MASSEY UNIVERSITY

TREASURY FRAMEWORK

JULY 2022

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1.0 INTRODUCTION

1.1 Purpose of Treasury Framework

The purpose of the Treasury Framework (Framework) is to outline approved policies and procedures in respect of all treasury activity to be undertaken by Massey University (Massey). The formalisation of such policies and procedures will enable treasury risks within Massey to be prudently managed.

As circumstances change, the policies and procedures outlined in this Framework will be modified to ensure that treasury risks within Massey continue to be well managed. In addition, annual reviews will be conducted to test the existing Framework against the following criteria:

- Best practices within the tertiary sector.
- The risk bearing ability and tolerance levels of the underlying revenue and cost drivers, and statutory stakeholder requirements.
- The effectiveness and efficiency of the Treasury Framework and treasury function to recognise, measure, control, manage and report on Massey's financial exposure to market interest and foreign exchange rate risks, funding risk, liquidity, treasury investment risks, counterparty credit risks and other associated risks.
- The operation of a pro-active treasury function in an environment of control and compliance.
- The robustness of the Framework's risk control limits and risk spreading mechanisms against normal and abnormal financial market movements and conditions.
- Consistency in achieving Massey's strategic objectives and financial plans/budgets.

It is intended that the Framework be distributed to all personnel involved in any aspect of the Massey's financial management. In this respect, all staff must be completely familiar with their responsibilities under the Framework at all times.

Adherence to the Treasury Framework is mandatory. Changes to the Framework can only be made by Massey's Council or the Finance and Assurance sub-committee of Council under delegation of Council.

1.2 Philosophy

A core principle of Massey University's Treasury Framework is to minimise risk arising from its treasury activities. Massey's finance function in relation to its treasury activity is a risk management function focussed on protecting its financial budgets and stabilising its income and expense lines. Accordingly, all treasury activity manages and protects legitimate underlying exposures, and activity that may be construed as speculative in nature is expressly forbidden.

2.0 SCOPE AND OBJECTIVES

2.1 Scope

This document identifies the policy and procedures of Massey in respect of treasury activities and applies to all Massey staff. The Framework encompasses the treasury activities of Massey.

2.2 Objectives

The objective of this Treasury Framework is to control and manage costs and treasury investment returns that can influence long-term plans, operational budgets and financial equity.

Specifically:

Statutory Objectives

Massey is required to comply with the following relevant legislation:

- Crown Entities Act 2004;
- Education and Training Act 2020; and
- Public Finance Act 1989.

Massey must comply with Section 297 of the Education and Training Act 2020, which prescribes that:

- The Council of an institution may establish, maintain and operate bank accounts in the name of the institution at any registered bank or any registered building society with which a Crown entity may establish, maintain, or operate a bank account under section 158 of the Crown Entities Act 2004.
- As soon as is practicable after receiving any money, the Council shall pay it into one of the institution's bank accounts.
- The Council or delegated authority shall properly authorise every withdrawal and payment of money from any of the institution's bank accounts.

Under the Education and Training Act 2020, Massey is also required to target and maintain a number of financial metrics / ratios subject to the Tertiary Education Commission (TEC) definitions. The TEC's reporting regime, the Tertiary Education Institution Financial Monitoring (TEIFM) return focuses on a range of financial targets, of which several are directly applicable to the management of treasury risks.

Investment Activity

The intention is that Massey's investment powers are conservative and expected to be risk averse.

Massey's authority to invest is governed by Section 65I (1) and (2) of the Public Finance Act 1989.

Section 65I(1) of the Public Finance Act 1989 permits the investments of any money held in a bank account:

- On deposit with a bank (whether in New Zealand or elsewhere) approved by the Minister for Education; or
- In public securities; or
- In any other securities that the Minister for Education may approve.

Public securities are defined under Section 2 of the Public Finance Act and includes any loan or credit agreement, guarantee, indemnity, bond, note, debenture, bill of exchange, Treasury bill, Government stock and any other security representing part of the public debt of New Zealand.

Section 65I (2) of the Public Finance Act 1989 allows Massey to:

- Invest money for any period and on any terms and conditions that it thinks fit; and
- Sell, or convert into money, any of its securities.

Investing in any other term investments and investments in shares, derivatives, gold, silver or any other commodities require the advance approval of the Minister for Education.

These restrictions do not apply to Trust Funds provided there are formal documents such as a Trust Deed. These exemptions apply to trust funds held by another legal entity for which Massey is the Settlor. When acting as a trustee or investing money on behalf of others, the Trusts Act 2019 highlights that trustees have a duty to invest prudently and that they shall exercise care, diligence and skill that a prudent person of business would exercise in managing the affairs of others.

Borrowing Activity

Section 282(4)(d) of the Education and Training Act 2020 states that an institution shall not exercise the power to borrow, issue debentures, or otherwise raise money without the written consent of the Secretary of the Minister of Education.

Under section 282(5)(c) of the Education and Training Act 2020, the Secretary's consent to borrow is not required if the amount to be borrowed does not exceed an amount determined by the Minister or ascertained in accordance with a formula determined by the Minister.

In accordance with the Ministerial Determination of Exempt Borrowing (New Zealand Gazette, May 2014 publication, notice number 2014-go2538), tertiary educational institutes (TEIs) are allowed to borrow subject to the stated criteria and conditions. Within this framework there are two levels of exempt borrowing; tier one allows TEIs to borrow up to 2% of the TEI's group consolidated total revenue while tier two allows TEIs to borrow up to $50 million or 10% of the TEI's group consolidated total revenue (whichever is less).

