

AFP® GUIDE TO



Short-term Investment Strategies to Manage Financial Risk

Global Liquidity Guide Series

Issue 3

Underwritten by





AFP® GUIDE TO

Short-term Investment Strategies to Manage Financial Risk

Global Liquidity Guide Series

Look to the Future when Setting your Investment Policy

Although yields on short-term investments are low currently, we have to believe that interest rates will eventually rise. And when they do, treasurers will need to be prepared with the policies, processes and technology in place that can support them in making the right decisions.

No activity in treasury is without risk – a driving factor that is changing the face of the treasury management industry as we know it – and short-term investing is no different. In fact, as treasuries continue to optimize the structures of their organizations to view risks more holistically; they also need to support that structure with modern technology that is as nimble as they have to be in response to market and regulatory changes.

Technology for such forward-leaning organizations is cloud-based software-as-a-service (SaaS), enabling easy access across integrated workgroups, both internally

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“In this guide, treasurers will find a thorough treatment of all of the aspects of policies, processes and technology treasurers should consider as they continue to manage their short-term investing and minimize financial risk.”

Tracey L. Ferguson Knight, Reval

and externally and across far-reaching geographies. It is also comprehensive, integrating cash, liquidity and risk for real-time global visibility and analytics to aid treasury and finance groups in finding and understanding where cash, debt and derivative positions and exposures lie across the organization.

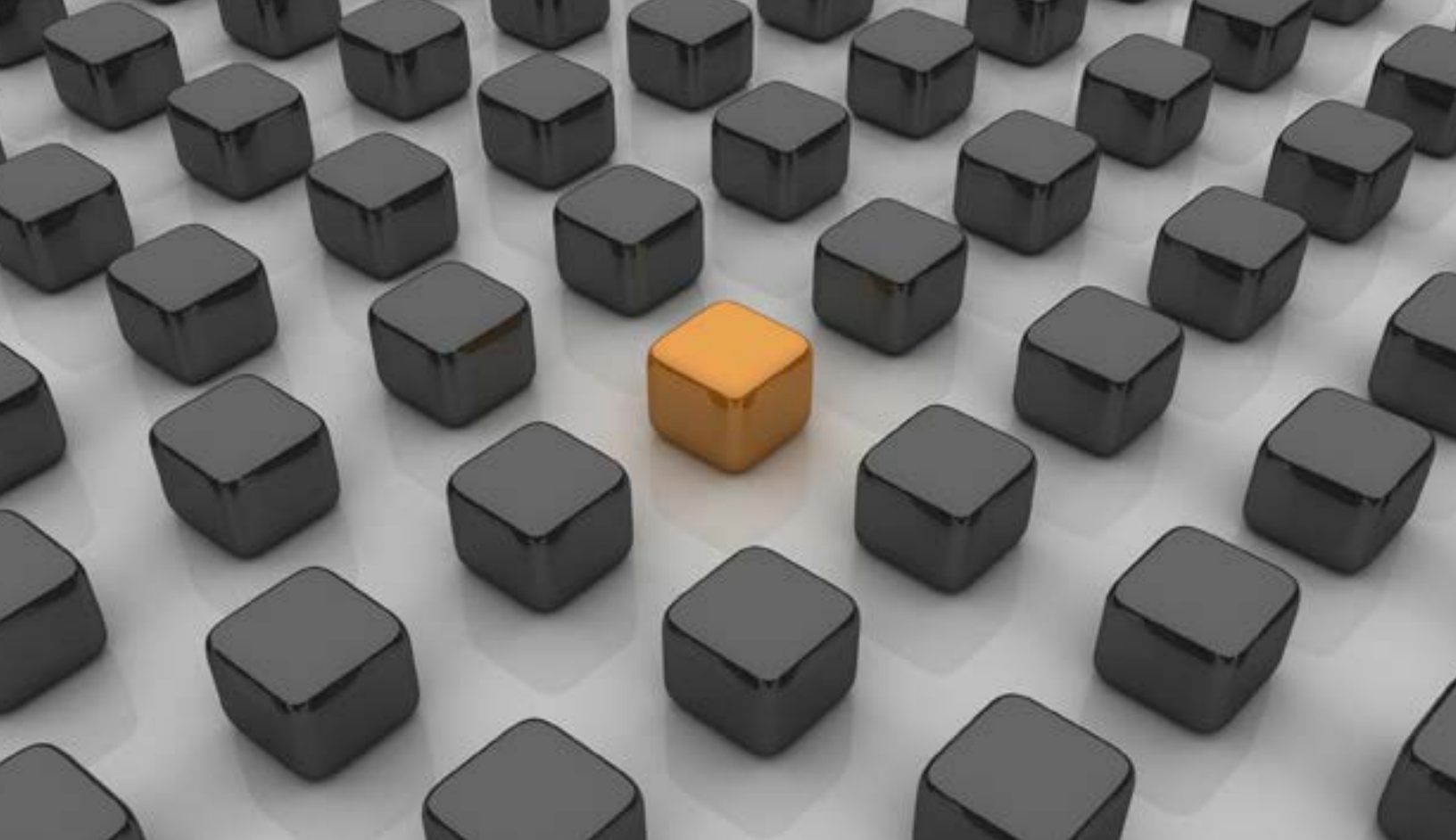
For example, when interest rates again begin to rise, companies will have to be prepared to handle the increased counterparty risks that come with commercial paper, banker's acceptances and other vehicles. Operating with the policies, processes and technology used in the current low-yield environment just won't be suitable when conditions change. Aside from direct investments, though, companies need to think of counterparty risks from bank balances as well, as many corporates have elected to keep most of their global balances with two or three banks. So, counterparty risk really is much larger than most corporates currently consider it, and the importance of having the ability to accurately evaluate, measure and report on counterparty risk will surely grow.

To be able to accurately have that global view of counterparty risk exposure, particularly given the emphasis right now on leaving balances at banks, it is imperative that that treasurers have global cash visibility – that they're able to gather balances quickly and easily from all of their accounts around the world to see their total exposure, not just those balances they currently get from the bank. We have seen corporates placing emphasis on gathering bank data electronically and using a TRM SaaS to help accomplish this without adding staff. Emphasis is also on having the ability to gather this data instantly, and having it accurate to the day. Further, an all-in-one TRM solution can not only help you gather your exposures across all different asset classes but also help integrate that with the cash forecast so that you can really get a sense of your total liquidity, which is what you are often aiming for with your investment policy.

In this guide, treasurers will find a thorough treatment of all of the aspects of policies, processes and technology treasurers should consider as they continue to manage their short-term investing and minimize financial risk.

Tracey L. Ferguson Knight, Reval Senior Solutions Consultant

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Introduction

This paper is intended to give the reader the tools to develop an investment strategy for managing global cash and the associated financial risks. In this paper, short-term is defined as any period up to one year.

There are a number of common scenarios in which an investment decision is required. These include:

- the investment of overnight surplus cash;
- the investment of general working capital;
- the investment of funds set aside for a particular purpose (e.g. to fund an acquisition or to return to shareholders); and
- the investment of funds received from a recent divestment.

At first sight, all these circumstances appear to suggest different investment strategies. The nature of the cash being invested is different, the timescales are different and the level of risk an organization might be prepared to accept may be different.

Yet it is possible, indeed desirable, to approach each investment decision with a single strategy. Having a single short-term investment policy, irrespective of the investment circumstances, will allow the treasury team responsible for investing cash to manage the investment risk in a consistent manner.

