take account of both revisions to macroeconomic parameters and new legislation.² However, there is a need to clearly define those circumstances under which changes in certain macroeconomic parameters will be permitted to automatically flow through to the updated calculation of expenditure limits. The more clarity there is around permitted adjustments, the better able KSUs will be to plan and comply with their expenditure ceilings, particularly in those instances where they will be required to absorb the impacts. It will be important to address this soon, as the issue may arise during preparation of the 2020 annual budget law, if parameters are updated.
- 10. It may not be realistic for KSUs to accommodate the impact of adverse changes in economic parameters in all circumstances over a long period. For example, the MoF may not be in a position to accommodate large deviations in debt service costs, nor may it be desirable. As these adjustments can be volatile, a requirement to absorb them could result in sharp year-on-year adjustments in other categories of expenditure. For this reason, several countries have adopted approaches that allow certain categories of expenditure to vary in line with pre-defined indicators (see Box 1.1).
- 11. Defining the circumstances under which any technical adjustments will be permitted will be essential to the credibility of the MTBF. Previous FAD reports have discussed various options for technical adjustments including defining a set of indicators (e.g., the exchange rate) or categories of expenditures (e.g., interest payments or unemployment benefits) for which adjustments will be allowed.³ Adopting such an approach, reinforces the principle that budgets are fixed in policy terms, and will only be adjusted based on certain predetermined technical rules. It also ensures that a consistent approach is adopted across KSUs.

² Under the BCU, expenditure ceilings for the Special Fund will automatically adjust in line with the revenue sources that finance those expenditures. FAD has previously advised that earmarking of revenues to special funds should be limited to improve effectiveness of budget management.

³ See FAD technical reports entitled: *Strengthening Public Financial Management* of May 2017, *Medium-term Budget Framework and Fiscal Risk Statement* of July 2017 and *Strengthening Budget Formulation and Fiscal Risk Management* of January 2019.

The 'fiscal space' provision in aggregate expenditures (see sub-section below) allows for these adjustments up to a point, without compromising the overall fiscal framework.⁴

- 12. For Ukraine, it may be prudent to adopt a conservative approach at this stage to adjusting expenditure ceilings. It will be important that technical adjustments are limited to factors that are genuinely beyond the control of government. The following could be considered but should only be adopted if the system of adjustment can work in a symmetric way, so that any savings on these budget items resulting from lower beneficiary numbers will not be retained by KSUs and spent on other purposes.
- Allowing technical adjustments for debt servicing payments that are impacted by changes in interest and exchange rates, as well as deviations in other payments that are highly dependent on exchange rates and which constitute a material share of a KSU's budget;
- Allowing for deviations in those payments that are automatically indexed to inflation or market wages under legal requirements (though not minimum wage or the minimum subsistence level set by the government);
- Some expenditures (e.g., pensions, family allowances) that depend on demographic variables might be linked to the relevant demographic driver. Sick pay or unemployment benefit which depend on labor market conditions might be allowed to vary.

Box 1.1. Technical Adjustments in Selected Countries

Ireland: cyclically-sensitive areas (e.g., unemployment benefits) and certain other expenditure categories are revisited each year in the light of updated economic forecasts. For these expenditures, if expenditure needs are smaller than the amount allocated, the difference is returned to the budget as a saving and cannot be reallocated by the relevant ministry to fund alternative activities. If the expenditure need is larger than the original allocation, then the appropriation will be adjusted.

Austria: ceilings for cyclically-sensitive items and some other special categories (about 20 percent of the budget) are not fixed but allowed to vary with pre-defined indicators. The Minister of Finance defines the spending categories for which flexible ceilings are set as well as the indicators for which they are permitted to be adjusted, through the adoption of a special regulation.

United Kingdom: Annually managed expenditures, which comprise around half of the budget, are allowed to vary. These expenditures are generally volatile, or demand driven, such as debt interest payments and social security payments. These expenditure allocations are adjusted on an annual basis in line with changes in certain parameters.

13. A broader approach, which could be considered at a later stage as the system matures, is to consider technical adjustments for other rules-based programs. Again, this would have the advantage of ensuring that adjustments work in both ways, so that KSUs neither win-nor-lose from changes in exogenous parameters that automatically impact their budget. A central technical reserve has several advantages over technical contingencies within individual

⁴ The Budget Declaration includes a provision in aggregate expenditures that is not yet allocated to individual expenditure ceilings.

programs (e.g., the education subvention), especially given the tendency to spend the latter on other purposes when it is not required to cover technical adjustments.

Budget Contingency

- **14.** The inclusion of a general expenditure contingency in the budget to cover costs from potential fiscal risk realization or technical adjustments is prudent. An expenditure contingency (termed 'fiscal space') has been included in aggregate expenditure projections for the budget year and forward years but has not been allocated to individual KSUs. The size of the provision seems reasonable, but the third year, is higher than allowances generally included by other countries. This may be appropriate at the transition stage. Going forward, ideally these amounts would be adjusted in line with observed experience of the size of non-policy variations.
- **15.** However, the 'fiscal space' will need to be well-communicated and strongly defended. There is a high risk that this will be seen primarily as a general policy reserve, which could undermine budget discipline and the incentives for medium-term planning by LMs. To guard against the risk of the fiscal space being eroded, the MoF should communicate to all stakeholders that it is not a general policy reserve and is not available for allocation to new policies as part of the annual budget process. For example, it could specify that the fiscal space will only be used to offset the impact of: unavoidable and unanticipated expenditures that genuinely could not be foreseen or accounted for at the time of preparation of the budget, and which cannot be absorbed within existing expenditure allocations. Ideally, such clarification would be added to the Budget Declaration prior to its submission to Parliament and detailed in the annual budget law.
- 16. The rules for utilizing the fiscal space should also be specified and appropriate accountabilities around its use established. The MoF intends to formalize the mechanism for allocating the fiscal space after observing experiences of various budget cycles. It will, however, be important that there are clearly specified authorities in place for accessing and allocating the fiscal space. It should be made clear, for example, whether the fiscal space can be allocated at the discretion of the MoF or require CMU approval. Further, to ensure appropriate accountability and transparency, it will also be important to ensure adequate ex-post reporting on how it is been allocated.

Budget Declaration

17. The 2020–22 Budget Declaration submitted to the CMU contained many elements of a sound medium-term fiscal strategy document. The declaration incorporated several of FAD's previous recommendations and included: an overview of the objectives for fiscal policy; medium-term macroeconomic and fiscal projections; a discussion of fiscal risks; and expenditure

⁵ The size of the fiscal space as a share of total other expenditures is 0.6 percent in 2020 (the budget year), 2.3 percent in 2021 and 6.2 percent in 2022. Generally speaking, contingency allowances across countries range between 1 and 4 percent of total expenditures, with progressively larger amounts included in forward years.

ceilings for KSUs, their key performance indicators (KPIs), and a more detailed discussion of priorities within each major spending area. An explanatory note to the declaration also included details of how revenue and expenditure projections were derived with detailed breakdowns of the medium-term fiscal projections by major tax and expenditure category.

