Treasury Single Account: An Essential Tool for Government Cash Management

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TECHNICAL NOTES AND MANUALS

Treasury Single Account: An Essential Tool for Government Cash Management

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This technical note and manual (TNM) addresses the following main issues:

- Discusses the problems of fragmented government banking arrangements and how a treasury single account (TSA) could address them.
- Explains the concept of a TSA and describes its features.
- Discusses the design issues that need to be considered in setting up a TSA system.
- Discusses the preconditions and key sequencing and implementation issues that need to be addressed in establishing a TSA.

Introduction¹

Government banking arrangements are an important factor in managing and controlling government's cash resources. They are critical for ensuring that (i) all tax and non-tax revenues are collected and payments are made correctly in a timely manner; and (ii) government cash balances are optimally managed to reduce borrowing costs (or to maximize returns on surplus cash). This is achieved by establishing a unified structure of government bank accounts via a treasury single account (TSA) system.

A TSA is a prerequisite for modern cash management and is an effective tool for the ministry of finance/treasury to establish oversight and centralized control over government's cash resources. It provides a number of other benefits and thereby enhances the overall effectiveness of a public financial management (PFM) system. The establishment of a TSA should, therefore, receive priority in any PFM reform agenda.

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¹This TNM is based on the IMF working paper "Treasury Single Account: Concept, Design and Implementation Issues," 2010, 10/143 (http://www.imf.org/external/pubs/cat/longres.cfm?sk=23927.0). It has benefited from review and comments by M. Cangiano, M. Lazare, colleagues from FAD PFM divisions, and I. Storkey and M. Williams (both FAD consultants).

Chapter I of this TNM discusses the importance of a TSA in PFM systems and describes its main features. Chapter II discusses the key design issues and preconditions that need to be addressed for setting up a TSA system, including a description of alternative TSA structures and transaction processing systems depending on institutional arrangements. Finally, Chapter III provides guidance on developing a strategy and lists the key issues to be addressed and steps to be followed while implementing a TSA.

I. Treasury Single Account (TSA): What it is and Why it is so Important

A. Importance of TSA in Public Financial Management Systems

If a country has a fragmented system for handling government receipts and payments through the banking system, it is a critical PFM weakness that needs to be addressed. A country with fragmented government banking arrangements pays for its institutional deficiencies in multiple ways. First, idle cash balances in bank accounts often fail to earn market-related remuneration. Second, the government, being unaware of these resources, incurs unnecessary borrowing costs on raising funds to cover a perceived cash shortage. Third, idle government cash balances in the commercial banking sector are not idle for the banks themselves, and can be used to extend credit. Draining this extra liquidity through open market operations also imposes costs on the central bank.²

A TSA system helps consolidate government cash balances, gives the ministry of finance/treasury oversight of all government cash flows, and brings improvements in budget control and monitoring. A TSA enables regular and effective monitoring of government cash resources by providing complete and timely information. A TSA also facilitates better fiscal, debt management, and monetary policy coordination as well as better reconciliation of fiscal and banking data, which in turn improves the quality of fiscal information. Finally, the establishment of a TSA significantly reduces the government debt servicing costs, lowers liquidity reserve needs, and helps maximize the return on investments of surplus cash (see IMF Working Paper WP/10/143 for a detailed description of benefits of a TSA system).

B. What is a TSA?

A TSA can be defined as a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources. It separates transaction-level control from overall cash management. In other words, a TSA is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and gets a consolidated view of its cash position at the end of each day. This banking

²It can be argued that this is a second order effect if the government has issued debt to offset its extra borrowing (as the debt will do the draining).

arrangement for government transactions is based on the principle of fungibility of all cash irrespective of its end use. While it is necessary to distinguish individual cash transactions (e.g., a typical revenue and/or expenditure transaction of a government unit) for control and reporting purposes, these objectives are achieved through the accounting system and not by holding and/or depositing cash in transaction-specific individual bank accounts. This enables the ministry of finance/treasury to delink management of cash from control at a transaction level.

An effective TSA system is founded on three key principles:

- The government banking arrangement should be *unified*, to enable ministry of finance/ treasury oversight of government cash flows in and out of these bank accounts and allow complete *fungibility of all cash resources*, including on a real-time basis if electronic banking is in place. Although a TSA structure can contain ledger sub-accounts in a single banking institution (not necessarily a central bank), and can accommodate external zero-balance accounts (ZBAs) in a number of commercial banks,³ these separate accounts should be integrated with a top account (called the TSA main account) usually at the central bank for netting off their balances (usually at the end of each day) to get the consolidated cash position.⁴
- No other government agency should operate bank accounts outside the *oversight of the treasury*. Institutional structures and transaction processing arrangements determine how a TSA is accessed and operated (see Section II). The treasury, as the chief financial agent of the government, should manage the government's cash (and debt) positions to ensure that sufficient funds are available to meet financial obligations, idle cash is efficiently invested, and debt is optimally issued according to the appropriate statutes. In some cases, debt management including issuance of debt is done by a Debt Management Office (DMO).
- The TSA should have *comprehensive coverage*, i.e., it should ideally include cash balances of all government entities, both budgetary and extrabudgetary, to ensure full consolidation of government's cash resources (see Section II for TSA coverage).