Today's strategic treasurers understand that all short-term investment decisions are fundamentally about managing risk. In every case, the cash to be invested over the short term must be placed somewhere. This may be 'idle' in the company's checking account, swept to a money market account or overnight deposit account, or invested in a range of short-term investment instruments. Whatever the decision made, the treasurer will need to have a clear understanding of the fundamental objectives of investing: maintaining principal, ensuring liquidity, and maximizing yield. The treasurer must also recognize that, just as there will be risks when choosing to invest in particular instruments, so there are risks in choosing (whether actively or passively) to keep cash wherever it happens to be.

“All short-term investment decisions are fundamentally about managing risk.”



Setting and Implementing Investment Strategies

The treasurer can work together with the CFO with, in many instances, the board's prior approval, to develop a short-term investment strategy, an investment policy and a set of operating procedures. The treasurer will be best placed to drive this process, given that the primary focus of any short-term investment strategy should be to manage risk in the context of the company's risk appetite.

The Strategy-Setting Process

The first stage will be to agree an overarching short-term investment strategy. This will reflect the organization's risk appetite and will provide the guidelines for the treasury to develop the investment policy. It is preferable that the strategy and, ideally, the policy also, is approved at board level.

The short-term investment strategy

The short-term investment strategy and policy are key parts of the organization's approach to working capital management. In terms of documentation, the short-term investment strategy need be little more than a board minute. This should simply state the degree to which the treasury should focus on each of the three investment objectives, and should reflect the wider risk appetite within the organization. The real detail will be incorporated into the investment policy and day-to-day operating procedures.

The Policy-Setting Process

Once the company has established and documented its risk appetite, the treasurer can work to develop a short-term investment policy. In terms of process, the best way to do this is for the treasurer, together with appropriate other colleagues (who might include the CFO or a treasury committee of the board), to develop a policy. The policy should then be put forward for board level approval. Again, the precise process will depend on the structure and culture of the company. Some companies require treasury policies to be formally approved by the full board; others are happy to devolve decision-making to a board-level committee.

The investment policy should seek to address the risks outlined below. Once the policy has been approved at senior level, it is usually appropriate to devolve the approval of detailed operating procedures to the CFO and the treasurer (depending on the size of the organization).

Setting Objectives

The first step in setting any investment strategy is to understand the three core objectives and the interrelationships between them. The three core objectives are to preserve the invested principal (also known as security or safety), to maintain access to the invested funds (liquidity), and to maximize the return on the invested funds (yield).

- **Security.** Successful preservation of principal results in the investor receiving the invested cash in full either on maturity or when the investor chooses to redeem the investment.
- **Liquidity.** Full liquidity means having complete access to the invested principal at all times. Some investment instruments, such as bank term deposits, results in cash being inaccessible until maturity. Other investment instruments, such as commercial paper, require the investor to sell the instrument in the secondary market to access the invested principal.
- **Yield.** The return on an investment can be provided in a number of ways. Some instruments, including bank deposits, pay interest (or a 'coupon') on maturity (or at regular intervals, in the case of longer-term instruments). Others pay a return in the form of the difference between the purchase and sale price (or the face value of an instrument held to maturity).

When investing, it is not possible to optimize all three objectives at the same time. The achievement of one requires accepting that another objective may not be met. For example, if an investor decided to prioritize the maintenance of principal as the key objective, this is likely to be by investing in high-quality, low-yielding assets. To maximize yield, an investor may have to forgo access to cash for some time, in other words lose liquidity. Alternatively, the investor may have to invest in riskier assets, putting principal at risk.

Therefore, when setting the investment strategy, the treasury practitioner will need to establish which objective(s) to prioritize in particular circumstances. Some organizations may decide to prioritize the same objective(s) for any short-term investment; others

may incorporate a process to evaluate the precise circumstances of the investment and then set the objectives accordingly.

The following examples illustrate the ways in which circumstances might affect investment objectives. (Please note these are illustrative only. Organizations in similar circumstances may decide to prioritize different objectives, although the fundamental requirement will always be the preservation of principal.)

Scenario 1

A company has implemented a pan-European cash mobilization structure for its EUR-denominated bank accounts. Cash is concentrated daily to a header bank account in London. Group entities are funded, also on a daily basis, from this bank account. The treasurer is responsible for investing surplus balances on the header account.

In these circumstances, the treasurer follows an investment strategy that prioritizes the preservation of principal (as surplus cash is needed to fund group entities) and liquidity (as group entities are funded on a daily basis).

Scenario 2

A retail company has committed to finalize an acquisition with a payment in three months. As a cash-generative business, the company has set aside the funds to pay the final installment. The treasurer needs to invest the funds until they are required to complete the acquisition.

In this case, the fundamental requirement is that the company can preserve the principal to meet the payment obligation on the due date. Given that requirement, the treasurer is prepared to compromise on liquidity to maximize yield, as the company does not need access to the cash until the due date.

These contrasting examples show how circumstances affect investment objectives. In the first scenario, it is important for the treasurer to retain access to cash to ensure the business units can be funded whenever necessary (and to avoid simultaneously borrowing and investing). In the second scenario, the treasurer has a known payment date and amount: as long as those two requirements are met, the treasurer will seek to maximize the return.

Identifying Investible Funds

Given the varying circumstances in which investment can take place, it is important that treasury practitioners can identify the appropriate conditions before an investment decision is made.

In practical terms, the treasurer will need to know the amount of cash available to be invested. This will include the location(s) of the cash and the currency(ies) in which it is denominated. Before investing, the treasurer will also need to know the period(s) over which the cash can be invested. Depending on the nature of the business, the treasurer may have a series of requirements: some cash may be needed the next day, whereas other cash may only be required at a known point in the future – at the end of the month, or on a specific date. The treasurer may also have a series of requirements for which the precise timing remains unknown: for example, the business forecast may suggest procurement payments of USD 50 million through the course of the year, but the exact payment date will depend upon the contract agreed by the procurement team.

Having an understanding of how funds will be used on redemption will also help the investment decision. For example, a treasurer may not be prepared to risk any principal when investing funds which form part of working capital. However, if the invested funds are to be returned to shareholders, it may be appropriate to target a higher yield, even at the risk of a loss of some principal.

Having a robust cash position forecasting process and an efficient global cash mobilization structure can give the treasurer visibility over the cash to be invested.

Cash position forecasting

In the first paper in this series, the AFP Guide to Strategic Global Cash Position Forecasting, we discussed the benefits of cash position forecasting and how it can provide the treasury team with information about the nature of cash surpluses, both locally and at the center. Understanding where the group's cash surpluses are, and for how long they are available, will help the treasurer to manage short-term investment.

In general terms, the longer that cash is available, the more flexibility an investor has when placing those funds. In addition, should the investor choose to sacrifice some liquidity (because the funds may not be needed by the business for a while), there may be the opportunity to generate a higher return as compensation. There may also be operational benefits as a result of having to process fewer transactions.

It is important to recognize that surplus cash can also be used to pay down debt or to fund strategic expansion, both of which may earn a better strategic return than a series of short-term investments. Funds can also be returned to shareholders, reducing the investment risk faced by treasurers.