- 18. Continuing to develop the declaration in future years will help to better explain the basis of fiscal plans and improve transparency. The following enhancements would strengthen the document.
- Including a discussion of the government's fiscal rules and statement of whether the current projections are consistent with those rules in the overview. Several countries include a fiscal strategy statement or chapter in their budget documentation to describe the alignment of their fiscal plans with their fiscal targets and to help underpin credibility.⁶
- Further elaborating on the components and drivers of the medium-term macroeconomic and
 fiscal projections, particularly for revenues. This can help to justify the current and mediumterm stance of fiscal policy, describe sources of budget volatility, and better explain the basis
 of fiscal plans. Incorporating these elements would require only minor amendments to the
 existing structure of the document.
- It would also be advisable to describe the basis for assumptions underpinning the fiscal forecasts and their uncertainty. For example, the assumption that the minimum wage will grow in the outyears (2021–22) by expected inflation suggests a significant fiscal risk from the public wage bill and social transfers given past trends.
- Further developing the assessment of fiscal risks as outlined below.
- **19. Future Budget Declarations will also need to ensure that deviations in medium-term projections and spending plans are clearly explained.** This will help underpin credibility of the MTBF and is required to fulfill obligations of the BCU (Article 33.8). Future Budget Declarations should include a comparison of aggregate revenue forecasts, expenditure plans, and deficit projections with the previous projections, along with an explanation of the main reasons for deviations. This should differentiate between deviations that are due to policy decisions of the government and those arising from other factors. As capacity permits, disaggregating non-policy changes into their different components, such as those due to revisions in macroeconomic parameters (e.g., inflation) and those due to volume changes (e.g., changes in the number of beneficiaries) would add further transparency. Table 1.1 provides an illustrative example of a reconciliation table. Some countries further disaggregate these drivers by detailing the main policy and other changes by program.

⁶ See FAD technical reports entitled: Strengthening Public Financial Management of May 2017 and Medium-term Budget Framework and Fiscal Risk Statement of July 2017.

Table 1.1. Ukraine: Illustrative Aggregate Reconciliation Table

	2019	2020	2021	2022	2023
	Current Year	Budget Year	BY+1	BY+2	
Expenditure (2020-22 Budget Declaration)	90	100	110	120	
Adjustment for policy decisions	0	0	2	3	
Adjustment for parameter changes	0	2	2	3	
Due to change in prices	-1	-2	-3	-4	
Due to change in other macroeconomic indicators	0	3	4	6	
Due to change in volumes or other program factors	1	1	1	1	
Other	0	0	0	0	
Total variation	0	2	4	6	
	Outcome	Current Year	Budget Year	BY+1	BY+2
Expenditure (2021-23 Budget Declaration)	90	102	114	126	145

- **20.** Explaining deviations to fiscal projections requires a sound understanding of their underlying cost drivers. The development of forward expenditure baseline estimates in Ukraine, discussed in Chapter II, would provide a stronger basis for explaining deviations in spending programs and in the aggregate fiscal projections. It will also be important to have a common understanding of what constitutes a policy change and what constitutes a non-policy change, which may not always be straightforward.
- 21. Efforts to increase fiscal risk disclosure should continue. The fiscal risk statement to be produced alongside the annual budget law provides an opportunity for further progress in disclosure. As the Budget Declaration becomes an increasingly strategic document, its content could be similarly expanded. Previous FAD reports provided guidance on incremental approaches to developing a fiscal risk statement, and examples of statements from other countries have been shared with the authorities. However, achieving progress will require clear accountabilities to be assigned to relevant agencies in the MoF.

22. The main priorities for future improvement in fiscal risk disclosure are:

- Providing a sense of the magnitude or likelihood of identified risks occurring;
- Expand the analysis for macro-fiscal risks to, at a minimum, include more robust discussion of how changes in macroeconomic indicators impact on fiscal aggregates, and over time to quantify these through sensitivity or scenario analysis; and
- Incorporating the fiscal risk analysis on state-owned enterprises that is already being
 undertaken, including guarantees on their borrowing. Some of these improvements could
 also be made in the fiscal risk statement submitted with the annual budget law in September
 this year.

⁷ The FAD team shared examples of fiscal risk statements from Georgia, Armenia, Tajikistan, Moldova and South Africa.

Spending Reviews

- 23. The 2019 spending review approach incorporates many good elements, drawing on lessons from the pilot process and international experience. It also incorporates several of FAD's previous recommendations. Importantly, it envisages a stronger role for the MoF in steering the process, more diversity in the composition of working groups, utilization of independent expertise, and a minimum requirement for presentation of reform options. Box 1.2 outlines some of the new elements adopted for the 2019 process.
- **24. Further actions are required to ensure tangible results are achieved.** Some countries have found it beneficial for a dedicated team in the MoF to support the working group Chairs to put in place administrative processes, support consistency across reviews, and ensure lessons for future conduct of spending reviews are retained. In particular:
- Each working group should have a detailed work plan with clear milestones for delivery and allocation of responsibilities between different members. Key milestones should cover: outcomes of evaluation of categories of expenditures; identification of potential policy measures; development and discussion of those measures; and preparation and finalization of components of the final report.
- Working groups should agree, early in the process, the structure for final reports. This will help guide the work of the review and assist in allocating responsibilities within the group.
- The ministerial coordination meeting should review options being considered at an early stage to ensure these meet expectations and are likely to yield tangible results. Although the guidelines stipulate that two policy options should be developed by working groups no target has been set for their magnitude.

Box 1.2. 2019 Spending Review Process

Nine working groups have been established across five LMs. The working groups are chaired by the head or deputy head of the relevant LM. New elements compared to the pilot process include:

- A requirement that monthly progress reports be submitted to the MoF and CMU;
- A requirement that at least half of the working group members come from outside the agency being reviewed and adoption of principles to ensure that all members have the opportunity to express their views. Should any member disagree with the conclusion of the final report, they have the option to submit an alternative opinion with the final report;
- A requirement for independent experts to be included in the working groups, with a recommendation for at least two national and two international independent experts;
- A requirement that each spending review develop at least two options for addressing the objectives of the review, neither of which can include a no change option;
- Ministerial coordination meetings (between the Finance Minister and relevant spending Minister or their deputies) at key milestones to resolve any disputes and provide feedback on the direction of the work of the reviews; and
- An instruction that spending review reports be published on the official websites of ministries within three days following their submission to Cabinet.