³ZBAs are transactional accounts (usually in commercial banks) operating on a zero-balance basis, i.e., end-of-the-day cash balances in these accounts are swept back into the TSA main account periodically (preferably daily). They can be used for collection of government revenues or for disbursements (in which case the concerned bank honors payments of the respective agency and is reimbursed by the TSA overnight. See IMF Working Paper 10/143 for a description of the various types of bank accounts, including the ZBAs.

⁴In some countries, government balances are consolidated outside the central bank, in a government-owned commercial bank. This model (i) potentially weakens the ministry of finance's policy leverage over the management of government cash flows unless there is a clear framework agreement giving the ministry of finance unambiguous control over all government balances backed by an information flow; and (ii) exposes the government to greater credit risk, including when the government underwrites the respective commercial bank. It also poses additional challenges for liquidity management by the central bank due to an extra layer of coordination and information sharing.

II. Design Issues and Preconditions for Setting up a TSA

A. TSA Design Issues

At least four key issues need to be addressed in designing a TSA system: (i) coverage of the TSA; (ii) government bank accounts structure; (iii) transaction processing arrangements and associated cash flows; and (iv) roles of the central and commercial banks in managing the TSA and provision of banking services.

Coverage of the TSA

The TSA coverage should be comprehensive by including all government-funded entities, including the autonomous and statutory government bodies as well as extrabudgetary funds (EBFs) and special accounts. This is to ensure that the TSA covers, as far as possible, all relevant cash resources of the government.⁵ All cash flows related to government revenue, expenditure, donor financing, debt issuance and amortization (including those associated with external debt) should be fully integrated into the TSA system. Including an EBF within the TSA may be difficult to achieve in some cases where it has a separate legal status or has a public standing (e.g., health funds). However, a balance needs to be struck between such EBF's legitimate claim to operational autonomy on the one hand and the potential costs/risks arising from fragmented management of public funds on the other.⁶

The donors should be encouraged to integrate their funds with the TSA⁷ or, as a minimum, to route final payments through the TSA. The latter arrangement enables the government to account for and report on donor-funded transactions passing through the TSA before payments are made to suppliers/beneficiaries from the donor bank accounts.⁸

Inclusion of social security funds and other trust funds in the TSA could be considered, provided that the accounting system is well developed and adequate safeguards exist to prevent the abuse of trust fund resources. It has become international good prac-

⁵Government here means central government unless a decision is taken to have a single TSA covering both the central and sub-national governments. One TSA for both central and sub-national governments (and even local governments) could be set up, but it would require a well developed accounting system and adequate checks and balances to prevent abuse. It also potentially complicates cash-flow forecasting.

⁶One possible arrangement is where the treasury has access to the EBF's cash on an arms-length basis; the treasury could even pay interest on the cash it borrows if that is necessary to discharge the EBF's fiduciary obligations. Under any arrangement, however, the EBF must be able to notify the treasury in advance of its liquidity requirements.

⁷It is still quite common in low-income countries that the donors and external loan providers, citing fiduciary concerns, require the government to manage their funds through separate bank accounts (whether in commercial banks or the central bank) and not through the treasury account (or TSA).

⁸To implement such an arrangement, there would be a need for a framework agreement covering the respective donors, government, central bank (which usually manages the TSA), and the respective commercial banks (managing donors' bank accounts). Such an agreement should specify the procedure, including how the donor flows and payment transactions are to be handled, including their timing.

tice to include as many government-managed trust funds within the TSA as legally possible. ⁹ To achieve this, the government accounting system should be fully reliable and capable of accurately distinguishing trust assets in the ledger accounts. As the resources of these trust funds are managed by the government only as a trustee, it is also necessary that the government does not use their cash reserves to finance its budget deficits by overlooking the respective trust funds' short-term liquidity needs, long-term liabilities, and statutory obligations (e.g., to make pension payments). ¹⁰ In practice, the trusts should notify the treasury of their future cash outflows.

Unless a public corporation is discharging a government function, it should not be included in the TSA. Public corporations¹¹ usually provide market-based goods and services and including them in the TSA could hamper their autonomy to implement commercially oriented strategies. However, if a public corporation is discharging a government function, it should be designated as a government unit (in line with the definition in the *GFSM* 2001) and its activities and resources should be integrated with the budget and TSA, respectively.¹²

Bank accounts structure

The government bank accounts structure under a TSA system could be either centralized or distributed, or it could have features of both.

- Centralized bank accounts structure. In a fully centralized structure, the TSA is composed of a single bank account—with or without sub-accounts—usually at the central bank. This is operated either by a centralized authority (e. g., a centralized treasury with or without regional units), or by individual line agencies/spending units (see the discussion below on transaction processing arrangements). In either case, all transactions passing through this single account are tracked, accounted for, and managed through a well developed accounting system.
- **Distributed bank accounts structure.** Under a distributed bank accounts structure (e.g., Sweden), there are several independent bank accounts (generally ZBAs opened with commercial banks) ¹³ operated by line agencies/spending units for their own trans-

⁹In some countries, earmarked trust funds have led to a complete fragmentation in the management of cash.

¹⁰A distinction should be made between (i) contributory schemes/programs (requiring the payment of contributions by beneficiaries or other parties on their behalf to secure entitlement to certain benefits) which distribute benefits in the same way as other transfer programs (and should be part of the TSA); and (ii) pension funds which invest past contributions in long-term financial instruments (and should be protected from short-term cash pressures, especially in low-income countries with limited access to market financing).

¹¹As defined under the IMF GFSM 2001.

