The capabilities of ministries of finance and planning to coordinate capital and recurrent expenditure

Synthesis report

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Acknowledgments

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Executive summary

Integrating capital and recurrent expenditures appropriately is a budget coordination problem faced by many ministries of finance in Africa. This report assesses the effectiveness of mechanisms used by the finance ministries of Botswana, Namibia, Rwanda and South Africa to integrate these expenditures within the overall budget process. It seeks to answer the following question: *When are finance ministries in countries with different institutional structures and economic conditions best able to coordinate the activities of various actors in order to integrate public capital and recurrent expenditures?*

Key definitions and concepts

Defining capital and recurrent expenditure in a developing country context is not straightforward. Capital expenditure is defined clearly in international public finance statistics as expenditure on public assets that will be used in the production and supply of goods and services, where the asset's life will be longer than one fiscal year and the asset is not intended for resale. Developing countries, however, often make distinctions between major and minor capital expenditures in their budget, managing the major items jointly with donor-financed recurrent expenditure in development budgets. This meant that understanding differences between capital and recurrent expenditure management required understanding how development budget processes and allocations were integrated with recurrent budget processes and allocations.

An appropriate degree of integration of capital expenditure and recurrent expenditure is a key concern of public financial management (PFM). While it is vital that capital asset investment choices are given attention, it is now commonly accepted that the capital budgeting process must be considered as part of the overall PFM system. In principle, capital and recurrent budgets should contribute to the same objective, and thus be budgeted for in an integrated manner. However, there are reasons for managing capital expenditure differently to recurrent expenditure. For example, the selection and management of capital projects require specific factors to be considered (such as lifecycle cost, rates of return or costs escalation over multi-year implementation periods), resulting in different information, process and skill demands during budget preparation and implementation.

Capital and recurrent expenditures can be separated across different dimensions to varying degrees between countries. Across the budget cycle, capital and recurrent expenditures can be presented separately to the legislature (the presentational dimension), appropriated separately by the legislature (the legislative dimension), and planned, allocated, managed and monitored by separate units of government (the institutional dimension). The research project considered the factors, rules and processes that help finance ministries integrate capital and recurrent expenditures relative to a shared objective-oriented framework, even if degrees of separation exist in terms of legislative, institutional or presentational practices. This is referred to as the managerial dimension.

These factors, rules and processes were seen as central to the coordinative capability of finance ministries. Whereas capacity refers to the volume or scope of ministry inputs of an appropriate quality (such as human resources and information technology systems), capability is about converting that volume into performance. The ability of finance ministries to transform capacity into capability depends on internal and external factors, as well as technical and political factors. The roles that a finance ministry can successfully assume in a budget system (its capability) are determined by its capacity and the specific technical arrangements of the system, and how the political economy and institutional incentives allow these arrangements to be put to effective use. Existing research has set out typologies of the different capabilities of a finance ministry. Krause (2015), for example, places the concept of capability into four categories – analytical, delivery, regulatory and coordinative – and arranges core public finance functions of the state against these capabilities.

The researchers of this report drew on this understanding of finance ministry capability and its disaggregation into various types to assess capital and recurrent integration capabilities, and analyse contributing factors. Furthermore, they used coordination theory to identify capital/recurrent coordination challenges and describe the mechanisms used by finance ministries to address these challenges. Specifically, they used the coordination theory concept of dependencies between activities, and the distinctions coordination theory makes between setting goals, mapping goals to activities, and managing information as an interdependent resource among activities.

Research framework

The study scope was narrowed to investigating central government's capital expenditure on public service infrastructure (such as schools, clinics and hospitals, prisons and police stations) and focusing on the budget preparation phase of the budget cycle. Besides looking at overall processes, the research teams looked specifically at integration in the education sector for comparison.

The main research question was broken down into the following sub-questions:

1. Describing the capital-recurrent integration context: How integrated or separate is the management of capital expenditure (capex) and recurrent expenditure in the legal, institutional and presentational dimensions (the capex context frame)? To what degree are expenditure management responsibilities decentralised? In order to formulate policy advice for different integration contexts, the study treated integration in the institutional, legal and presentational dimensions (and the differences in it) as the context for measuring coordinative capability in the managerial dimension, because it was important to understand which arrangements work better under which circumstances.
2. Assessing capex integration: What do the results of PFM (prudent capex decisions, credible capex budget, reliable resource flows to capex projects, institutionalised accountability) suggest about the integration of capital and recurrent expenditures? The study assessed signals of over-integration (capital decisions not taken in an integrated manner or jointly with recurrent budget decisions, relative to a shared framework of objectives and priorities, and the recurrent costs of capital expenditure not budgeted), as well as under-integration (absence of capital project-specific procedures, analysis and information).
3. Evidence of coordinative capability: What are the strengths and weaknesses of the finance ministry's coordinative capability to manage capex integration? How well has the ministry managed these weaknesses? What contribution can be made to the integration outcomes observed? The study described the coordinative mechanisms of the four finance ministries to set appropriate goals for capital and recurrent budgeting (use of objective frameworks); to map out processes that coordinate actors and activities towards appropriate integration; and to manage the information flow between actors and activities in the system.
4. Factors that contribute to or detract from capabilities: Which analytical, regulatory and delivery capabilities affect the finance ministry's coordinative capability? Which factors – internal or external, technical, or political/institutional incentive factors – determine its ability to coordinate the integration of capital and recurrent expenditures? The study investigated the ability of different factors to explain the chain, from the mechanisms used to the integration outcomes observed.
5. What finance ministries can do: How has the finance ministry adjusted factors within its control to boost its ability to coordinate capital and recurrent expenditures under different circumstances? What are the lessons? What policy advice can be derived from the study?

Findings on the integration context and common integration challenges

Integration context: Botswana, Namibia and Rwanda use the concept of a development budget as a presentational and/or appropriation mechanism in their public finance systems. In all three cases, these budgets relate to development projects undertaken by government and comprise not only capital expenditure but (a relatively small portion of) recurrent expenditure. South Africa does not use the concept of a development budget or aggregate development projects as a budget planning or management device in its public finance system, besides infrastructure grants from central to subnational government, which could be seen as the limited use of a form of development budgeting.

The institutional dimension is where significant separation results in high coordination problems. In this dimension the four countries fall into two groups. South Africa and Rwanda have more integrated capital and recurrent expenditure institutions, despite institutional separation of planning and budgeting. In both countries, one institution or unit is responsible for managing both capital and recurrent budgets. Botswana and Namibia separate both planning and budgeting as well as capital and recurrent expenditures in terms of responsible institutions. Namibia has the most institutionally separated system, with full separation from the centre to the line. Botswana has one ministry (and therefore joined-up political responsibility) but two units at the centre, and separation at the line ministry level.

Coordinative challenges: In Botswana and Namibia capital and recurrent expenditures are budgeted and allocated by different actors at both the line ministry and central levels. Rather than ensuring that capital expenditure is treated appropriately, the main challenge throughout budget preparation is to make sure that the goals set in the parallel processes are shared (or that decisions in both processes use a common understanding of needs and priorities), and that actors, processes and information flow are coordinated so that quality information on capital and recurrent expenditures is shared between the recurrent and capital process. By contrast, in Rwanda and South Africa the main challenge is less about ensuring common goals and information-sharing and more about making certain that key outputs of a sound project cycle receive timely and full consideration in the budget cycle. These outputs include project planning and costing, appraisal, review, and monitoring and evaluation. The main challenge in these countries is therefore around the alignment of the budgeting and project cycle.

This does not mean that the coordination of goals and information in South Africa and Rwanda or project cycle outputs in Namibia and Botswana were perfect. The study also found that there are many common challenges that relate to deficiencies in the project and budget cycles, whether they occur under circumstances of institutional integration or not. These include the quality of costing and forecasting; providing

for maintenance expenditure; and balancing capital and recurrent expenditures to achieve the desired sector outcomes, with under-provisioning for capital expenditure.

Mechanisms to address coordinative challenges

Setting common goals and managing processes, actors and information for integration (avoiding under-integration): The PFM systems of all four countries include features aimed at setting common goals and coordinating processes, actors and information. These were particularly strong in Rwanda and South Africa, both of which do not separate planning and budgeting functions between institutions of government. The features include:

- The use of sector strategies and a strategic budgeting phase in the budget process to set common goals for capital and recurrent expenditure decisions: A key reference point and focus in the entire process in South Africa and Rwanda is the integration and coherence of sector/ministry, department or agency (MDA) expenditure towards sector objectives set in sector strategies. These strategies also feed into medium-term expenditure frameworks as a further coordinating mechanism in both countries. In Namibia a medium-term expenditure framework that integrates capital and recurrent expenditure is in place, but it is separate from the annual budget process in several respects, and it is largely the annual process that determines the appropriations.
- The use of a budget calendar that is followed in practice and sequences activities and decisions in the budget process, allowing information flows to be coordinated.
- The use of joined-up processes and information instruments for capital and recurrent expenditure decisions: Rwanda's joined-up processes provide a good example of how the integration of capital and recurrent expenditures is dependent on one process deciding both, even if in two phases. The integration of the process is apparent in that the same joined-up information instruments are used, the same actors participate, and the rules that govern both are coherent and emphasise the integration of expenditures. South Africa's process also adheres to these requirements. Botswana's system does not have similar joined-up processes, rules or information instruments that integrate expenditure until after the main capital and recurrent allocations have been made, when the two sets of proposals are reviewed jointly by the Estimates Committee. However, Namibia has recently introduced several changes to integrate the process better, moving it closer to the kind of practices used in Rwanda.
- Structuring the finance ministry review processes to assess capital and recurrent expenditures jointly: This is the case in South Africa. In Botswana, in contrast, finance ministry review processes run separately for most of the budget preparation process.[1] If integration at the finance ministry level is weak, systems rely on the integration of processes at the line ministry level. In Botswana, development expenditure finances the periodic five-year National Development Plan (NDP) and new project proposals are the result of the NDP process. The expectation is that during the annual budget process, line ministries will ensure that the recurrent expenditure obligations of development expenditure are covered. This depends on MDAs having processes in place for finance officers and development officers to exchange information. The fieldwork found that this does not necessarily occur in practice. In Namibia there has been recent progress towards more integrated processes at the central level, with the Ministry of Finance coordinating the budget circular and review processes with the National Planning Commission (NPC), even if the final decisions on budget allocations are still taken separately.
- The use of up-to-date, coherent and accurate information on capital and recurrent expenditures organised into whichever other budget categories apply when expenditure decisions are made: Key to this is strong financial management information systems and a shared, multidimensional chart of accounts (COA). This is in place in Rwanda, South Africa and Namibia. Botswana does not have an integrated budget and account structure in place. The presentation of capital (development) and recurrent (operational) expenditures differ in the COA. Recurrent expenditure is reported under segments that show the budget organisation, account and cost centre; development expenditure is reported only under cost centres, which are aggregated by projects. Also, the cost centre codes for recurrent and development expenditures are different. This means it is not possible to link maintenance and manpower recurrent costs (in the recurrent/operational budget) to development projects (in the development budget).

Integrating capital project cycle concerns into the budget process (avoiding over-integration): The PFM systems of all four countries include features that are specific to planning and managing capital investment projects. These include:

- Setting specific information requirements for capital investment proposals: All four countries require additional information to be submitted with investment project proposals. In three cases – Namibia, Botswana and Rwanda – this information is used to give the project the go-ahead in a separate project approval process. In South Africa, the information is used to approve the project in an integrated way, with recurrent expenditure as part of MDA proposals.
- The use of feasibility studies/appraisals to ensure value for money and achievability: Namibia, Rwanda and South Africa require some assessments to be done for all projects, including an assessment of financial viability. In Rwanda and South Africa the scope and depth of analysis that is required depends on the type and size of proposed project. By the time the project is submitted for the first round of approval, all required assessments and appraisals are expected to have been done and financed by the proposing MDAs. The finance ministries in both Rwanda and South Africa review and vet

1 Some process reforms were introduced into the 2017 budget process after the fieldwork for this study, including joined-up hearings with line ministries early in the process.

the viability of projects before putting them forward for financing. In Namibia, all projects are subject to feasibility studies – a phase that is approved for financing before the project itself is approved. This results in a very long project cycle.

- The use of project/investment committees to approve projects: Botswana and Rwanda have committees in place that approve projects. A key difference between the placement of Botswana's Project and Budget Review Committee, which approves projects, and Rwanda's Public Investment Committee is that the latter is the only point in an integrated cycle where there is a specific focus on capital investments. Moreover, the projects proposed arise out of sector-level reiterative consultations that integrate capital and recurrent expenditures. Botswana's Project and Budget Review Committee is *a* step in the capital process, and is disconnected from the recurrent process; in Rwanda, the Public Investment Committee is the *only* step focused on investment expenditure and follows from a series of fully integrated steps.
- Capital project monitoring: Monitoring capital project implementation on a project basis is a key part of capital expenditure management in all four countries. While this would be the case in any well-managed project cycle, the integration of this information into the budget process is the focus of this paper. In Rwanda, the Programme Management and Monitoring Unit in the finance ministry budget unit is responsible for supporting project implementation and monitoring and evaluation by MDAs; Single Project Implementation Units have also been established in each ministry to monitor projects. In South Africa the establishment of the infrastructure reporting model for provinces and the capital project database for central government ministries are important interventions for the National Treasury to help facilitate accountability for capital project planning and implementation in the provinces. Both databases draw on a standardised COA. In Namibia, the NPC's sector teams are charged with monitoring project implementation, and the information is used to allocate funding and update the project's records in the development budget. This process is also supported by the COA and a consolidated integrated financial management system. The monitoring system in Botswana operates through MDA planning officers, who are deployed to line ministries and report to the finance ministry's director of development programmes. This occurs separately from recurrent expenditure monitoring.

Balancing capital and recurrent expenditure to achieve desired sector outcomes: Under both institutional separation and integration, a key challenge faced by finance ministries is to balance capital and recurrent expenditure to achieve the desired sector outcomes. The following mechanisms assisted countries in addressing this challenge.

- The use of ceilings: Both Namibia and Botswana ensure that the sum total of financing decisions taken in the capital process and recurrent process does not exceed the aggregate ceiling by determining a ceiling for each process upfront in the fiscal framework. While this coordinates the decisions for fiscal discipline purposes, this mechanism has consequences for whether individual sectors achieve an appropriate balance, and could have consequences for achieving appropriate balances and trade-offs centrally. Rwanda stands in contrast. Recurrent and capital ceilings are issued to MDAs later in the budget preparation process (separately for domestically and donor-financed projects). These are informed not only by national plans and the previous year's expenditure, but also by sector strategies and a first round of joined-up (with central and sector actors), sector-based planning, which result in sector-driven capital requests.
- Forcing expenditure through earmarked grants: Although vastly different in form, South Africa's use of performance-based infrastructure conditional grants to address low capital investment in the provinces is similar to Rwanda. It earmarks funding for capital purposes based on bottom-up expenditure proposals from spending agencies to ensure quality expenditure and an appropriate balance. While this kind of mechanism might be suitable in some circumstances, it is the same as having institutional and process separation between capital and recurrent expenditures, but only for a smaller portion of capital expenditure. Like Botswana, where complete institutional and process separation prevails, it requires careful process and incentive design to avoid capital expenditure criteria and above-sector priorities determining capital allocations, and to ensure that recurrent expenditure implications are integrated into capital decisions and recurrent budgets.

Including recurrent expenditure costs of capital projects (including maintenance) in capital expenditure decisions and recurrent budgets: The projection and integration of the recurrent expenditure (including maintenance costs) of capital assets after project completion is largely unsolved for all four countries, whether there is institutional separation or integration. This is because even where medium-term budgeting is in place, the duration of even the shortest project cycle normally means relying on later budget cycles than that of the initial proposal to provide for these costs. An additional problem is the quality of cost estimates. Emerging solutions to these issues include:

- Use of lifecycle costing: South Africa requires the lifecycle costs of all capital projects to be set out, including capital, operational and maintenance costs, and a sensitivity analysis of the key parameters to be conducted. The capital planning guidelines, released with the Medium-term Expenditure Framework guidelines at the start of each budget process, set the parameters for costing.
- Contracting professionals to conduct feasibility studies: In Namibia, cost estimates for public infrastructure projects in the development budget are reliable because they are done by professional firms contracted to the Ministry of Works and Transport. In Botswana, the use of quantity surveyors employed by the Department of Building and

Engineering Services in the Ministry of Information Science and Technology to calculate capital costs for development projects also ensures more accurate cost estimates, even if not for long-term development expenditure.

- Use of a longer-term horizon for the development budget: Botswana's NDP process requires the full cost of projects to be set out over five years. These costs are updated as required in the annual development budget process. However, even if the NDP provides the forward costs, the budget formats do not offer a mechanism to reflect these costs beyond the budget year.
- Line ministry processes: The Botswana and Namibia studies highlighted the degree to which the incorporation of new operational costs for capital projects into recurrent budget proposals relies on line ministry processes. In Namibia, service delivery ministries start their planning and budgeting cycle at district level so that regional- and district-level officials are aware of new capital assets coming into operation and should incorporate requirements in time.
- Earmarking maintenance costs: All four countries face issues in ensuring long-term maintenance of capital assets. Even when maintenance costs are correctly estimated and adequate allocations are made, maintenance expenditures are vulnerable to spending pressures on other recurrent items. In South Africa from 2017/18, however, 20 percent of the intergovernmental education infrastructure grant will be allocated and earmarked for maintenance only. While there are many strong arguments against ring-fencing expenditures, they need to be traded off against ubiquitous under-budgeting and under-realisation of maintenance expenditure and the associated costs over the long term. Earmarking maintenance expenditure with grants or exclusion from virement allowances could offer a viable solution to this problem of capital-recurrent budget integration.

Assessing factors that hinder or enable the coordinative capability of finance ministries

The study examined how the types of technical mechanisms described above interacted with other variables to determine the coordinative capability of finance ministries to integrate capital and recurrent expenditures.

Internal capacity, capability and cultural factors: The study found that the coordinative capability of finance ministries relates strongly to its internal skill profile and other capabilities. Specific factors are:

- Policy analysis skills, staff numbers and retention, and the resulting analytical capability and quality of data: In all the countries, the number of staff involved in line ministry allocations and their skills and experience influence the ministry's ability to coordinate expenditures. Specifically, sufficient staff with economic/policy analysis skills are crucial. For example, Namibia has a shortage of senior economists and Botswana has a shortage of staff with policy analysis skills. In contrast, the sector-specific knowledge and analytical capacity of finance ministry staff in Rwanda and South Africa drive quality engagement between the ministry and line ministries, and overall coordinative capability.
- Institutional memory and experience: An emerging issue in South Africa is the high turnover of staff in the National Treasury and the loss of senior staff with deep institutional memory – which gave them authority when engaging with sectors – to units outside the budget process or altogether.
- The finance ministry's organisational structure: The organisation of the finance ministry division(s) that deal with budget allocations along sector lines aid coordinative capability. In Namibia, Rwanda and South Africa, parts of the budget office functions are organised along sector lines, resulting in stronger relationships with sector ministries and better sector knowledge and analytical skills. However, South Africa also demonstrates that complex structures require more coordination of finance ministry processes.
- Capacity-building capability: In Rwanda and South Africa, coordinative efforts are aided by strengthening the capacity of other actors in the budget process through formal training and backstopping (availability to answer queries and assist), and ongoing support. Finance ministries in both countries saw training and capacity building as crucial to their engagements with the rest of government.
- The ability to set, communicate and enforce the right rules and processes: In Rwanda, while sector-level work is steered towards integration by detailed guidelines, the lack of clear guidance on the costing of recurrent expenditure of capital projects results in poor integration of this information into the budget process. In South Africa, both the integrated and capital budget processes are directed by annually updated guidelines that respond to ongoing and emerging budgetary challenges. There are examples in the case studies of how failure to appropriately regulate processes and direct information needs can undermine coordinative capability.
- Units to monitor expenditure: Consolidated, single COAs and integrated information systems are important for integrating expenditures. Their effective operation, however, is a function of the finance ministry's capacity to manage budget information. In South Africa, for example, the Public Finance Statistics unit, a component of the Budget Office, plays a key role in setting the COA and providing training on its implementation. In Rwanda, the Programme Management and Monitoring Unit is key in tracking financial information on project implementation.
- A result-oriented and reform-minded finance ministry: The finance ministries in Rwanda and South Africa strive to address issues that arise in the budget process, with reform in mind and the desire to achieve good public policy outcomes. In both cases, a culture that emphasises managerial oversight in terms of objectives rather than due administrative process enables engagement across units and individuals within the finance ministry.

External factors: While internal capacity and a conducive finance ministry culture can boost coordinative capability, the case studies also demonstrate how external factors can have the opposite effect.

- Lack of capacity of other government actors: The case studies confirmed that weak planning, budgeting and analytical capacity elsewhere in government make it difficult to coordinate government actors towards integration of capital and recurrent expenditures through the levels of the budget process. This is particularly true in Botswana and Namibia, where there is more reliance on integration at line ministry level, given high institutional and managerial separation at the centre. However, central integration can easily be counterbalanced by weak capacity elsewhere. For example, there is a lack of capacity in South Africa, particularly at provincial level, where there are few policy analysts and/or weak budget management capacity in sectors as well as at the centre of some provincial governments. In Rwanda, integration is supported by sector planning and budgeting capacities. However, managing the capital budget and the integration of project cycle information into the budget process appropriately is a challenge for effective use of investment funds.
- Conducive mandates, political support and the authority of the finance ministry: Without proper authority to regulate and manage budget processes, mechanisms to integrate capital and recurrent processes and information would be ineffective. Research shows that **effective authority is dependent on the capacities of finance ministries, their technical or legal mandates, and "soft" political factors**. In Namibia the NPC's constitutional mandate to set priorities for and the direction of national development has affected the Ministry of Finance's authority to establish integrated budgeting rules and processes, even if its authority in PFM matters is firmly established. In South Africa, the National Treasury's grip on public finances is an outcome of its legal mandate (set out in the Constitution, the Public Finance Management Act and the Municipal Finance Management Act) and the way in which it has developed these mandates through secondary regulations for all spheres of government, as well as its delivery and analytical capability. In contrast, the authority of Rwanda's Ministry of Finance and Economic Planning was boosted in 2009 by consolidating its mandate of planning authority and functions, including the authority to manage capital project financing and oversight.

Conclusion

The study has found several mechanisms adopted by finance ministries to effectively coordinate the integration of capital and recurrent expenditure under different circumstances of institutional, legislative and presentational separation. However, adopting these mechanisms as individual strategies is not enough to engineer integration, and setting these mechanisms is very different to implementing them effectively, particularly when they govern the actions of other actors.