25. Expanding the methodological guidelines in future years would ensure a solid basis for the conduct of spending reviews. The guidelines contain several good elements setting out the procedures and approach to conducting spending reviews. There would be merit in supplementing these with more detailed guidance on approaches to evaluating existing expenditure and on expected outputs. Providing templates for final reports would ensure working groups are aware of what is expected to be delivered and help structure and standardize processes. Annex I of this report provides examples of tools and techniques for conducting expenditure analysis while Annex II provides a possible structure for the spending review report template. There may also be merit in elevating some of the principles of the guidelines to the CMU resolution initiating the reviews, to give them greater force.

Future Directions for Reform

- **26.** Preparation of an updated PFM reform strategy affords the opportunity to review progress and consider the next generation of budget reforms. The current PFM reform strategy expires in 2020, and the MoF plans to develop an updated strategy for the period 2021-2023. While good progress has been made in a number of areas, there are still outstanding areas for reform. A summary of the status of previous FAD budget reform recommendations is at Annex III.⁸ The IMF's resident PFM advisor will continue to support implementation of key PFM reforms.
- 27. The next stage of reform should include better integration of the various budget tools that inform fiscal policy-making. Reforms underway on fiscal risks and medium-term budgeting will better inform management of the fiscal position and performance of Ukraine. As these reforms mature, it will become increasingly important to clarify how this information is brought together within the MoF to inform the determination of, and advice to government on the overall fiscal strategy. Reforms should also be supported by continuing to build fiscal analysis capabilities within the MoF.

C. Recommendations

Recommendation 1.1: Further enhance the MTBF and budget process.

- Clarify the circumstances under which expenditure ceilings can be amended, limiting these to a narrow set of technical adjustments and communicate the arrangements to LMs (March 2020).
- Clearly define the circumstances and authority required for utilizing the 'fiscal in the Budget
 Declaration' prior to its submission to parliament. Limit these to expenditure deviations that
 were unforeseen, unavoidable, and cannot be absorbed within KSU ceilings and to technical

⁸ This does not cover the budget related recommendations from the June 2016 Public Investment Management Assessment for Ukraine.

- adjustments resulting from changes in macroeconomic parameters (immediate) and require ex post reporting on its use.
- Update the instructions to LMs for preparation of their budget submissions, requiring KSUs
 to separately identify in their requests for new funding the components due to: changes in
 costs of delivering existing programs at currently agreed levels of service; changes in costs
 due to the implementation of new government decisions or legislative requirements; and
 new proposals, not yet agreed, that either change the scope of existing policies or propose
 new ones (latest by January 2021, and earlier if capacity in LMs permits).

Recommendation 1.2: Further enhance the content of the Budget Declaration.

- Further enhance content of the Budget Declaration, by: including discussion of performance against fiscal rules; expanding the discussion on the drivers of the macroeconomic and fiscal projections; and, expanding the fiscal risk statement as outlined in paragraph 17 (June 2020).
- Formulate the approach to reconciling changes in fiscal projections and expenditure plans (December 2019), and ensure any additional information required from LMs and KSUs are included in updated budget instructions for the 2021 budget process (January 2020).

Recommendation 1.3: Further enhance the guidelines to support the conduct of spending reviews. Update the spending review guidelines to include an annex on approaches to analyzing the efficiency and effectiveness of spending and to include a template or outline for the final report (end-2019).

II. PREPARING EXPENDITURE BASELINES

A. Defining Forward Baseline Estimates

- 28. Forward baseline expenditure estimates are the best estimate of the cost of delivering existing government policies at current service levels over the medium term. Forward baseline estimates should include the impact of factors that affect the cost of delivering existing government policies, like changes in prices and/or volumes that are beyond government's control (Figure 2.1). They should take into account the impact of already announced policy changes that are due to come into effect.
- **29.** Forward baseline estimates do not include new policies not yet decided by government. Forward baseline estimates are not intended to be a prediction of the most likely outcome of spending in a given year—in part because they do not account for future policy changes or future fiscal conditions.

⁹ This chapter focuses on the construction and use of forward baseline estimates for expenditure; however similar concepts and approaches can be used for estimating forward baseline revenues.

Figure 2.1. Examples of Factors Affecting Prices and Volumes

Price drivers

- · Average wage increases
- · Exchange rates
- Interest rates
- · Price indexes

Volume drivers

- Changes in eligible population for a benefit
- Number of school age children
- Take up rates
- **30.** Forward baseline estimates should not be confused with future spending allocations that are reflected in budget ceilings. Ceilings are decided by Government and need not equal the cost of delivering existing government policy. If ceilings differ from baseline estimates, there is a need for further policy decisions about: (i) whether to utilize fiscal space or how to reduce expenditures (if the ceilings are lower); or (ii) whether to expand government services or maintain the buffer to accommodate unexpected events that may arise (if the ceiling is higher).

B. Role of Baselines in Supporting Budget Preparation

31. Forward baseline estimates enable stronger management of the aggregate fiscal position. The sum of individual expenditure baselines can be compared against aggregate revenue projections to calculate estimated future budget surpluses or deficits. By comparing this to fiscal targets and objectives, government can understand if there is likely to be room to fund new polices in future years, or if fiscal adjustment will be required. This provides the government with early information about when the fiscal position will be tight and enables early action, which can often be less painful than late fiscal adjustments.

32. Forward baseline estimates can support more strategic and better-informed expenditure prioritization decisions during the budget process.

- Highlighting emerging areas of spending pressure. A review of forward baselines across
 all areas of spending helps highlight aggregate spending trends and emerging areas of
 spending pressure. For example, forward baselines would likely show faster growth of health
 spending as the population ages that may need to be accommodated through adjustment in
 other spending areas. Information about spending trends can also inform the choice of areas
 in which to conduct spending reviews.
- More focused decision making. In time, the establishment of robust forward baselines can
 enable greater focus in the budget process on discretionary changes to policy, instead of
 debates about the extent of funding required to meet ongoing service delivery.
- **Consistent benchmark to assess policy change.** Forward baselines create a consistent benchmark from which the cost of policy changes can be measured.
- Reconciliation of changes in expenditure between successive budgets. Forward baselines
 enable a full explanation of why expenditure has changed, distinguishing between factors in

government's control (policy decisions) and those outside its control as set out in Chapter 1. This transparency helps build and maintain confidence in the budget.

33. Forward baseline estimates will also enable improved planning by LMs, particularly now that expenditure ceilings are in place. The approval of medium-term ceilings enables forward planning by LMs. By comparing ceilings to their forward baseline estimates, LMs can understand if they have room for new policies (Figure 2.2, panel a), or if they will need to adjust plans to reduce existing services and commitments to fit within ceilings (Figure 2.2, panel b).