Global cash mobilization

In the second paper, the AFP Guide to Mobilizing Global Cash, we discussed how to develop a global bank account structure which gives visibility to cash balances and has the capability to concentrate cash in a pooling structure. Mobilizing cash on a global basis via the use of notional and physical cash pools can help the group treasury operate more efficiently. These structures allow balances on various bank accounts to be aggregated, typically by currency, so that the group can more easily identify those accounts with cash surpluses and those which require funding.

Pooling cash balances has multiple benefits. It can reduce the amount of external borrowing, as surplus cash from one bank account is used to fund another. This can be structured to take place automatically, on a cross-border basis. From an investing perspective, pooling structures allow surplus cash to be concentrated to a particular location. Although there is a concentration risk in withdrawing pooled cash from local markets, the group treasurer has greater control over investment strategy. Depending on the organization's circumstances, pooling can also give the treasurer access to a wider variety of instruments when investing.

Decision-making responsibility

In each organization, the responsibility for decision-making and execution across the full range of treasury activities needs to be fully understood and

documented in treasury policies. From a short-term investment perspective, organizations range from the highly centralized, where the central treasury is responsible for decision-making and execution, to those that are fully decentralized, where operating companies determine and execute their own decisions.

In practical terms, most organizations sit somewhere between these two extremes. In global organizations, there are two key elements to determine:

- **The scope of central treasury's authority for setting investment strategy and policy.** The organization's culture will have an impact on whether the central treasury can impose policy on operating companies. Broadly speaking, there are three different approaches: central treasury determines all investment policy; central treasury determines investment policy for central treasury and any surplus funds denominated in the organization's main operating currency in all group entities; or operating companies are responsible for setting their own investment strategy and policy.

- **The extent to which operating companies are responsible for execution.** This will be influenced by the cash management structure within the organization. In most cases, practical considerations mean that operating companies will be responsible for executing at least some investment decisions. These may be made after consultation with (and possibly with the approval or authorization of) central or regional treasury. Execution responsibility should be clearly documented in the treasury procedures. This decision on responsibility will also include the authority to outsource investment management to a third party provider.

Identifying Sources of Risk

There are a number of factors, or risks, which may prevent the organization meeting its declared short-term investment objectives. The challenge for the treasurer is to first identify and then manage any risks to which the organization is exposed in attempting to achieve these objectives. In other words, the treasurer needs to identify the factors which might result in a loss of principal and/or liquidity, or a lower than expected return on investment. These risks include market risk (primarily in the form of interest rate and foreign exchange risk), counterparty risk and liquidity risk. This section examines how these risks arise.

Market risk

Market risk is the risk that changes in market prices affect the outcome of the investment. In the case of short-term investment, investors are most likely to be exposed to interest rate and foreign exchange risk.

Interest rate risk

Interest rate risk is the risk that a change in interest rates affects the value of the invested principal or the return on investment. The way interest rate risk manifests itself depends partly on the investment instrument.

Interest rate risk is generally not a significant issue for overnight and other very short periods. It increases as treasurers have the opportunity to lock in funds for longer periods. It is also relevant when treasurers have responsibility for managing investments in high inflation and high interest rate environments, such as in some emerging markets. For example, a treasurer with responsibility for managing investments in the USA and in Brazil will have faced significantly different interest rate environments in recent years. Brazil's Selic benchmark interest rate increased from 8.75% in July 2009 to 12.5% by July 2011, before being cut back to 7.25% by October 2012. In contrast, in the USA, the target for the Federal Funds Rate has been between 0% and 0.25% since December 2008.

If the investment instrument (such as certificates of deposit) has a fixed face value but pays a coupon or offers the opportunity to earn interest, a change in

the interest rate may affect the return. For example, an investor can lose a potential return if interest rates rise after the investor has committed to a particular investment instrument. Alternatively, if interest rates fall, the investor loses by not committing to a higher rate. In other words, for these instruments, investors tend to find fixed rates more attractive when rates are falling; floating rates allow companies to benefit when interest rates are rising. Whether the investor gains or loses as a result of a change in interest rate, the invested principal will remain the same.

Some instruments, such as bonds and some governments' treasury bills, are issued at a discount to their face value. Interest rate changes affect the value of the instrument at the time of issue and in the secondary market. At issue, the lower the interest rate, the closer the price of the instrument will be to its face value. If interest rates fall, the value of the instrument will increase. If interest rates rise, the value of the instrument will fall (as the discount has to increase to match interest rate increases elsewhere). With this type of instrument, the investor is exposed to the risk of a loss of principal if the instrument is sold in the secondary market, as the value of the instrument can fall if interest rates rise after purchase. However, if the investor holds the instrument to maturity, it will pay the face value (this is likely to be invested principal plus a return).

Foreign exchange risk

Foreign exchange risk is the risk that a change in exchange rates affects the value of the invested principal or the return on investment. It applies when an organization has cash flows (and investments) in currencies other than its operating currency.

When an organization has surplus cash in multiple currencies, the treasurer will need to have a strategy for managing the foreign exchange risk. In many cases, a global organization will choose (and may need) to invest foreign currency surpluses in the market in which those surpluses were generated. For example, exchange controls can make it difficult to repatriate funds to the home market. Instead, the organization may decide to invest the surplus locally and to reinvest any return in that country.

On the other hand, if there are limited local investment opportunities (or in order to take advantage of higher returns elsewhere), the treasurer may decide to repatriate funds to the home market to invest in the company's operating currency. In these circumstances, the company will be exposed to foreign exchange risk, such that there may be a loss of principal if the exchange rates change over the investment period.

There is a risk that exchange rate movements can result in a loss of principal as a result of depreciation. Such positions can be hedged using foreign exchange derivatives. However, this strategy brings its own risks, including counterparty risk.

Counterparty risk

Counterparty (or credit) risk is the risk that the counterparty with which an investment instrument is held fails to meet its obligations. Depending on the nature of any failure, this can result in a loss of principal, liquidity or return.

Whenever a company has surplus cash, it is exposed to the risk that the counterparty with which the cash is held may fail, resulting in a loss of principal. This applies whether the counterparty is the bank operating the company's checking account, a money market fund, or the issuer of commercial paper. The nature of this counterparty risk may have an implication for the timing of any loss which might occur. For example, an investment in commercial paper may result in a loss of some principal if the issuer is only able to pay a proportion of the face value on maturity.

In most locations, retail investors are covered by some form of deposit insurance when placing funds with locally regulated banks. In some locations, this cover extends to institutional investors. For example, in the USA, institutional investors can access federal deposit insurance (FDIC) via the Certificate of Deposit Account Registry Service (CDARS) or Federally Insured Cash Accounts (FICA). These both divide large deposits among a number of banks to keep the insured amount below the FDIC threshold: CDARS uses certificates of deposit whereas FICA uses money market demand accounts. However,

even if an investment is covered by such a scheme, it can take some time for the insurer to process any claims, resulting in a loss of liquidity and yield (as interest will not be earned from the point of the counterparty's failure). (This will depend on the location, however. The USA has a very orderly process which can result in settlement within two days. In other locations, settlement can take much longer.) Where an investment is not covered by insurance, the loss of liquidity is likely to be longer, as any formal winding-up proceedings may take over a year.

The table on the next page outlines the availability of deposit insurance in a number of countries around the world. Schemes vary from country to country in terms of both the instruments and the type of investor covered. Some schemes, such as the FDIC in the USA, provide cover to all investors. Others, including the FSCS in the UK, restrict cover to non-institutional investors. It is important to understand the scope of any deposit insurance scheme before placing an investment.