¹²There are instances (e.g., in some transition countries) of entities legally defined as public corporations (or autonomous institutions) but essentially engaging in government activities largely funded through budgetary transfers. In many Latin American countries, autonomous institutions usually perform government functions (with the exception of some public enterprises) and receive budgetary transfers. Such practices blur the boundary between the government sector and the broader public sector.

¹³The bank accounts must be authorized by the ministry of finance/treasury.

- actions, with positive and negative balances in these accounts netted into the TSA main account. ¹⁴ Money is transferred (usually at the beginning or end of the day) to these accounts as approved payments are made, and the central bank, which manages the TSA, provides the consolidated cash balance position at the end of each day.
- Bank accounts structure with both centralized and distributed features. While the
 fully centralized and fully distributed structures are the two ends of the possible continuum of bank account structures, there could be several combinations of the two. In
 all these arrangements, it is important that any balances left with the banking system are
 swept overnight back into the TSA.

Transaction processing arrangements and associated cash flows

There are different options as to how a TSA interacts with government transaction processing systems for revenue collection and payment disbursement. A transaction processing system, *inter alia*, is based on the distribution of responsibilities for budget execution, accounting control, and administration of the revenue collection and payment systems. In some countries, all expenditure transactions are approved centrally in the ministry of finance/treasury and paid from the TSA. Alternatively, individual spending units/agencies may be responsible for payments and they may have transaction accounts in the banking system for this purpose. Several countries operate a hybrid system under which major receipts and payments flow directly through the TSA, but smaller transactions rely entirely on the commercial banking system. In these arrangements, however, the use of cash is minimized if any balances left with the banking system are swept overnight back into the TSA. It is then for the government cash managers to decide how to manage any net balance, including, for example, investing any temporary surplus with the banking system.

A centralized transaction processing system would imply a concentration of authority at the treasury (or a centralized unit) to process cash transactions and operate the TSA (see Figure I). In this case, the central unit (supplemented, if necessary, by a network of regional units) provides payment services to the spending units and has the exclusive authority to operate the TSA, including the regional-level transaction accounts. The spending units submit their payment requests to the central unit. There could be separate sub-accounts for each regional treasury unit and/or individual spending units. ¹⁶ Such a transaction processing model could be associated with either the centralized (e.g., Brazil and France) or the distributed bank accounts structure (e.g., the UK has a distributed structure with ZBAs, although

¹⁴The interbank clearing and settlement system is generally used to sweep balances from these linked accounts to the TSA main account at the end of each day.

¹⁵These transaction accounts could be either agency-specific sub-accounts of the TSA main account (if a centralized bank accounts structure is in place) or independent accounts with central and/or commercial banks operated on zero-balance basis (if a distributed bank accounts structure is in place).

¹⁶For example, in the case of France, the transaction accounts (*comptes d'opérations*) of the treasury regional offices are only sub-accounts, and all payments to suppliers, beneficiaries, and wage earners are processed through the TSA main account.

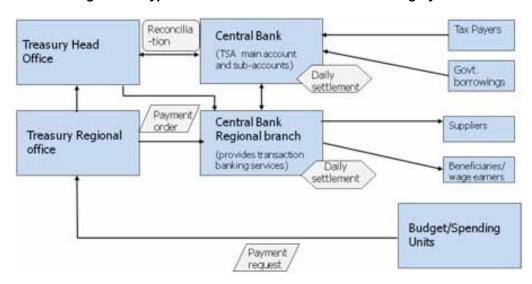


Figure I. A Typical Centralized Transaction Processing System

there is no central approval of payments; however, there is a centrally negotiated contract on which most spending units piggy back).

A decentralized transaction processing system would imply that each spending unit processes its own transactions and directly operates the respective bank account under the TSA system (see Figure II). If necessary, a cash disbursement ceiling for each spending unit can be enforced against a sub/ledger account or transaction account within the TSA, although that would be more straightforward with an Integrated Financial Management Information System (IFMIS). For cash management purposes, positive and negative balances in these sub/ledger accounts and transaction accounts are netted into the TSA main account—the top account in a hierarchical structure. This is a model of centralized cash control, but decentralized responsibility for commitments, payments, and accounting. Such a transaction processing model could be associated with either the centralized (e.g., India, where a single bank account at the central bank is supplemented by subsidiary ledger accounts to record and control payments attributable to individual line ministries) or the distributed bank accounts structure (e.g., Sweden, where each decentralized budget institution has one or more transaction accounts at one or more banks).

Efficient and reliable communication networks and an interbank clearing/settlement system are necessary to have a TSA system with both the distributed bank accounts structure and decentralized transaction processing. This would allow for netting of balances of transaction accounts (operated by spending units) with the TSA main account at the central bank. If a commercial bank has several transaction accounts (under a central contract), all the netting is initially done within the bank so that there is one overall net transaction with the TSA at the end of the day. Poor banking and technological infrastructure in some develop-

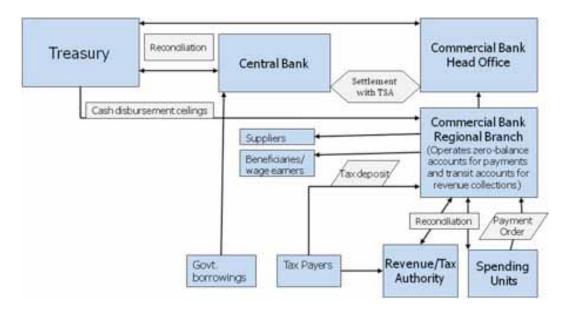


Figure II. A Typical Decentralized Transaction Processing System

ing countries and LICs is sometimes an obstacle to combining consolidation of cash balances with decentralization of payment processing. A typical development path could involve centralizing transaction processing before subsequently decentralizing it.