Room for New Activities b. Adjustments Required 2500 2500 2500 2500 Ceiling is below baseline Ceiling is above so cuts to existing policies and services equal to the baseline, and room 2400 2400 2400 2400 for new policies is gap are needed to fit Budget year: equal to the gap within ceiling Budget year: ceiling and 2300 2300 2300 2300 ceiling and basleline baseline equal, equal, no no action action needed 2200 2200 2200 2200 needed 2100 2100 2100 2100 2000 2000 2000 2000 2020 2022 2020 2021 2022 2021 ■ Forward baseline estimates ■ Forward baseline estimates Expenditure ceiling Expenditure ceiling

Figure 2.2. Illustrative Comparison of Expenditure Baselines and Ceilings

C. Methodology for Preparing Baselines

Steps in Process

- 34. The key steps in preparing expenditure forward baseline estimates are outlined in Box 2.1. All areas of spending should be modelled so that the sum of the baselines covers all government expenditures.
- **35.** For each modelled area of spending, factors impacting on future prices and volumes should be identified and estimated. Price and volume changes are applied starting from a base year. The base year is the latest approved budget for the budget year including approved changes to date (such as in-year reallocations). Box 2.2 shows an illustrative example.
- **Price changes** are usually linked to expected inflation, though interest and exchange rates are also important price indexes for some components of expenditure. The latest Ministry of Economic Development and Trade (MEDT) estimates of price indexes such as average wages, consumer price inflation and exchange rates should be applied across all areas of spending so that estimates are internally consistent. Sector specific price indexes can

be used when there is strong case they are more reliable for estimating sector costs than wider indexes.

• **Volume changes** are usually estimated on the basis of cost drivers and legal requirements. Consideration should be given to which programs are demand driven. Demand driven programs have no cap on the number of services that are provided (such as payments of pensions to eligible pensioners), and total cost therefore varies with demand.

Box 2.1. Major Steps in Preparing Expenditure Baselines

1. Determine the existing budget

- Understand the current spending base. This requires knowing the purpose of the agency's spending.
- Choose the level on which to forecast spending.
- Identify past one-off expenditures. These are to be removed from the spending base if they will not be incurred in coming years (e.g., the cost of elections held in the base year).

2. Identify and apply cost drivers

- Identify price and volume cost drivers. This should be done for each level of baseline estimates.
- Link cost drivers to macroeconomic and demographic variables (e.g., CPI or population growth).
- Adjust base spending by the price and volume parameters.

3. Include the effect of past policy decisions not fully reflected in the base

- Additional costs or savings resulting from past policy decisions that are yet to fully mature should be included in adjusted projected spending (e.g., a policy of increasing transfers which was only implemented halfway through the base year). Note that these costs or savings are expected to be already adjusted for price and volume parameters.
- 4. Aggregate spending to arrive at an overall baseline for each spending area, ministry, or other administrative unit

Box 2.2. Illustrative Example of Applying Price and Volume Changes

The below presents a hypothetical example of a program where those eligible for the program receive free service provision from the government. The costs of the program are impacted by changes to administrative staff and their salaries, changes in beneficiary numbers and changes the cost of delivering the service. The following assumptions are used.

- The cost of delivering the services is assumed to grow in line with inflation (price change) and changes in beneficiary numbers are based on historical trends (volume change);
- Wages are assumed to grow in line with projections for wage growth (price change) and increases in the number of staff required to deliver the service based on previously approved expansion of services (volume change).

Illustrative Example for a Program

	2019 (Actual)	2020	2021	2022
Base ('000s)	21,000	-	-	-
No. of administrative staff	50			
No. of beneficiaries	20,000			
Average wage administrative staff	20,000			
Cost of service provision	1,000			
Price changes				
Wage growth	0	4.00%	4.50%	4.50%
Cost of service provision	0	3.00%	3.50%	3.50%
Volume changes				
Additional staff required to meet	0	5.0%	0.00%	0
expansion in services	U	5.0%	0.00%	U
Additional beneficiaries		1%	1.25%	1.50%
Forward Baseline Estimate ('000)		21,898	22,945	24,097

Technical Issues for Consideration

- **36.** While the concept of expenditure baseline estimates is relatively simple, there are many challenges in implementation. Some of the key challenges include: determining the basis for the preparation of forward estimates and defining what constitutes existing and new policies. Providing guidance and a consistent approach will improve the quality and usefulness of the estimates prepared.
- **37. Determining the level of detail in calculating baseline forward estimates requires judgment.** A balance is needed so that the baseline for a KSU is reflective of material cost and price drivers but avoids unnecessarily detailed estimates that increase the administrative burden of the exercise. Expenditure items can be grouped where they have common cost drivers. Usually large spending components (e.g., large virements and social benefits) are modelled separately. Smaller components of a KSU's expenditures can be grouped together. Many countries will prepare baselines at the program level as a default approach.
- **38.** Calculating baseline forward estimates can require differentiating between fixed and variable costs. The future costs of many services comprise a fixed cost (such as program administration costs) and variable costs that vary with the volume of services delivered. Care should be taken to avoid applying volume-driven parameters to fixed costs (where they are material).

- **39. Defining what "existing government policies" also requires considerable judgment in some areas.** The general principles and challenges are explained below, and case studies are in Box 2.3.
- Scope of existing government policies: Existing government policies are those which the
 government is formally committed to at the time the estimates are made. For Ukraine, this
 means policies that are included in active legislation. Existing government policies include
 approved policies that have not yet taken effect.
- The currently agreed level of services may not be clear: For instance, while legislation may define a given level of service, this may not be consistent with budget allocations. The default presumption should be the continuation of the current level of service (i.e., the current budget allocation should be viewed as the best indicator of the current government policy).
- Existing policies set to expire during the baseline horizon: The decision here is whether or not to assume that existing policies are likely to continue. A general rule is that mandatory programs (e.g., transfers defined in law) are expected to continue after their scheduled expiry dates, while spending requiring annual appropriations are not.
- Determining and applying one-off policies and other policy adjustments: Reflecting policies that are one-off or have a "lumpy" impact over the medium-term requires a careful review of past decisions and records. For example, the baseline may require adding new activities in future years that do not exist in the current year, such as maintenance costs once construction of an asset is completed. Also, many one-off items may not be one-off in practice; for example, natural disasters may occur with somewhat predictable frequency and can therefore be included in baselines.

Box 2.3. Examples for Determining Existing Government Policies

Minimum wage dependent expenditure —Because minimum wages are determined by the government, a strict application of existing government policies would mean that future estimates of minimum wages (and wages linked to minimum wages) would be based on no growth in the minimum wage. However, preparing estimates on this basis could lead to a large underestimation of future costs and not be credible. In this case, baseline estimates could be based on a technical assumption informed by trend movements in minimum wages, though care is needed to avoid this becoming a floor for future minimum wage decisions by government.

Broad government aspirations and goals—Baselines should not include broad goals or aspirations in sectoral strategies that are not developed into specific approved and costed policies. However, where the Government's commitment to a quantum of expenditure is concrete, such as the 5 percent of GDP devoted to defense and national security, it should be included in baseline estimates at the aggregate level. This is despite the detailed allocation to policies and KSUs occurring subsequently.