There is further information on the availability of short-term investment instruments in the AFP Country Profiles at www.afponline.org/countryprofiles/

Liquidity risk

Liquidity risk is the risk that an investor cannot access funds when they are needed.

Treasurers will use their cash flow forecasts to improve their understanding of when cash will be required in the business. The company will want to avoid situations where it has invested, but inaccessible, cash and a simultaneous external borrowing requirement. This is most obviously a risk when a company selects to invest in a term deposit, in which case funds are not usually accessible until maturity. However investing in other instruments can also give rise to a liquidity risk. For example, although, in most circumstances, investors are able to sell commercial paper or government paper in the secondary market, in market downturns it may be difficult to do so, forcing the investor to hold the instrument to maturity, as has happened with auction rate securities in years past.

GUIDE TO INTERNATIONAL DEPOSIT INSURANCE SCHEMES

Country	Deposit Insurer	Maximum Insured	Website
Argentina	Seguro de Depósitos Sociedad Anónima	ARS 120,000	www.sedesa.com.ar
Australia	Australian Prudential Regulation Authority	AUD 250,000	www.apra.gov.au
Belgium	Deposit and Financial Instrument Protection Fund	EUR 100,000	www.beschermingsfonds.be
Brazil	Fundo Garantidor de Créditos	BRL 70,000	www.fgc.org.br
Canada	Canada Deposit Insurance Corporation	CAD 100,000	www.cdic.ca
Chile	No scheme. Covered by government guarantee.		www.sbif.cl
China	No scheme.		www.pbc.gov.cn
Czech Republic	Deposit Insurance Fund	EUR 100,000	www.fpv.cz
France	Fonds de Garantie des Dépôts	EUR 100,000	www.garantiedesdepots.fr
Germany	Compensation Scheme of German Banks	EUR 100,000	www.bankenverband.de
Hong Kong	Hong Kong Deposit Protection Board	HKD 500,000	www.dps.org.hk
India	Deposit Insurance and Credit Guarantee Corporation	INR 100,000	www.dicgc.org.in
Ireland	Irish Deposit Guarantee Scheme	EUR 100,000	www.centralbank.ie
Israel	No scheme.		www.bankisrael.gov.il
Italy	Interbank Deposit Protection Fund	EUR 100,000	www.fitd.it
Japan	Deposit Insurance Corporation of Japan	JPY 10 million	www.dic.go.jp
Korea, South	Korea Deposit Insurance Corporation	KRW 50 million	www.kdic.or.kr
Luxembourg	Deposit Guarantee System	EUR 100,000	www.agdl.lu
Mexico	Instituto para la Protección al Ahorro Bancario	400,000 UDIs (ca. MXN 1.9 million)	www.ipab.org.mx
Netherlands	The Nederlandsche Bank Collective Guarantee Scheme	EUR 100,000	www.dnb.nl
Poland	Bank Guarantee Fund	EUR 100,000	www.bfg.pl
Puerto Rico	Federal Deposit Insurance Corporation	USD 250,000	www.fdic.gov
Russia	Deposit Insurance Agency		www.asv.org.ru
Singapore	Singapore Deposit Insurance Corporation	SGD 50,000	www.sdic.org.sg
Sweden	Swedish National Debt Office	EUR 100,000	www.riksgalden.se
Switzerland	Deposit Protection of Banks and Securities Dealers	CHF 100,000	www.einlagensicherung.ch
Taiwan	Central Deposit Insurance Corporation	TWD 3 million	www.cdic.gov.tw
Turkey	Savings Deposit Insurance Fund of Turkey	TRY 50,000	www.tmsf.org.tr
United Arab Emirates	No scheme. Covered by government guarantee.		www.centralbank.ae
United Kingdom	Financial Services Compensation Scheme	GBP 85,000	www.fscs.org.uk
United States of America	Federal Deposit Insurance Corporation	USD 250,000	www.fdic.gov
Venezuela	Fondo de Protección Social de los Depósitos Bancarios	VEF 30,000	www.fogade.gob.ve

Any loss of liquidity is likely to affect the net return on any investment, too. Although the invested funds will continue to earn the expected return, the treasurer will need to identify a source of short-term liquidity until the instrument matures. Except in rare circumstances, this will cost the organization more than the return on the invested funds, resulting in an effective negative return.

Note that any withholding tax can also affect liquidity, too. Even if an investor benefits from a double taxation treaty to reduce the tax liability, it can take time and resource to reclaim the withheld tax.

Other risks

As well as these main risks, there are also operational risks which arise whenever a treasury makes a decision and executes a policy or procedure. These risks include risks of error and fraud within the treasury department, as well as systems risks (failure to execute intended decisions). These can result in losses of principal, liquidity and potential return, depending on the nature of the event.

Managing Risk

The key to a successful strategy lies in identifying and then managing risk effectively. In most cases, the treasurer will prioritize the preservation of principal and the maintenance of sufficient liquidity. However, even when the strategy aims to improve yield, it is important to understand the risks faced, to ensure that the prospective return adequately reflects them.

There are a number of different tools available to manage risk. They include the use of hedging techniques, counterparty diversification and the selection of appropriate investment instruments. These are explored below.

Managing market risk

To manage market risk, treasurers will need to understand the sensitivity of their cash balances and potential investment instruments to changes in market rates.

Managing interest rate risk

Managing interest rate risk becomes a greater challenge as the investment period lengthens. There will be small differences between returns when investing overnight, but the risks are greater when an investor locks funds into an instrument for weeks or months.

One way to manage interest rate risk is to work to reduce a portfolio's sensitivity to interest rate changes. With interest rates at or close to historic lows around the world, there is clearly more scope for interest rates to rise in the future (although perhaps not any time soon). To reduce the risk of being caught out by rising interest rates, an investor can work to reduce the average maturity of the portfolio. In other words, where an investment policy might permit the use of instruments with a maturity of up to one year, it may be more appropriate to opt for shorter periods. Reducing average maturity will also work in higher interest rate environments where there is more uncertainty over the future direction of interest rates.

Another technique is to protect against adverse interest rate movements by entering into a derivative contract. It is important to bear in mind that a derivative contract will expose the company

to particular risks on its own account, notably counterparty risk. Any option contract will have an additional cost in the form of the premium, which must be included in any evaluation.

Managing foreign exchange risk

To manage foreign exchange risk effectively, the treasurer needs to develop a clear understanding of the use to which invested funds are to be put on maturity. If funds are being held in a particular currency to fund working capital requirements in that currency, there is limited foreign exchange risk to be managed (although there may be a translational risk at reporting times).

Foreign exchange risk is most likely to arise in two scenarios. The most likely is when cash is generated in one currency but is then required elsewhere in the business in another currency (for working capital purposes, or as a permanent cash surplus to be returned to shareholders in the operating currency). The treasurer has to decide whether to transact the surplus into the required currency immediately or to invest the surplus in the original currency and transact at a future date. There is no need to hedge an immediate transaction. However, the treasurer may decide to hedge a future transaction, to protect against an adverse exchange rate movement. Note that obtaining hedge accounting treatment will be important in these circumstances.