The introduction of electronic transaction processing (e.g., IFMIS) and payment systems facilitates the establishment of a TSA. Modern payments processes rely increasingly on electronic transactions, centralizing receipts and payments through a limited number of agents, and processing government transactions with a minimum of intermediate handling steps. This avoids unnecessary use of cash, thus reducing operational risk.

Provision of retail banking services

The design of a TSA system should reflect the respective roles of the central bank and commercial banks in so far as retail banking services are concerned. A key question is whether transaction banking for all government receipts and payments is to be done through the commercial banks, or some transaction banking will be done directly through the central bank. In both cases, however, the TSA main account should be held at the central bank. ¹⁷

Usually the central bank, while maintaining the TSA, may not necessarily maintain bank accounts for agency-specific transactions, particularly in countries with an advanced commercial banking network. In these instances, it is regarded as inappropriate for

¹⁷As the central bank acts as the fiscal agent of the government, the custody of the TSA in most countries is with the central bank, although in theory, the TSA main account may also be held at a commercial bank. In fact, there is no realistic alternative for countries without a well developed commercial banking system.

the central bank to undertake the government's retail banking transactions, particularly as the government is usually its only direct customer. The central bank is unlikely to see itself as a continuing supplier of volume transaction services, because it cannot compete with the larger players in the market in terms of volumes of business and economies of scale. While it would not withdraw services from existing customers, it may be unlikely to compete for any business that is offered in a competitive tendering exercise. As a result, transaction banking services could progressively move to commercial banks, leaving only the low-volume, high-level government accounts within the TSA structure at the central bank.

A related issue is the management of banking system liquidity, including government revenue collection cash float with the commercial banks. Fluctuations in government deposits are often a dominant and volatile factor affecting overall liquidity of the money market. In most countries, commercial banks are used for revenue collection purposes on a remuneration basis. International good practice is to have the banks transfer collected revenues to the TSA main account on the same day (eliminating one of the sources of float). In some countries, banks providing revenue remittance services are remunerated by allowing them an interest-free float for a few days. This remuneration system is not transparent and does not clearly indicate the cost of revenue collection services provided by banks.

Similar issues arise in the case of 'seed funds', where the treasury advances cash to the banks to ensure that they have sufficient liquidity to finance payments. Where it is necessary to provide intra-day liquidity, the balance should be swept back into the TSA at the end of the day. If that is not possible, the seed fund should be properly remunerated.

B. Accounting and Reporting Systems for TSA Operation

The government accounting system should be designed to record all transactions and capture relevant information independently of the cash flows in specific bank accounts. In other words, different types of cash transactions (whether receipt or disbursement of cash) passing through the same bank account may require different accounting treatments and need to be distinctively recorded through a system of linked ledger accounts to track and control annual appropriations and monthly/quarterly allotments issued by the ministry of finance. There may be problems, in practice, in achieving this result. In many countries with manual accounting systems, a comprehensive treasury ledger system does not exist and a significant part of the information required for budgetary and financial accounting (e.g., information specific to spending agencies, budget lines, etc.) continues to be derived from the government's bank accounts structure. As bank accounts are closed for establishing a TSA, some information that is available from the banking system is likely to be lost. If such information

¹⁸In countries with fragmented government banking arrangements, it is not uncommon to find separate bank accounts operated by spending units for specific types of expenditures (e.g., for salary payments, capital expenditure payments, etc.). Under a TSA system, even if the transaction processing is decentralized, there is no need for expenditure-specific bank accounts and the underlying accounting system should be able to track and report actual expenditure against authorized budget appropriation and/or in-year allotments.

is relevant for budget management purposes, it should be captured through the chart of accounts, which may require modification. This work should also be completed during the design phase of the IFMIS. An IFMIS usually comes with an inbuilt general ledger (*GL*) module which typically has layers of accounts for handling all types of treasury operations related to receipts, payments, financing, and surplus cash placement.¹⁹

The TSA may include multiple sub-accounts (or ledger accounts), e.g., to maintain the distinct accounting identity of line ministries, agencies, and tax departments. This distinction between sub-accounts (or ledger accounts) and actual bank accounts is important. The authority for a spending unit to spend is not represented by cash availability. At any one time, the aggregate permissions to spend (or spending authority issued to all spending units) may exceed the consolidated cash balance shown against the TSA main account. This is not a problem so long as cash is available when payments actually materialize.

The implementation of a TSA may require a redistribution of accounting roles and responsibilities between the treasury, line ministries, and lower level spending units. Depending on the TSA structure, the treasury or line ministries/agencies, or both, would maintain the initial accounting records (e.g., cash books) and have bank reconciliation responsibilities. As the authorization of commitments is likely to remain with the individual spending units even under a centralized payment set-up, there is a need to ensure that the commitment control and payment systems are integrated to avoid the risk of payment arrears when commitments materialize. This issue should be addressed while configuring the IFMIS.