Infrastructure investment expenditure—Existing commitments to infrastructure projects are always included in forward baseline estimates. However, whether baseline estimates include a forecast for future investment decisions not yet made varies across countries. Where the quantum of these future decisions is clear, it can be included (such as for the State Regional Development Fund). Where there is more uncertainty, the choices are to: estimate based on historical budget share, or to not include an estimate but make this explicit when presenting baselines.

40. Further clarity can be achieved by explicitly defining what is "new policy." This helps set out what should not be included in forward baseline estimates. The definition used in Albania is presented in Box 2.4.

Box 2.4. Definition of New Policy: Albania

New spending initiatives refer to the additional costs arising from the introduction of new services, improvement of existing services or increase in outputs. The key characteristics of new policy proposals are:

- A proposal for a completely new policy;
- A proposal for a significant change in the level of services associated within an existing expenditure program;
- A significant change in implementation plans of an expenditure program or a project, which results in an increase in spending patterns in some years and a reduction in others.

Source: Government of Albania, Guidelines for preparing Medium-term Baseline expenditure projections.

Integrating Baseline Preparation into the Budget Process

- **41. Typically, forward baseline estimates are prepared early as a key input into the budget process.** Preparing baselines early in the budget process would enable them to influence the strategic budget decisions that are made through the annual budget declaration. It also provides information to KSUs to help inform their budget bids.
- **42.** Baselines should be prepared using consistent and the most up to date economic and fiscal parameters. The applicable parameters should be specified clearly to LMs and to the MoF, so consistent approaches are used. This also allows updates for late parameter changes to be done by the MoF with confidence about the basis of KSU calculations. If a previous set of parameters are to be used this should also be clearly communicated.
- **43. In Ukraine, baselines could be prepared before the strategic phase of the budget process commences.** The updated parameters produced by the MEDT used for the budget declaration are not available early enough in the year to allow for these to be used by LMs to prepare baseline estimates before they formally submit information for the preparation of the budget declaration. Instead, LMs prepare their submissions on a constant cost basis, with adjustments made centrally by the MoF once parameters are finalized. Earlier FAD reports have recommended amending the budget calendar to allow for the update of baselines prior to the submission of budget bids by LMs. In the absence of those reforms, baselines could be prepared based on the set of parameters used at the time of finalization of the annual budget. Any updates to those estimates could then be made centrally by the MoF, in consultation with LMs, to inform the finalization of expenditure ceilings (as was done in the 2020 budget declaration process).

¹⁰ See paragraph 6 of this report and FAD Technical Report "Strengthening Budget Formulation and Fiscal Risk Management," of January 2019 for further details on the current approach for LMs to prepare their submissions.

- **44. Expanding the awareness of the goals and uses of forward baseline estimates in supporting medium-term budgeting will be important.** The full implications of the introduction of medium-term budgeting are still being worked through by many participants in the budget process in Ukraine. Forward baselines add another layer of complexity by requiring not just a medium-term horizon, but also deeper thinking about how different factors will impact on budgets over that period. However, as set out before, baselines are key to ensuring expenditure ceilings are feasible and can be complied with. In this way, they help ensure that MTBF reforms are successful and sustainable.
- **45. The MoF will need to play a central role in driving the reforms to ensure consistency and build capability across government.** A MoF instruction outlining the approach to developing baseline forward estimates would help develop capability and awareness. In some areas, specific advice could be needed. Health is a notoriously difficult area to prepare baselines and could also benefit from external expertise. The approach to costing new policy proposals should also be broadly consistent with the approach for baseline forward estimates.
- **46. Building capacity to prepare baseline forward estimates can begin before a complete manual is ready, and the process will inevitably evolve over time.** Countries implementing baselines have continued to refine both guidance and the approach to sector estimates, to ensure it remains appropriate, is not subject to manipulation, and reflects new data or technology. As a result, any manual would be a work in progress. Therefore, estimation of forward baselines can occur in LMs that wish to commence before a complete manual is available. Indeed, in some areas of LMs, the basis for such work is already occurring, as set out in Chapter 3.
- **47.** The goal is for LMs and the MoF to jointly determine, understand and agree the forward baseline estimates. In the near term, more of the data and capacity to calculate baselines may exist within the MoF in some sectors. However, some LMs already do have the capacity to undertake this work, as outlined in the next chapter. In time, the goal should be for LMs to prepare updated baselines, with oversight and verification from the MoF. Ultimately LMs should have greater access to service level information to support the preparation of baselines, but the MoF should retain a role in verifying the approach. The possible roles of the MoF line departments in supporting forward baselines and the MTBF more broadly are set out in Box 2.4.

¹¹ The FAD team shared manuals from Albania and Slovak Republic, as well as the EU principles (https://ec.europa.eu/info/sites/info/files/ip045 en 0.pdf) for constructing and assessing forward baseline, which are likely to be informative for Ukraine.

Box 2.4. Potential Roles of MoF Line Departments in Supporting Baseline Forward Estimates and Medium-Term Budgeting

- Support the budget department in developing guidance on preparation of baseline forward estimates by contributing their sectoral expertise (and subsequent updates to the guidance).
- Support the production of expenditure baselines, working with LMs to build their capacity. A helpful first step could be discussions with the LMs to work through their programs and subventions and identify relevant price and volume drivers. Discussions could also cover the level at which it would be sensible to model baselines (as discussed in paragraph 36).
- Support LMs in identifying options for adjustments that may be required to current policies so that LMs can comply with expenditure ceilings and facilitate government decisions on these matters where needed. This includes cuts in activities and services where baselines exceed the ceilings; and new policies where baselines are below the ceilings (see Figure 2.2).
- Provide support to the MoF Budget Department in recommending updates to ceilings in the annual budget declaration process, based on their understanding of forward estimate baseline movements and pressures.^{1/}
- Continue to challenge the effectiveness and costing of proposals for new policies submitted in the budget process.

1/ Where baselines indicate that there is significant room under expenditure ceilings for particular KSUs, the MoF may propose reducing the ceilings for that KSU for redistribution to KSUs facing expenditure pressures they are unable to meet, or the MoF may propose a reduction in the aggregate expenditure ceiling through the annual budget declaration process.

D. Recommendations

Recommendation 2.1 Prepare guidelines for the preparation of forward baseline estimates that support the development of a consistent approach.

- The MoF should prepare instructions for the development of forward expenditure baseline
 estimates, setting out: their uses; the approach to their estimation; the process for their
 review and validation by the MoF; and a number of practical examples. Guidance should be
 issued by July 2020 so that KSUs have sufficient time to prepare their inputs for the 2021
 Budget Declaration.
- In preparing the instructions, the budget department should consult with the MoF's line departments and LMs.