Secondly, companies may also have surplus cash in a currency, where the local market has insufficient alternative locations for this cash to be placed. In this case, it may be considered prudent to invest the funds elsewhere to manage counterparty and liquidity risk. This may require the funds to be transacted into another currency before they can be invested. Some organizations may also choose to transact balances into other currencies to take advantage of higher available returns. Both scenarios will expose the organization to the risk that an exchange rate movement will affect the value of the principal when it is transacted back into the original currency. (Note that the organization will lose, as the bank will apply a margin on both legs of the foreign exchange transaction, although the contract could work to its advantage as well.) In these circumstances, it may

be appropriate to hedge the foreign exchange risk to preserve the value of the principal.

Managing counterparty risk

Managing counterparty risk is central to the effectiveness of a short-term investment strategy. There are two elements. The first is to avoid concentrating funds with too few counterparties. This is also known as concentration risk. The second is to try to evaluate the relative financial strength of selected counterparties so that the full counterparty risk can be understood. We investigate these in turn.

Managing concentration risk

The best protection against counterparty risk is to limit the amount of investment with any single counterparty.

This is most important in organizations where cash is concentrated to particular locations before being invested. The challenge for the treasury in these circumstances is to understand the precise nature of the counterparties across the portfolio. The treasurer will want to assess counterparty exposure by group, rather than individual entity, especially because deposit insurance (where available) is often subject to group limits.

When cash is not concentrated before being invested, it may be sufficient to allow operating companies to manage their own short-term investment. A group treasury may want to try to introduce similar concentration limits at the local level. Realistically, this is only likely to apply when surplus cash at the operating company reaches a threshold level.

In decentralized organizations, it is important to recognize that there will be some protection, even if the central treasury has no control over investment decisions. As long as operating companies invest locally, there will be some limit on concentration, even if all choose to hold funds with the local branch of the same bank.

Even when cash is centralized, there will usually be a requirement for local operating companies to manage some short-term investment decisions. This is because cash may not be centralized daily, especially those balances not denominated in the group's operating

currency. Again, once a threshold balance has been reached, it will be prudent to manage concentration risk at the local level.

Evaluating individual counterparties

The second part of managing counterparty risk is to work to understand the relative strength of counterparties approved for investment purposes and to set maximum investment limits (or proportions) accordingly.

Despite some much-publicized criticisms of the credit rating agencies, credit ratings remain a good tool to help treasurers start to evaluate counterparty risk. They are widely available and offer coverage across a wide part of the market, especially banks, in most of the larger countries around the world.

Treasurers using credit ratings to evaluate counterparty risk must be aware of their limitations. These include:

- **Lack of responsiveness.** Because of the way credit rating agencies work, they cannot respond quickly to market events. Initially ratings (of sovereigns, issuers or instruments) are developed by an analyst and agreed at an internal meeting at the agency. Each rating agency has its own methodology (which is published on the respective agency's website), but the process is similar. Once published, ratings are then subject to ongoing monitoring. However, this process does not respond quickly to market events because of the collegiate way in which ratings decisions are reached. They only provide a broad view of the rated entity's creditworthiness, by classifying a credit into one of a number of categories, rather than giving each one a credit value.
- **The need to identify the rated entity.** One of the problems for treasurers is to ascertain the precise counterparty, when investing. This can be difficult when a banking group (for example) has multiple subsidiary entities with very different credit ratings (often depending on the degree of guarantee provided by the parent). It is important to work with a bank representative or relationship manager to better understand the entities with which any deposits are (or could be) held. Investors should

also consider reviewing 'living wills' (guides to how a bank should be broken up in the event of failure) of the largest banks to get a clearer understanding of where any held deposits sit within the structural make-up of the banking group.

- **Incomplete coverage of credit ratings.** The availability of published credit ratings differs significantly between different investment markets. Some markets, such as the US commercial paper market, are essentially inaccessible to issuers without a published credit rating. However, other domestic markets, such as the equivalent French domestic commercial paper market, are much more 'name-driven', meaning that published credit ratings are not necessarily needed by issuers to sell paper into those markets. This can make establishing and following a global investment policy difficult in each market.

Despite these caveats, published credit ratings remain a popular and useful initial tool to evaluate counterparty creditworthiness. Sovereign ratings can provide a framework to establish country investment limits. They should also be used to analyze any insurance or support programs in place in those countries. Individual credit ratings can provide the framework for individual counterparty investment limits.

Treasurers should look beyond the credit rating itself. All ratings are accompanied by reports providing the detail to support the rating. These reports also contain analysis of the market events to which the issuer is most exposed. In the case of banks, credit rating agencies also prepare reports giving their views of the way their governments provide additional support for the banking industry in their jurisdictions. However, evaluating the detail in the credit reports can be a time-consuming task for a treasury team member, especially when a treasury is considering a range of potential counterparty banks.

Developing a more accurate and immediate view of counterparty creditworthiness can be more difficult, although other sources of information are available to support treasurers. Market information in the form of both bond and stock prices provides a view of the strength of the counterparty, while

incorporating other factors too. A credit default swap spread represents the market view of the likelihood of default, and is an increasingly useful shorter-term indicator of a counterparty's strength.

However, because of the wide range of information available, it can often be beyond the resources of individual treasury departments to perform detailed and ongoing credit checks on all potential counterparties. Some treasury departments outsource counterparty credit checking to a third party. This can be done in two ways. The first is to outsource the credit checking process by purchasing credit check analysis from a specialist provider. This allows the treasurer to have more detailed analysis of actual and potential counterparties. However, much of the initial work in developing a shortlist of potential providers has to be done anyway.

The other alternative is to outsource investment management to a specialist fund manager or money market fund. With a specialist fund manager, the company will need to indicate its risk appetite and investment objectives for the fund manager to follow. In both cases, the investment management service will include a creditworthiness checking process.

When an organization manages its own short-term investment, it is good practice to maintain an approved counterparties list, which should be reviewed and updated on a regular basis. Once a counterparty has been approved internally, a dealing mandate or similar contract should be agreed, before any funds are placed.

Many companies incorporate published credit ratings in their investment policies, restricting permissible investment instruments to those with a minimum, usually investment grade, credit rating. This approach also allows the company to invest more with higher-rated counterparties. With a specialist fund manager, it is appropriate for the treasurer to agree approved counterparties as part of the operating agreement.

Managing liquidity risk

Liquidity risk is managed first by having an effective cash position forecasting system in place. Adopting such a system was discussed in the AFP Guide to Strategic Global Cash Position Forecasting. This will

help the treasurer to understand future cash balances and requirements and to avoid, as far as possible, simultaneous borrowing and investment.

To manage liquidity risk, the investment policy should seek to restrict the use of investment instruments of a longer duration or term to maturity. This can be done in two ways: a requirement that a minimum proportion of cash is accessible within a maximum period (for example, 20% accessible overnight and 50% accessible within a week, depending on the cash flow patterns of the business), or a requirement that a proportion of cash is invested in instruments with particular redemption characteristics (for example, 25% invested in sight instruments and a further 25% invested in instruments with a maturity of less than one week).

Note that any counterparty failure will also give rise to a liquidity risk when it is unable to meet its obligations at maturity.

Managing other risks

Other risks associated with short-term investment, such as the risk of error and fraud, are managed primarily through the adoption of policies which segregate responsibilities appropriately between suitably qualified team members.