Accounting data on revenue and expenditure maintained by the treasury/line agencies should be fully reconciled with banking transaction data.²⁰ A TSA facilitates reconciliation between the government accounting data and cash flow statements from the central bank and commercial banks. There should be reconciliation of parallel but related streams of transaction data. First, at the line agency/spending unit level, payment instructions or checks issued should be reconciled with those paid by the banks; second, at the treasury, receipts from banks should be reconciled with the payments made by taxpayers,²¹ and cash balances in the banks netted off against transactions by line agencies/spending units (see Box 1). If adequate

¹⁹The GL module of an IFMIS, therefore, should have the following functionalities: (i) recording of payments and all transactions with cash (transfers among accounts, transfers to deposit accounts and other investment actions, transfers to the TSA main account in the central bank, etc.); (ii) continuous tracking of cash in bank accounts; (iii) transferring cash to bank accounts outside the TSA system (e.g., petty cash, salaries, pensions, etc.); (iv) reconciliation of daily postings in the general ledger and associated subsidiary ledgers with the cash movements in the TSA, including daily and monthly reconciliation of transaction accounts (such as ZBAs) of line agencies; and (v) preparing summary statements of transactions for reporting and monitoring purposes.

²⁰Bank reconciliation is an important element of managing and accounting for government transactions through the banking system. The benefit of reconciling the bank statement is ensuring that the amount of cash reported by the treasury (from its own books) is consistent with the amount of cash shown in the bank's records. Fiscal transparency also requires routine (normally on a monthly basis) reconciliation of bank statements with government accounting data (*Manual on Fiscal Transparency*, p. 55, 2007, IMF).

²¹Each day, all tax revenue-collecting banks should submit to the tax administration and the treasury the bank account statements to be used for reconciliation against taxpayer records and the treasury general ledger.

communication infrastructure exists, the treasury should be electronically linked with the central bank and commercial banks to enable the electronic transfer of payment instructions, the electronic receipt of bank statements, and the exchange of information for facilitating automatic bank reconciliation.

C. Preconditions for Setting Up a TSA

There is a need to address some important issues upfront before key decisions are taken on design options and the strategy to establish a TSA. Unless these issues are addressed, the TSA implementation is unlikely to be successful, as the experience of many countries demonstrates. Successful implementation of a TSA also requires sound treasury systems and processes. Therefore, TSA and treasury reforms should be viewed as one integrated package.

- A complete inventory of existing bank accounts. As a key precondition, the government should have full information about the bank accounts opened/operated by various agencies under its control. In some countries, an unknown number of government bank accounts are opened by line ministries/agencies, sometimes outside the treasury's control. It may, therefore, be necessary to conduct a census of the bank accounts of all government agencies, asking each agency to provide information on the number and type of accounts held at commercial banks and the amounts deposited in them and explain the reasons for holding them. Even this simple task may prove difficult to achieve in the face of resistance from government agencies and their respective bankers. Following the census, a complete inventory of government accounts should be prepared (including their nature, type, and cash balances).
- Political support for reform of government banking arrangements. Establishing a TSA may require hard decisions, such as closing the existing bank accounts of spending units (outside treasury control), that can provoke powerful opposition. For success, a TSA reform must be explicitly and strongly supported by the highest levels of government. Cabinet decisions to initiate and reinforce the reform are helpful.
- Banking network and technology. The technological feasibility and capacity of the
 banking system to participate in the operation of a TSA, and to report on TSA transactions, should be established.²⁴ This includes the existence of an interbank settlement
 system, a small payments clearing system, a Real Time Gross Settlements System (RTGS)
 at the central bank for high value transactions, and the connection of major commercial

²²Unknown or hidden bank accounts pose particular threats to the overall objectives of the TSA concept and its associated benefits.

²³The banks, in order to try to stop the census and anticipating that the accounts will be closed afterwards, argue that the existence of banking-secrecy norms prevents them from providing this information to the treasury, and some "autonomous" public agencies tend to argue that they are not obliged to provide such information.

²⁴In fact, a decision on TSA could trigger the acquisition of necessary technology by the banking system as the banking services will be remuneration based.

Box 1. Bank Reconciliation Procedure

- **Step1 Check previous Bank Reconciliation Statement.** Confirm that outstanding items and errors included in the last Bank Reconciliation Statement now appear on the bank statement for the current period. Any items still outstanding from the previous reconciliation and carried forward to the current Bank Reconciliation Statement should be explained and follow-up action noted.
- Step 2 Compare the ledger and the bank statement. Compare the ledger entries for receipts with the deposit transactions on the bank statement, and the ledger entries for payments with the payment transactions on the bank statement. Entries that appear in both the cash-at-bank ledger account and the bank statement should be marked off. The remaining items, where the ledger and bank statement vary, may be due to: (i) outstanding or late deposits that appear in the cash-at-bank ledger account and not on the bank statement; (ii) checks not presented or electronic funds transfers (EFT) that appear in the cash-at-bank ledger account and not on the bank statement; (iii) items appearing only on the bank statement that do not appear in the cash-at-bank ledger account, for example fees, charges and electronic deposits; or (iv) errors made in entering items in the cash-at-bank ledger account and/or errors made by the bank (providing the transaction banking services) on the bank statement.
- **Step 3 Prepare journals for entries in the ledger.** Prepare journals for those transactions appearing only on the bank statement that are confirmed as being legitimate transactions. When these items have been recorded in the cash-at-bank ledger account they can be marked off, since they are now common to both sets of records.
- **Step 4 Prepare adjusting journals for any corrections to the ledger.** Prepare adjusting journals for any errors identified in the cash-at-bank account. When these errors have been adjusted in the cash-at-bank ledger account, the entries should match the bank statement transactions and they can also be marked off.
- **Step 5 Advise the bank of any errors in the bank statement.** The bank (providing the transaction banking services) should be notified of any errors appearing on the bank statement. These items will appear on the Bank Reconciliation Statement. The errors should be corrected by the bank and should be recorded on the subsequent bank statement.
- Step 6 Prepare the new Bank Reconciliation Statement. The remaining differences that are included on the Bank Reconciliation Statement are those items that appear in the cash-at-bank ledger but not on the bank statement, i.e., outstanding deposits and unpresented checks or EFTs. Errors made on the bank statement and any items still outstanding from the last Bank Reconciliation Statement also need to be included on the new Bank Reconciliation Statement.
 - banks to the RTGS. This requirement is especially important in the case of a distributed government bank accounts structure.
- **Review of legal/regulatory framework.** Sometimes the existing legal and regulatory frameworks may allow spending units to have independent bank accounts. These need