III. PREPARING BASELINES IN SELECT LINE MINISTRIES

A. Ministry of Education and Science

48. The Ministry of Education and Science administers both budget programs and subventions.

- The largest budget programs are for education in universities and secondary education institutions that are the direct responsibility of the national government and for scientific research in universities apart from the Academies of Sciences.
- The largest subvention is for teachers' salaries in comprehensive schools that are the direct responsibility of sub-national levels of government. The subvention is calculated according to a legislated formula.
- Some further details on the Ministry's budget arrangements are presented in Annex IV.

Current Approach

- **49. The Ministry undertakes projections of the cost of its budget programs and subventions.** These projections are an input into the budget and medium-term fiscal projections prepared by the MoF and the ceilings agreed in the budget process.
- **50.** The Ministry's Strategic Directorate prepares cost projections for the subventions. The projections for the comprehensive education subvention are based on a legislated formula, which gives the parameters to be forecast.
- Of these parameters, the number of students by sub-national government area and class type is the only one forecast by the Strategic Directorate staff. The remaining parameters are either regulated or provided to the Ministry as part of the budget process.
- The number of students is forecast by estimating entry rates of students into the first year of
 the comprehensive system and exit rates after grade 9 to other parts of the education system
 such as vocational and technical training. These rates are estimated from historical trends.
 Movement between grades at intermediate levels and exits from the final year of the system
 are assumed to be 100 percent.
- Estimated entry rates are also compared with data on births as a check on whether the estimates are reasonable. Strategic Directorate staff anticipate receiving more information in future on pre-school enrolments, which will also assist with estimating entry rates.
- **51. The Ministry's Budget Directorate prepares cost projections for the budget programs.** The budget program projections for the budget year and the medium term are prepared according to step-by-step calculations specified in the budget proposal document. These calculations draw largely on parameters provided to the Ministry as part of the budget process or on historical data. The Budget Directorate staff are not required to forecast additional parameters or make judgments in the preparation of the core cost projections.

Issues for Consideration

52. The Ministry's current approach to identifying the cost drivers of its budget programs and subventions is reasonable, but more detailed work to assess their robustness will be required in future. The FAD team only discussed the approach taken to projecting costs for a limited number of higher education programs. Further work would be required to ensure

that the cost drivers for government programs with variable costs are fully identified and that appropriate parameters are being applied. Further, the Ministry may wish to undertake an analysis of the sources of errors in its projections, particularly for the comprehensive education subvention and the larger budget programs, to test whether other projection techniques, such as the use of different parameters or demographic modelling, might give better results.

- **53. Medium-term budgeting provides a stronger basis for the Ministry to plan its future activities.** As the Ministry beds down its medium-term projections methodology, it should increasingly use the projections to assess the sustainability of its programs and subventions over the medium term against the ceilings allocated in the budget process. This information can be used by Ministers and the MoF to better understand the cost of government programs and their sustainability within the overall budget envelope and can inform actions the Ministry needs to take to ensure ceilings are met. An important first step in this process would be the construction of forward baselines following the methodology presented in Chapter 2.
- **54.** The Ministry may wish to review internal arrangements for medium-term budget planning to ensure relevant information is consolidated across the Ministry. One option is to consider giving lead responsibility for medium-term budget analysis and planning to one area, possibly the Strategic Directorate with its link to policy prioritization, notwithstanding the current split of the projections function across two directorates. However, such an approach would require the fundamental disconnect between strategic prioritization and planning and budgeting to be addressed.

B. Ministry of Social Policy and Pension Fund

55. The budget of the Ministry of Social Policy funds the Pension Fund's deficit and some categories of pension top-ups and supplements. The Pension Fund's main source of revenue is the single social contribution paid by employers, which passes through the MoF, but is not accounted for as a budget revenue or expense.

Current Approach

- 56. Staff of the Pension Fund and the relevant area of the Ministry of Social Policy prepare the cost projections for the Pension Fund. These projections are an input into the budget and medium-term fiscal projections prepared by the MoF and the ceilings agreed in the budget process.
- **57. Retirement pensions are calculated according to a legislated formula.** Major inputs into the formula are the retiree's length of work record and the average salary against which their contributions were paid to the Pension Fund. The minimum subsistence level, which is decided by government, is also an important parameter in establishing minimum levels for pension entitlements. Retirement pensions are indexed to an average of CPI growth and growth in the average salary of Pension Fund contributors.

58. The process followed for estimating pension expenditure closely aligns with the process for preparing forward baseline estimates set out at Box 2.1.

- The projections use the legislated formulas for new pension entitlements and pension indexation as a basis for the budget year and the medium term, along with estimates of pension eligibility and take-up.
- Of the major parameters used in the formula, forecast salary growth is given by the
 parameters provided to the Ministry as part of the budget process. The subsistence level is
 decided by government, typically late in the budget process, but is estimated by the Ministry
 of Social Policy in advance of the decision.
- The number of pensioners is projected by the Ministry and the Pension Fund. A significant amount of detail is known about existing pensioners (detailed on Pension Fund Form 6PF for all pensioners and for those that have taken up a pension in the past calendar year). These projections are based on trends for pension eligibility, pension take-up and death rates.
- The characteristics of new pensioners in terms of their length of work record and average contribution salary is also monitored and estimated by the Ministry and the Pension Fund. Detailed work records for Pension Fund contributors are available from 2004. These records will become increasingly useful to the projections methodology in future as they cover a greater proportion of retirees' working lives.

Issues for Consideration

59. The approach to projecting the pension costs is sound, but deeper consideration of longer-term drivers will be increasingly important for the accuracy of ceilings in the forward years and to inform policy decisions.

- The use of historical trends to estimate relevant parameters is likely to produce acceptable
 projections over the short run (especially if trends in the shift of parameters are also taken
 into account). Over a longer period, the use of demographic modelling and explicit
 assumptions on behavioral responses to changes in the pension system are likely to be more
 informative.
- This approach may be useful for the medium-term budget projections and would also be beneficial for policy costings if any further changes to the pension system were contemplated in future.
- In future, the Ministry should undertake an analysis of the sources of errors in the Pension Fund projections and whether alternative projection methodologies, such as the demographic modeling mentioned above, would have yielded better results.
- For pension funds in general, long-term modelling beyond the three-year term of Ukraine's MTBF is appropriate given the long-lived fiscal effects of the system. Long-term modelling was done in 2017 at the time of the last major reforms but would usefully be done

periodically to continue to assess the system's likely fiscal impacts. One option for this would be to start to replicate the EU Ageing Report for Ukraine.

C. Recommendations

Recommendation 3.1. Spending ministries should further develop methodologies for medium-term baseline forward estimates. The Ministry of Education and Science and Pension Fund should develop baseline forward expenditure estimates following the methodology presented in Chapter 2, to ensure regular assessments are made of the of the affordability of its programs and subventions within budget ceilings.