The development of treasury technology means that some activities can be automated. For example, many companies automatically sweep surplus cash (with or without a threshold balance) into overnight deposit accounts. In these circumstances, the underlying

instruction, including any standard settlement instructions, should always be subject to regular and spot audits. Where an automated system is not possible or not desired, treasury processes can be structured to incorporate authorization procedures within the treasury and risk management solution. For example, a decision to send cash to a particular location may require multiple approvals: these can be managed via the treasury platform allowing appropriate individuals to initiate and authorize transactions remotely. Ideally all such activities should be made in such a way that manual intervention, including any rekeying of data, is unnecessary, as such activity significantly increases the risk of error.

Settlement risk can be reduced also by the use of a treasury solution. Treasury solutions can store standard settlement instructions; ensuring funds do not go astray. They can manage the dealing process in an automated way, recording all transactions (and quotes in many cases). These activities can be audited and reviewed regularly to ensure the process is as efficient and as effective as possible. However, the treasury should also have a manual back-up procedure in place, in case of disruption to the treasury platform.

Treasurers can manage many of the risks by outsourcing investment management to a third party. The company will still be responsible for setting the strategy and, with the third party, the policy. However, the responsible for daily execution will be transferred to the third party. Any third party investment management contract should be clearly documented.

What an Investment Policy Should Contain

The risks outlined above must all be taken account of by the treasurer in developing an investment policy to be put forward for board approval. This section describes the key features of any investment policy and the main decisions to be made.

Market Risk

The investment policy should include detail on how to approach foreign exchange risk and interest rate risk. It should state the circumstances in which derivatives can be used.

Foreign exchange risk

The investment policy should state how foreign currency investments can be used. Most international organizations will have the bulk of their cash flows denominated in one currency (the currency of operation, usually its home market), and then cash flows denominated in each country in which it operates. Some non-US companies may also have cash flows denominated in USD (for example, to pay fuel costs).

The investment policy should state whether it is permissible to transact operating cash surpluses into another currency for investment purposes. This decision needs to be consistent with any wider cash and liquidity management policy which has been adopted by the organization. There are a number of scenarios:

- **No foreign exchange transactions for investment purposes.** The policy may prohibit foreign exchange transactions because of the risk to principal, especially if balances are due to be recycled back into the business.
- **Local currency can be or should be transacted into operating currency (or other global currency) for investment purposes.** The policy may permit or require operating companies to transact local currency surpluses into the group operating currency before investment. This may be appropriate where the local operating company wants access to a wider range of alternative

investment instruments, such as offshore money market funds. Any such policy statement should be accompanied by clear operating procedures to reduce the risk of a loss of principal. Such a policy will be conditional on local exchange control rules.

- **Only group treasury is permitted to approve foreign exchange transactions.** In more centralized organizations, it may be appropriate to require operating companies to invest surplus cash in their local currency, with group treasury determining whether and when to manage any foreign exchange transactions. Again, this should be consistent with the wider cash and liquidity management policy.

The investment policy should also address which foreign exchange derivatives (swaps, options and forwards) are permitted. For example, it may be appropriate to use a forward to ensure a certain value of foreign currency is available on a specified date.

Interest rate risk

Managing interest rate risk is potentially more complex, especially over longer time periods. In general terms, the longer the period to the maturity of the invested instruments, the more exposed the company is to interest rate risk. The investment policy should indicate how the company should manage this exposure, depending on how the accounting is determined for the investments. If there is a hold to maturity policy, then there is little concern with interest rate risk. If the investments are marked available for sale, then there is more concern for marking the prices to market on a recurring basis, typically at month end. There would be more concern for longer maturity portfolios, but given that the focus of this paper is less than a year, preservation of principal is most important. There are a number of variables:

- **Fixed versus floating exchange rates.** Some companies elect to have a ratio of fixed to floating exchange rates as a tool to manage interest rate risk.
- **Maturity of individual investment instruments.** The investment policy may place a limit on the maturity of individual investment instruments. This may be in the form of a proportion of instruments within particular limits.

- **Maturity of investment portfolio.** The policy may place a limit on the maturity of the portfolio as a whole. This could be instead of any individual instrument limits, or in combination with those limits. If this approach is selected, the treasurer will need to decide whether to apply these limits solely to a portfolio managed at group level, to apply it at each management level (where operating companies manage their own portfolios), or to try to apply a single maturity limit across all investments held by the group.

Counterparty Risk

Managing the counterparty risk is central to any short-term investment policy. For a global organization, the treasury policy will need to decide whether to approach counterparty risk from a group-wide perspective or an entity-by-entity perspective, or country by country. Practicalities may suggest only one approach is possible, but each has its own merits.

Group-wide counterparty risk management

To be able to manage counterparty risk on a group-wide basis, the central treasury needs to have good visibility over each group entity's cash positions. Furthermore, it needs to have the ability to ensure each group entity will follow a central investment policy. As well as having good visibility over group cash positions, central treasury will also need to be able to act in a timely fashion to influence local decision-making.

Where cash is centralized, most investment decisions will be also be made centrally, ensuring a de facto group approach to counterparty risk. There will often need to be some additional local investment decisions, especially if a threshold balance approach to cash pooling is adopted. Even so it should be possible to extend the group investment policy to all the local entities. This approach will also cover entities which are outside any global cash management structure, whether for operational or regulatory reasons, so that the same approach to counterparty risk management can be followed throughout the group. However, this may be difficult to monitor and effect on a short-term basis, even if the group entities are required to report positions to the center.

One of the challenges of the group-wide approach is that any use of centralization typically results in a reliance on a smaller number of banks (especially if balances are notionally pooled). The use of cash mobilization may result in more cash balances remaining with those institutions, resulting in a greater concentration risk than might otherwise be the case.

Entity-by-entity approach

This problem can also emerge when counterparty risk management is left with operating companies. In these cases, the group entities may decide to invest with particular bank counterparties for a variety of reasons. Because of the lack of international banks with local networks, the group as a whole may have less concentration risk if decisions are left with the group entities (the entities being unlikely to select the same banks). Problems may arise if the central treasury places restrictions on the use of local banks as part of a bank relationship or bank account management strategy. As a result, local entities may end up having larger proportions of funds on deposit or in checking accounts with relationship banks.

Country-by-country approach

In some organizations, it may be possible to manage a compromise between the first two approaches by managing counterparty risk on a country-by-country (or region-by-region) basis.

Setting counterparty limits

Whichever approach is used, the investment policy will need to set a series of counterparty limits. These limits represent a maximum that can be invested with any single counterparty. Each policy should either include or refer to an approved counterparty list. The policy may also set an additional rule, such that only counterparties with a specified minimum rating are permitted. This would mean funds being withdrawn from any counterparty on the approved list whose rating is downgraded below the minimum rating.

- **Absolute limits.** The investment policy may set a series of absolute limits in a named currency or currencies (for example, a maximum of USD 10 million with any A-rated bank). Note that there can be problems if all investment limits are set

according to the group operating currency: exchange rate movements can result in a breach of limits.

It is common to set higher limits for more highly rated counterparties (for example, a maximum of USD 10 million with any A-rated bank; a maximum of USD 50 million with any AA-rated bank).

- **Relative limits.** As an alternative approach, counterparty limits may also be in the form of a series of relative limits. For example, the policy may state that ‘a maximum of 10% of surplus cash can be invested with a particular counterparty’. This has the benefit of being more adaptable for group entities with different levels of surplus cash to invest, and allows counterparty risk to be addressed consistently across all group entities.