Coordinative capability can be achieved if finance ministries put specific budget system mechanisms and capacities in place:

- Different coordinative problems require different mechanisms. But some mechanisms can address multiple coordination challenges. These include a budget calendar to set a predictable budget process; comprehensive and integrated strategies, budget frameworks and COAs; and common information bases.
- Finance ministries need appropriate numbers of skilled staff, with analytical skills in particular.
- Finance ministries that organise budget sections by sector are more likely to coordinate other actors, particularly line ministries, because they are able to obtain sector knowledge and experience to build relationships and engage other actors authoritatively.
- Effective regulation is important to direct the activities of other actors and prescribe what should be considered when decisions are taken.
- The ability to build the capacity of other actors (through formal and informal training and engagement) is essential.
- Monitoring expenditure is vital. An informed finance ministry ensures that actors within government make well-judged decisions and are held accountable; an uninformed finance ministry will not be able to coordinate activities and decisions, nor will it be able to enforce rules and regulations.
- Finance ministries that are result-oriented, willing to adjust internal and external processes to address emerging challenges, and collaborate internally are more likely to be able to coordinate other actors and set appropriate information requirements. Similarly, those that empower their own officers are more likely to lead other actors.
- It is crucial that finance ministries have political support within government. Where support is lacking, other factors, such as the ministry's analytical capacity, monitoring capabilities, and relationships and engagement with other actors, become critical.

The case studies show that having most or all of a set of core internal characteristics in place ensures that mechanisms contribute towards integration, even when external factors hinder processes. However, the country's circumstances (or external factors) dictate which internal characteristics are more important to pursue. For example, in countries where the finance ministry does not have the mandate for capital budgeting, its own capacity to analyse both capital and recurrent proposed expenditures and engage with the responsible institution is crucial. Finally, the case studies confirmed the hypothesis that different capabilities of finance ministries are interdependent. For example, analytical capability depends on the delivery capability of robust budget information bases, which in turn is dependent on regulatory and coordinative capability. Overall, these are dependent on an appropriate skills mix and internal organisation and culture.

Introduction

Integrating capital and recurrent expenditures appropriately is a budget coordination problem faced by many ministries of finance in Africa. This report assesses the effectiveness of mechanisms used by the finance ministries of Botswana, Namibia, Rwanda and South Africa to integrate these expenditures within the overall budget process. It seeks to answer the following question: *When are finance ministries in countries with different institutional structures and economic conditions best able to coordinate the activities of various actors in order to integrate public capital and recurrent expenditures?* The fieldwork was undertaken in 2016 and the findings of this report reflect a snapshot of the case study countries' systems and the associated lessons that could be learnt from their circumstances at the time.

The study is the first in a series of projects that form part of the Collaborative Africa Budget Reform Initiative (CABRI) research programme on the capabilities of finance ministries. The programme aims to examine and provide guidance for African finance ministries on critical policy questions around institutional capability. Capital and recurrent expenditures was chosen because it is a key policy question for CABRI constituent countries.

The report has four main sections. Section 1 provides a summary of the conceptual framework and explains the research framework and process. (Annex 1 provides a comprehensive background discussion of the conceptual framework.) Section 2 outlines the main findings on each country's practice in integrating capital and recurrent expenditures. Section 3 offers insight into the factors affecting finance ministries' ability to effectively manage these practices, and section 4 sets out the conclusions and recommendations.

SECTION 1

Concepts and research framework

Capital and recurrent expenditures: definitions and concerns

Defining capital and recurrent expenditures

Defining capital and recurrent expenditure in a developing country context is not straightforward. Capital expenditure is defined clearly in international public finance statistics as expenditure on public assets that will be used in the production and supply of goods and services, where the asset's life will be longer than one fiscal year and the asset is not intended for resale. Developing countries, however, often make distinctions between major and minor capital expenditures in their budget, managing the major items jointly with donor-financed recurrent expenditure in development budgets. This meant that understanding differences between capital and recurrent expenditure management required understanding how development budget processes and allocations were integrated with recurrent budget processes and allocations.

Integration or separation?

An appropriate degree of integration of capital expenditure and recurrent expenditure is a key concern of public financial management (PFM). While it is vital that capital asset investment choices are given attention, it is now commonly accepted that the capital budgeting process must be considered as part of the overall PFM system (Dorotinksy, 2008). In principle, capital and recurrent budgets should contribute to the same objective, which is why they should be budgeted for in an integrated manner (Premchand, 2007). However, there are reasons for managing capital expenditure differently to recurrent expenditure, including that the selection and management of capital projects require specific factors to be considered (such as lifecycle cost, rates of return or costs escalation over multi-year implementation periods), resulting in different information, process and skill demands during budget preparation and implementation.

In many of CABRI's constituent countries, practices around integrating or separating capital and recurrent expenditures change as countries experience repeated cycles of integrating and separating planning and finance ministries. When the ministries are separated, capital expenditure often falls under a development budget managed partly or fully by the planning ministry, while recurrent expenditure or the operational budget falls under the finance ministry. When countries decide to reintegrate ministries, processes become more integrated.

Dimensions of integration

Capital and recurrent expenditures can be separated across different dimensions to varying degrees between countries. Across the budget cycle, capital and recurrent expenditures can be planned and allocated separately, presented separately to the legislature, appropriated separately by the legislature, executed and managed separately, and reported separately. This budget cycle separation may be reinforced by capital expenditures being managed throughout, or at certain points, by a different government institution to that of recurrent expenditure.

Webber (2007) sets out four dimensions of integration. These are:

- The legislative dimension. Capital and recurrent expenditures are presented and processed in the legislature in an integrated process and appropriated in a single appropriation law.
- The institutional dimension. The responsibility for capital and recurrent expenditures is integrated at the central finance agency level (one ministry) and at the line ministry, department or agency (MDA) level.
- The presentational dimension. Capital and recurrent expenditures are presented together throughout the budget preparation, planning and reporting processes, even if separation occurs elsewhere.
- The managerial dimension. This dimension refers to the development of a programme framework or some other form of an objective-oriented framework to integrate expenditures, and the associated rules and processes to manage expenditure in relation to the framework.

This research project focuses on the managerial dimension. It considers the factors or institutions that help finance ministries integrate capital and recurrent expenditures in this dimension when degrees of separation exist in other dimensions. Ministries' capability in this dimension is central to determining budgetary outcomes.

Capability of Finance Ministries

A number of commentators make an important distinction between the capacity and capability of finance ministries (Dressel & Brumby, 2009; Allen et al., 2015; Allen & Grigoli, 2012). The capability of a finance ministry refers to more than its capacity. According to Dressel and Brumby (2009), capacity refers to the volume or scope of ministry inputs of an appropriate quality (determined, for example, by the information technology or human resource base), while capability is about converting that volume into performance. The ability of finance ministries to transform capacity into capability depends on internal and external factors, as well as technical and political ones (Dressel & Brumby, 2009; Allen & Grigoli, 2012). Institutional structures, processes and functions of finance ministries, as well as the budget process, are regarded as technical factors, while the political economy environment of institutional incentives, actors and structural constraints on ministries are considered political factors. The roles that a finance ministry then assumes (its capability) are determined by the specific technical arrangements and how the political economy and institutional incentives allow these arrangements to be put to effective use (Dressel & Brumby, 2009).

Existing research has set out typologies of the different capabilities of a finance ministry. Krause (2015), for example, places the concept of capability into four categories – analytical, delivery, regulatory and coordinative – and arranges core public finance functions of the state against these capabilities. Allen et al. (2015) also speak about policy, regulatory and transactional functions, and discuss various organisational elements of finance ministries in relation to these functions and how they have changed over time.

The researchers of this report drew on this understanding of capability and its disaggregation into various types to assess the capability to coordinate capital and recurrent expenditures, and analyse contributing factors.

Determining the coordinative capability of finance ministries

While the relevant literature on capability has recognised that coordinative capability is central to finance ministries performing public finance functions, the issue has been unpacked to a limited degree. However, a body of work on coordination theory that has been in development since the 1990s has established a set of concepts and theories that can contribute to understanding and analysing coordination in any of these disciplines (Malone & Crowston, 1990). The material defines coordination as "managing the dependencies between activities" with the need to coordinate activities, actors and the resources they use around shared goals. Crowston, Rubleske and Howison (2004) note that in addition to the emphasis on dependencies, the separation of actors, goals and activities in Malone and Crowston's framework is important because it allows for conceptualising what needs to be done separately from who is doing it.

Malone and Crowston set out a simple framework of the components of coordination and the associated processes that need to be in place, as shown in Table 1, with preliminary identification of how the concepts can be applied to the coordinative capability of finance ministries.

This study uses coordination theory to identify the challenges of coordinating capital and recurrent expenditures under different circumstances, and to describe the mechanisms used by finance ministries in the four case study countries to address the problem.

Research framework and methodology

The purpose of this study is, first, to understand when finance ministries are best able to coordinate the processes, activities and decisions of different actors in the budget process in order to integrate public capital and recurrent expenditures under different legal, institutional and presentational regimes, and, second, to develop policy advice based on this knowledge.

Focusing the scope of research

It was acknowledged at the outset that it would not be possible to investigate all capital expenditure across the full budget cycle with the study's available resources, nor was it necessary to do so. Within the overall capital-recurrent integration field, the study scope was narrowed to investigating central government's capital expenditure on public service infrastructure (such as schools, clinics and hospitals, prisons and police stations) and focusing on the budget preparation phase of the budget cycle. Besides looking at overall processes, the research teams looked specifically at integration in the education sector for comparison.

Table 1: Deconstructing coordination

Components of coordination	Associated coordinative processes	Budget process application
Goals	Identifying goals	Setting public finance outcomes (integration of capital and recurrent budgets to ensure optimal service delivery or avoid expenditure inefficiencies)
Activities	Mapping goals to activities	Setting and, in the absence of setting, coordinating the budget system, including setting activities (processes), rules and responsibilities for capital and recurrent expenditures
Actors	Selecting actors	
Resources	Managing resources	Key resources in the budget process are information, people and time. What is the capability of the finance ministry to manage the flow of information, the use of people (skills), and the time between activities in the budget planning and implementation processes? Are information flows on time, accessible in the right place and usable to allow integrated decisions?

Conceptual framework for research

Figure 1 shows the conceptual framework for this research, and is followed by an explanation of the framework's components.

Research subject

The subject of the research (shown in the dashed block) is the coordinative capability of finance ministries to integrate expenditures. While finance ministry capacity (an independent variable) can be described more tangibly, capability is not directly observable. Rather, it is apparent in finance ministries' coordinative actions and their efficacy. Drawing on coordination theory, the study first investigated whether the finance ministries in the four case study countries had the capacity and coordinative mechanisms in place that enabled them to:

- Set appropriate goals for capital and recurrent budgeting (use of objective frameworks)
- Map out processes that coordinate actors and activities towards appropriate integration
- Manage the information flow between actors and activities in the system.

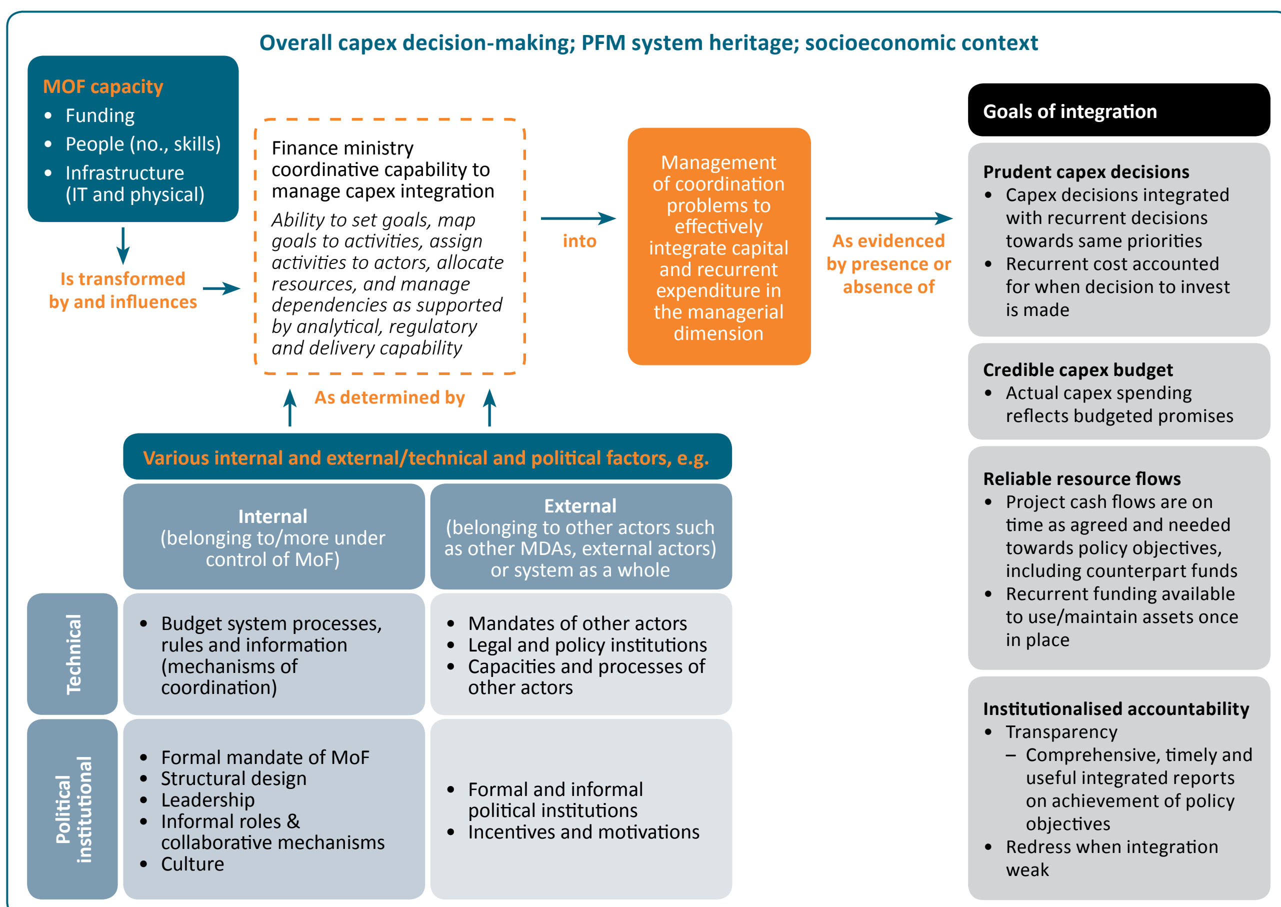
Goals of integration

To understand whether coordination attempts were successful, the study looked at the integration outcomes. It used the dimensions established by Andrews et al. (2014) for defining basic PFM functionality to describe the observable characteristics of a system that indicated appropriate integration. These are shown in the grey block in Figure 2. Capability to coordinate integration would mean setting in place frameworks and processes to ensure that capital expenditure is neither under-integrated (capital decisions are taken without taking into account recurrent expenditure objectives and implications for the sector) nor over-integrated (the unique nature, challenges and requirements of capital expenditure are not taken into account).

The researchers checked whether:

- Capital expenditure trade-offs were based on the policy objectives and priorities that the expenditure would contribute to, *in an integrated manner or jointly with recurrent expenditure.*
- The recurrent cost of capital projects, comprising the asset's maintenance costs and recurrent inputs such as staff and services, was factored into capital project assessment and selection, and into recurrent budgets.
- Capital project-specific procedures were in place to ensure effective public investment management and value for money in capital expenditure, including appropriate costing and appraisal processes, and the once-off nature

Figure 1. Conceptual framework



of capital expenditure being recognised in budget allocations and management.

- Capital budgets were spent on time and were credible. This meant looking at whether capital expenditure choices took into account the spending capacity of sectors (determined by recurrent expenditure) and were made based on sound costing of projects.

An analysis of these points indicates whether there is enough effort to integrate capital and recurrent expenditures and to appropriately treat capital expenditure separately.

Factors affecting coordinative capability

The research framework's hypotheses on the factors likely to influence coordinative capability appear in the blue circle (internal capacity) and the blue matrix (technical and political/institutional factors). The technical and political/institutional factors each comprise internal and external factors.

Internal factors are defined as being more or less under the finance ministry's control. Such factors include the institutions of the budget process and the coordination mechanisms instituted by the ministry to manage dependencies between budget processes and decisions, and the information and other resources required for them.

Contextual factors

The research focuses on the effective *managerial* integration (as shown in the orange block) of capital expenditure and finance ministry coordinative capability under different systems of institutional, legal and presentational integration, which were treated as contextual factors (see page 2 for a discussion of the dimensions of integration). The degree to which PFM responsibilities are decentralised from the centre to spending agencies was also taken into account as a contextual factor, considering that higher decentralisation would increase or change the nature of the coordinative burden for the finance ministry.

Research questions

The main research question was broken down into the following sub-questions:

1. Describing the capital-recurrent integration context: How integrated or separate is the management of capital expenditure (capex) and recurrent expenditure in the legal, institutional and presentational dimensions (the capex context frame)? To what degree are expenditure management responsibilities decentralised?
2. Assessing capex integration: What do the results of PFM (prudent capex decisions, credible capex budget, reliable resource flows to capex projects, institutionalised accountability) suggest about the integration of capital and recurrent expenditure (effective capital and recurrent integration, as shown in the orange block)?
3. Evidence of coordinative capability: What are the strengths and weaknesses of the finance ministry's coordinative capability to manage capex integration? How well has the ministry managed these weaknesses? What contribution can be made to the integration outcomes observed?
4. Factors that contribute to or detract from capabilities: Which analytical, regulatory and delivery capabilities affect the finance ministry's coordinative capability? Which factors – internal or external, technical, or political/institutional incentive factors – determine its ability to coordinate the integration of capital and recurrent expenditures?
5. What finance ministries can do: How has the finance ministry adjusted factors within its control to boost its ability to coordinate capital and recurrent expenditures under different circumstances? What are the lessons? What policy advice can be derived from the study?

See Annex 2 for the consolidated research framework used by the researchers, with the associated checklists and judgement criteria.

Study process

The research team leader and CABRI secretariat developed the study's conceptual framework. Research sub-teams conducted the fieldwork for the four case study countries between April and August 2016. The findings and conclusions of this report reflect the countries' circumstances and the lessons to be learnt from them at the time. Where possible, the report refers to reforms undertaken after the fieldwork was conducted, but cannot reflect on the impact of these reforms on coordinative capability or the integration of capital and recurrent expenditure.

Country matrices were drawn up against the research questions and reviewed by the respective finance ministries, and served as the basis for this synthesis report. The report was reviewed by the CABRI secretariat, country respondents and a peer review panel set up by CABRI before finalisation.

SECTION 2

Capital-recurrent integration in four case study countries

The integration context

In order to formulate policy advice for different integration contexts, the study treated integration in the institutional, legal and presentational dimensions (and the differences in it) as the context for measuring coordinative capability because it was important to understand which arrangements work better under which circumstances.

While institutional integration can be seen as detracting from coordinative capability as much as budget process factors, it can also be seen as a given for the research, setting a higher or lower level of integration challenge to be solved in the managerial dimension (or for the technical arrangements of the budget process).

Before looking at whether expenditures are integrated in the legal, institutional and presentational dimensions in Botswana, Namibia, Rwanda and South Africa, it is necessary to plot how these two expenditure categories relate to concepts of operational and development budgets in each of the countries. This is because the existence (or not) of a development budget concept determines the degree of separation in these dimensions, and makes the coordination task more or less difficult.

Botswana, Namibia and Rwanda use the concept of a development budget in their public finance systems: in all three cases, these budgets relate to development projects undertaken by government and comprise not only capital expenditure but (a relatively small portion of) recurrent expenditure:

- In Botswana, the development budget relates to a separate government fund, the Development Fund, which includes "any monies appropriated by law from the consolidated fund to finance, among others, various government development expenditures. The fund also includes monies received from proceeds of loans raised by the government for purposes of expenditure on development and any other government projects, and reimbursements for any project" (Government of Botswana, 2015). By law, the Development Fund is kept in a separate account with the Accountant General.
- In Rwanda, the appropriation law distinguishes between recurrent and development expenditures, both of which are financed from the Consolidated Fund, although development budget expenditures can also be financed from separate accounts kept by spending agencies. The total development expenditures equal the development budget, and include both recurrent and capital expenditures on development projects.
- In Namibia, the development budget is developed and presented separately, and includes development projects financed by the Namibian government and donors. However, it is appropriated in one law and managed from a single Consolidated Revenue Fund, although some donor expenditures might be managed from other accounts.

South Africa does not use a development budget or aggregate development projects as a budget planning or management device in its public finance system, besides infrastructure grants from central to subnational government, which could be seen as a form of development budgeting. In addition, it maintains a separate fund, the Reconstruction and Development Fund, for donor expenditures managed through government systems (whether it finances capital or recurrent expenditures). These expenditures comprise less than 1 percent of the budget and are not appropriated by the legislature. But they are reflected in a donor receipts budget table for each recipient spending agency. Annexed to each is the budget document chapter of the relevant agencies in the Estimates of National Expenditure.

In Botswana, Namibia and Rwanda the portion of capital expenditure (and the small portion of recurrent expenditure) that is also development expenditure is treated separately from recurrent expenditure in one or more of the dimensions of integration. The small portion of capital expenditure that is allocated as part of the operational budget (usually for minor equipment outlays such as computers) is fully integrated in all four countries in that it is planned, allocated, appropriated, managed and reflected together with recurrent expenditure.

The discussion below on the integration of capital and recurrent expenditures focuses on the integration of the bulk of capital expenditure (in the development budget) with the bulk of recurrent expenditure (in the operational budget).

Table 2 shows that there is considerable variation in the contextual dimensions of integration. The institutional dimension[2] is where significant separation results in high coordination problems, so this dimension is used to categorise the countries into two groups.

- South Africa and Rwanda have more integrated capital and recurrent expenditures planning institutions, despite institutional separation of planning and budgeting. In both countries, one institution or unit is responsible for managing both capital and recurrent budgets. However, South Africa does not use the category of development expenditure as such.
- Botswana and Namibia separate capital and recurrent expenditures significantly in terms of the institutions that are responsible for each. Namibia has the most institutionally separated system, with full separation from the centre to the line. Botswana has one ministry (and therefore joined-up political responsibility) but two units (managed in the same division of the ministry) at the centre, and separation at the line ministry level.

2 If capital and recurrent expenditures are integrated institutionally at the central and line ministry levels, separating them for purposes of drafting the appropriation law and budget document is unlikely to present a coordination problem. Rather, the coordination problem would present a challenge to the analytical capability of the finance ministry. Therefore, in order to categorise the countries clearly, the institutional dimension was prioritised.

While the effective degree of decentralisation of PFM functions is not significantly different among the four countries, there are differences in institutional integration. While South Africa and Rwanda decentralise the responsibility for expenditure management to line ministry accounting officers in the organic PFM law, in Botswana and Namibia the responsibility is retained by the finance minister but delegated to line ministries either through regulations (Namibia) or deconcentration of finance ministry staff to line agencies (Botswana).

The four countries have different practices regarding the institutional and managerial integration of planning and budgeting, and how this relates to capital project preparation, budgeting and the budget cycle. This posed a research challenge. Table 3 reflects these differences.