Recommendation 3.2. The Ministry of Education and Science and the Ministry of Social Policy should analyze the sources of errors in medium-term projections and refine methodologies as appropriate.

Recommendation 3.3. The Ministry of Education and Science and the Ministry of Social Policy should increase their use of demographic data and projections, including for periodic longer-term modelling of pension expenditure.

Annex I. Example Tools, Techniques and Approaches for Conducting Spending Analysis

The conduct of spending reviews requires expenditure to be examined from a range of different perspectives. Spending reviews should examine: (i) the *relevance* of the program to determine how well it is aligned with government policy priorities; (ii) the *effectiveness* of different interventions (allocative efficiency) to assess how well programs and policies meet or contribute to their intended objectives; and (iii) the *efficiency* or cost-effectiveness of activities to determine whether similar outputs or outcomes could be achieved with fewer inputs or through the application of different productive processes (operational efficiency).

A mix of qualitative and quantitative data should be applied in the analysis. Qualitative data could include literature reviews (including lessons from other countries), laws, regulations, interviews with stakeholders and surveys/questionnaires, which could be designed and applied as part of the analysis. Quantitative data could include input data (such as financial and employment information) output data (such as the number of hospital beds or schools) outcome data (such as achievement of literacy rates, poverty goals, etc.).

Many methodologies can be used to shed light on the relationship between inputs, outputs and outcomes. Approaches often used are:

- Evaluation of historical developments in spending inputs and outputs or outcomes;
- Comparative analysis including comparisons across countries, regions, districts;
- Evaluation of the relationships between inputs and outputs or outcomes. The latter can use simple techniques such as unit costs, scatter plots, or correlations between inputs and outputs/outcomes, or more sophisticated statistical tools.

The table below presents some examples of questions to be asked and types of relatively simple approaches that can be usefully employed in the analysis stage of a spending review process.

Analysis	Question to ask in the analysis	Possible tools, techniques, approaches
Spending description Analysis of the scope of the program or activity Spending and Output	 What is the program focus? What is the public policy rationale for the spending activity? What are the objectives and outputs of the spending activity? 	Program/activity description and strategic objectives Rationale of the program/activity Indication of whether the program/activity is identified as strategic and/or a priority in strategic and planning documents
Spending trends and non-monetary inputs	 What is the level of spending? Has spending been increasing or decreasing? Are there sudden stops or accelerations? Have all spending components been growing at the same pace? Are there context factors to be accounted for (e.g., reforms of the program/activity, changes in input prices)? What is the development in nonmonetary inputs (such as personnel)? 	 Spending analysis: Description of spending level (e.g., spending as percentage of GDP) and of its changes over time Decomposition of total expenditure by:
Outputs and outcomes	 What are the outputs and outcomes from the activity? What areas have shown large growth in outputs over time? What are the reasons behind the increases? 	 Average administrative cost per program Developments in the volume of outputs (e.g., number of applications processed in a program, number of hospital admissions, number of firms receiving subsidies, number of students, number of m³ of water produced) Developments in outcome indicators if possible (e.g., number of pupils achieving a secondary education degree, literacy rates)
Efficiency and Effecti Assess the efficiency of spending	 veness Analysis: Are outputs being provided in a cost-effective way? How does spending compare to international benchmarks? 	 Compare the average cost of delivering a unit of output across production units (e.g., schools or municipalities) that deliver the same (or a similar) program Compare the average cost to private producers that deliver a similar product or

Analysis	Question to ask in the analysis	Possible tools, techniques, approaches
	 How does spending compare when internally benchmarked across the country? How do costs vary between production units? Can steps be taken to provide the same activity at lower cost? Are there opportunities for greater user-pays? Is there overlap or duplication with other government programs? 	service (e.g., the cost of a specific medical procedure between private and public hospitals) Compare the average cost to the delivery of a similar product or service in other countries Identify distance from best performers (countries that display lower cost at the same service level, or higher service level at the same cost) Examine utilization of staff work time and staff skill composition (e.g., how many officers are allocated to a specific task across districts) Examine level and development of user-charges or co-payments as a portion of total cost and how those charges are distributed between relevant groups Identify activities and outputs of programs aimed at similar objectives (including from other ministries or levels of government)
Assess the effectiveness of spending	 Are outcomes good? Does the activity meet the policy objectives? Is the output delivered to the intended beneficiaries? 	 Compare input/outcome indicators across countries, regions, districts, offices, production units or programs (e.g. life expectancy vs. per capita health expenditure across countries, educational achievements vs. spending per pupil across countries, percent reduction in poverty gap vs. spending across social assistance programs). Assess the portion of spending that reaches the intended beneficiaries (value of outputs to recipients compared to total expenditure) Assess achievement of KPIs

Annex II. Generic Outline of a Spending Review Report

Table of Contents

Executive Summary

- Context
- Overview of analysis and conclusions
- Summary of recommendations

Section 1: Overview

This section could include the following subsections:

- Motivation for review, goals, and scope
- Summary of programs supporting achievement of policy goals
- Overview of expenditure under review in aggregate and by program activity
- Summary of programs within scope of review, their policy rationale, objectives, and their
 outputs and impacts this could also include discussion of recent trends in program
 expenditure and the key drivers of these trends as well as potential future pressures.
- Summary of reforms undertaken so far and remaining challenges
- Key issues to be considered by the spending review

Section 2: Analysis of Efficiency and Effectiveness of Programs

This section could include the following subsections:

- How spending compares to cross-country benchmarks including total expenditure, outputs delivered, outcome indicators
- Assessment of how well the spending is meeting policy objectives (effectiveness)
- Assessment of whether program is being delivered in a cost-effective way (efficiency)
- Discussion of whether there are duplicative programs intended to achieve similar objectives

The above section can utilize the approaches to analysis in Annex 1.

Section 3: Policy Options

This section should provide details of the policy options developed by the spending review and could include:

- Description of each proposal covering: the rationale for the proposal; the main benefits (financial and non-financial); who will be affected by the policy and how; and, any other social and economic consequences;
- Implementation issues, including who should be involved in implementing the reform, timeframe required for implementation, whether legal or institutional changes are required or consultation with third parties and potential factors that could hinder reform implementation or the realization of benefits; and
- The detailed financial implications of options

Section 4. Conclusions and Opinions of the Working Group

- Opinion of the majority of the working group.
 - Here the majority of the working group might express opinion about the preferred policy options to be adopted and what, if any further investigation might be warranted.
- Opinions of the individual members of the working group not fully supporting the majority opinion.
 - This should include proposals for alternative policy options, if the majority proposals are not supported, or additional proposals not supported by the majority opinion, with the same level of supporting justification required above.
 - If majority opinions proposals are not supported, clearly explain the reasoning for this and draw attention to perceived risks or consequences.