In both cases, the limits could be subject to an absolute minimum threshold so that, for example, the policy may state that ‘any surplus cash balances above EUR 20 million are subject to the following counterparty limits’. This avoids the need for organizations to devote resources to managing counterparty risk on low balances, while recognizing that any organization can have fluctuating surplus cash to invest.

It may also be appropriate to have a series of absolute limits such that, for example, ‘if surplus balances are above a total of EUR 20 million, a maximum of 25% of cash may be held with one counterparty and, in addition, if surplus balances are above a total of EUR 50 million, a maximum of 10% of

GABRIEL MOTTA, CORPORATE TREASURY MANAGER, GOL LINHAS AEREAS INTELIGENTES

A Brazilian company, Gol Linhas Aereas Inteligentes is the second largest airline in the region, with a fleet of 127 Boeing 737 and four Boeing 767 aircraft. It serves 62 destinations, both within Brazil and in nine countries in the Americas.

The approach to managing liquidity is closely related to the company’s liability management policy. In terms of debt management, its objective is to avoid debt maturing within three years. It has three main bond issues in its portfolio: one matures in 2017, another matures in 2020 and it also has a perpetual bond. One challenge for the company will be to renegotiate the terms of the bond maturing in 2017 to maintain its three-year rule. There are also two local debts, maturing between 2015 and 2017.

On the liquidity side, the company aims to have approximately 20% of its cash position on the balance sheet. This liquidity gives the company a lot of flexibility to manage any market volatility, notably fuel prices and the USD/BRL exchange rate (most of the company’s revenues are denominated in BRL; most of its expenses are denominated in USD), as well as a buffer of cash to cover any periods of low demand.

When investing cash surpluses, GOL’s treasury chooses to invest in plain vanilla instruments. Investments are divided between Brazilian government instruments (treasury bills and bonds), CDBs (*certificados de depósito bancário*, certificates of deposit issued by Brazilian banks), and short-term mutual funds backed by five of Brazil’s major banks. These instruments meet the company’s objectives. ‘We cannot have any volatility of return in our investments,’ says Motta.

Cash is invested for a maximum term of 90 days, reflecting the cash conversion cycle. Although Motta places cash in instruments with overnight access, he tries where possible to avoid drawing down funds in less than 30 days. This is because the Brazilian government applies a 0.38% financial transaction tax (IOF) on any investment with a maturity of less than 30 days.

Motta is also careful to manage the company’s exposure to individual banks. ‘We limit our exposure to 20% of invested funds with any one bank. This is supported by the risk desk which is triggered if any investment exceeds that amount.’

cash may be held with a single counterparty'. Such an approach means that the number of required counterparties expands as the organization expands, as there is also a cost in working with a large number of counterparties.

Limit by counterparty and instrument

The investment policy should cover all potential counterparties, including both banks and non-banks. For non-banks, credit ratings may not be available in all markets. In these circumstances, where formal credit ratings are not available, the policy may permit investment on a different basis.

The company will also want to implement counterparty limits for any associated derivative instruments, especially swaps and forward rate agreements. It may be appropriate to incorporate a risk weighting with any derivative agreement, reflecting the real risk to the company as a whole. The same approach should also be taken when investing in non-bank assets supported by bank credit lines.

The policy will need to be clear with respect to investment levels, and specifically as to whether limits apply to invested principal only, or to additional earned interest as well.

Liquidity Risk

The selection of particular investment instruments can help to manage liquidity risk, and can also help in the management of other risks (especially interest rate and foreign exchange risk).

In most cases, it is appropriate for the treasury policy to include a list of instruments the organization is permitted to hold. Depending upon the geography of the organization's areas of operation, it may also be appropriate for the treasury to restrict the list in some locations. For example, while commercial paper may be listed as a permitted instrument, the policy could permit investment only in locations which have a certain level of liquidity, or where the issuer has a published credit rating.

- **Checking accounts.** The simplest form of short-term investment is to leave cash in business checking accounts. Some banks pay interest on

these balances (this depends on local regulation and local market practice). The current low interest rate environment means returns are low.

These bank accounts may be part of a wider cash pooling structures. Surplus balances on these accounts can sometimes be swept into interest-bearing overnight deposit accounts or money market funds.

Using checking accounts means that the company retains liquidity, as the funds are fully accessible, subject to the wider counterparty risk (which may be a particular problem if the company uses a cash pooling structure).

- All entities have some form of business account, so this is likely to be the default solution, especially for low positive balances.
 - **Demand deposits.** Demand deposit accounts are similar to checking accounts, in that they offer instant access and, therefore, no loss of liquidity. Most pay some interest on surplus balances but, again, the current low interest rate environment means any interest paid will be low.
 - **Time deposits/certificates of deposit.** Time deposits and certificates of deposit both require investors to commit funds with the counterparty for a period of time. Banks offer time deposits for periods from overnight to over a year. They are widely available in most jurisdictions.
- Although both forms of investment have fixed maturities, certificates of deposit can usually be sold in the secondary market, allowing the investor access to the funds. In most environments, this provides sufficient liquidity. However, in the event that the counterparty bank has difficulties, it may prove difficult for investors to sell the instrument on, with the resultant loss of liquidity.
- **Commercial paper.** Commercial paper is issued by companies and other issuers, usually in the form of unregistered promissory notes. Regulations in the jurisdiction in which the paper is issued usually determine its maximum maturity. These regulations usually cover the security registration requirements of the local regulator.

As with certificates of deposit, investors may hold the instrument to maturity, although the paper can usually be sold in the secondary market to allow the investor to realize their investment when necessary.

Most commercial paper is issued as domestic commercial paper. The largest market is the US commercial paper market. This is a ratings-driven market, such that most commercial paper issues are issued with a published credit rating from a registered credit rating agency. A number of other countries have large domestic commercial paper markets, where most paper is issued in domestic currency.

In addition, the euro commercial paper market is effectively an international commercial market which allows international companies to raise funds across different markets in a more cost-effective manner.

The most strongly rated credits have additional credit enhancement facilities. These are usually in the form of back-up credit lines from banks, designed to ensure the repayment of principal on maturity (in the event that an issuer cannot 'roll over' the paper to a new issuance). An investor will want to evaluate the creditworthiness of the entity providing the back-up facilities before making an investment.

One of the key variants of commercial paper is asset-backed commercial paper. This is issued in the same form as standard commercial paper, but the issuer tends to be a standalone entity which is established to be bankruptcy-remote. In these circumstances, the entity issues paper which is repaid using assets (often receivables, such as mortgage payments or car payments) purchased from one (or more) borrowers.

Commercial paper is usually issued on a regular basis as a source of working capital finance for the issuer. In some cases, the issuer will use banks to 'privately place' paper, meaning the paper is sold directly to the investor (rather than being available on the open market).

Some issuers also respond to reverse enquiry, such that they issue paper to investors to meet particular requirements. This allows investors to match the investment with their liquidity requirements.

■ **Treasury bills.** Treasury bills (which may have different names in different countries) are short-term government-issued securities. They tend to be issued with maturities under a year, although again, maturities vary from one country to the next. Terms of about three months are often common.

Issuance arrangements are determined locally, with weekly or monthly auctions common.

As government instruments, their creditworthiness is determined by the financial strength of the issuing government. Most governments are assessed by one or more of the major credit rating agencies.

As with other instruments, investors can hold them to maturity. In most locations, investors can sell treasury bills in the secondary market to retain liquidity. However, some governments prohibit the sale of treasury instruments in the secondary market.