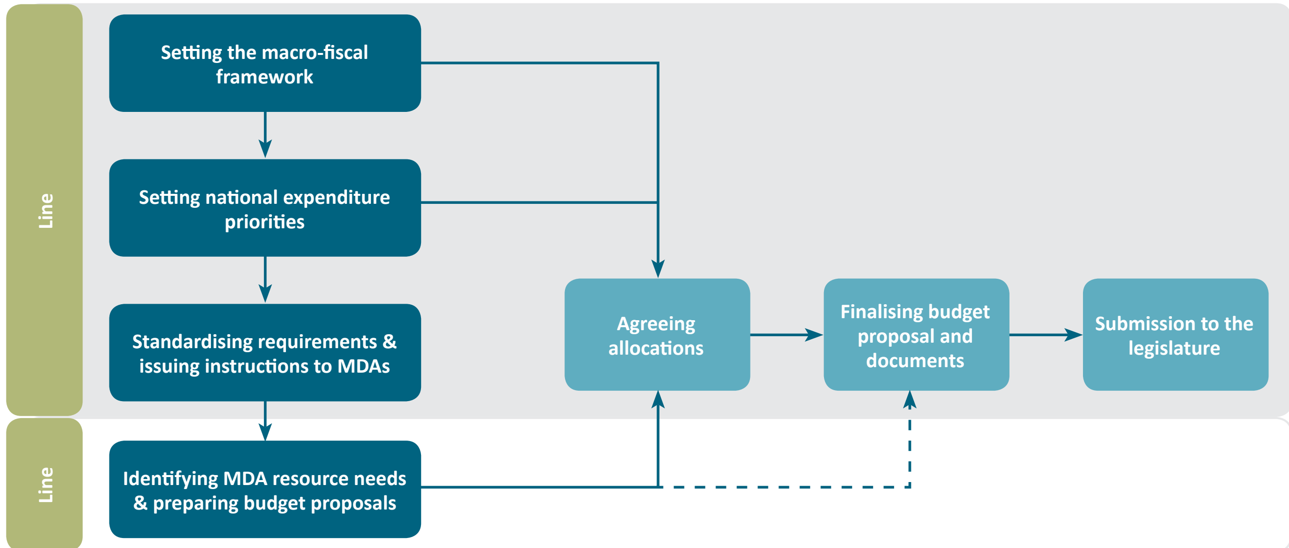
2

Table 2: Legal, institutional and presentational integration

	Legal	Institutional	Presentational
Botswana	Fully separated: Recurrent and capital expenditures are approved in a separate Appropriation Act.	One ministry, separate units, separation at line ministry level: Planning and budgeting functions fall under one ministry – the Ministry of Finance and Development Planning (MoFDP) – and are managed within the same division of the ministry. However, separate units are in charge of development and recurrent expenditures. In line ministries, planning officers are responsible for capital expenditure whereas finance officers are responsible for recurrent expenditure.	Integrated and separated presentation: Capital expenditure is presented separately as the development budget in the estimates book. The recurrent and development budgets are thus presented separately but in the same book. Some tables in the book, however, present the two components in an integrated manner.
Namibia	Fully integrated: Recurrent and capital expenditures are approved as one amount in the Appropriation Act.	Separate ministries, separation at line ministry level: Namibia is the only country in the sample that has separate planning and finance ministries. The National Planning Commission (NPC) is established in the Constitution and responsible for development planning and capital expenditure. The Ministry of Finance (MoF) is responsible for recurrent expenditure. This split is often reflected at the line ministry level, where finance officers manage recurrent expenditure and planning departments manage development expenditure.	Integrated and separated presentation: The NPC presents the development budget separately to the legislature. However, this is not part of the formal budget presentation, which integrates recurrent and capital expenditures in one document by agency – in the Estimates of Expenditure – and by agency and programme – in the accompanying Medium-term Expenditure Framework (MTEF) document.
Rwanda	Indicated separately but approved together: Recurrent and capital expenditures are approved separately, but in the same Appropriation Act.	One ministry, one unit, integrated at line ministry level: Planning and budgeting functions fall under one ministry – the Ministry of Finance and Economic Planning (MINECOFIN). While there is a planning unit within the ministry, the responsibility for financing both recurrent and capital expenditures rests with the national budget department. The function is integrated in line ministries.	Integrated and separated presentation: The annexes to the Appropriation Act provide the development budget by project (Annex II–3). However, there is also an annex that presents the development expenditures together with recurrent expenditures by programme and agency. Another annex presents the accounting categories of recurrent and capital expenditures by agency.
South Africa	Indicated separately but approved together: Recurrent and capital expenditures are listed separately in the Appropriation Act, which is approved by programme.	Two ministries, but one unit responsible for budgeting and integration at line ministry level: South Africa locates the planning function with the Presidency (in the Department of Planning, Monitoring and Evaluation, the DPME) and responsibility for the budget with the National Treasury. However, the planning entity has no budgeting responsibilities. At the line ministry level, planning and budgeting for recurrent and capital expenditures is fully integrated.	Integrated presentation: Recurrent and capital expenditures are presented in an integrated manner in the same budget document.

Table 3: Integration of planning and budgeting		
	Institutional dimension – integration of planning and budgeting	Managerial dimension (frameworks and processes) and integration in the budget process
Botswana	The MoFDP is responsible for planning and budgeting, and uses two separate units, which are managed in the same division of the ministry.	Planning is done every five years to develop a National Development Plan (NDP). The plan is set out according to themes, sector, objectives and strategies, but also includes a second volume of approved projects. Data for this volume is updated in the budget cycle. In principle, government does not fund projects that are not approved for inclusion in the NDP.
Namibia	Constitutionally, the NPC is responsible for planning, while the MoF is responsible for budgeting. In practice, the NPC also takes responsibility for capital project budgeting. The NPC falls under the prime minister.	The NDP is developed periodically, and is set out by sectors, objectives and strategies. Projects to fulfil the plan are proposed within the budget process. At the time of the fieldwork, Namibia was developing a national strategic plan, which included a list of projects by sector. The intention was that, in future, only projects within this plan would be financed.
Rwanda	The MINECOFIN is responsible for planning and budgeting, and does so through two units. Each is responsible for both capital and recurrent expenditures. There is also a separate minister of state for planning under the finance minister.	Rwanda has a seven-year Economic Development and Poverty Reduction Strategy 2, which frames compulsory sector strategies, all set out in terms of objectives and strategies. An annual planning phase is integrated into the budget process to update expenditure plans in line with the strategies. Capital projects are proposed in the budget process.
South Africa	The Presidency, through the DPME (which has its own minister), is responsible for planning. The National Treasury is responsible for budgeting. However, it is more complex than described here: The DPME's planning component is at a highly strategic level, such as the NDP. In terms of the Constitution, planning at provincial level is an exclusive provincial competency. Budgeting is similarly complex.	South Africa's NDP was prepared by the NPC,[3] which was appointed by the Presidency. It is set out according to sector, objectives and strategies. The National Treasury used to be responsible for sector/MDA planning frameworks, but gave this responsibility to the DPME in 2015. This means that the periodic strategic plans and annual performance plans prepared by all MDAs are set out by budget programmes. Capital projects are proposed through the budget process. The establishment of long-term infrastructure plans in accordance with the Infrastructure Delivery Management System Portfolio Management is evidence of integrated planning at provincial level.

Figure 2: Common budget preparation steps



The structure of South Africa's education sector posed a difficulty. The expenditure competency is shared between national government and the provinces – the autonomous layer of subnational government. National government is responsible for policy and oversight in the performance of the sector, while the provinces are tasked with delivering education services to the population. This means provincial governments, rather than the national government, have control over capital expenditure decisions within most provincial budgets, which are largely financed by a single unconditional grant transfer. In addition, the national Department of Education plays a role in infrastructure planning, insofar as it makes decisions related to the education infrastructure grant, which is a conditional transfer. The measures undertaken by the South African National Treasury to ensure integration of capital and recurrent expenditures in this sector are therefore different to the measures undertaken by the other three countries.

3 The NPC was set up in 2008 to prepare an NDP. The Commission's secretariat was later integrated into the DPME, the department in the Presidency responsible for facilitating and supporting government's planning, monitoring and evaluation functions.

Coordinative challenges of capital and recurrent integration

The two groups of countries face different coordinative problems, which arise from their institutional set-ups. This section addresses these issues against a schematic set of steps in the budget preparation process, and the analysis draws on each country's integration outcomes (see Annex 2). The coordinative challenges for each group are not the only ones faced by finance ministries in the budget process; they are the specific ones for integrating capital and recurrent expenditures. There are many other challenges, including the uphill task of coordinating multiple information sets for a single decision-making process.

Coordinative challenges posed by institutional separation

Namibia and Botswana's dual institutional responsibility for capital and recurrent expenditures reflects a lower level of integration, compared to Rwanda and South Africa. Other than separate institutions (or units in the case of Botswana) making capital and recurrent expenditure decisions, in both cases most capital expenditure trade-offs at the centre are made between development budget proposals within a development budget ceiling, using different criteria and objective frameworks for the bulk of recurrent expenditure in the operational budget. Despite all the countries having tried to take the recurrent cost of capital projects into account by requesting that the costing be done as part of project identification, this requirement is often not met. In fact, in Namibia, it has been dropped from the required project documentation. While it is met in some cases in Botswana, the estimates provided are unreliable.

Table 4 outlines the coordinative challenges identified in Namibia and Botswana in relation to budget preparation steps (Figure 3) as:

- Setting goals for multiple actors who undertake separate sets of activities that need to be coordinated.
- Managing actors, processes and information: Ensuring that actors and processes are coordinated by managing the sequence of processes and the flow of information between parallel activities.

Coordinative challenges posed by institutional integration

Because single institutions are responsible for budgeting both capital and recurrent expenditures in Rwanda and South Africa, the same objective frameworks are used, despite capital expenditure decisions being subjected to additional scrutiny and criteria (such as feasibility and financial viability). While Rwanda's use of a capital ceiling for MDAs in the budget preparation component of annual planning and budgeting processes results in trade-offs between capital projects rather than trade-offs between expenditure objectives within a sector, the strong emphasis on sector strategies as a framework for assessing all trade-offs at all levels helps to mitigate the risk of non-integration. Stronger integration is also indicated in Rwanda and South Africa by stronger practices around assessing recurrent costs as part of capital budgeting decisions, and reflecting these costs in budgets when due (see Annex 3 for assessments of outcomes).

Under institutional integration – as is the case for South Africa and Rwanda – the challenge faced by the finance ministries is therefore not so much to ensure integration of capital and recurrent expenditures against the expenditure objectives they both contribute to, but to ensure that processes and information related to the project cycle (planning and costing, financial and economic appraisal, review, and monitoring and evaluation) are integrated into the budget cycle to inform decisions. Both countries have instituted mechanisms to address these challenges, with more or less success (as set out in Annex 3).

Table 4: Coordinative challenges in Namibia and Botswana

Generic step	Coordinative challenges
Setting the macro-fiscal framework, including an expenditure ceiling	Managing processes, actors and information: Coordinating processes, rules and information so parallel processes result in the same decisions by drawing on a common pool, the aggregate expenditure ceiling
Setting national expenditure priorities	Goal setting: To achieve capital and recurrent coordination, the finance ministry must ensure that common expenditure goals are set for both processes
Issuing budget instructions	Managing processes, actors and information: Ensuring that two sets of ceiling and priority settings result in coherent budget instructions that contribute to integration
Line ministry planning and prioritisation processes (bottom-up determination and prioritisation of needs)	Goal setting: The finance ministry must be able to ensure that the same goals are set for both processes by line ministries Managing processes, actors and information: Ensuring that the same set of information on needs and priorities informs both budgeting processes in MDAs, and that there is an exchange of information, with the necessary recurrent information in the capital process and the necessary capital information in the recurrent process
Agreeing on allocations at the centre	Goal setting: Ensuring that both sets of trade-offs are made using the same goals, even if different actors are involved Managing processes, actors and information: Ensuring that the same set of information on needs and priorities informs both trade-off processes, and that there is an exchange of information, with recurrent information in the capital process and capital information in the recurrent process
Finalising the budget proposal and documents	Managing processes, actors and information: Ensuring that information from both processes arrives on time and to specification, that information from both processes is uniform, and that monitoring, review and evaluation are combined

Common integration challenges

In terms of key coordinative challenges, in Botswana and Namibia capital and recurrent expenditures are budgeted and allocated by different actors at both the line ministry and central levels. Rather than ensuring that capital expenditure is treated appropriately, the main challenge throughout budget preparation is to make sure that the goals set in the parallel processes are shared (or that decisions in both processes use a common understanding of needs and priorities), and that actors, processes and information flow are coordinated so that quality information on capital and recurrent expenditures is shared between the recurrent and capital process. By contrast, in Rwanda and South Africa the main challenge is less about ensuring common goals and information-sharing and more about making certain that key outputs of a sound project cycle receive timely and full consideration in the budget cycle. These outputs include project planning and costing, appraisal, review, and monitoring and evaluation. The main challenge in these countries is therefore around the alignment of the budgeting and project cycle.

This does not mean that the coordination of goals and information occurred without issues in South Africa and Rwanda or that project cycle outputs were well coordinated and of quality in Namibia and Botswana. The study simply showed that the challenges faced (and partly or fully addressed) fall into these camps. This is useful because best practices and opportunities for cross-pollination can be identified.

However, there are many common challenges that relate to deficiencies in the project and budget cycles, whether they occur under circumstances of institutional integration or not. These include:

- The quality of costing and forecasting, particularly of recurrent expenditure implications of capital projects.
- Providing for maintenance expenditure, particularly with expenditure being squeezed out by demand for new capital expenditure or through virements to other recurrent expenditures even when allocated.
- Balancing capital and recurrent expenditures to achieve the desired sector outcomes, with under-provisioning for capital expenditure.

Mechanisms to address coordinative challenges

The four countries employ various budget process mechanisms to address coordinative challenges. This section discusses these mechanisms in the context of three broad challenges: setting common goals and managing processes, actors and information to ensure integration of expenditures; ensuring that capital project cycle information is appropriately integrated into the budget process; and ensuring better quality of costing information and appropriate levels of capital expenditure and maintenance expenditure.

Setting common goals and managing processes, actors and information for integration

It is important to point out that, particularly in Botswana, where the periodic NDP sets out a list of projects for implementation, integration of expenditures is highly dependent on integration in this periodic process. However, findings suggest that the mechanisms in this process are not particularly strong, with weaknesses in determining recurrent cost implications and the appraisal of projects before their inclusion.

Mechanism: The use of sector strategies and a strategic budgeting phase to set common goals for capital and recurrent expenditure decisions

In South Africa and Rwanda, capital and recurrent expenditure decisions are made by referencing sector and MDA strategies and plans. This occurs during the budget process at both line ministry and central level. But this does not mean that the national-level objective frameworks, which play such an important part in capital expenditure decision-making in Botswana and Namibia, are ignored at either level. In both South Africa and Rwanda, sector-level strategies, plans and budget submissions are required to reference national-level objective frameworks when setting priorities and making expenditure proposals for the budget year and two outer years of the budget framework. Furthermore, trade-off decisions at the centre within and between MDA proposals are made in terms of the national expenditure priorities set. A key reference

Table 5: Common challenges under institutional integration

Generic step	Coordinative challenges
Setting the macro-fiscal framework, including an expenditure ceiling	Ensuring an appropriate balance between capital and recurrent expenditures in a joined-up process
Setting national expenditure priorities	No coordinative challenge identified relating to integration
Issuing budget instructions	Managing processes, actors and information: Ensuring that budget instructions set clear requirements for additional information relating to capital expenditure
Line ministry planning and prioritisation processes (bottom-up determination and prioritisation of needs)	Managing processes, actors and information: Ensuring that MDA prioritisation processes result in a balance of capital and recurrent expenditures, and that capital expenditure proposals are assessed, properly costed, appraised and evaluated prior to being included in the budget proposal
Agreeing on allocations at the centre	Managing processes, actors and information: Ensuring that central prioritisation processes result in a balance of capital and recurrent expenditures, and that capital expenditure decisions are for projects that are feasible, viable and represent value for money. Ensuring the capital project implementation capacity of line ministries
Finalising the budget proposal and documents	Managing processes, actors and information: Ensuring that capital projects can be separated out of the budget allocations for review, monitoring and evaluation

Box 1: Good practice example: Rwanda's two-phase budget process

In Rwanda, the budget process has two phases: a strategic, planning-oriented phase, followed by a detailed budget proposal preparation phase. The use of a two-phase process, in which a joined-up first phase builds an agreed-on framework for more detailed budget decisions on parallel processes, could assist countries with institutional separation of responsibilities for capital and recurrent expenditures to integrate them more successfully.

The process begins with the first planning and budget call circular (usually in September, about nine months prior to the start of the fiscal year in July), which contains the requirements for the planning phase. There is a highly iterative process for developing and reviewing documents of MDA plans and investments during the planning process. These documents set out how sector plans, which are drafted periodically and are the implementing instruments for the national strategy, will be financed over the medium term. The process is characterised by reviews of past performance and sector-planning consultations both within MDAs and with local government, as well as the MINECOFIN. During this process, recurrent and capital expenditures are considered side by side, and investment proposals, which are vetted by the Public Investment Committee (PIC), are selected on the basis of the relevant sector strategies.

A second budget call circular is then issued, with ceilings for recurrent (divided into personnel, and goods and services) and capital expenditure (divided into domestically financed and donor financed). These ceilings are informed by the planning phase outcomes and are binding at ministry level by category, although ministries have the flexibility to move funding between sub-categories within the ceilings and between agencies reporting to the ministry. The plans and investments documents remain the instrument used to detail the budget planning in this phase.

In Rwanda, the two phases fall under different MINECOFIN units: the strategic planning phase is the responsibility of the national development planning and research department, while the national budget department is tasked with the budget phase. This does not affect the integration of capital and recurrent expenditures, as the budget department participates fully in the strategic planning processes through sector focal points, and vice versa.

The greater emphasis on sector strategies as a means of integration occurred after the 2007 Public Expenditure and Financial Accountability (PEFA) assessment diagnosed a weakness in this area.

point and focus in the entire process, however, is the integration and coherence of sector/MDA expenditure towards sector objectives. Box 1 offers insight into Rwanda's process, rules and information instruments to ensure appropriate integration through sector strategies.

Rwanda's MINECOFIN makes use of the following key instruments, mechanisms and capacities:

- The joined-up planning and budget call circulars that set out a detailed budget calendar. The circulars include detailed templates for joined-up submissions. The calendar sets out the process as an instrument of integration, and the rules laid out in the circulars serve the same purpose.
- The single-ministry plans and investments documents and budget submissions are instruments to extract capital and recurrent information from MDAs about their strategies and to guide negotiation between the actors in the process.
- The provision of guidelines for decision-making processes, including by the PIC, that stipulate requirements for the integration of capital and recurrent expenditures.
- The provision of human resource support to MDAs to coordinate actors and information throughout the planning and budgeting process. This is evident in the planning and budgeting units' use of focal points to act as points of contact for MDA staff, and to ensure integration of the two processes. The agencies interviewed said that focal point support is critical. Ensuring that MDAs are well informed and that the MINECOFIN has a good understanding of the work that takes place at sector level throughout the budget year helps to manage coordination.

Namibia introduced programme-based, medium-term expenditure planning in the early 2000s as a first strategic phase of the budget process to address weaknesses in strategic budgeting, medium-term planning and integrating expenditures. In this phase, MDAs are required to set out their medium-term expenditure plans, joining up capital and recurrent expenditures by programme. While sector strategies are not a requirement in Namibia, the medium-term expenditure plans submitted by ministries – which include extensive narratives, objective setting and budget information – provide an opportunity to establish sector and programme objectives for integration. The medium-term expenditure process culminates in a consolidated MTEF document with individual chapters for each vote that is published by the MoF as part of the supplementary documents submitted to Parliament. The main budget process, which is the second phase, culminates in the Estimates of Expenditure, set out by vote, which by law underpins the Appropriation Act.

However, the MDA MTEFs and two-phased process have not had an integrating effect in Namibia as they have in Rwanda. This is because:

- The MTEF phase is almost exclusively an MoF initiative. The NPC allocates most capital expenditure within the

development budget ceiling and does not participate in MTEF processes, even though it is responsible for the capital budget side of the main budget process. Even if the MoF uses the MTEF document to make recurrent budget decisions in the main budget phase, the document has no or little relevance to the NPC's decisions. The NPC's criteria are alignment with the NDP and the feasibility and affordability of projects within the development budget ceiling. Ministry MTEF documents therefore do not have a similar role to Rwanda's sector strategies, ministry plans and investments documents, which guide trade-offs for both capital and recurrent expenditures.

- In other ways, the MTEF process appears to be poorly integrated with the main budget process. Separate circulars are issued for the two processes, and the link between the two is not apparent. The line ministries do not think that their MTEF submissions should frame their main budget submissions, as the main budget process at the centre is linked weakly to the MTEF submissions. Responsibility for the two submissions is often divided up in ministries, weakening continuity.
- The two processes use different classifications. While the economic/line item classification is consistent (the main categories being operational and development expenditure, both broken down as recurrent and capital), the MTEF uses a programmatic classification that is different to the administrative/functional main division classifications used for the Estimates of Expenditure. As the latter is the legal instrument, the potential for a programmatic approach to integrate expenditures is reduced because the real focus of the budget process is on producing the estimates.

Mechanism: A budget calendar that sequences actors and activities appropriately and predictably

A budget calendar that is followed in practice and that sequences activities and decisions in the budget process is a key requirement for integration. In Rwanda, the MINECOFIN's calendar specifies the activities of all actors, including different ministry units, line ministries and local authorities. It sequences the strategic planning and detailed budgeting phases, allowing capital and recurrent decisions to be made once information on requirements for both are on the table. In South Africa, the budget calendar similarly sequences activities across actors and levels of government so that the overall process is predictable.

Mechanism: The use of joined-up processes and information instruments

Rwanda's joined-up processes provide a good example of how the integration of capital and recurrent expenditures is dependent on one process deciding both, even if in two phases. The integration of the process is apparent in that the same joined-up information instruments are used, the same actors participate, and the rules that govern both are coherent and emphasise the integration of expenditures.

South Africa's process also adheres to these requirements. While the budget process is not as clearly divided into two phases and does not have separate sector and MDA information instruments, it has a strategic component in that different sector actors from national and provincial MDAs participate in a portfolio budget process through technical sub-groups of the broader functional groups, which use MDA budget submissions. These submissions consider trade-offs within the overall expenditure ceiling between different spending entities and capital and recurrent expenditures to achieve common sector goals. South Africa's main integrating information instruments are MDA strategic and operational plans, and joined-up budget submissions. Portfolio Working Groups, chaired by National Treasury sector specialists, make recommendations to a central Medium-term Expenditure Committee on allocations to MDAs and conditional grants to provinces, and on integrating capital and recurrent expenditures. These groups include representatives from the National Treasury and the Presidency (which take the lead in planning), the Department of Cooperative Governance and the Department of Public Service and Administration. The guiding framework for these allocations is the NDP (developed by the NPC); the medium-term strategic framework, which sets priorities at the start of each government term; and the annual set of expenditure priorities, determined in a Cabinet-level workshop at the start of the budget process. These national-level instruments are also required to drive MDA plans and budget submissions as set out in the MTEF guidelines, issued by the National Treasury as the single and integrated budget call circular.