to be amended and good international practice is to vest the ministry of finance/treasury with the sole legal authority for opening government bank accounts. To make the TSA a stable feature of treasury management, it is good practice to include it (in related laws such as a treasury law or an overarching PFM law) as a fundamental feature of the respective country's PFM system.

III. Key Sequencing and Implementation Issues

A. Implementation Strategy

Once the preconditions are addressed, a clear strategy and action plan for TSA implementation should be developed. The strategy should reflect the decisions on key design issues (see Section II.A), in particular: (i) identifying the parastatals/autonomous entities and EBFs under TSA coverage; (ii) specifying the bank accounts structure and the associated transaction processing systems—this decision is also linked to the IFMIS architecture (if an IFMIS is under implementation or is being planned); (iii) specifying the respective roles of the central bank and commercial banks, including for transaction banking services; and (iv) identifying the changes necessary to the accounting system, including accounting regulations/instructions and roles and responsibilities of different stakeholders.

A steering committee and a complementary technical committee could usefully oversee/coordinate TSA implementation and provide technical support as necessary. The steering committee/task force should be led by the ministry of finance/treasury and be composed of high-level representatives of the central bank, revenue agencies, and a few larger line ministries. This committee would be involved in all key decisions. The technical committee, on the other hand, would do the necessary technical work, including preparation of the detailed functional and procedural document for TSA-related business processes. It should also be led by the treasury and have members from the key line ministries/spending units, revenue agencies, central bank, IFMIS project team, and the supreme audit body.

While the objective should be to establish a full TSA, the implementation phasing needs to be calibrated taking account of the technological requirements and required changes to business processes. The introduction of a TSA should not be viewed as an independent activity and should be integrated with other treasury reforms, including changes to budget execution processes. The use of pilots in selected ministries/agencies could also be considered. If an IFMIS is planned or under implementation, some measures towards a TSA have to be implemented in tandem with the IFMIS.²⁵ For example, a TSA system with cen-

²⁵The advantages of working with an IFMIS include the possibility of creating any number of sub-ledger accounts that are needed for financial management purposes. The IFMIS should also provide electronic interfaces between the treasury and line agencies on the one hand and the banking system (including commercial banks providing transaction banking services) on the other, so as to reduce transaction costs for payment processing and facilitate electronic payments and revenue transmittals.

tralized payment system processing can be progressively introduced as the IFMIS is rolled out (if there is adequate connectivity between the line agencies and the treasury).

The ministry of finance/treasury should negotiate a service level agreement (SLA) with the central bank for the establishment and maintenance of the TSA (see Box 2). The agreement should cover: the timely provision of transaction data in a specified format and reports on cash balances by the central bank and its branches (if they provide retail banking services); transaction validation requirements; the bank reconciliation procedure; fees and charges for the banking services; and monitoring mechanisms.

If commercial banks are to provide transaction banking services under the TSA system, their remuneration should be negotiated competitively (instead of remunerating them through a free cash float). The relationship between these commercial banks and the central bank should be clearly defined. Fees/charges to be paid to commercial banks for their retail banking services, penalties for nonperformance, reporting arrangement, bank reconciliation procedure, etc., should be specified in framework agreements, preferably through a competitive bidding process. These agreements should provide adequate safeguards to the government against deliberate delays in the transfer of balances from the transaction accounts to the TSA main account at the central bank.

One issue that needs to be addressed is whether separate SLAs should be signed with the central bank and commercial banks. There are arguments in favor of having just one agreement with the central bank, which in turn contracts out transaction banking services to the commercial banks on an agency basis. ²⁶ Given that the central bank has the expertise to monitor the performance of commercial banks and better assess the risk exposure of obtaining transaction services from them, an arrangement where the central bank contracts services on behalf of the treasury could be beneficial to the government, albeit it will imply higher central bank service fees. On the other hand, the government can leverage its role as the single biggest customer of the banking sector by directly obtaining banking services at very competitive rates and specifying clearly (through the procurement process) its service requirements to encourage the development of banking services and infrastructure. ²⁷ Even if the government decides to procure transaction banking services directly (and not through the central bank acting as its agent) from the market, setting common objectives for line agencies to take a consolidated approach—specifically in planning their banking services on a joint basis and

²⁶This practice is followed in India, for example.