Appendices

- a. Members of the working group
- b. Methodology of the quantitative analysis
- c. List of legal and other supporting documents (laws, decrees, regulations) where relevant

Annex III. Progress in Implementing Budget Reforms

Recommendation	Report	Status
Medium-Term Budget Framework		
Adopt amended Budget Code; adopt a CMU resolution detailing further technical aspects relevant for medium-term budgeting	(1), (3)	Completed. Although CMU resolution might need some refinement, but essentially done
Present the fiscal forecasts and the MTBF in a general government perspective; Provide a discussion of the macroeconomic and fiscal outlooks in both qualitative and quantitative terms, including the main drivers of the medium-term macro-fiscal projections	(1), (2), (4)	Largely completed. The Budget Declaration contains some discussion of the macro forecasts, but general government consideration and the discussion of the main drivers, hence the big picture is missing
Building the budget challenge capacity of MoF budget officers to scrutinize budget requests during budget preparation	(2)	Further improvement is needed
Limit overspending of the Special Fund and reduce the amount of earmarking revenues in the state budget	(1)	Partly done, ceilings have been applied to the special fund, although these are allowed to vary with their revenues. Earmarking has not been reduced.
Give LMs a stronger mandate to plan and manage portfolio finances, within the approved LM ceiling, by requiring that they prioritize the requests of lower level spending units and negotiate with the MoF on their behalf.	(1), (2)	Largely completed.
Foster meaningful bilateral negotiations between the MoF and LMs on the ceilings and explain the results in the Budget Declaration	(2), (4)	Just commenced.
Clarify the ceilings characteristics.	(1), (2), (4)	Done to a large extent through the BCU amendments.
Develop a model for technical adjustments.	(1), (2), (4)	Not yet done
Transparently disclose ceiling revisions; Report and explain deviations in a standardized way; Reconcile and explain deviation among documents (macro-fiscal forecasts and expenditure ceilings against previous vintage, draft budget law against budget declaration, final accounts against adopted budget)	(1), (2), (4)	Not yet applicable
Develop a forward-baseline-estimates methodology for the state budget in the MoF; Quantify the budgetary impact of new policies at the KSU level; Develop rules and procedures to estimate the medium-term impact of new policies on subnational finances; Separately disclose the baseline and target scenarios; Provide training on the FBE methodology to KSUs; Apply the methodology to the Strategic Budget Document	(1), (2), (3), (4)	Not yet initiated.

(1)	
8	

Recommendation	Report	Status
To strengthen the information base for policy prioritization, require LMs to report progress against key performance indicators in their budget submissions and end-year reports.	(2)	Reform in progress
Modify the draft law on strategic planning to accommodate sector strategies, covering the strategic planning requirements of more than one 'central executive authority' where their respective services are sufficiently related to one another; Overhaul the existing strategic planning guidelines in line with the new draft law and with good practice in sector strategy formulation	(4)	Not done
Fiscal Risk Analysis and Disclosure		
Broaden FRMD's mandate cover all material fiscal risks; Transfer oversight of financial and commercial operations from the FRMD to supervisory boards, as established	(1)	The mandate was broadened, but the oversight function wasn't transferred
Undertake and publish sensitivity analysis especially for macro-fiscal variables and SOE sector	(1)	Not done
Undertake and publish debt sustainability analysis	(1)	Partly completed. Analysis of risks around debt portfolio included in Budget Declaration and Debt Management Strategy
Amend BCU to incorporate fiscal risk management functions and a fiscal risk statement	(1), (3)	Done
Publish initial FRS	(1)	Done
Design or refine the necessary methodologies and incorporate into the Fiscal Risk Statement analysis of Macroeconomic risks; risks related to Public debt; Financial Sector; SOEs and guaranties	(4)	Not done
Spending Reviews		
Develop a spending review manual setting the framework and objectives of the spending reviews, clearly laying out the different phases of the review (data collection, analysis, and policy development), providing guidance on how to conduct analysis and develop proposals, and providing templates and instruction for final outputs; Launch the second round of spending reviews in early 2019 for completion in early 2020, with proposals available for potential incorporation into the 2021 budget.	(4)	Done, refinements to be expected after the second round

Recommendation	Report	Status
Public Investment Management		
Establish the legal basis for commencing with multi-annual commitments for capital projects, up to a defined level and subject to agreement with the MoF; Assess the supporting requirements needed to establishment an effective multi annual commitment system	(4)	Not done
Develop a National Infrastructure Strategy	(1)	Not done. Although this is outside the roles of the MoF. The Ministry of Economic Development and Trade is responsible or the formation and implementation of investment policy.
Set up an investment planning unit	(1)	Not done
Create a single online database of information for all investment projects.	(1)	Not done
Extend project appraisal and selection approach to all major national public investments	(1)	Reform in progress

Note:

- (1) FAD Strengthening Public Financial Management (May 2017)
- (2) FAD Medium-Term Budget Framework and Fiscal Risk Statement (July 2017)
- (3) FAD Fiscal Decentralization and Legal Framework for Fiscal Risk Management and Medium-term Budgeting (December 2017)
- (4) FAD Strengthening Budget Formulation and Fiscal Risk Management (January 2019)

Annex IV. Budget of the Ministry of Education and Science

The Ministry of Education and Science is a key spending unit within the Ukrainian budget. As a key spending unit, the ministry is allocated a single budget ceiling that covers all its budget programs and subventions. The Ministry allocates funding to individual budget programs and subventions within the overall budget ceiling.

- Actual spending on budget programs is within the control of the Ministry—the Ministry
 decides how much funding to allocate to each program. Actual spending on the
 comprehensive education subvention is outside the control of the Ministry—it is determined
 by the legislated formula.
- The subvention formula allocates funding for teachers' salaries according to the required number of teachers and teachers' average salaries. The required number of teachers depends on the number of classes and the teaching hours for each class, which in turn are specified by regulated parameters for class capacity and teaching hours.
- Actual spending on teachers' salaries may vary from the subvention funding, since actual
 class sizes or teaching hours may vary from the regulated parameters. In this case, any
 overspend would need to be funded from other sources and would initially be the
 responsibility of the relevant sub-national government.
- There is a technical reserve within the comprehensive education subvention of up to 1 percent of the allocated funding. The use of this technical reserve is not solely at the discretion of the Ministry of Education and Science; it is subject to a broader government decision-making process involving the MoF.
- The Ministry can also request additional funding for each budget program. Such requests
 must be accompanied by a justification. The MoF can consider these requests in its proposed
 budget ceilings.
- Requests for additional funding could, for example, cover cost pressure from within the
 program's existing scope of activities that are not captured by the budget proposal
 calculation, from proposals to increase the scope of activities in support of the program's
 existing objectives, or from government decisions taken or legislation passed that will
 increase the cost of the program in future.
- Requests for additional funding are for a single amount for each budget program. They do not separately account for different sources of cost pressure unless this is done in the written justification.