At the time of the fieldwork, Botswana's system did not have similar joined-up processes, rules or information instruments that integrated expenditure until after the main capital and recurrent allocations had been made, when the two sets of proposals were reviewed jointly in a project/expenditure review and then by the Estimates Committee.[4] Namibia, on the other hand, has recently introduced several changes to integrate the process better, moving it closer to the kind of practices used in Rwanda. Botswana is considering a set of reforms that may include joined-up medium-term, programme-based budgeting to address several issues, including the separation of capital and recurrent expenditures. Namibia's innovations, which involve mainly process changes, are discussed in Box 2.

Mechanism: Structuring the finance ministry's review process

The effectiveness of a finance ministry's internal processes to successfully integrate capital and recurrent expenditures can be shown by comparing the findings on Botswana and South Africa. South Africa's are discussed above. In Botswana, prior to the 2017 budget process, processes were not joined up in a similar way. While the Estimates Committee reviewed the budget recommendations made by the finance ministry units dealing with the development and recurrent budgets towards the end of the executive budget preparation process, other processes were largely separated.

4 For the 2017 budget Botswana adopted measures similar to those described in the box, with more joined-up instruments, including joint hearings by the technical committees for development and recurrent expenditure held early in the process, supported by a joint circular for this phase. These were previously separate.

Box 2: Emerging good practice in Namibia: Creating joined-up information-sharing opportunities when budget processes are separate

The MoF and NPC have developed several mechanisms to improve joined-up processes. Both institutions agree that these mechanisms have been effective because they have engineered a more integrated view on allocations, even if allocations are made separately. The potential to negotiate give-and-take between capital and recurrent allocations for an MDA is stronger, given MDA objectives and expenditure pressures. The following are the key mechanisms:

- The main budget process to determine the Estimates of Expenditure begins with a joint circular. The MoF collates its own requirements and those of the NPC into a single circular that is issued to MDAs, setting out the calendar for both the operational and development budget processes and specifying the information that needs to be submitted. However, the joint circular does not result in a single budget submission that will ensure that the same information is provided to both the MoF and the NPC; two separate submissions are made. This is mitigated by the submissions to each being available to the other, as they are made online.
- The MoF has introduced joint hearings. Previously, the MoF and the NPC engaged MDAs separately (as is the case in Botswana, where Thematic Working Groups engage MDAs on the development budget using one set of criteria, and the Budget Administration Unit engages MDAs on the operational budget). In Namibia, joint hearings are held first at a technical level, then at a ministerial level. These hearings ensure that the NPC is aware of recurrent budget issues when making development budget allocations, and vice versa.
- NPC and MoF technical staff are organised along sector lines, enabling a series of meetings between the two institutions before and after the budget hearings to discuss MDA plans and allocations.

If Namibia can strengthen these innovations by joining up the MTEF processes, it would move closer to Rwanda's practices, in which investment decisions are made by a separate body but in a way that is integrated into the overall budget process.

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Furthermore, in Botswana, the Development Programmes Unit has links with deconcentrated MoFDP planning officers in line ministries. During the budget preparation process, the director calls officers together for discussions (this is also done for monitoring purposes during the spending year). These officers meet with the central office to prepare line ministry budget proposals, review them and allocate development budget resources. A similar process – both during budget preparation and implementation – occurs on the recurrent side between the budget division and finance officers.

Mechanism: Integration of processes at line ministry level

Having two separate institutions in charge of processes at the centre places a significant burden on integration at the line ministry level. In Botswana, where development expenditure finances the periodic five-year NDP and new project proposals are the result of the NDP process, the expectation is that during the annual budget process, line ministries will ensure that the recurrent expenditure obligations of development expenditure are covered. This depends on MDAs having processes in place for finance officers and development officers to exchange information. The fieldwork found that this does not necessarily occur in practice.

In Namibia, many MDAs had processes in place to consider the separate requests to the NPC and the MoF jointly. This could be because MDAs generate project proposals as part of the budget cycle in terms of their ongoing sector needs and plans.[5]

Box 3: Emerging good practice in Namibia: An MDA-level committee that approves recurrent and development requests in an integrated manner

Namibia's Ministry of Education believes that requests are well integrated, even though the planning division generates development requests while the finance division generates recurrent ones. Integration occurs at two levels. First, recurrent and project requests are generated in the education regions, where there are no separate planning and financing officers. Second, a high-level management committee considers development and recurrent requests jointly against the sector plan before approving both for submission.

In principle, MDA-level integration around a single sector plan could be an important integration point when there is high institutional separation at both central and recurrent levels. But this countervailing effect would still be limited, unless there is explicit reference to the sector plan and iterative checking of approvals. If this is not the case, and decisions are taken based purely on national priorities within iterative referencing, there is a strong chance that capital allocation of an expenditure initiative will be made while the recurrent allocation will not be. As a result, for example, new staff will be appointed to improve a service but without the equipment to do so. Line ministries that are responsible for integration would be significantly supported if a joint budget submission was required that separates the financial requests in the end, but which has to motivate for both in terms of sector initiatives and plans.

5 This was true at the time of the fieldwork. However, Namibia was in the process of finalising a rolling strategic plan, the Harambee Plan, which was centrally drafted and expected to detail projects that would be considered in the process in future. Only projects that were already in this plan would be financed in future budget cycles. This would take the Namibian system closer to Botswana's system, which could result in ministry-level coordination processes failing more often, and lower integration of development (or the bulk of capital) and recurrent expenditures.

Mechanism: Integrated budget structures, charts of accounts and information bases

Findings on Namibia, Rwanda and South Africa reveal the importance of up-to-date, coherent, accurate information on capital and recurrent expenditures organised into whichever other budget categories apply when expenditure decisions are made.

- In Rwanda, planning reviews and consultations that take place in the strategic phase cover both operational and development expenditures, and capital and recurrent expenditures. The reviews and consultations draw on the integrated financial management system, which uses a systematic, multidimensional chart of accounts (COA). Having started as a budget system in 2006, the financial management system has since expanded to include accounting and reporting, and a planning module in 2016/17. This enables the same information to be available to all parties in the budget process.
- In Namibia, the integrated financial management system also covers budget preparation, implementation and reporting, and the development and recurrent budget. The common budget structure is at the heart of this integration. Budget submissions are done online and can be linked to actual expenditure information, providing a common financial base for decisions to be made by both the NPC and the MoF. The COA is integrated across the recurrent and development budget, and framed by an integrated budget structure that underpins the Appropriation Act and is set out in the Estimates of Expenditure. The programme basis of the MTEF is not captured in the COA: in 2016, the MoF piloted the programme budget structure using programmes as consistent allocation vehicles for both the MTEF and estimates (or main) budget processes. The MTEF programmes are now part of the COA for the pilot ministries.
- In South Africa, the COA includes fund, economic, functional, administrative, programme and project dimensions. It is important for coordination across budget phases and actors, including central and line ministries, and at national and provincial levels of government. It is also crucial to the integration of budgeting and reporting because South Africa does not have an integrated financial management system.[6] The COA operates as a bridge between the Excel-based budget submission database and the accounting software and user interface that are used for actual expenditure information and reports. This means a consistent base of information is available to make budget allocation decisions and track project expenditure. This information is also available to the infrastructure reporting functions.
- Botswana does not have in place this integrated budget and account structure or the information base for monitoring expenditure and making allocations. The presentation of capital (development) and recurrent (operational) expenditures differs in the COA. Recurrent expenditure is reported under segments that show the budget organisation, account and cost centre; development expenditure is reported only under cost centres, which are aggregated by projects. Also, the cost centre codes for recurrent and development expenditures are different. This means it is not possible to link maintenance and manpower recurrent costs (in the recurrent/operational budget) to development projects (in the development budget). However, Botswana has had an integrated financial management information system in place since 2004: the Government Account and Budgeting System provides a monthly review of revenue and expenditure (capital and recurrent) for each ministry and has been rolled out broadly to MDAs across the country.

However, the kind of COA separation that reinforces institutional and managerial separation of capital and recurrent expenditure is a product of the separation of development and recurrent budget appropriations. In South Africa and Rwanda, appropriations are also made separately to capital and recurrent expenditures to protect capital expenditure, but the separation occurs as an outcome rather than a precondition for the budget preparation process.

Interventions: Options for integrating processes and information

Even when institutional separation exists, countries can ensure that capital and recurrent expenditures are integrated with one or more of the following three sets of interventions.

Ensuring that trade-offs in both processes, at sector/MDA and central level, are made using the same objective framework. Ideally, this framework should be formulated at the sector/MDA level. When trade-offs are made between development projects in a planning and budgeting silo around a national plan, there is a high risk that sector constraints will not be taken into account and that sectors will not have a strong operational capacity to sustain assets or interventions. If a national framework, such as an NDP, is in place, the link between sector investment plans and the national strategy should be made through the rules on planning instruments at the sector/MDA level and through the participation of all actors in centralised planning and budgeting forums.

When sector plans are not linked to the national plan, finance ministries can introduce mechanisms that force capital and recurrent processes together at strategic points in the budget cycle.

- A strategic phase can be introduced into the cycle in which both the development and recurrent budget institutions participate, and which builds an agreed-on framework for decisions by both.
- Opportunities can be created whereby each institution is aware of decisions being made in the other institution; can jointly engage with MDAs; and can negotiate trade-offs within a sector or MDA budget between capital and recurrent.
- A joined-up committee (such as South Africa's Medium-term Expenditure Committee) can engage both institutions

6 South Africa is in the process of developing a system.

throughout the budget process. The Botswana Estimates Committee could fulfil this function, but it is placed too far down the line in the process to engineer effective integration. Recognising this weakness, Botswana's finance ministry started reforming the process in 2016 to offer more opportunities for joined-up planning for the 2017 budget process.

Whichever of these options is used to join processes at the centre, using a reliable budget calendar and ensuring that processes at MDA level are integrated are critical for coordinating capital and recurrent expenditures.

The finance ministry can introduce instruments that integrate operational and development or recurrent and capital expenditures, even if separate institutions are responsible for these sets of expenditures.

- Joined-up budget submissions are a first option. This is a relatively easy reform and can be considered for quick implementation. It will ensure that line ministries integrate their proposals so they are coherent and that each institution makes trade-offs based on the same information. This mechanism is used successfully in Rwanda (with somewhat separated institutions) and South Africa. Namibia's system can be strengthened with the introduction of a joint budget submission resulting from a joint budget circular.
- A second option is to introduce programme-based budgeting, which by nature has to consider capital and recurrent expenditures together (preferably over the medium term) and make trade-offs between programmatic initiatives in terms of MDA/sector objectives, notwithstanding their capital and recurrent composition. This mechanism is used in South Africa and Rwanda. The Namibian experience, however, points to the need for caution: first, programme-based medium-term budgeting rarely directs allocations effectively if it is merely attached to a budget process that continues as usual. It needs to fully replace the existing budget process. This includes replacing administrative/functional budget classifications (within MDAs) with programmes as the only vehicles for allocation. Second, processes to vet capital investment allocations need to be sequenced carefully within the programme-based process. They also need to use the objective frameworks of this process so its decisions do not undermine coherent programme-based planning and budgeting. There is a strong argument to be made that programme-based budgeting can succeed only if it is agreed that capital and recurrent expenditures need to be fully integrated. Ideally, programme-based planning requires sector or MDA-based ceilings without or prior to economic category ceilings. Furthermore, experience across Africa shows that programme-based budgeting can be effective only under certain conditions, such as having basic, functional PFM systems and credible budgets in place.

Whichever of these options or combinations of options are used, the research reveals the importance of having an integrated budget structure, consistent COAs and integrated information systems that support integrated decision-making.

Integrating capital project cycle concerns into the budget process

The PFM systems of all four countries include features that are specific to planning and managing capital investment projects. These are set out in Table 6, which forms the basis of the subsequent analysis.

Mechanism: Setting specific information requirements for capital/investment proposals

All four countries require additional information to be submitted with investment project proposals. Table 6 details how each country requires information to be submitted in the budget process. In three cases – Namibia, Botswana and Rwanda – this information is used to give the project the go-ahead in a separate project approval process. In South Africa, the information is used to approve the project in an integrated way, with recurrent expenditure as part of MDA proposals.

Mechanism: Use of feasibility studies/appraisals to ensure value for money and achievability

Namibia, Rwanda and South Africa require some assessments to be done for all projects, including an assessment of financial viability. In Namibia, all projects are subject to feasibility studies – a phase that is approved for financing before the project itself is approved. In Rwanda and South Africa, the submission documentation requires some form of assessment of financial and economic viability, with only larger and more complex projects requiring full feasibility studies. Furthermore, by the time the project is submitted for the first round of approval, all required assessments and appraisals are expected to have been done and financed by the proposing MDAs. The finance ministries in both Rwanda and South Africa review and vet the viability of projects before putting them forward for financing.

Mechanism: Use of project/investment committees to approve projects

Botswana and Rwanda have committees in place that approve projects. In Rwanda, this is a multi-stakeholder committee chaired by the MINECOFIN and supported by a secretariat operating out of the ministry. It is the only point in the budget cycle where capital expenditure is considered exclusively: the process to develop proposals for the committee is fully integrated, and the desirability of projects is assessed by the committee in terms of the project's contribution to sector strategies (see Box 4).

A key difference between the placement of Botswana's Project and Budget Review Committee, which approves projects, and Rwanda's PIC is that the latter is the only point in an integrated cycle where there is a specific focus on capital investments. Moreover, the projects proposed arise out of sector-level reiterative consultations that integrate capital and recurrent expenditures. This difference is demonstrated in Figure 3, which presents Botswana and Rwanda's budget preparation processes. Whereas Botswana's Project and Budget

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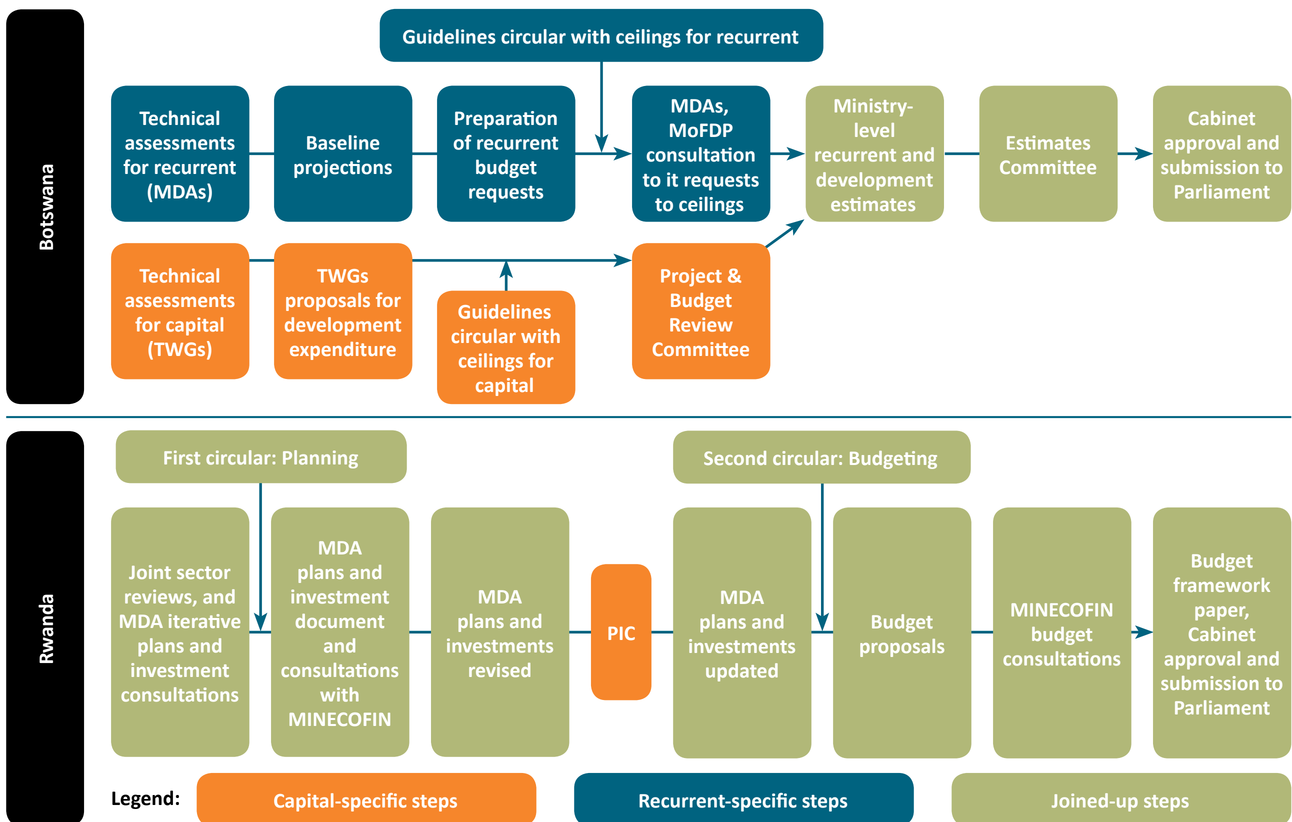
Table 6. Project identification and the budget process

Country	Practices for project identification and approval	Project information instruments	Appraisal/feasibility assessment practices
Botswana	Projects must be listed in the NDP or they will not be considered in the budget process. The NDP's Thematic Working Groups identify projects and review them in the budget process. The Project and Budget Review Committee approves the project for placement in or updating the NDP.	A **project memorandum** is used to request funding from the MoFDP once the Project and Budget Review Committee has approved the project update for the NDP. The memorandum includes a breakdown of expected costs and spending, links to national and sectoral policies, a breakdown of capital costs for project components, and detailed technical descriptions. All recurrent costs should be included for the five years of the development plan.	There are no specific provisions for feasibility studies or project appraisals. However, capital costs for development projects are calculated by a team of quantity surveyors in the Department of Building and Engineering Services within the Ministry of Information, Science and Technology. Recurrent costs are prepared by the ministry proposing the project. Huge capital projects do sometimes undergo economic feasibility studies or cost-benefit analyses, but this takes place only after a project has been approved for the NDP.
Namibia	New projects can be proposed in any year as part of the budget process. The NPC approves projects as part of the budget process based on feasibility, affordability and how they align with the NDP. Projects are approved in two phases: the NPC approves a feasibility study based only on preliminary information. Once the results are in, projects are resubmitted for financing approval.	A **project identification form** is submitted to the NPC in the budget process and at the start of the project cycle. It includes the purpose of the project, its scope, preliminary cost estimates and phasing, and project motivation. Once feasibility studies have been completed, an updated project identification form that includes the feasibility study is submitted.	All proposed investment projects are assessed by thorough feasibility studies. Public infrastructure projects are assessed by a panel of service providers managed by the Ministry of Works, with the budget for approved feasibility studies allocated to the ministry proposing the project. Estimating the full capital and assessing its financial viability is part of the study.
Rwanda	Projects are identified through sector-planning processes in the budget cycle's planning phase. The PIC approves projects at the end of this phase based on desirability (alignment with national strategic frameworks and sector plans), achievability (including an assessment of technical feasibility and implementation capacity) and sustainability (including financial viability and an assessment of recurrent costs). The PIC is a joint committee that brings together permanent secretaries of the MINECOFIN, big-spending ministries, the justice ministry and MINECOFIN directors general.	A **project profile document** is submitted in the planning phase of the budget process for each proposed project and is assessed by the PIC. It includes planning documents; a description of the project, the socioeconomic impact and costs; and justification for how it links up with the planning framework (linkages to thematic areas under the Economic Development and Poverty Reduction Strategy).	Projects that require a loan, involve public-private partnerships or cost over $1 million are appraised using cost-benefit and cost-effectiveness analysis techniques. If approved, the projects are sent to the MINECOFIN for financing. The PIC secretariat, which is placed in the MINECOFIN, reviews feasibility studies for quality.
South Africa	Projects are proposed by MDAs in terms of their own plans. The NDP is not project-based; it sets out broad strategies and priorities for sectors that must be realised through sector and MDA strategic plans. Projects are submitted to the Public Finance division (part of the National Treasury budget group, which also includes the Budget Office and the Intergovernmental Relations (IGR) division) for assessment before entering the Portfolio Working Group process for review, approval and submission to the Medium-term Expenditure Committee for financing as part of financing the overall budget of an MDA.	Submitted projects must be accompanied by a **project concept note**. This should include a needs-and-demand analysis, with project outputs, and an analysis of alternative options. The following analyses are required: technical analyses, including an environmental, socioeconomic, and legal and regulatory due-diligence analysis; a viability evaluation (financial and economic); a risk assessment and sensitivity analysis; and an analysis outlining the preferred option, implementation readiness, institutional capacity and procurement plan.	A basic financial and economic viability analysis must be done. For large and/or complex projects, the National Treasury requires a professional feasibility study. MDAs must finance these studies out of their baseline allocations, and the studies must be completed before projects are submitted for approval. Most projects are assessed by sector directorates in the Public Finance division. However, the mega-project unit reviews very large public investment projects, such as power stations or railroad developments, in order to advise the National Treasury on their desirability and feasibility.

Box 4: Rwanda's PIC: An investment committee that operates in the budget process

Rwanda's PIC is the point in the planning and budget preparation process when investment projects are scrutinised to decide which will be included in the annual budget. This point in the cycle is significant because it requires a functional separation of capital and recurrent expenditures to ensure that large investments are fully assessed. The committee ensures a more rigorous approach to scrutinising potential investment projects and continuously assessing ongoing projects. The PIC has the authority to drop projects and can sequence new projects depending on the available resource envelope and the projects' contribution to the delivery of the Economic Development and Poverty Reduction Strategy and sector strategies. The committee draws on multiple sources of information to coordinate effectively and prioritise capital investments. These include project profile documents, sectoral knowledge, information on overall ceilings for MDAs, MDA and national priorities, and government as a whole.