Government paper is not limited to treasury bills issued by central government. Various state, local, or municipal governments issue some form of bills or bonds, as do public corporations. Investors will want to understand the level of central government support for any such issue before deciding to invest.

Some central banks also issue money supply bonds, although investors are generally banks and other financial institutions.

■ **Corporate and government bonds.** Longer-term instruments (with maturities over a year) are also available, issued by both corporates and governments. There are two ways a short-term investment can be made:

■ Investors can purchase long-term bonds and then sell the instrument in the secondary market when funds are needed. As with similar strategies, this can be affected by market conditions. Because bond prices vary in the market, this strategy requires the investor to risk at least some of the principal (in a similar way to shorter-term instruments issued at a discount). If an investor holds such bonds for long enough, a coupon may be payable, offering the investor an additional return on the investment.

■ Secondly, the investor can purchase a bond shortly before maturity. Although the

instrument retains its original conditions, once the term nears maturity, the instrument will have the characteristics of a short-term instrument. The investor will receive the bond's face value on maturity.

Some investors invest in floating rate notes, which have the same characteristics, especially if the instrument is close to a fixing date, when an interest payment is made. Because they attract a floating rate, their price can vary significantly in the secondary market, as they are affected by interest rate changes.

- **Mutual funds.** Mutual funds, especially in the form of money market funds, are popular forms of investment for short-term cash. There are significant differences in the approaches taken by money fund managers, depending on their location and the opportunities available to them. The two most popular forms of money market fund are the 2a-7 funds based in the US, and the European-based money market funds subject to European Securities and Markets Authority (ESMA) regulations. These place restrictions on the type of instruments the money market fund can invest in.

Any investment in a money market fund should only be made if the investor fully understands the fund manager's approach to building its portfolio and, therefore, the nature of the risks to which the investor's cash will be exposed. It is important to recognize that non-US and non-EU money market funds may not have the same characteristics as 2a-7 funds and will, therefore, represent a significantly different risk.

As part of the process of assessing a money market fund (or other third party fund manager), the treasurer should evaluate the fund for liquidity risk. In this context, the treasurer should assess the fund's portfolio in terms of the nature of the assets held and the fund manager's ability to meet any redemption requests at short notice. Prudent treasurers will also assess the spread of investors in any mutual fund: any fund which relies too heavily on a small number of investors may

have difficulty liquidating investments to meet redemption requests.

The investor should review the following: the credit quality of permitted investment instruments; the portfolio's weighted average maturity; the portfolio's weighted average life; the proportion of assets maturing overnight and within a week; and the proportion of the fund's assets held by the largest ten shareholders.

- **Repurchase agreements.** Repurchase, or repo, agreements involve the sale and repurchase of the same security, usually a government instrument because of its credit quality. An investor would purchase and then resell the same security (technically a reverse repo transaction) on a pre-agreed date for a pre-agreed price. The difference between the purchase and sale prices represents the return for the investor.

The bilateral nature of most contracts means that terms can be set to meet the investor's requirements. These offer good protection of principal because the underlying security is held during the length of the agreement.

Impact of Regulation

There are currently a range of regulatory initiatives which have the potential to change the investment environment. The Basel III proposals are already having an effect on the type of term deposits that are on offer to institutional investors. The discussion by the EU of adding a financial services tax could also impact investing decisions in the region as well. (At present, 11 of the 27 EU member states back the tax: Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain.) Regulators in the US and the EU are both working on changes to money market fund regulations as attention shifts from banks to the wider financial environment. The most controversial is a plan to prohibit the use of constant net asset value (i.e. a fixed invested principal) by money market funds. This will reduce the attraction of money market funds to many short-term investors, as it significantly increases the risk to the invested principal.

CASE STUDY – US-BASED INTERNATIONAL AIRLINE

To manage its cash, the company maintains bank accounts around the world denominated in local currency. Passengers purchase tickets denominated in their local currency, much of which is used to pay local trade receivables denominated in that currency. This cash is primarily received via the credit card processors, either directly from American Express or via the group's cash management bank in the case of Visa and MasterCard purchases.

As a US-based airline, most of the company's cash flows (receipts and disbursements) are denominated in USD. As a result, the company's short-term investment strategy is primarily focused on the USD-denominated balances which form the majority of the cash surplus.

Most cash is kept in an investment account, with trade accounts funded as necessary. The treasury uses weekly cash forecasts to identify the need for

cash and the basis for any movement of funds into the trade accounts.

As an airline business, the company is exposed to price volatility, especially with respect to fuel prices, so its short-term investment strategy is very conservative, focused on preserving principal. It chooses only to invest in a limited number of instruments with highly rated counterparties. Investment instruments considered appropriate for the company's investment strategy included the highest quality treasury bills, money market funds conforming to 2a-7 standards, and fixed term certificates of deposit via the Certificate of Deposit Account Registry Service (CDARS), which gives the company access to FDIC insurance. The company also works to minimize concentration risk. It applies strict limits to particular counterparties, although investments via CDARS and in money market funds also help to manage this risk.

Other Risks

To manage other risks such as fraud and operational error, the treasury policy should be supported by a clear set of operating guidelines. These should include clear rules regarding the segregation of duties, the documentation of activity, and regular and spot audits. Any automated processes should be established within these guidelines and the treasury platform should be audited to check they are being followed appropriately.

For global organizations, managing tax liabilities is a complex task. Understanding whether tax is withheld on short-term investment returns is complex and can affect the return on an investment. Even where a double taxation treaty allows an investor to reclaim withheld tax, it can result in a loss of liquidity. The policy should incorporate a statement on how to assess the impact of tax.

The policy should incorporate a section on exceptions management. This should address any breach of

limits. It should also set a process for dealing with any short-term investment requirement which is outside the scope of the investment policy. It is usually appropriate for some form of board-level involvement to be required at this stage.

All investment decisions should be subject to regular review, to ensure the appropriate procedures are followed. Decisions should also be appraised to try to ensure as efficient a process as possible. The appraisal should assess how effectively an investment achieved its objectives.

The policy should also state when any third party investment manager can be used, and how the relationship is to be monitored and appraised. It is not necessary to outsource all short-term investment when using a third party. Many companies choose to segment their cash. In such circumstances, some choose to outsource the management of longer-term funds to a third party, while continuing to manage the investment of immediate working capital.



The Contents of an Investment Policy

The following points should be addressed in a short-term investment policy:

- A statement of investment objectives.
- Investment conditions:
 - Permitted currencies and approach to foreign exchange risk (if not managed by a separate policy);
 - Approach to interest rate risk, including any maximum instrument or portfolio maturity;
 - Permitted counterparties, including reference to approved counterparty list and any minimum credit rating;
 - Permitted instruments;
 - Tax;
 - Reporting and accounting.
- Reference to operating procedures:
 - The policy should explicitly refer to operating procedures. These will be in the form of a separate document detailing daily procedures, including individual authority limits.

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WWCP researches, authors and publishes authoritative Treasury Managers' Handbooks for Scandinavia/Nordic/Baltic countries; Central and Eastern Europe; Europe (five editions); Africa; the Americas (four editions); and a Global Treasury CD covering 98 countries (three editions). Publications also include a number of definitive treasury guides: Best Practice and Terminology; with The ACT, Investing Cash Globally (three editions), International Cash Management and Trade Finance; and, with AFP, Treasury Technology and this Global Liquidity Guide Series.

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