²⁷Although the government is the biggest consumer of transaction banking services in most (if not all) countries, there may not be a single channel of communication between government, as consumer, and the banking industry, with individual line ministries/agencies operating in silos. If the government acts collectively as a single customer, its requirements are taken seriously and create enough demand in the market for individual commercial banks to invest in technology, etc. to secure government business. This was the case in New Zealand where Westpac deployed resources across the country to meet the government's requirements and developed the DeskBank system. In some Asian countries, the banks have found the government business so advantageous that they have competed to win the contract by offering negative fees (i.e., to pay to the treasury).

Box 2. Service Level Agreement between the Central Bank and the Ministry of Finance

The service level agreement (SLA) should specify the terms and conditions (including the fees) under which the central bank (i) manages the accounts and subaccounts of the treasury under the TSA system; (ii) collects revenue receipts and makes payments on its behalf (operates as the government's banker and payment agent); and (iii) performs as its fiscal agent (managing bonds and bills issuances, servicing public debt, making investments, buying and selling foreign currency) and its settlement agent. The list of issues to be included in this agreement could therefore include:

- The basis for estimating the fees for service and the circumstances that may change them. The fee should reflect the central bank costs and be charged per transaction.¹
- The basis for remunerating government balances at the central bank. It is usually
 linked to the rate at which the central bank lends to commercial banks, or to the average return of the central bank portfolio.
- Information required on real time for managing the TSA, about the flows to/from the TSA. The agreement should specify the degree of detail of the information provided. Key elements of the daily reports from the banks should include daily opening and closing balances, and a summary of receipt and payment transactions on a daily basis. An appropriate format for monthly aggregate reports should also be developed.
- The turnaround times by the central bank to execute the transactions, either as a fiscal, settlement, or payments agent.
- The management of common operational risks, including the handling of any business continuity issues (caused, e.g., by computer system failure).
- Mechanisms to review central bank's performance under the agreement and provisions for compensation in case there is a breach in the agreement.

¹ In some countries the treasury pays to the central bank a fixed monthly fee for all of its services independently of the number of transactions delivered, a practice that should be avoided.

Adapted from Williams, Mike, 2010, "Government Cash Management: its Interaction with Other Financial Policies," Technical Notes and Manuals, Fiscal Affairs Department, International Monetary Fund.

taking a consolidated approach to service management and delivery—would deliver greater efficiency and effectiveness. Treasury should lead this approach and develop a standard SLA for obtaining transaction banking services.²⁸

²⁸To enable a multi-banked solution to work effectively, some countries such as the UK use a "service integrator" to deliver what is effectively a single unified banking solution to line ministries/agencies. The service integrator combines transaction data flows from different banks to provide line ministries/agencies with a single view of their accounts and data flows, in effect ensuring that the various services required by them are brought together into a single point of delivery.

The TSA implementation strategy should include measures to develop reliable cash flow forecasts. It is very difficult to implement a TSA, especially with decentralized transaction processing, if the treasury is unable to foresee cash flows.

B. Key Implementation Steps

The implementation of a TSA would typically involve the following steps:

- The census of government bank accounts should be reviewed to identify bank accounts for closure. In particular, those bank accounts that have outlived their utility (and are not required) should be closed and their balances should be transferred to the TSA.
- Some existing cash-holding bank accounts at commercial banks could be converted to zero-balance accounts (ZBAs) for transaction banking purposes.
- The treasury/technical committee should prepare a functional and technical requirements document, including a clear identification of changes to business processes and any required amendments to the financial regulations and any other law/regulation to support the budget execution and accounting procedures under the TSA system.
- The IFMIS design should provide for the required interface between the TSA and the
 transaction processing and accounting systems, whether centralized or decentralized.
 With the introduction of electronic fund transfer (EFT) in the banking sector, it would
 be possible to move towards direct payments from the TSA main account, especially for
 large value payments to suppliers, or regular large quantity transactions (such as wages).
- An orderly and gradual transfer of cash balances from the existing commercial bank accounts (that are either to be closed or converted to ZBAs) to the TSA should be implemented, with a view to ensuring minimal disruption to banking system liquidity and monetary policy (this activity needs to be coordinated with the central bank).
- Taxes are now collected in most countries by the commercial banks and an efficient TSA system will require that the revenues collected are remitted to the TSA at the end of each business day. Banks should be able to report to the treasury the amounts collected on a daily basis, for cash management purposes. Participation of respective commercial banks will be required to introduce electronic collection of taxes. The revenue collection and remittance services should be remunerated on a fee-per-transaction basis. ²⁹ Usually these banking services are contracted by an autonomous tax agency.
- In order to procure services from the commercial banks in an efficient and cost-effective manner, the following factors, among others, should be taken into consideration during the procurement process: (i) designing the bid selection criteria to avoid contracting the services to only one bank, in circumstances where this could generate systemic risks, given that the treasury is likely to be the largest client of the banking system; (ii) ensuring adequate geographical coverage of the bank branches; and (iii) making sure that the

²⁹However, in many developing countries the service is still remunerated by the interest-free days that the revenues can be maintained in the bank before being deposited at the central bank. For instance, in most Latin American countries the number of days on average is 2-4 days.