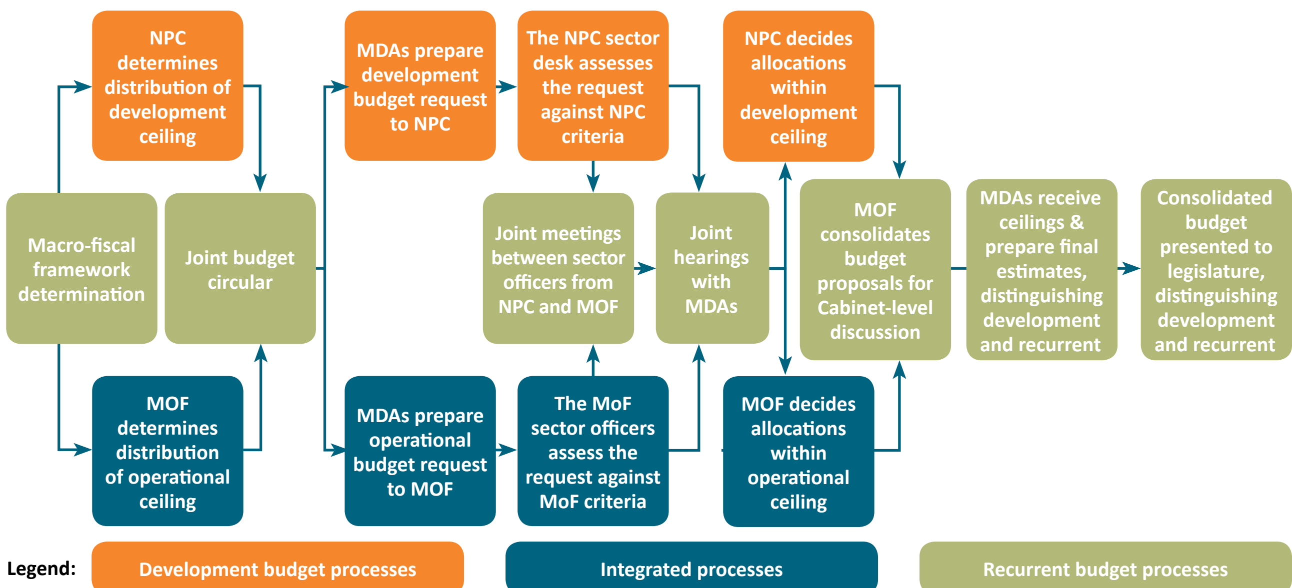
Figure 3: Comparison of the roles of capital project approval committees in Botswana and Rwanda



Review Committee is *a* step in the capital process, and is disconnected from the recurrent process, in Rwanda, the PIC is the *only* step focused on investment expenditure and follows from a series of fully integrated steps. It is more difficult to integrate processes where there is institutional separation, but it is not impossible. However, it requires agreement from all the institutions involved, more integrated information instruments and a set of rules, if the integrated steps involve joint decision-making.

Namibia is shifting to a more integrated process, although decision-making is still separate. Figure 4 sets out the country's process and identifies the integrated steps.

Figure 4: Capital project approval in Namibia against integration points in budget process



Mechanism: Capital project monitoring

Monitoring capital project implementation on a project basis is a key part of capital expenditure management in all four countries. While this would be the case in any well-managed project cycle, the integration of this information into the budget process is the focus of this paper.

In Rwanda, the Programme Management and Monitoring Unit, based in the MINECOFIN's budget unit, is responsible for supporting project implementation, and monitoring and evaluation by MDAs. It is primarily concerned with the financial monitoring of projects. Moving the unit to the MINECOFIN's planning unit in order to integrate financial and physical monitoring of projects is being considered. The establishment of Single Project Implementation Units in each ministry to monitor projects is an attempt to strengthen monitoring capacity at line ministry level, and has been credited with improving capital project disbursement and completion rates. These units and the MINECOFIN unit provide information on ongoing projects and the implementation capacity of MDAs in the backward-looking review process that starts the planning phase, and the subsequent planning consultations. Data from these units also forms part of the information on ongoing projects that is submitted to the PIC for approval and review.

South Africa's National Treasury has no direct control over the allocation of funds to capital projects from the approximately 60 percent of nationally collected revenue that is spent by the provinces. Nor does it have control over implementation. So, the establishment of the infrastructure reporting model is an important intervention for the National Treasury to help facilitate accountability for capital project planning and implementation in the provinces. The model is an online database that updates the National Treasury's IGR division on capital project budget submissions and stages of delivery. The model is a key tool for allocating infrastructure conditional grants to provinces. It also acts as an early-warning system to support provincial institutions in capital project oversight. When project implementation issues are picked up, the National Treasury alerts the responsible provincial treasury department and minister. While the database is not without problems – provinces often table different projects to what was approved in the budget process and implement yet another set of different projects – it is better than having no data at all. At the national level, the Budget Office maintains a similar database for projects implemented by national government departments and agencies, which feeds directly into the National Treasury's assessment of budget submissions. Both databases draw on the standardised COA that is used across national and provincial levels of government.

In Namibia, the NPC's sector teams are charged with monitoring project implementation. These teams receive regular updates during the year from MDAs on project implementation. Furthermore, MDAs have to submit project identification forms every year for all ongoing projects in the budget cycle, with updated information on implementation. The NPC uses this information to allocate funding and update the project's records in the development budget, which is submitted to Parliament as a supplementary document to the Estimates of Expenditure, setting out the development budget on a project basis. This process is also supported by the COA and a consolidated integrated financial management system.

The monitoring system in Botswana operates through MDA planning officers, who are deployed to line ministries and report to the MoFDP. These officers meet with the MoFDP's director of development programmes every two weeks to exchange information on project implementation. There are also technical assessments of ongoing projects at the start of the budget process (although this happens separately for development and recurrent expenditures) through the MoFDP's Development Programmes unit and the Thematic Working Groups.

Interventions: Options for integrating capital project cycle concerns into the budget process

To effectively manage capital projects and integrate them appropriately into the budget process, finance ministries should consider these key practices:

- Submit project-related information in the budget process when new projects are proposed or requests for continued funding for projects are made.
- Use feasibility studies/appraisals to back up the information submitted.
- Make use of project/investment approval committees to approve projects. These committees function differently in the case study countries. In Rwanda, it is the main mechanism that ensures appropriate integration of capital project cycle concerns, whereas in Botswana the committee functions only as a step. Namibia's practices represent a middle road, where the process of selection is project-focused but draws on joint processes, although without a joint budget submission document in place.
- Monitor capital projects and use a consistent budget classification to include monitoring information.

Balancing capital and recurrent expenditures to achieve sector outcomes

Under both institutional separation and integration, finance ministries face the challenge of balancing capital and recurrent expenditures to realise the desired sector outcomes. This section looks at the mechanisms used in the four case study countries to address this problem.

Mechanism: The use of ceilings

Separate ceilings derived from separate processes upfront: By determining a ceiling for each process upfront in the fiscal framework, Namibia and Botswana ensure that the sum total of financing decisions taken in the capital and recurrent processes does not exceed the aggregate ceiling. These ceilings are translated in the separate process channels into MDA ceilings for capital and recurrent expenditures. For capital expenditure, MDA ceilings draw on expenditure/projects in previous years and priorities as set out in the NDP, and on past expenditure and baseline projections for recurrent expenditure. In Namibia, no ceiling is issued for the second outer year, allowing for new open-ended proposals.

While this mechanism coordinates decisions for fiscal discipline purposes, it has consequences for whether individual sectors achieve an appropriate balance, and could have consequences for achieving appropriate balances and trade-offs centrally. In Namibia, for example, education sector respondents reflected that while it needs to invest more in capital projects at ministry level, the sector is also faced with the incentive to maximise its share of each pool. It is risky to propose that the sector reduce its recurrent expenditure over the medium to long term within an aggregate share of resources in order to invest more in physical assets because it may lose the money on the recurrent side and then not be a priority sector on the capital expenditure side.

Setting a capital ceiling upfront could ensure an adequate level of investment in the economy by the state, but this practice could undermine the overall quality of expenditure and long-term capital investment in two ways. First, while financing is still available, allocations would be made to capital projects even if they were poorly conceived, planned and executed, and even if urgent recurrent expenditure shortfalls hampered service delivery. Second, when information on the forward recurrent cost of capital (or overall development) projects is weak, projects may be affordable over the medium term but not over the long term. There was evidence of this in Botswana, where weak planning and costing of capital projects approved for financing resulted in scope expansion and a much higher future cost. In all four countries, the poor quality of recurrent cost information associated with capital projects increases these risks, particularly as the affordability of the recurrent cost is not the concern of the actors who make decisions on capital.

Separate ceilings in the context of integrated budget proposals and an aggregate overall ceiling. Rwanda stands in contrast. Recurrent and capital ceilings are issued to MDAs later in the budget preparation process (separately for domestically and donor-financed projects). These are informed not only by national plans and the previous year's expenditure, but also by sector strategies and a first round of joined-up (with central and sector actors), sector-based planning, which result in sector-driven capital requests.

Mechanism: Forcing capital expenditure through earmarked grants

Although vastly different in form, South Africa's use of performance-based infrastructure conditional grants to address low capital investment in the provinces is similar to Rwanda. It earmarks funding for capital purposes based on bottom-up expenditure proposals from spending agencies to ensure quality expenditure and an appropriate balance. The National Treasury has designed a provincial infrastructure grant that allocates funding to infrastructure and supports building the capability of infrastructure units in the provincial departments of health, education and roads, as setting capital envelopes for the provinces in the large unconditional transfer (the equitable share) is not possible. The volume of the grant is determined as part of the vertical division of revenue (between the spheres of government), while its distribution depends on infrastructure proposals received from provinces via the national departments. It is assessed in an integrated manner, with recurrent expenditure in portfolio budget groups, which combine provincial and national actors.

While this kind of mechanism might be suitable in some circumstances, it is the same as having institutional and process separation between capital and recurrent expenditures, but only for a smaller portion of capital expenditure. Like Botswana, where complete institutional and process separation prevailed at the time of the research, it requires careful process and incentive design to avoid capital expenditure criteria and above-sector priorities determining capital allocations, and to ensure that recurrent expenditure implications are integrated into capital decisions and recurrent budgets.

South Africa has measures in place to address these concerns: the grants are determined as a separate capital decision but based on integrated objectives and project proposals from the sector/MDA level; the information requirements include lifecycle projection of revenues (if any) and costing of expenditures to assess financial viability, including the net future demand on general budget revenues.

Interventions: Options to balance capital and recurrent expenditure to achieve sector outcomes

Key mechanisms to balance capital and recurrent expenditure are:

- Separate ceilings for capital and recurrent expenditure issued to line ministries based on a first, strategic and integrated phase of sector-based planning. This first phase allows the finance ministry to consider both sector and national fiscal framework factors when issuing ceilings.
- The use of earmarked grants, but with mechanisms to ensure that the volume of the grant takes into account sector objectives and bottom-up project proposals.

Including recurrent expenditure costs of capital projects (including maintenance) in capital expenditure decisions and recurrent budgets

The projection and integration of the recurrent expenditure (including maintenance costs) of capital assets after project completion is largely unsolved for all four countries, whether there is institutional separation or integration. In all four cases, issues around the accurate costing of recurrent expenditure, including operation and maintenance components, and the incorporation of this information into capital decision-making and recurrent budgets were highlighted by respondents across government. Countries have used several mechanisms to address this.

Challenges in estimating recurrent costs

In Rwanda, there is a gap for a consolidated approach throughout government for the calculation of future recurrent costs. Respondents in the MINECOFIN's planning unit and in two agencies indicated that different sectors, levels of government and organisations have varying methods of

estimating recurrent costs of capital projects. For example, recurrent allocations for decentralised capital expenditures implemented by the Local Administrative Entities Development Agency are systematically set at 7 to 10 percent of the capital costs of a project for the current budget year. For externally financed capital projects, on the other hand, development partners often suggest a percentage of the total cost. The external finance unit uses a guideline of 7 to 10 percent of the capital cost as a recurrent cost projection. However, these are broad estimates that are applied inconsistently, resulting in poor quality of forward costing.

The guidelines issued to the PIC set out the recurrent cost information that will be used to assess the financial viability of the project and are supported with detailed templates in the first budget circular, but they still do not set out how to estimate the different types of costs in different sectors.

According to Namibian respondents, recurrent operational costing is sector-specific, depending on the type and quality of human resources required to operate a typical sector capital asset and the cost of complementary sector goods and services. While maintenance costs can be estimated as a percentage of capital cost across types of assets, the operational cost requires more intelligent costing models. These are difficult to set up, use and maintain. In Namibia, despite the need for such a model in the education sector being identified in a 2010 study, little progress has been made to develop one.

In Botswana, the study also found that despite estimates of recurrent costs being a requirement in the project memoranda, such costs were not consistently provided. Similar constraints around skills to undertake this costing and a lack of guidelines were indicated.

The study also highlighted challenges in incorporating costs even if correctly estimated. Respondents in Namibia and South Africa noted that when projects are first submitted, the future operational cost falls outside the medium-term horizon so there is no urgency to calculate it correctly and include it in the recurrent budget submission. This creates challenges for maintenance expenditure. In South Africa, maintenance expenditure is often postponed because it is under pressure from other recurrent and capital expenditure demands. Institutions undertake new infrastructure projects rather than funding maintenance because of the political premium placed on investment in new infrastructure, incentives in the conditional grants systems and delays in the implementation of maintenance activities, which the public works department undertakes. During budget implementation, maintenance expenditure allocations are often not realised because budgeting rules allow for virement between recurrent expenditure items. Because other recurrent items are more rigid, maintenance is often postponed. Maintenance backlogs therefore reach critical levels, driving up costs and becoming new capital projects.

Mechanism: Use of lifecycle costing

South Africa requires the lifecycle costs of all capital projects to be set out, including capital, operational and maintenance costs, and a sensitivity analysis of the key parameters to be conducted. The capital planning guidelines, released with the MTEF guidelines at the start of each budget process, set the parameters for costing.

A lifecycle net cash flow calculation is required. This includes an assessment of whether the project is financially sustainable (financed by the discounted future revenue flows it creates over its lifecycle) and will require supplementary funding. If extra funding is required, MDAs must check the viability from an economic and social point of view to justify its future call on general budget revenue.

This approach to making sure that the future recurrent costs of capital projects and their affordability are included when projects are assessed and approved is the most robust among the approaches reviewed in the study. It is also echoed in Namibia's approach, which requires robust feasibility studies to be done.

Mechanism: Contracting professionals to conduct feasibility studies

In Namibia, cost estimates for public infrastructure projects in the development budget are reliable because they are done by professional firms contracted to the Ministry of Works and Transport. The guidelines for these studies also require lifecycle financial viability to be assessed. But the process results in a long project cycle. The NPC approves projects in two phases: a feasibility study must be done, for which money is made available in the budget year; if the study is completed in time, the project is put forward for financing, citing the results of the feasibility study. Project implementation often begins up to three years after first proposed.

In Botswana, the use of quantity surveyors employed by the Department of Building and Engineering Services in the Ministry of Information Science and Technology to calculate capital costs for development projects also ensures more accurate cost estimates, even if not for long-term development expenditure. The costs of development projects often escalate, but this is largely due to their scope expanding once they have been approved.

In South Africa, professionals conduct feasibility studies only for projects that are deemed large or complex. However, all projects go through a systematic analysis, the depth of which depends on the project's nature and complexity. Project approval processes are also shorter. There is no requirement to approve feasibility studies before the project itself. The requirement is that feasibility studies and all other design and assessment processes be done prior to the first submission, financed by the ongoing recurrent allocations of MDAs. Results of these processes are set out in the project document. Projects that require feasibility studies can therefore break ground within two years of conceptualisation, assuming procurement processes are initiated soon after parliamentary budget approval and proceed smoothly.

In both Namibia and South Africa, however, even if robust forward cost calculations are done as part of the project assessment, the duration of even the shortest project cycle means that these recurrent costs are not assessed in the recurrent budget estimate process and that future budget cycles are relied on to incorporate the cost.

Mechanism: Use of a longer-term horizon for the development budget

Botswana's NDP process requires the full cost of projects to be set out over five years. These costs are updated as required in the annual development budget process. But this plan is static – the budget updates cover six years of historical data, a revised budget for the current year and an estimate for the budget year. Even if the NDP provides the forward costs, the budget formats do not offer a mechanism to reflect these costs beyond the budget year.

Furthermore, the forward recurrent costs of development projects are not always estimated, and the cost estimates stop with the conclusion of the project. The way in which the NDP sets out projects does not make clear whether recurrent costs are an estimate of operational costs, maintenance costs or both, or merely recurrent costs incurred during project implementation.

Mechanism: Line ministry processes

The Botswana and Namibia studies highlighted the degree to which the incorporation of new operational costs for capital projects into recurrent budget proposals relies on line ministry processes. In Botswana, this involves planning officers communicating the operational cost needs of completing projects to finance officers in the year prior to the budget year in which operational costs are first required.

In Namibia, service delivery ministries start their planning and budgeting cycle at district level so that regional- and district-level officials are aware of new capital assets coming into operation. They should incorporate operational requirements three years in advance, when the year in which the expenditures will be made first appears in the MTEF. Even when this does not occur – medium-term expenditure planning is weak in many ministries – the operational costs are included at the latest in the year prior to when they are due. In the education ministry, even if district officials do not incorporate the costs, the functional departments at national level responsible for the service for which the asset was built ensure that the costs are included.

The Namibian system is therefore aided by full institutional integration at the regional and district level. In Rwanda and South Africa, the lack of institutional separation throughout the system also aids the timely incorporation of operational costs into recurrent budgets.

Mechanism: Earmarking maintenance costs

All four countries face issues in ensuring long-term maintenance of capital assets. Even when maintenance costs are correctly estimated and adequate allocations are made, maintenance expenditures are vulnerable to spending pressures on other recurrent items.

The South African case study offers an option for finance ministries to force maintenance expenditure, but in the context of autonomous provinces and an intergovernmental grant system. Up until the 2017/18 budget, recurrent costs associated with school buildings and other projects were not included in the conditional grant allocations for these projects. This meant provinces had to budget for maintenance out of their equitable share (an unconditional grant making up the bulk of provincial budgets) or own revenue, despite having submitted capital project budgets with lifecycle maintenance costs. From 2017/18, however, 20 percent of the education infrastructure grant will be allocated and earmarked for maintenance only. This will be on a trial basis and may be increased if successful.

While there are many strong arguments against ring-fencing expenditures, these arguments need to be traded off against ubiquitous under-budgeting and under-realisation of maintenance expenditure and the associated costs over the long term. Earmarking maintenance expenditure with grants or exclusion from virement allowances could offer a viable solution to this problem of capital-recurrent budget integration.

Interventions: Options to include recurrent expenditure costs (including maintenance) in capital expenditure decisions and recurrent budgets

Integrating long-term recurrent costs of capital projects into capital expenditure decisions and recurrent budgets remains a challenge, whether countries plan and budget under circumstances of institutional separation or integration. To address this issue, finance ministries can adopt the following mechanisms that the case study countries have employed:

Ensure that reliable estimates of recurrent costs are integrated into capital budget decisions

- Use lifecycle costing to assess the viability of capital projects, or facilitate the incorporation of recurrent costs into investment budget decisions by setting costing horizons beyond the upcoming budget year or the medium term for development projects.
- Use professional firms for project costing and feasibility studies.

Ensure timely and adequate allocations for operational and maintenance costs of capital assets

- Ensure that robust line ministry processes are in place for handing over new capital assets.
- Earmark maintenance allocations.

Only one of these solutions is about integrating project and budget cycle processes – the handover of assets on project completion. The others highlight the degree to which capital and recurrent integration issues are about failings within these cycles, rather than about weak coordination between the budget and project cycles.

SECTION 3

Assessing factors that hinder or enable the coordinative capability of finance ministries

The previous section discussed the various mechanisms used by the finance ministries of the four case study countries to appropriately integrate capital and recurrent expenditures, and the degree to which they were successful. In the research framework, these mechanisms are seen as a set of factors that determine the coordinative capability of finance ministries (internal technical factors). This section examines how these technical mechanisms of the budget process interacted with other variables to determine the coordinative capability of finance ministries to integrate capital and recurrent expenditures.

Internal technical factors as integration mechanisms

Table 7 extracts from the discussion on mechanisms the kind of coordinative actions that finance ministries take to address integration challenges. The analysis draws on Shick's (2013) three levers of budget reform (changing processes, information instruments and rules) to categorise the coordinative actions of finance ministries with regard to integrating capital and recurrent expenditures.

As Table 7 shows, some mechanisms would be ineffective on their own, or are appropriate only in specific institutional circumstances. For example, PICs are appropriate in systems that are integrated. The use of capital budget ceilings addresses issues around ensuring adequate investment in sectors and the economy overall, but only if they are issued after an integrated strategic phase to the budget process.

The table also supports an intuitive understanding that different coordinative challenges require different technical budget process measures from finance ministries. Therefore, to coordinate capital and recurrent expenditures, information instruments and rules for including capital project concerns into the budget cycle need to be set effectively. This does not apply to the challenge of coordinating su bnational and national expenditure planning in joint competency sectors, for example.

However, some key coordinative technical interventions may apply to several challenges. The following mechanisms could be used to address multiple coordinative problems:

- The use of a single set of trade-off criteria in terms of substantive policy objectives at the centre for trade-offs between sectors.
- The use of comprehensive, coherent and integrated sector-level plans that frame budget prioritisation enables finance ministries to facilitate coordination across actors and budget categories. In Rwanda, these plans enable coordination across ministries, agencies, local governments and donors by sector.
- An inclusive, reiterative and integrated strategic planning phase in the budget process involving all actors. In South Africa, this phase addresses capital and recurrent expenditure, and intergovernmental and planning and budgeting coordination concerns. In Rwanda, it coordinates donor and government expenditure.
- Having an integrated, single-budget structure and a common COA supported by a centralised information system across budget actors and categories. Rwanda, where the integrated financial information system includes a planning module, is a case in point. It now integrates planning and budgeting as much as it integrates capital and recurrent expenditures through both phases. In Namibia, the single-budget structure and COA aid integration despite institutional separation. A coherent budget framework in South Africa and consolidated COA enable coordination and sequencing of decision-making across the budget process and between budgetary actors.

The length of the budget process is a significant internal technical factor that aids capital and recurrent integration in South Africa and Rwanda, though it is not directly related to mechanisms to integrate expenditures. Both countries have long budget preparation processes, about eight months, from issuing the first budget circulars to submitting the budget to the legislature. This allows for sufficient time, at line and finance ministry levels, for the analysis and coordinative processes that aid integration. In contrast, Namibia and Botswana's process is between five and six months. Line ministries in Namibia sometimes had less than a month, with too little time for engagement between different units at this level.

Other factors

Findings from the four case studies reveal how the effectiveness of these mechanisms, which indicate coordinative capability, were enhanced or undermined by the environment in which they were established.

Table 7: Capital-recurrent integration mechanisms by the kind of coordinative action

Mechanism.	New processes/structures introduced or existing ones altered	New information instruments introduced or existing ones standardised	New rules introduced or existing ones adjusted
Integrating capital and recurrent to achieve joint objectives	Establish a strategic, integrated budgeting phase to frame any subsequent separated technical budgeting for capital and recurrent expenditures. Establish joined-up budget proposal assessments, hearings and/or decision-making processes between capital and recurrent decision-makers. Ensure that the budget process is predictable, with a detailed, reliable budget calendar.	Set sector strategy requirements to aid integration of expenditures. Use joint budget circulars and joint budget submissions. Integrate capital and recurrent expenditures by MDA in a single budget structure. Establish an integrated COA for both recurrent and capital/ development expenditures.	Set rules that use sector strategies and/or a common centralised policy framework and spending priorities for budgetary decision-making. Set rules for line ministry processes that require integrated generation of capital and recurrent budget proposals.
Integrating capital project cycle concerns in the budget cycle for better quality investment expenditure	In integrated processes, introduce a capital project approval unit/PIC and set rules for it. Undertake capital project monitoring.	Set information requirements for capital project proposals in the budget process. Require feasibility studies/appraisal studies for capital projects (above a certain size or of a certain complexity). Develop capital project monitoring databases with standardised information for use in the budget process.	Set rules/criteria for making capital budget decisions in the budget cycle that use project cycle information, such as financial and economic viability analyses. Require that feasibility study results are used in the budget process. Require that monitoring information on ongoing projects/ implementing ministries is used to decide forward allocations.
Ensuring an appropriate balance of capital and recurrent expenditures	Set aggregate and MDA capital ceilings only after a strategic budget process to balance top-down requirements for level of investment, with bottom-up sector priorities and investment/recurrent requirements.		Set top-down capital budget ceilings. Earmark capital expenditure requirements (following a process with appropriate integration) through grants or by disallowing virement from capital to recurrent expenditures.
Ensuring reliable costing and integration of forward recurrent expenditure in capital decisions and recurrent budgets		Standardise that capital projects are costed over their full lifecycle or at least for a longer period than the budget horizon. Standardise costing methods. Require that feasibility studies (at least for projects over a set threshold) are professionally done/ adhere to standards.	Issue guidelines on capital/ investment planning, costing and budgeting. Earmark maintenance costs.

3

Internal capacity, capability and cultural factors

Policy analysis skills and staff numbers and retention influence analytical capability and quality of data

The sequencing of finance ministry processes is important. Sequencing processes so that capital and recurrent budget staff can engage in joint processes or in one another's process is beneficial, even more so when staff have a strong skill profile. In all the countries, the number of staff involved in line ministry allocations and their skills and experience influence the ministry's ability to coordinate expenditures.

Sufficient staff with economic/policy analysis skills is crucial. Namibia has a shortage of senior economists and Botswana has a shortage of staff with policy analysis skills. In Botswana, a deterioration in the quality of project review and assessment at finance ministry level has affected the quality of information coming out of project cycle processes in the budget cycle. There are only four economists in the Development Programmes division, and each has to work with submissions coming from four to five sector ministries within the limited time of the budget process. In Namibia, MoF analysts have an accounting background and are inexperienced in assessing recurrent proposals to the MoF holistically with development project proposals to the NPC. They focus on assessing line items for adequacy against past spending and affordability within the recurrent ceiling.[7]

In contrast, the sector-specific knowledge and analytical capacity of finance ministry staff in Rwanda and South Africa drive quality engagement between the ministry and line ministries, and overall coordinative capability.

7 Namibia's MoF intends to address this issue by using its participation in the World Bank's BOOST programme to improve staff analytical skills and by establishing an economist unit in the budget office to support sector staff.

In South Africa, the National Treasury's budget group coordinates planning and proposals, and is made up of the following units:

- The Budget Office is responsible for allocations for inter-sector recommendations, engagement with line ministries to manage the preparatory process, and in-year monitoring and public finance statistics, including on infrastructure.
- IGR is responsible for provincial and local government analysis, and includes the provincial infrastructure unit.
- Public Finance analyses sector policies and expenditure to ensure intra-sector allocative and operational efficiency. It chairs the Portfolio Working Groups, provides recommendations on intra-sector allocations, and undertakes monitoring and oversight of sector expenditure.

It is not only a question of highly skilled staff, but also ensuring that the units' structures and staffing align with their respective mandates and responsibilities. Each unit is staffed with highly skilled professionals who engage in substantial analysis and relationship-building with the relevant sector: Public Finance has a team of at least three people in the education sector; IGR analysts focus on each province; and Budget Office teams work on capital and expenditure planning. The National Treasury therefore has very high analytical capability dedicated to each sector and aspect of the budget. In addition, the DPME works on monitoring and evaluation.

Institutional memory and experience is important. An emerging issue in South Africa is the high turnover of staff in the National Treasury and the loss of senior staff with deep institutional memory – which gave them authority when engaging with sectors – to units outside the budget process or altogether.

While having enough skilled people is important, large numbers of staff can be a risk as coordination tasks become more difficult, as shown in Botswana. The MoFDP deploys cadres of finance officers and planning officers to line ministries. In the past, this has been a key coordinating mechanism, even though mostly across sectors and not necessarily between capital and recurrent expenditures. However, with the increase in officers, and variability in their capacity, skills and experience, this capability has waned. There is less direct contact between managers and individual officers for support and backstopping, and, with fewer meetings overall between centre and line MoFDP staff, officers in line ministries feel less empowered to regulate the behaviour of their ministries, undermining the MoFDP's capability to coordinate through standardised processes and information requirements.

The finance ministry's organisational structure promotes coordination

The organisation of the finance ministry division(s) that deal with budget allocations along sector lines aid coordinative capability. In Namibia, Rwanda and South Africa, parts of the budget office functions are organised along sector lines, resulting in stronger relationships with sector ministries and better sector knowledge and analytical skills. The skills developed in Rwanda and South Africa were oriented towards policy analysis insofar as the overall allocative budget process emphasised allocative efficiency.

In Namibia, where the finance ministry is responsible only for recurrent allocations, the ministry's culture was more focused on economy and affordability in terms of fiscal discipline, despite ongoing efforts to balance this focus with allocative efficiency. However, the sector organisation of both the NPC and the MoF helped facilitate meetings by sector between the organisations to review budget submissions.

In Rwanda, the MINECOFIN's budget and planning units are both organised along sector lines, facilitating full attendance of the units involved in both recurrent and development expenditure processes. The Rwanda case study also noted the importance of defining the responsibilities of each officer clearly, on the one hand, and informal communication between officers assigned to the same ministry in the two units, on the other. Also, each ministry has a focal point in the MINECOFIN budget office, allowing for stronger relationships, better participation in the budget process and more engagement around the budget cycle.

South Africa demonstrates that complex structures require more coordination of finance ministry processes. With each unit of the budget group being responsible for some aspect of allocations and/or monitoring within a single-budget process integrated through a single consolidated budget framework, respondents pointed out that there might be some duplication of monitoring databases that do not speak to one another and that there is a need for overall coordination. Furthermore, none of the databases fulfil the need for overall coordination, and as they are not aligned, it is not easy to put their information together for this purpose. On the other hand, information from the different sources is integrated through the portfolio budget process that involves all units.

Building actors' capacities

In Rwanda and South Africa, coordinative efforts are aided by strengthening the capacity of other actors in the budget process through formal training and backstopping (availability to answer queries and assist), and ongoing support. This includes improving analytical skills and training on COAs and the use of information systems. This is important because it ensures that actors across government approach processes and decisions in the same way, as determined by the finance ministry. Finance ministries in both countries saw training and capacity building as crucial to their engagements with the rest of government. Building the capacity of other actors is largely determined by the communication capabilities of the ministries as a whole and individual officers. The ability of finance ministry officials to engage line ministry officials in formal workshop settings and in continuous, informal communication on policies and allocations is important.

In Botswana and Namibia, this perspective did not emerge from the case studies. However, in Botswana, the placement of cadres in line ministries was seen as a way of applying its rules, principles and approaches because these officers are

responsible for budgetary processes on both the recurrent and development side. But links between these cadres and their managers at the centre have weakened in recent years, and some ministries have appointed their own officers to assist in these processes, further weakening the links.

The ability to set, communicate and enforce the right rules and processes

Whether finance ministries are able to **set, communicate and enforce the appropriate processes and rules for the budget and budgetary information emerged as a factor in all four cases**.

- In Botswana, some core guidance is not up to date. There is a delay in updating the financial regulations (to support the 2013 PFM Act), and the planning officer and financial officer manuals have not been fully rewritten since the late 1980s. Without up-to-date information on PFM processes, it is difficult for the MoFDP to coordinate actors around processes that are intended to support integration. The MoFDP is in the process of updating the regulations and manuals.
- In Rwanda, while sector-level work is steered towards integration by detailed guidelines, the lack of clear guidance on the costing of recurrent expenditure of capital projects results in poor integration of this information into the budget process.
- In South Africa, both the integrated and capital budget processes are directed by annually updated guidelines that respond to ongoing and emerging budgetary challenges. In fact, introducing capital planning guidelines was a response to the over-integration of capital expenditure, in which insufficient attention is paid to the information, procedures and analysis needed to select and manage capital versus recurrent expenditures.

While the ability to set and enforce rules is dependent on finance ministry legal mandates and effective authority (discussed in the next section), designing suitable regulations and communicating them effectively depends on whether people with the right skills are employed, empowered to take action as required and appropriately used by finance ministries. Designing and implementing a regulation or guidelines may require people who recognise the need to regulate, understand policy and administrative processes in the context of the political economy, and can communicate clearly. This includes lawyers, accountants, sector specialists, communication specialists and writers who can produce comprehensive documents that are easily understood.

There are examples in the case studies of how failure to appropriately regulate processes and direct information needs can undermine coordinative capability. While Namibia's MTEF process was introduced to better coordinate planning and budgeting/capital and recurrent budgets within a performance-based, medium-term programme-based budget approach, the allocative component of the process is rendered largely ineffective because the legal framework for budgeting (the 1991 Public Finance Act) causes efforts to be focused on detailed processes that result in the development budget and the Estimates of Expenditure. This is because the estimates are the legally binding basis for the Appropriation Act. Setting out the budget format is within the finance minister's mandate, and the choice could have been to overhaul the system. Yet the programme-based process was bolted onto the existing one, leaving it largely unchanged.

Creating units to monitor expenditure aids integration

Consolidated, single COAs and integrated information systems are important for integrating expenditures. Their effective operation, however, is a function of the **finance ministry's capacity to manage budget information**. In South Africa, the Public Finance Statistics unit, a component of the Budget Office, plays a key role in setting the COA and providing training on its implementation. It is also concerned with integrating budget proposals during the budget process as well as national-level actual expenditure information for internal and external reporting. The IGR division's role in tracking provincial-level expenditure is also significant.

In Rwanda, the Programme Management and Monitoring Unit is key in tracking financial information on project implementation. In Botswana and Namibia, the integrated financial information management systems are managed by the finance ministries.

A result-oriented and reform-minded finance ministry that collaborates internally

The finance ministries in Rwanda and South Africa strive to address issues that arise in the budget process, with **reform in mind and the desire to achieve good public policy outcomes**. In both cases, a culture that emphasises managerial oversight in terms of objectives rather than due administrative process enables engagement across units and individuals within the finance ministry.

Respondents in Rwanda noted that units and individual officers are empowered to do their jobs, driving change in their areas of responsibility. This encourages ownership and accountability for outcomes. This culture is not exclusive to the finance ministry: it occurs within a government-wide culture of dynamism and result-orientation. Following significant reform of the budget process between 1994 and 2003, the budget group consists of professionals who seek the best solutions for policy and process challenges within their remits. In both countries, individual officers are prepared to go the extra mile, including within the finance ministry, to build the kind of engagement and relationships that are needed to effectively coordinate through the technical mechanisms employed in the budget process.

External factors

Lack of capacity of other government actors hinders integration

The case studies confirmed that weak planning, budgeting and analytical capacity elsewhere in government make it difficult to

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coordinate government actors towards integration of capital and recurrent expenditures through the levels of the budget process. This is particularly true in Botswana and Namibia, where there is more reliance on integration at line ministry level, given high institutional and managerial separation at the centre. This is also likely to hold for the coordination of donor, own, national and subnational expenditure, and planning and budgeting. It raises the need for coordination at the centre (ironically, for Namibia and Botswana) or for finance ministries to deliver (particularly in South Africa, as discussed below). In the four case studies, the capacity of other actors plays out in the following way:

- Finance directors play an important part in the integration of capital and recurrent expenditures in Namibia. They are responsible for submitting the final line ministry budget proposals to the MoF in the integrated budget structure by division once the NPC and MoF have made final allocations. However, not all ministries have suitably qualified finance directors, with some relying on lower-level personnel to take responsibility for budget submissions.
- In Botswana, finance officers and planning officers in line ministries are relied on to coordinate. But their training, skills and experience differ significantly between ministries. The MoFDP is aware of the issue and sponsors planning and finance officers to further their studies. Many officers therefore already hold advanced degrees in economics, finance and related fields, but budget constraints have resulted in training backlogs.
- There is a lack of capacity in South Africa, particularly at provincial level, where there are few policy analysts and/or weak budget management capacity in sectors as well as at the centre of some provincial governments. The National Treasury has had to rely on its own delivery capacity, complementing provincial capital budgets that result from provincial prioritisation processes through infrastructure conditional grants that result from central prioritisation processes.
- In Rwanda, integration is supported by sector planning and budgeting capacities. However, the appropriate management of the capital budget and integration of project cycle information into the budget process is a challenge for effective use of investment funds. In response, the MINECOFIN requires all ministries to have Single Project Implementation Units, which have addressed capacity issues in the past – these units reduced bottlenecks in multi-project units and ensured that the MINECOFIN was clear on the contact point for every major project. But respondents also noted a lack of capacity in line ministries to plan and budget capital projects, particularly regarding the estimation of recurrent cost implications.

The authority of the finance ministry relies on conducive mandates and political support

The authority of the finance ministry in matters relating to the budget is crucial for coordinative capability. Without proper authority to regulate and manage budget processes, mechanisms to integrate capital and recurrent processes and information would be ineffective. Research shows that **effective authority is dependent on the capacities of finance ministries, their technical or legal mandates, and "soft" political factors**.

In Namibia, the Constitution forces an institutional separation of planning and budgeting in that the NPC is tasked with setting the priorities and direction of national development. While the finance minister is responsible for presenting the Estimates of Expenditure, the Namibian system has interpreted the division of responsibilities to imply that the NPC is also responsible for budgeting for development priorities. This legal mandate has affected the MoF's authority to establish integrated budgeting rules and processes because it has to negotiate the capital component with the NPC. Its overall authority in PFM processes, however, is well recognised. Respondents have attributed this to its legal mandate, the finance minister's political power and the delivery capability of the MoF, which manages the Treasury, the payments system and the integrated financial management system that underpins budget execution in Namibia.

In South Africa, the National Treasury's grip on public finances is well recognised. This is an outcome of its legal mandate (set out in the Constitution, the Public Finance Management Act and the Municipal Finance Management Act) but is also a result of the way in which it has developed these mandates through secondary regulations for all spheres of government. Its delivery capacity – its ability to monitor expenditure processes and maintain public finance statistics – and analytical capabilities further support its authority. The National Treasury's analytical capabilities, provided by its highly skilled staff, which includes sector specialists, are key in influencing policy processes, and give it authority to decide which public goods and services will be financed and how. This combination of mandates, staff capacities and technical capability was supported in the past when this authority enjoyed the backing of the president and the ruling party. More recently, much of this support is no longer as apparent, with the result that the National Treasury has faced significant battles to ensure that all financing decisions are taken through the budget process. This is the case for decisions about large infrastructure projects financed through state-owned enterprises. Whereas previously the National Treasury, with its legal/technical and political authority, would have played an important role in discussing these projects, now it relies far more on its authority to approve capitalisation funding and guarantees for enterprises to manage these processes.

In contrast, the authority of Rwanda's MINECOFIN was boosted in 2009 by consolidating its mandate of planning authority and functions, including the authority to manage capital project financing and oversight. All capital project monitoring is now centralised in the MINECOFIN; before, it shared a dual mandate with an autonomous entity of government (the Central Projects and External Finance Bureau). Furthermore, more recently a separate minister of state for planning was appointed in the MINECOFIN, boosting its political authority and capacity for planning. This has been important for the ministry's capacity to direct the activities of other government actors.

Summary of the key factors that support coordinative capability

The following internal factors determine coordinative capability:

- Sufficient staff with economic/policy analysis skills
- Institutional memory and experience
- Organisation of budget offices along sector lines
- Capabilities to build the capacity of other actors in the budget process
- Communication capabilities
- Delivery capability, including in setting up and maintaining information bases
- Regulatory capability
- A culture that is result-oriented, with reform in mind and internally collaborative.

These factors are insufficient on their own, and depend on one another to promote coordinative capability. Effective regulatory capability, for example, relies on the skill profile of the finance ministry and its delivery capabilities; some institutional memory and the right institutional culture are also necessary. The two case study countries that performed well in integration, Rwanda and South Africa, have all these characteristics to some degree. On the other hand, Namibia and Botswana lack some crucial components while having others in place. In Namibia, for example, analytical capacity is weak, affecting both its regulatory and coordinative capability. Processes in Botswana are largely driven by out-of-date regulations, and a culture of institutional collaboration within the finance ministry does not appear to be well established.

The case studies found that even where all these factors are present, additional key external factors – those outside the control of the finance ministry – are required, including capacities elsewhere in government, an appropriate mandate and political support.

SECTION 4

Summary and conclusion

The study sought to answer this question: *When are finance ministries in countries with different institutional structures and economic conditions best able to coordinate the activities of various actors in order to integrate public capital and recurrent expenditures?*

The research framework established that the following features indicate effective integration:

- Capital expenditure trade-offs are based on the policy objectives that the expenditure will contribute to, *in an integrated manner or jointly with recurrent expenditure.*
- Capital and recurrent expenditures are appropriately balanced *at sector level and overall.*
- Robust capital project cycle information, such as from appraisals and project monitoring, is appropriately integrated in the budget process.
- The recurrent cost of capital projects is considered in capital project decisions and recurrent budgets.

Coordinating the activities and decisions of actors towards these goals requires a series of technical mechanisms with which finance ministries are able to ensure that common goals are set for actors' activities, ensure that budget processes are appropriately sequenced to coordinate the information flows that inform activities and decisions, and monitor these decisions. These mechanisms employed by the four case study countries strengthened the finance ministries' coordinative capability.

Mechanisms to coordinate timely capital and recurrent expenditures towards a common set of goals:

- Sector strategies to frame budget decisions at line ministry and central levels to ensure common goals for capital and recurrent budget decisions.
- A joined-up strategic budgeting phase to frame subsequent recurrent and capital expenditure processes.
- An appropriately sequenced, predictable budget process, as set out in a circulated budget calendar.
- Integrated budget circulars and budget submissions.
- Joint central reviews of budget submissions, joint hearings and/or joint decision-making processes, particularly when institutional separation is in place.
- Joined-up line ministry processes.
- Integrated budget structures, COAs and information bases.

Mechanisms to integrate capital project cycle concerns into the budget cycle:

- Standardising information requirements that need to be submitted with budget cycle requests to finance capital projects.
- Requiring feasibility studies/appraisals to ensure quality information, particularly for projects above a threshold size, and the submission of this information in the budget cycle.
- Project/investment committees to approve projects, particularly in circumstances of institutional integration. Where there is institutional separation, these committees should be required to use sector strategies and recurrent budget requirements as key criteria for decision-making.
- Monitoring capital projects.

Mechanisms to ensure that capital and recurrent expenditures are set at appropriate levels:

- Top-down expenditure ceilings that are appropriately sequenced in the budget process so that levels of capital and recurrent expenditure in sectors are not set without consideration of sector objectives.
- Earmarking capital expenditure to protect investment expenditure.

Mechanisms to ensure the integration of recurrent expenditure costs of capital projects in capital expenditure decisions and recurrent budgets:

- Lifecycle costing required as part of project proposals.
- Use of professionals for feasibility studies, particularly for larger projects.

- Use of a longer-term horizon for the development budget, particularly when MTEFs are not in place.
- Robust line ministry processes to ensure communication between separate units for capital and recurrent expenditures.
- Earmarking maintenance allocations to ensure adequate maintenance of existing and new assets.

Adopting these mechanisms as individual strategies is not enough to engineer integration. Also, some require more attention depending on whether countries have separated or joined-up institutions or units. Deciding on which mechanisms to focus and which to combine depends on the country. However, using joint instruments and processes is important in cases of institutional separation, as much as using capital-specific instruments and processes in the budget cycle is important in cases of institutional integration.

The study also found that different coordinative problems require different mechanisms, though some are less specific and can be employed to address most coordination issues. These include a budget calendar to set a predictable budget process; comprehensive and integrated strategies, budget frameworks and COAs; and common information bases.

However, setting these mechanisms is very different to implementing them effectively, particularly when they govern the actions of other actors, which is where several internal and external factors come into play. The case studies show that having most or all of a set of core internal characteristics in place ensures that mechanisms contribute towards integration, even when external factors hinder processes. However, the country's circumstances (or external factors) dictate which internal characteristics are more important to pursue. For example, in countries where the finance ministry does not have the mandate for capital budgeting, its own capacity to analyse both capital and recurrent proposed expenditures and take on discussions with the responsible institution is crucial.

The case studies made clear the degree to which the capabilities of finance ministries are interdependent: for example, analytical capability depends on the delivery capability of robust budget information bases, which in turn is dependent on regulatory and coordinative capability. Overall, these are dependent on an appropriate skills mix, and internal organisation and culture.

Coordinative capability can be achieved if finance ministries put specific budget system mechanisms in place:

- Finance ministries need appropriate numbers of skilled staff, with analytical skills in particular, to achieve the authority required to coordinate the budgetary decisions of other actors. Too many staff (lacking appropriate skills) can make internal coordination tougher.
- Finance ministries that organise budget sections by sector are more likely to coordinate other actors, particularly line ministries, because they are able to obtain sector knowledge and experience to build relationships and engage other actors authoritatively.
- Effective regulation is important to direct the activities of other actors and prescribe what should be considered when decisions are taken. This depends on mandates, political authority and staff skills (particularly analytical skills, to ensure the legitimacy of finance ministry views, set the correct rules for processes and information, and communicate them effectively).
- The ability to build the capacity of other actors (through formal and informal training and engagement) and monitor expenditure in the budget process is vital. An informed finance ministry ensures that actors within government make well-judged decisions and are held accountable; an uninformed finance ministry will not be able to coordinate activities and decisions, nor will it be able to enforce rules and regulations.
- Finance ministries that are result-oriented, willing to adjust internal and external processes to address emerging challenges, and collaborate internally are more likely to be able to coordinate other actors and set appropriate information requirements. Similarly, those that empower their own officers are more likely to lead other actors.
- Finally, it is crucial that finance ministries have political support within government. Where support is lacking, other factors such as the ministry's analytical capacity, monitoring capabilities, and relationships and engagement with other actors become critical.

References

Allen, R. & Grigoli, F. (2012). Enhancing the capability of central finance agencies. In *Economic Premise*, 73. World Bank.

Allen, R., Hurcan, Y., Murphy, P., Queyranne, M. & Yläoutinen, S. (2015). *The Evolving Functions and Organization of Finance Ministries.* Working Paper (WP15/232). IMF.

Allen, R. & Krause, P. (2013). The role, responsibilities, structure and evolution of central finance agencies. In R. Allen, R. Hemming & B. Potter, *The International Handbook of Public Financial Management.* London, UK: Palgrave Macmillan.

Andrews, M., Cangiano, M., Cole, N., De Renzio, P., Krause, P. & Seligmann, R. (2014). *This is PFM.* CID Working Paper (No. 285), July 2014. Centre for International Development at Harvard University.