- banks comply with minimum service standards and provide for effective mechanisms for enforcing these standards (e.g., penalties for deviation from standards).³⁰
- There may be a need for special arrangements—e.g., cash safes and imprests—for remotely located agencies/spending units without access to the banking network. Mobile banking options may also be considered, if available. However, the need for imprest accounts should be carefully reviewed, and as the banking sector develops, these accounts should be progressively closed.³¹
- The users of the TSA system, within the ministry of finance/treasury and line ministries/ agencies, should be trained to build their comprehensive understanding of the new banking, payment, and accounting arrangements, including under the IFMIS. A user manual on receipt and payment procedures should also be developed.
- For accounting purposes, it may be preferable for the introduction of the new banking arrangements to coincide with the beginning of the fiscal year.

A TSA regime should be supplemented by proactive cash management. This involves forward cash planning as a precondition and implies the development of a strategy for remunerating temporary cash surpluses and financing temporary cash needs. The overall objective of effective cash management is to reduce the average cash balances of the government to a minimum level (consistent with unexpected variations from reasonably accurate forecasts), so as to avoid unnecessary borrowing and to maintain stable liquidity levels as far as possible. ³² In fact, many advanced countries attempt to minimize the level of cash balances in the TSA. They set a target, typically low, for end-of-day balances, and then actively manage the balances so that they do not exceed the ceiling represented by the target, while at the same time ensuring that the TSA does not fall into overdraft.

How the ministry of finance/treasury chooses to manage cash balance targeting has implications for both monetary policy and financial market development.³³ The instruments and methods used for cash balance targeting vary widely.³⁴ For a single government interface with the market, the integration of debt and cash management functions is especially important. The needs of cash management and monetary policy normally coincide when cash

³⁰The objectives (i) and (ii) may be incompatible in some cases (i.e., one dominant commercial bank may have the best geographical spread).

³¹In several Latin American countries that have developed a TSA, there are still many imprest accounts (called 'revolving funds'), meant to be used for petty cash transactions, but their balances are not swept overnight into the TSA. Besides being inefficient, these accounts can potentially be misused.

³²For further discussion on this issue, please refer to *Modernizing Cash Management* by Ian Lienert (2009), Technical Notes and Manuals, Fiscal Affairs Department, International Monetary Fund.

³³For a fuller discussion on this issue, please refer to *Government Cash Management: its Interaction with Other Financial Policies* by Mike Williams (2010), Technical Notes and Manuals, Fiscal Affairs Department, International Monetary Fund.

³⁴For example, most countries start with a process of "rough tuning" which essentially entails the use of treasury bills (T-bills) or other short-term borrowing instruments aimed at offsetting the impact on the banking sector of net cash flows in and out of government accounts. Fine tuning relies on more active policies drawing on a wider range of instruments (*repo* is the preferred instrument) to target daily cash balance in the TSA.

balance targeting is used. Where the treasury successfully targets a stable cash balance in the TSA, there are benefits to monetary policy. In particular, the effect of the government's fiscal transactions is largely neutralized for money market and monetary policy purposes, thereby simplifying the central bank's domestic liquidity management task. In this sense, active cash balance targeting facilitates monetary policy. There can, however, be strains between cash management and monetary policy, particularly when the central bank does not have sufficient means (i.e. collateral) to mop up excess domestic liquidity through *repo* operations, whether that liquidity is generated by the ministry of finance/treasury running a deficit or by foreign currency inflows (e.g., large proceeds from mineral/oil exports). It will be difficult for many developing and low-income countries to target cash balances in the absence of a developed domestic short-term securities market, or arrangements with commercial banks to lend cash at short notice to the treasury. It is also operationally demanding. However, the development of an active cash balance targeting policy should be a long term objective, to be implemented when the necessary pre-conditions are in place.

Conclusion

Fragmented government banking arrangements hinder effective cash management. The primary objective of a TSA is to ensure effective aggregate control over government cash balances. The consolidation of cash resources through a TSA helps to avoid borrowing and paying additional interest charges to finance the expenditures of some agencies while other agencies keep idle balances in their bank accounts. Effective aggregate control of cash is also a key element in monetary, debt, and budget management.

A TSA system should embody the following principles: (i) the government banking arrangement should be unified to ensure the fungibility of the government's cash resources; (ii) no other government agency should be allowed to operate bank accounts without the oversight of the treasury; and (iii) the coverage of the TSA should be comprehensive, encompassing all government cash, both budgetary and extrabudgetary.

The design of a TSA in a particular country depends on the stage of development of the public institutions and financial management systems and the degree of maturity of its banking system, including the technology used for the interbank settlements and clearing systems. In countries with well developed PFM systems and an advanced banking network, best practice implies creating a TSA in the central bank, while a well developed accounting system records all transactions of different entities that may have transaction accounts in commercial banks on a zero-balance basis.

Issues related to consolidation of cash in a TSA for cash management purposes should not be confused with issues related to the distribution of responsibilities for accounting control and processing of receipts and payments. A TSA can operate with both centralized and decentralized transaction processing and accounting control systems.

Regardless of their degree of development, all countries should aim at establishing a TSA, provided this takes account of the preconditions identified in this note and addresses the various implementation issues. While the objective should be to establish a full TSA, the implementation phasing needs to be calibrated taking into account the technological requirements and required changes to business processes, which should be introduced in a way to fully reflect the respective country's unique circumstances. The introduction of a TSA should not be viewed as an independent activity and should be integrated with other treasury reforms, including changes to budget execution processes. If an IFMIS is planned or under implementation, several measures towards a TSA have to be implemented in tandem with the IFMIS roll out.

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