Crowston, K. (2003). A taxonomy of organizational dependencies and coordination mechanisms. In T. Malone, K. Crowston & G. Herman, *Organizing Business Knowledge: The MIT Process Handbook.* MIT Press.

Crowston, K., Rubleske, J. & Howison, J. (2004). Coordination theory. In P. Zhang & D. F. Galletta (Eds), *Human-Computer Interaction in Management Information Systems Vol I.* ME Sharpe.

Dabla-Norris, E., Brumby, J., Kyobe, A., Mills, Z. & Papageorgiou, C. (2011). Investing in public investment: An index of public investment efficiency. WP/11/13.

Dorotinksy, B. (2008, February). Capital budgeting and public financial management. *PFM Blog*.

Dressel, B. & Brumby, J. (2009). Enhancing capabilities of central finance agencies: From diagnosis to action. World Bank.

Government of Botswana. (2015). *Estimates of Expenditure 2015/16.*

Jacobs, D. (2009). *Capital Expenditures and the Budget.* PFM Technical Guidance Note no 8. IMF.

Krause, P. (2015). What do we know about finance ministries?

Malone, T. & Crowston, K. (1990). What is coordination theory and how can it help design cooperative work systems? *Proceedings of the Conference on Computer Supported Cooperative Work.* Los Angeles, October 1990.

Malone, T. & Crowston, K. (1994). The interdisciplinary study of coordination. *ACM Computing Surveys, 26* (1), 87-119.

Malone, T., Crowston, K., Lee, J., Pentland, B., Dellarocas, C., Wyner, G. et al. (1999). Tools for inventing organizations: Toward a handbook of organizational processes. Center for Coordination Science, MIT.

Morgan, P. (2006). The concept of capacity. European Centre for Development Policy Management.

Premchand, A. (2007). Capital budgets, theory and practice. In A. Shah, *Budgeting and Budgetary Institutions.* World Bank Institute.

Rajaram, A., Minh Le, T., Biletska, N. & Brumby, J. (2009). *A Diagnostic Framework for Assessing Public Investment Management.* World Bank.

Sarraf, F. (2005). Integration of recurrent and capital "development" budgets: Issues, problems, country experiences, and the way forward. *Implementation Note 35104*. World Bank.

Schick, A. (2013). Reflections on two decades of public financial management reform. In M. Cangiano, T. Currestine & M. Lazare, *Public Financial Management and Its Emerging Architecture.* IMF.

Webber, D. (2007). Integrating current and development budgets: A four-dimensional process. In *The OECD Journal on Budgeting*, 7(2).

World Bank. (2010). Botswana – Public expenditure review. Washington, D.C.: World Bank.

Annex 1: Background on key research concepts

Capital and recurrent expenditures: definitions and concerns

Defining capital and recurrent expenditures

For capital expenditure to be regarded as such (and all other expenditure to count as recurrent expenditure) three criteria must be met:

1. The assets created by the expenditure must be used in the production or supply of goods and services (productivity criterion).
2. The asset's life must be longer than a fiscal year (longevity criterion).
3. The asset must not be intended for resale in the ordinary course of operations (Premchand, 2007).

Military expenditure is a standard exclusion in public finance, even if it meets all three criteria.

However, the distinction between what counts as recurrent and capital expenditures is conflated with what counts as operational and development expenditures, particularly in dual budgeting practices, which is prevalent in developing countries (Webber, 2007; Sarraf, 2005). Governments use different categories to define how an expenditure is managed (Jacobs, 2009). Some use the terms "public investment" or "development expenditure" to refer to expenditure on assets that will last for many years, such as public goods like roads, and intangibles like education and research (op. cit.). While this could be seen as a subcategory of capital expenditure next to minor capital expenditure on assets that last for a short period (like computers, furniture and cars), some countries include in development budgets any expenditure financed by donors or undertaken as part of a national development plan project, whether of a recurrent or capital nature.

Different countries use different terms to identify categories of expenditure, such as recurring and nonrecurring; ordinary and extraordinary; revenue and capital; current and capital; current and investment; above and below the line; operational and development; and recurrent and development (Sarraf, 2005).

Integration or separation?

An appropriate degree of integration of capital expenditure and recurrent expenditure is a key concern of public financial management (PFM). While it is vital that capital asset investment choices are given specific attention, the capital budgeting process must be considered as part of the overall PFM system (Dorotinksy, 2008). In principle, capital and recurrent budgets should contribute to the same objective, which is why they should be budgeted for in an integrated manner (Premchand, 2007).

Yet many African countries maintain dual budgets in one form or another (see Box 5). The impact of minimal integration of capital and recurrent expenditures in budget preparation and execution is well documented (Sarraf, 2005; Jacobs, 2009; Webber, 2007). When there is limited or no integration, the recurrent cost of capital expenditures is not taken into account, resulting in underused assets. Also, the capital budget may be deployed based on prioritisation factors different to those applied to recurrent expenditure, crippling service delivery and underusing recurrent inputs such as staff. If expenditures are totally separate, there is a risk of double budgeting for an activity. This can also happen if development budgets allow for recurrent expenditure or if some capital items are funded through recurrent processes or budgets.

However, there are reasons for managing capital expenditure differently to recurrent expenditure. Rajaram et al. (2009) and Premchand (2007) observe recurring capital budgeting problems when expenditures are integrated that result in the highly inefficient use of public resources, including poor project selection and poor workmanship; incomplete, delayed and stalled projects; underfunding of projects; payment delays; cost escalation; and unspent year-end amounts. As noted by Dabla-Norris et al. (2011), "Large cost overruns, benefit shortfalls, waste and low completion rates are common in major infrastructure projects in developing countries, and can be attributed to their poor selection, monitoring and evaluation." Capital-specific factors need to be considered when selecting capital projects for financing. Furthermore, specific analytical demands on government during budget preparation and different implementation management demands require at least some separate treatment in the budget cycle for capital expenditure versus recurrent expenditure.

Jacobs (2009) summarises the dilemma best:
Capital and recurrent expenditures need, in some cases, to be considered separately:

- Capital spending within the budget needs to be clearly identified separately in order to highlight certain government priorities.
- Also, given the large amounts usually involved (and their once-off nature), capital-specific procedures are needed for project selection and evaluation, asset procurement and project management, and subsequent management and disposal of capital assets.

But sometimes, capital and recurrent expenditures need to be considered together:

- For efficient planning and budgeting purposes (as they contribute to the same objectives).
- Because investment proposals need to be appraised in terms of both capital and operating costs.

In many of CABRI's constituent countries, practices around integrating or separating capital and recurrent expenditures change as countries experience repeated cycles of integrating and separating planning and finance ministries. When the ministries are separated, capital expenditure often falls under a development budget managed partly or fully by the planning ministry, while recurrent expenditure or the operational budget falls under the finance ministry. When countries decide to reintegrate ministries, processes become more integrated. There are historical roots to the separation of development and operational budgets, as examined in Box 5 below.

Box 5: Why development budgets are prevalent in Africa

Dual budgeting practices in African countries are a product of colonialism: whereas operational expenditure could be managed by each country, capital expenditure – on account of its once-off nature and size – required a different set of procedures that were managed in the capitals of the colonisers. The expenditures were therefore set out in separate documentation, for separate approval, and followed separate execution procedures (Webber, 2007).

In the 20th century, the practices that applied to budgets for the colonies were also applied to budgets in the colonisers' home countries. In the aftermath of the Great Depression, Sweden introduced a capital budget that was funded by public borrowing – generally not favoured to finance public expenditures – to create public assets that were durable and self-financing, and contribute to expanding the net worth of government (Premchand, 2007). This was followed by more waves of budgetary practice that favoured the use of a separate budget for capital, driven over time by the desire to reduce the deficit on the main budget and appear more creditworthy; by the importance attached to capital budgets as a vehicle for development plans; and by the rise of economic techniques to assess the value of capital assets thus created (op. cit.).

Developing countries retained dual budgeting because it enabled them to separate the ongoing costs of government, and the associated rising current revenues, from ambitious new development plans and their financing needs (Webber, 2007). Sarraf (2005) explains that inexperienced finance ministries in newly independent countries were unable to carry out medium-term development planning tasks and project appraisals, so ministries for planning, development or economic affairs had to be set up for this purpose. These ministries were also responsible for identifying, appraising, budgeting and even doing the accounting and reporting for investment budgets. With separate budget circulars going out, separate processes in finance ministries emerged. These patterns were reinforced by donors who provided official development aid and were prepared to finance development activities but not consumption spending.

The resulting use of dual budgeting – in the managerial, institutional, legal and presentational dimensions – was therefore common in African countries. However, in the 1990s, the efficiency cost of full separation was clear. Coupled with the introduction of policy and budgeting frameworks, such as poverty reduction strategies and medium-term expenditure frameworks, governments were urged to do away with dual budgeting and integrate structures and processes for capital and recurrent expenditures.[8]

More recently, there has been renewed focus on the demands of choosing, implementing and maintaining public infrastructure projects as governments and donors have come to understand the impact of infrastructure gaps on economic growth and realised that investment spending is "a poor proxy for the accumulation of productive assets in developing countries owing to waste or corruption" (Dabla-Norris et al., 2011). The institutional context in which investment decisions are made and the quality of project selection, management and implementation play a crucial role in determining the return on investment and its growth dividend. These observations have resulted in an emphasis on separate capital investment management and plans.

8 For examples, see the World Bank Public Expenditure Management Handbook (1998), the Department for International Development's Guidelines on Understanding and Reforming Public Expenditure Management (2001) and the Guidelines for Public Expenditure Management by the International Monetary Fund (IMF) (1999). Diagnostic frameworks such as the Country Financial Accountability Assessments (2003) and the IMF Report on the Observance of Standards and Codes also asked explicit questions about the degree of integration of capital and recurrent expenditures.

Dimensions of integration

Capital and recurrent expenditures can be separated to different degrees across different dimensions. Across the budget cycle, capital and recurrent expenditures can be planned and allocated separately, presented separately to the legislature, appropriated separately by the legislature, executed and managed separately, and reported separately. This budget cycle separation may be reinforced by capital expenditures being managed throughout, or at certain points, by a different government institution to that of recurrent expenditure.

Webber (2007) sets out four dimensions of integration. These are:

- The legislative dimension. Capital and recurrent expenditures are presented and processed in the legislature in an integrated process and appropriated in a single appropriation law.
- The institutional dimension. The responsibility for capital and recurrent expenditures is integrated at the central finance agency level (one ministry); within the finance ministry in one department or unit (or in such a way that the responsibility is integrated if there is a separate unit for capital expenditure); and at the line ministry, department or agency (MDA) level. The presence of project implementation units can lead to separated responsibilities for the planning and execution of capital expenditures, even when these expenditures are otherwise integrated.
- The presentational dimension. Capital and recurrent expenditures are presented together throughout the budget preparation, planning and reporting processes, even if separation occurs elsewhere. A simple integrating table can be a starting point even if two budget documents, prepared in separate institutions and for separate approval, are presented.
- The managerial dimension. This dimension refers to the development of a programme framework or some other form of an objective-oriented framework to integrate expenditures. It is also concerned with the processes and frameworks required to integrate capital and recurrent expenditures for decision-making purposes, throughout the budget cycle, in different configurations of legislative, institutional and managerial integration.

This research project focuses on the managerial dimension. It considers the factors or institutions that help finance ministries integrate capital and recurrent expenditures in this dimension when degrees of separation exist in other dimensions. Ministries' capability in this dimension is central to determining budgetary outcomes.

Sarraf (2005) identifies four similar dimensions against which the separation or integration of capital and recurrent expenditure can be described and analysed, but organises them slightly differently: (1) separate central ministries managing processes and making different decisions (the institutional dimension); (2) separate planning and budget allocation processes (this is similar to Webber's managerial dimension, and also makes reference to the frameworks and rules for budget processes); (3) a separate budget; and (4) separate budget execution, accounting, banking and reporting processes. The last two dimensions combined are the equivalent of Webber's presentational dimension. In many cases, a separate budget not only means separate documents but also very different formats, with the recurrent budget being classified against standardised line items or the GFS-aligned economic classification, while the capital budget is usually presented as a list of projects.

Distinguishing between the dimensions of separation or integration throughout the budget cycle, and how integration can then still occur in Webber's managerial dimension, can be useful in understanding whether capital and recurrent expenditures are effectively integrated and what the contributing factors are. This is addressed in more detail in the research framework.

Capability of finance ministries

CABRI has recently started looking at how leadership, staff and institutional factors shape the capability of finance ministries, and has been working with ministry members to build these capabilities. The management of public finances is central to how governments manage the economy, execute policies and direct administrations. The scope and size of PFM has grown significantly since the mid-1900s. This expansion has been driven not only by the growth of public revenue and expenditure, but also by the expansion of the state's role and how it chooses to put that role into effect (Allen et al., 2015). The demands on finance ministries – in terms of transactional processing and regulatory, analytical and oversight capacity – have become far more intense; how finance ministries fulfil these mandates largely determines public finance outcomes.

This section sets out a conceptual framework based on work done by other organisations on the capability of finance ministries.

Capability versus capacity

A number of commentators make an important distinction between the capacity and capability of finance ministries (Dressel & Brumby, 2009; Allen et al., 2015; Allen & Grigoli, 2012). The capability of a finance ministry refers to more than its capacity. According to Dressel and Brumby (2009), capacity refers to the volume or scope of ministry inputs of an appropriate quality (determined, for example, by the information technology (IT) or human resource base), while capability is about converting that volume into performance. Dressel and Brumby also note that because finance ministries are so central to the functioning of the state, considerable efforts have been made to build this capacity, particularly in developing countries, through investment in human resources, IT, accounting and budgeting. But this has produced mixed results. While in some countries institutions have been successfully transformed, more often than not the transformation of central finance agencies was unsustainable or did not occur at all despite considerable capacity-building efforts.

One reason for these divergent outcomes is that efforts have generally focused on building capacity rather than strengthening the capabilities of central finance agencies (op. cit.). For Dressel and Brumby, capability is the ability to marshal combinations of inputs and influence the external environment to yield production. They draw on earlier work by Peter Morgan (Morgan, 2006) to distinguish five features of capability.

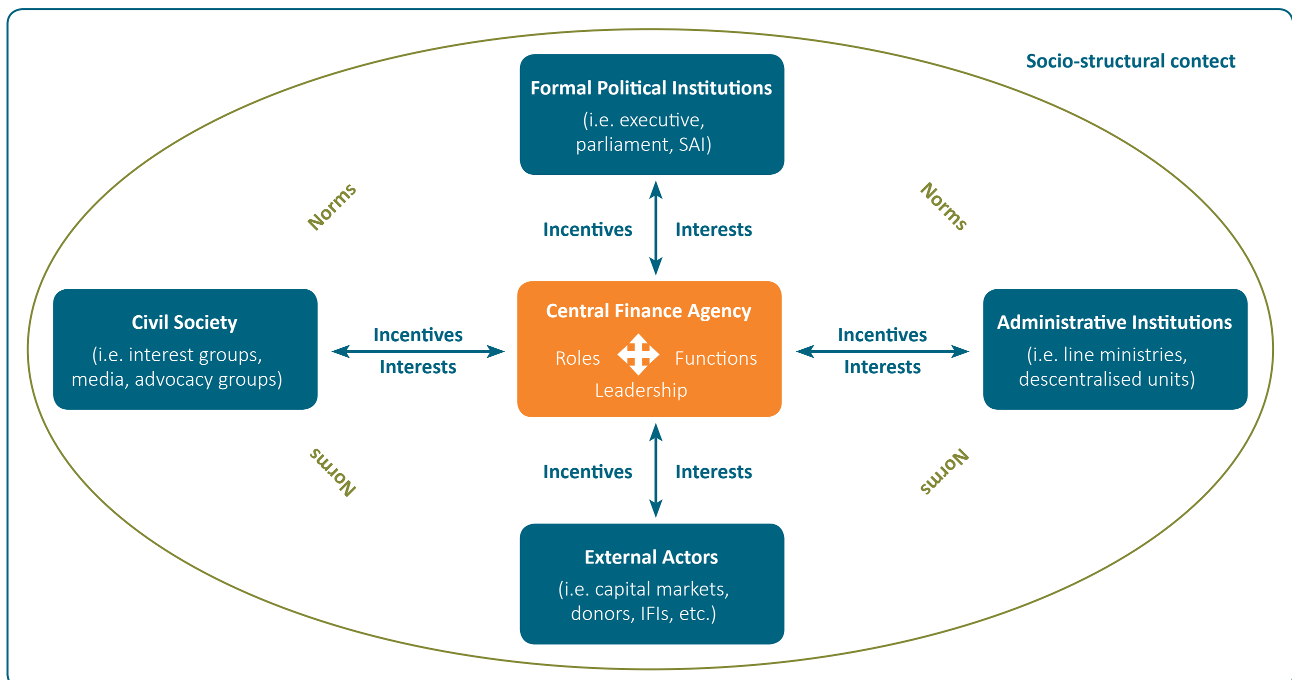
Table 8: Features of capability	
Capability to:	**Criteria**
Act	Degree to which priorities are set, decisions are based on the priorities and decisions are implemented Degree and use of operational autonomy Action orientation within the system Integrity of the organisation, its leadership and staff Effective human, institutional and financial resource mobilisation
Generate development results	Strengthening public institutions and services Generating substantive outcomes such as better health and education Improving sustainability of development results
Relate	Degree of legitimacy in the eyes of its supporters and stakeholders Ability to protect the core interests of the system Operational autonomy balanced with joined-up government
Adapt	Adaptive management culture Ability, opportunity and discipline to learn Confidence to change Ability to balance stability and change
Integrate	Integrating structures inside the system A well-defined set of simple rules that govern operations A leadership intent on achieving coherence A shared vision of the intent of the organisation

Other authors offer different capability typologies. Krause (2015) places the concept of capability into four categories – analytical, delivery, regulatory and coordinative – and arranges core public finance functions of the state against these capabilities. Allen et al. (2015) also speak about policy, regulatory and transactional functions, and discuss various organisational elements of finance ministries in relation to these functions and how they have changed over time.

Measuring capability: Key factors

The ability of finance ministries to transform capacity into capability depends on internal and external factors, as well as technical and political ones (Dressel & Brumby, 2009; Allen & Grigoli, 2012). Institutional structures, processes and functions of finance ministries, as well as the budget process, are regarded as technical factors, while the political economy environment of institutional incentives, actors and structural constraints on

Figure 5: The political economy environment of central finance agencies



Source: Dressel & Brumby (2009)

ministries are considered political factors. The roles that a finance ministry then assumes (its capability) are determined by the specific technical arrangements and how the political economy allows these arrangements to be put to effective use (Dressel & Brumby, 2009).

Dressel and Brumby also look at frameworks to assess the political economy environment and institutional incentives. They identify an investigation of the institutions, incentives, individual actors and interests at play, internal to the finance ministry and externally, as key. Figure 5 offers a broad picture of how to identify these factors.

The first step in identifying these factors is to assess the management context, and management of people and processes in finance ministries. Table 9 sets out the criteria for this assessment.

Table 9: Assessing internal institutional and political factors

Category	Elements	Assessment
Management context	PFM environment	Clarity of roles and responsibilities in performing PFM tasks Ability to coordinate across agencies that contribute to central finance functions
	External relations	Ability to influence through building and maintaining positive relationships within government and with other stakeholders
Managing internal processes	Corporate planning	Ability to plan use of resources and access them to support business aspirations
	Structure	Ability to design and manage structures to support business objectives
	Systems	Ability to move information to where it is most valuable for monitoring and decision-making Ability to make decisions and implement them in a timely fashion
Managing people	Values	Ability to manage shared values and commitment to functional objectives
	Human resource skills	Ability to access necessary skills to carry out functions
	Performance and accountability	Ability to encourage better performance from individuals

Source: Dressel and Brumby (2009)

Elements associated with the other factors are then assessed, as set out in Table 10.

The researchers of this report drew on this analytical framework and these typologies to accurately assess capability and analyse contributing factors.

Using this framework to analyse 10 finance ministries' capability, Allen and Grigoli (2012) identified the following common factors that affect public finance functions in various countries:

- The head of state's unpredictable role, which could have a significant effect on a finance ministry's coordinative capability, particularly to integrate capital and recurrent expenditures.
- The division of financial power among several ministries to avoid excessive authority in the hands of one person.
- Internal capacity issues of finance ministries relating to their organisational structures, attraction and retention of staff, performance management, decentralised decision-making, change management, and/or IT.
- Weak coordination between development partners and finance ministries, and low ownership of PFM reforms.

Allen et al. (2015) make the point that while the formal powers of finance ministries are important, technical mastery significantly influences how these powers are transformed into real capability within the system. This suggests that coordinative capability that arises from formal powers, roles, rules, processes and information can be leveraged or negated by technical analytical capability. Dressel and Brumby also acknowledge this point.

Allen et al. further discuss the tension between imperatives for the centralisation of power and capability (fiscal control) and decentralisation, and how choices in this regard can influence the capabilities of finance ministries.

Table 10. Other factors that impact on institutional incentives and political context

Dimension	Elements to consider
Political institutions	Type of government in place: presidential or parliamentary Limited access order (nation state where the political system manipulates the economy to create rents) or open access order (sustained by competition – political and economic competition balances interests and rent-seeking behaviour)
Administrative institutions	Nature of principal-agent relationship between finance ministry and line ministries (roles, rules and information, and the resulting incentive structure from these three factors)
External actors	Influence of capital markets and actors such as development partners (international finance institutions, regional banks, and multilateral and bilateral donors), particularly with regard to reforms and overburdening capability
Civil society	Role and influence of actors in civil society
Socio-structural context	Economic base and presence of economic opportunities, societal systems for distributing opportunities and access to resources (presence of neopatrimonialism), and cultural context

Source: Dressel and Brumby (2009)

Determining the coordinative capability of finance ministries

While the relevant literature has recognised that coordinative capability is central to finance ministries performing public finance functions, the issue has been unpacked to a limited degree. For example, Dressel and Brumby (2009) note, "As central finance agencies are in charge of the health of the overall public finance system, they cannot fulfil their mandate without being able to ensure collaboration among various functions, establish adequate reporting requirements, and bring transparency with respect to internal processes."

Dressel and Brumby draw attention to specific coordination failures in finance ministries, including two that relate specifically to capital-recurrent coordination:

- Lack of coordination between capital and recurrent expenditures. Capital and recurrent expenditures are prepared separately; recurrent cost implications for new and existing capital assets are not considered; and different priorities apply when preparing capital and recurrent budgets.
- Failure to take note of spending capacity when developing capital budgets. The capital budget is generated as a wish list, with little consideration of logistical and other issues associated with execution.

Other failures relate to the lack of connection between planning and budgeting and between revenue agencies and treasuries. Overlapping responsibilities for local government finances and the prevalence of informal systems that overrule the formal PFM systems are also problematic.

However, a body of work on coordination theory has been in development since the 1990s. The material aims to collate issues on coordination that arise in various fields – including computer science, sociology, political science, management science, systems theory, economics, linguistics and psychology – and establish a set of concepts and theories that can contribute to understanding and analysing coordination in any of these disciplines (Malone & Crowston, 1990). This study drew on concepts and approaches in the material to examine the challenge of coordination facing finance ministries.

The material defines coordination as "managing the dependencies between activities", where dependencies refer to goal-relevant relationships between different actors' activities (op. cit.). According to the authors, a simple dictionary definition of coordination is "working together harmoniously", which implies that activities (work) are directed towards common ends or goals, and that these activities are not independent, hence the need for coordination. Instead, activities must be performed in ways that result in "pleasing" outcomes and avoid "displeasing" ones.

Crowston, Rubleske and Howison (2004) note that in addition to the emphasis on dependencies, the separation of actors, goals and activities in Malone and Crowston's framework is important because it allows for conceptualising what needs to be done separately from who is doing it.

Malone and Crowston set out a simple framework of the components of coordination and the associated processes that need to be in place, as shown in Table 11, with preliminary identification of how the concepts can be applied to the coordinative capability of finance ministries.

The authors also note that the resources required for an activity must meet three requirements: they must be on time, accessible (in the right place) and usable (of the right quality). Common means that organisations use to meet these requirements are:

- On time: Produce to order, just-in-time production systems and detailed advance planning.
- Accessibility: Produce resource at place of need and ensure transferability if produced in different places (IT systems to transfer information).
- Usable: Standardisation of requirements.

It is useful to apply Schick's three levers of budget systems reform to this framework: process adjustments, restrictive rules and new information (Schick, 2013).

This study uses coordination theory to identify the challenges of coordinating capital and recurrent expenditures under different circumstances, and describe the mechanisms used by finance ministries in the four case study countries to address the problem. These mechanisms and how incentives influence their efficacy are key to understanding the coordinative capability of finance ministries.

Table 11. Deconstructing coordination

Components of coordination	Associated coordinative processes	Budget process application
Goals	Identifying goals	Setting public finance outcomes (integration of capital and recurrent budgets to ensure optimal service delivery or avoid expenditure inefficiencies)
Activities	Mapping goals to activities	Setting and, in the absence of setting, coordinating the budget system, including setting activities (processes), rules and responsibilities for capital and recurrent expenditures
Actors	Selecting actors	
Resources	Managing resources	Key resources in the budget process are information, people and time. What is the capability of the finance ministry to manage the flow of information, the use of people (skills), and the time between activities in the budget planning and implementation processes?

Sources: Malone & Crowston (1990) and Malone & Crowston (1994)

Annex 2: Consolidated research framework

Question 1: How integrated or separate is the management of capital expenditure (capex) and recurrent expenditure in the legal, institutional and presentational dimensions (the capex context frame)?			
Dimensions of context	Approach to answering question/ judgement criteria	Evidence to answer question/ assess against criteria	Sources
Institutional separation	For capital as against recurrent expenditure, are different ministries responsible for: • Coordination and oversight across the cycle? • Allocations between ministries, departments and agencies (MDAs)? • Capital expenditure management across the cycle? If the same ministry is responsible for any function, are different units within the same ministry responsible?	NA – researcher to map institutional separation	Interviews CABRI BPP results PEFA report (discussion of PI 12 IV results, if still valid) Other reports (overall and sector PERs, and various PFM reports) CABRI reports
Presentational and legal separation	Integration/separation of capital and recurrent in budget/appropriation law, legislature processes and external reports	NA – researcher to map presentational and legal separation	Interviews Check appropriation laws, budget and external report formats CABRI BPP results CABRI reports
Degree of public financial management (PFM) decentralisation	Overall, are expenditure responsibilities centralised (controlled by the finance ministry) or decentralised (the responsibility of line ministries)?	NA – researcher to describe degree to which expenditure management responsibilities are decentralised to line MDAs	PFM legislation Secondary reports Interviews CABRI reports
Question 2: What do the results of public finance management suggest about the integration of capital and recurrent expenditures?			
Assessment dimensions	Approach to answering question/ judgement criteria	Evidence	Sources
Capital expenditure is not under-integrated	Investigate the behaviour of actors and capex outcomes to determine whether: • Capital expenditure trade-offs are usually/occasionally/rarely/never based on the policy objectives they contribute to, in an integrated manner or jointly with recurrent expenditure • Recurrent cost of capital projects is usually/occasionally/rarely/ never factored into capital project assessment and selection, and into recurrent budgets • Recurrent cost estimates are realistic and reliable	Presence of: • Recurrent costs of capital projects are taken into account in budget submissions, budget allocations and projections • Thoroughness/effectiveness of mechanisms to estimate the recurrent costs of capital projects • Evidence that sector policy objectives drive capital expenditure Absence of: • Existing service delivery assets are underused/badly maintained	PEFA Indicator 12 (IV, old framework) provides a secondary source measure of integration Other PEFA indicators will be of interest Budget submission formats Interviews Other reports (overall and sector PERs, CABRI reports, and various PFM reports) Interviews

Question 2: What do the results of public finance management suggest about the integration of capital and recurrent expenditures?			
Assessment dimensions	Approach to answering question/ judgement criteria	Evidence	Sources
Capital expenditure is not overly integrated; specific procedures allow projects to be managed appropriately	Investigate the behaviour of actors and capex outcomes to determine whether: • Capital project-specific procedures are in place for all/most/some/no projects at appropriate thresholds • Budget processes appropriately treat capital expenditure given its once-off and investment nature • Approved/budgeted capex projects are almost always/normally/often not underfunded or delayed due to funding shortfalls • There are many/few/hardly any incomplete and stalled projects	Presence of: • Capex outturns equal capex budgets/capex budget used as planned • Mechanisms exist to separate capital expenditure out of MDA baselines Absence of: • Wasteful "white elephant" projects • Delays in design and completion of projects • Underfunding and cost overruns • Many open/incomplete and stalled projects	If reliable and available, use public budget documents and reports to calculate variances. Be aware of reliability of capex budget figures, particularly for donor expenditures. Other reports (overall and sector PERs, and various PFM reports) CABRI reports Interviews

Question 3: What evidence is there of the finance ministry's coordinative capabilities, and what contribution can be made to the integration outcomes observed?			
Assessment dimensions	Approach to answering question/ judgement criteria	Evidence	Sources
Step 1: Identify the need for coordination to integrate capital and recurrent expenditures			
Determine the need for coordination	Map capital expenditure budget process (activities and resources) relative to the recurrent/main budget preparation process Identify key points at which integration/ separation should occur to achieve optimal integration Determine dependencies between activities and resources	NA Researcher to draw a process map or adjust existing maps	Interviews Budget documents (legislation, budget calendar and circulars) CABRI reports Secondary literature
Step 2: Collect evidence of finance ministry capability to coordinate			
Has the finance ministry set a common goal of integration that is achievable?	Finance ministry authority is accepted to set the goal and set mechanisms Relevant actors (internal and external) agree that integration is important	Commitment to integration as measured by: • Discursive commitments • Policy statements • Legal framework provisions • Actual behaviour and procedures	Country documents (PFM reform plans, legislation, the budget calendar/circulars) Secondary literature, including the PEFA reports (if still relevant) CABRI reports Interviews
What mechanisms has the finance ministry put in place to manage dependencies between activities?	For identified dependencies in the process, attempts have been made to assign responsibilities to actors and specify requirements for information. In addition, mechanisms such as scheduling/sequencing, notification and tracking, synchronising, resource allocation, standardisation, resource transfer systems, negotiation, decision-making rules or others are in use, as specified by the finance ministry	Evidence of: • Attempts at mechanisms to manage dependencies • Actors following assigned roles, processes, rules and information requirements set out by mechanisms	Budget calendar/circulars Secondary literature, including the PEFA reports (if still relevant) Interviews CABRI reports – check PPBB and value-for-money studies, as well as others
Step 3: Argue contribution			
Can evidence of successful or unsuccessful integration be partly attributed to the finance ministry's attempts at coordination?	Contribution or non-contribution of coordinative attempts towards the outcomes observed Other processes and mechanisms that can explain evidence of successful/ unsuccessful integration	Actions by other actors that can explain evidence observed	Secondary literature, including the PEFA reports (if still relevant) Interviews

Question 4: Which factors – internal or external, technical or political/institutional incentive factors – determine the finance ministry's ability to coordinate the integration of capital and recurrent expenditures?			
Assessment dimensions	Approach to answering question/ judgement criteria	Evidence	Sources
What coordinative contribution – the ability to resolve dependencies in integrating capital and recurrent expenditures – has the finance ministry made in terms of regulatory, analytical and deliver capacities?	Analytical, regulatory, delivery capabilities contribute to: • Acceptance of authority/legitimacy of finance ministry to coordinate • Quality of finance ministry's activities and resources used and produced • Ability to act • Other	Other actors refer to these capabilities in explaining why they follow assigned roles, processes, rules and information requirements Recognise finance ministry authority Evidence that finance ministry can enforce decision rules on integration	Secondary literature, including the PEFA reports (if still relevant) CABRI reports Interviews
How does the finance ministry's capacity (inputs over which it has control) contribute to or detract from its coordinative capability?	Staff numbers, skills, financial resources and information technology (IT) systems impact positively or negatively on coordinative capability	See previous Plus: • Ability of finance ministry staff to attend to and follow up on coordinative mechanisms • Ability of IT systems to manage information requirements (accessibility, punctuality and usefulness of information) • Ability to finance its human resource, space and IT requirements	Secondary literature, including the PEFA reports (if still relevant) CABRI reports and CABRI BPP Interviews
Internal political/ institutional factors	Finance ministry organisation supports coordination for integration Finance ministry leadership, informal roles and collaborative actions (positive or negative), and culture support its capability to coordinate integration	Finance ministry mandate supports integration Finance ministry leadership acknowledges the goal of integration and supports processes Internal operations for integration are governed by a well-defined set of rules (management of internal processes) Ministry able to access necessary skills to carry out functions Integrity and culture of the organisation support effective implementation of mechanisms (values are shared, with commitment to objectives) Performance is managed towards integration	Secondary literature, including the PEFA reports (if still relevant) CABRI reports Interviews
External technical factors	Capacities and systems of other actors support success of coordinative mechanisms	For example, evidence that other actors/institutions have/ lack capacity and systems that contribute to timely, useful and available information for integration activities	Secondary literature, including the PEFA reports (if still relevant) CABRI reports Interviews
External political factors	The formal and informal political institutions, influence of external actors (donors) and civil society, and cultural context support finance ministry's attempts to coordinate	For example, evidence of role of strong political actors Division (or not) of financial power of the state Evidence of limited access or open access order state and impact on incentives to coordinate Evidence of impact of socio-cultural context on incentives to integrate	Secondary literature, including the PEFA reports (if still relevant) CABRI reports Interviews

Question 5: How has the finance ministry adjusted factors within its control to boost its ability to coordinate capital and recurrent expenditures under different circumstances? What are the lessons? What policy advice can be derived from the study?	
Assessment dimensions	Approach to answering question/judgement criteria
What actions did the ministry take to build its capability to coordinate expenditures? • By building its capacity (staff/skills, resources, IT systems) • By building other capabilities • By actions to set integration goals, coordinating actors and resources, and mechanisms to manage dependencies between actions and resources in the budget process • By influencing external capacities, systems and political institutional factors What evidence of success/barriers was observed? What are the links between the outcomes observed and the mechanisms? What are the lessons learnt?	Summarise key factors from the evidence collected and findings against previous questions
What are the pertinent contextual factors that made these efforts successful/unsuccessful; which will influence the external validity of the lessons learnt?	Identify under which circumstances these lessons would be valid for other countries

Annex 3: Assessment of integration

Integration indicator

Capital expenditure trade-offs are based on the policy objectives that the expenditure will contribute to, *in an integrated manner or jointly with recurrent expenditure.*

Botswana	Namibia	Rwanda	South Africa
Botswana's practices against this criterion show very weak integration. Capital expenditure trade-offs are based on the policy objectives laid out in the National Development Plan (NDP), which is built up by sector. But it is not clear that this is done in a way that integrates recurrent costs. Capital trade-offs are made through the Thematic Working Groups, which focus only on development expenditure. Recurrent expenditure trade-offs are made on a different track, based on baseline projections developed under the leadership of a different unit of the Ministry of Finance and Development Planning. The system relies on integration at line ministry level without specific measures, leaving it to institution-determined communication between finance officers and planning officers. From the 2017 budget, the finance ministry started implementing reforms aimed at more integration.	Namibia's practices show weak integration. The National Planning Commission (NPC) makes capital expenditure trade-offs. Alignment with the NDP, feasibility and affordability (within the capital expenditure ceiling over the medium term) are key criteria. The Ministry of Finance (MoF) makes recurrent expenditure trade-offs separately, with efficiency and affordability within the recurrent budget ceiling as key criteria. However, this split in trade-off decisions is mitigated by MoF-instituted process mechanisms to coordinate decision-making by the NPC and the MoF teams. Apart from these mechanisms, the system relies on integration within the framework of sector strategies, where they exist; at line ministry/sector level when requests are generated.	Rwanda's practices show strong integration. Capital expenditure trade-offs are usually based on the policy objectives they contribute to, in an integrated manner or jointly with recurrent expenditure. There is a highly iterative process for developing and reviewing spending agency plans and investments during the planning process. This is characterised by consultations both within ministries, departments and agencies (MDAs) and with local government and the Ministry of Finance and Economic Planning (MINECOFIN). During this process, recurrent and capital expenditure are considered side by side. In response to the first budget circular (the planning circular), MDAs can propose new capital expenditure through the project profile document. In the second circular (the budget circular), capital expenditure is somewhat separated out, as ministries receive a capital ceiling separately from personnel, and goods and services ceilings, and must make capital trade-offs within this ceiling. Rwanda has a Public Investment Committee (PIC) that has to approve a project before it can be considered for financing, and this committee has to take sector strategies into account before approving a project.	South Africa's practices show very strong integration. Spending agencies can propose capital and recurrent expenditure as they deem best, based on the optimal mix of inputs to achieve priority MDA/sector objectives. An overall expenditure ceiling is determined by the National Treasury, which then hears budget submissions and proposals from MDAs as part of the Medium-term Expenditure Committee process. Both capital and recurrent expenditures are discussed and integrated throughout the process. This integrated process is followed at national and provincial levels of government.

The recurrent cost of capital projects – comprising maintenance costs of the resulting asset and recurrent inputs such as staff and services to operate it – are factored into capital project assessment and selection, and into recurrent budgets.

Botswana	Namibia	Rwanda	South Africa
Botswana's practices against this criterion show weak integration. Mechanisms to incorporate recurrent costs of capital projects into budget submissions and decisions exist, but are not always uniformly applied. The required recurrent cost information is not always provided in budget submissions or taken into account in decision-making. Ensuring the recurrent operational cost of completed capital projects is within budget relies on planning officers notifying finance officers when it is due. Mechanisms to estimate the recurrent costs of capital projects are limited to rules of thumb, without clear evidence that they are followed, and there are a variety of practices across ministries. The 2010 Public Expenditure Review in Botswana identified crowding out of costs for the maintenance of existing infrastructure, which is crowded out by new capital spending.[9] Respondents in the recurrent budget unit emphasised that this is still the case, highlighting that a drive in recent years to implement new projects has meant little emphasis on maintenance-focused recurrent costs. This has resulted in a backlog of maintenance needs.	Namibia's practices show weak integration. The length of the Namibian project cycle (longer than the medium term) means the recurrent cost of capital expenditures is not routinely substantively taken into account when allocating expenditure to capital projects. The NPC's project identification form originally included a section in which recurrent costs needed to be set out. But according to respondents, this section was dropped because ministries did not complete it when submitting the forms. Including the recurrent cost of major capital investment in planning is dependent on long-term planning and costing of the sector. According to the Public Expenditure Review of Education undertaken in 2011, this type of long-term costing is still weak. Information gathered during fieldwork suggests that it has not been developed since then. A complication in the Namibian system is that maintenance expenditure is allocated on the Ministry of Works and Transport's budget, and is entirely separated from capital expenditure decisions.	Rwanda's practices show somewhat weak integration. New and existing projects are submitted to the national investment planning unit in a project profile document that requires estimated costs for operation and maintenance. Additionally, the national-level PIC is mandated to endorse new projects for implementation under the annual budget; review each capital project put forward by the MDAs; and include in criteria for prioritisation and selection the costs of the project and financial viability (alongside its desirability and achievability). This indicates a close monitoring of the benefits and risks of large capital expenditures over the medium term, and their financial sustainability. However, it is not clear whether the recurrent cost estimates are realistic and reliable. For recurrent expenditures related to wages and salaries, the costs are more reliable and realistic (a finding reiterated in the 2010 PEFA report PI-12, p.60). This is not the case for maintenance costs.	South Africa's practices show somewhat strong integration. Historically, budget submissions were weak in estimating the recurrent cost of capital projects, especially as these often fell outside the medium-term budget period. More recently, the National Treasury requires all capital project proposals to include a financial cost analysis that estimates the lifecycle cost of the proposed asset, including maintenance and operational costs. The net cash flow must be presented (taking into account revenues the asset may generate, if any) to determine the demand that will be placed on the recurrent budget to maintain and operate the project. Several factors mitigate against this measure, resulting in maintenance costs being available on budgets. These include the twin pressures on the budget for fiscal consolidation after the financial crisis and for expanding physical infrastructure to stimulate growth. This means that maintenance expenditure is squeezed out. Other factors include the fact that the National Treasury cannot control how the unconditional grant transfer is used, including whether maintenance expenditure is planned for and the possibility of maintenance allocations being vired for other recurrent purposes even when budgeted for. In some cases, the Department of Public Works is responsible for maintenance expenditure, which separates it from line ministry capital budget planning.

9 World Bank, 2010

Capital project-specific procedures are in place to ensure effective public investment management and value for money in capital expenditure. This includes, for example, appropriate costing and appraisal processes, and that the once-off nature of capital expenditure is recognised in budget allocations and budget management.

Botswana	Namibia	Rwanda	South Africa
Botswana's practices against this criterion show appropriate separation. Due to the dual nature of the budgeting system, there are budget processes that appropriately treat capital expenditure given its once-off and investment nature. These include the Project and Budget Review Committee, which assesses new and ongoing projects before approving them for the annual budget. In addition, while the recurrent costing exercise has been identified as an area for reform, the process for generating capital costs is clear. Additionally, large capital projects do sometimes undergo economic feasibility studies or cost-benefit analyses, but this takes place only after a project has been approved for inclusion in the NDP. No threshold is specified for the definition of a "large" project.	**Namibia's practices show appropriate separation.** Budget processes for development expenditure are separate and driven by proposals for, the cost of and allocations to individual projects. Rigorous feasibility assessment processes are in place. This includes assessing the cost of projects, specifically for the type of expenditure that is the focus of this study. The project cycle is fully developed and captured in a set of guidelines administered by the works ministry, and includes a feasibility study phase for all projects. The guidelines are largely adhered to. As development budget allocations are made by project, appropriate measures are in place to remove capital expenditure from baselines once a project is completed.	**Rwanda's practices show appropriate separation.** There is a strong level of scrutiny and prioritisation of potential capital projects before they are included in the annual budget. Through the PIC, every project is assessed according to its desirability, achievability and viability against a clear set of criteria. In addition, any project that requires a loan, involvement of a public-private partnership or costs more than $1 million must go through an appraisal using cost-benefit and cost-effectiveness analyses before being sent to the MINECOFIN for financing. As part of the first budget call circular, MDAs are required to submit project profile documents (for all new projects) and ongoing project assessment forms (for ongoing projects) for the PIC's consideration. Ongoing projects are resubmitted for retention and are removed from MDA allocations when closing.	**South Africa's practices show appropriate separation.** The capital planning guidelines are issued every year together with the medium-term framework guidelines. They provide the framework for planning and appraising capital projects appropriately. The information from these processes is submitted to the National Treasury together with any capital budget proposals for inclusion in the budget process. Departments are expected to finance appraisal costs out of their ongoing recurrent baselines. As capital expenditure is appropriated separately, the chart of accounts allows for actual expenditure by project to be recorded. Because capital project monitoring mechanisms are in place for both national and provincial capital expenditure, the system allows for projects to be identified by baselines and expenditure, and for the removal of allocations on completion. Finally, a specific unit of the National Treasury assesses the quality of the proposals for mega projects, including assessing feasibility and appraisals.

Capital budgets are spent on time and are credible – capital expenditure choices effectively take into account the spending capacity of sectors (determined by recurrent expenditure) and are based on sound costing of projects.

Botswana	Namibia	Rwanda	South Africa
Botswana's practices against this criterion show somewhat weak integration. Control of capital expenditure seems slightly sporadic, with large deviations (overspending and under-spending) between estimates and actual expenditure. However, this is related to the ability and incentives to estimate accurate recurrent costs, and prevent large changes in the scope of development projects. Under-implementation of the development budget was identified as a key concern for Botswana in the 2010 Public Expenditure Review.	Namibia's practices show strong integration. The capital budget is highly credible, suggesting that the planning for capital expenditure projects is realistic about implementation and/or that the mechanisms to reallocate unused funding during the spending year in the development budget are effective. Cost overruns do not occur often on development projects once feasibility studies have been done because of the rigour required. But cost overruns can occur on "top-down" projects that are political. While delays in project design and implementation occur, open and stalled projects are not common. Delays are due to weaknesses in the project implementation cycle, including its length and the delay between the NPC agreeing to a project and the legislature allocating the money, which occurs after the start of the fiscal year. Further delays can occur once a project is approved, indicating coordination weaknesses. This includes the fact that the works ministry – responsible for capital projects – comes into play only at this point, identifying design oversights in the initial phase. Being excluded from early project approval phases means the department cannot plan its capacity appropriately, leading to bottlenecks. This may be a sign of overseparation and coordination failure.	Rwanda's practices show somewhat strong integration. An analysis of aggregate capital expenditure outturn with budget allocations from published budget execution reports for three consecutive financial years (2012/13, 2013/14 and 2014/15) posted on the ministry's website shows consistent underperformance on capital expenditure at 94 percent of budget over the three years. Specifically, domestically financed capital expenditure averaged 90 percent realisation against budget. Underperformance on domestically financed capital expenditure can be attributed, as the budget execution reports indicate, to technical and administrative bottlenecks. Anecdotal evidence from the MINECOFIN and agencies indicates that there are sometimes delays in completing projects due to availability of funds, agency capacity, procurement, staffing and external factors from working with some development partners. The introduction of the Single Project Implementation Units in MDAs has improved project design and implementation because responsibilities and lines of communication with development partners and implementers are much clearer.	South Africa's practices show somewhat strong integration. The South African system relies heavily on the monitoring of capital project implementation as an early-warning system to ensure that projects are completed on time. Monitoring of provincial-level capital project implementation is undertaken through the infrastructure reporting model of the Intergovernmental Relations division, which alerts the provincial treasury and political leadership to slow project implementation. The Budget Office (responsible for national budget management) similarly maintains a database on national departments' capital expenditure. The National Treasury reported that capital budget realisation has improved to above 90 percent of budget, and that significant delays occur mostly on mega projects, which are often implemented through state-owned enterprises.