- All projected borrowings are to be approved by Massey's Council as part of the annual budgeting process or by resolution of Council before the borrowing is affected.
- All legal documentation in respect to borrowing, investment and financial instruments will be approved by Massey's in-house legal team or solicitors prior to the transaction being executed.
- Massey will not enter into any borrowings denominated in a foreign currency.

General Objectives

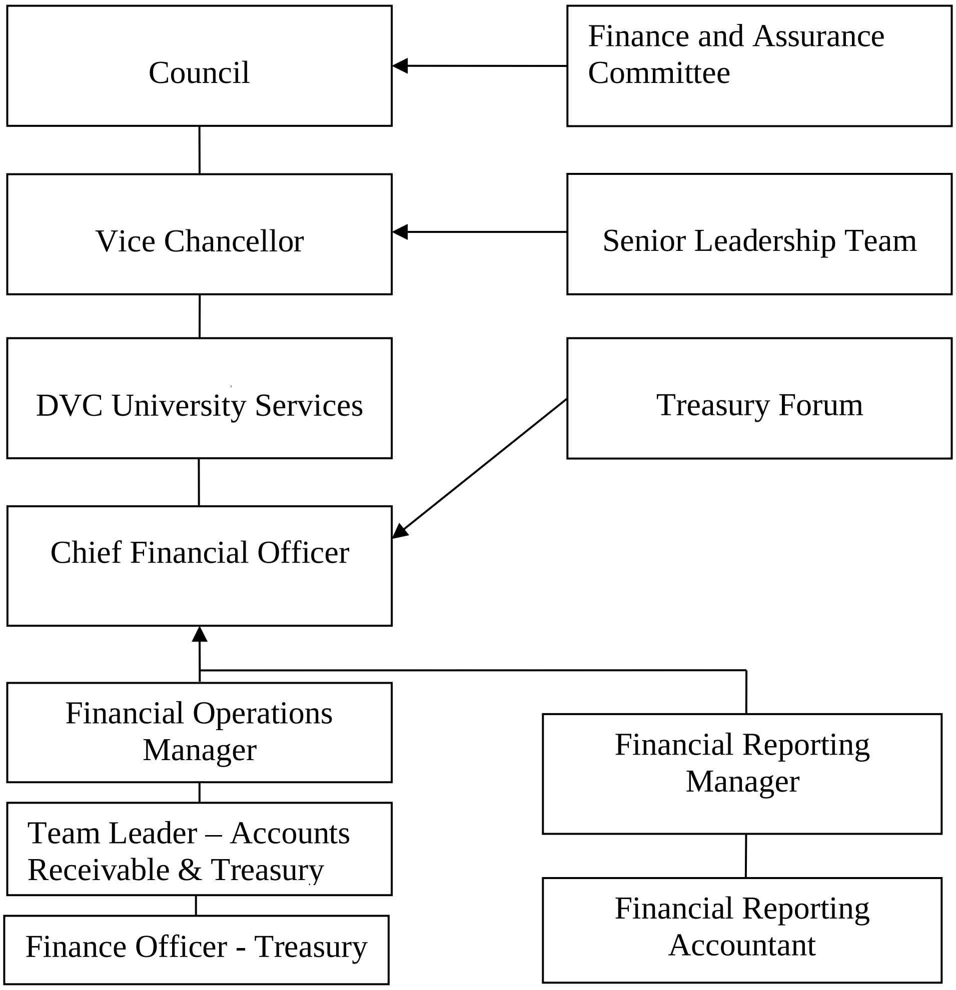
- This framework outlines processes and procedures for Massey to:Undertake financial management activity to ensure Massey achieves its long-term financial strategy and plans.
- Maintain appropriate liquidity levels and manage cash flows within Massey to meet known and reasonable unforeseen funding requirements.
- Manage investments to optimise returns in the medium term whilst balancing risk and return considerations.
- Minimise costs and risks in the management of its borrowing.
- Minimise exposure to adverse wholesale interest rate movements.
- Proactively manage interest rate risks.
- Arrange and structure long-term funding at the lowest achievable interest margin from debt lenders. Optimise flexibility and spread of debt maturity.

- Monitor and report on borrowing financial covenants and ratios under the obligations of lending/security arrangements, and Tertiary Education Commission ("TEC") requirements.
- Comply with financial ratios and limits stated within this Framework.
- Managing net foreign currency payments protecting the NZD financial budget.
- Invest, borrow and transact risk management instruments within an environment of control and compliance.
- Monitor, evaluate and report on treasury compliance and performance.
- Maintain the professional treasury competency of all personnel engaged in implementing this policy.
- To minimise exposure to counterparty credit risk by dealing with and investing in credit worthy counterparties.
- Ensure that all statutory requirements of a financial nature are adhered to.
- To ensure adequate internal controls exist to protect Massey's financial assets, prevent unauthorised transactions, and project a professional image of financial and management control.
- Maintain strong relationships with external treasury-related stakeholders.

3.0 MANAGEMENT RESPONSIBILITIES

3.1 Overview of Management Structure

The following diagram illustrates those individuals and bodies who have treasury responsibilities. Authority levels, reporting lines and treasury duties and responsibilities are outlined in the following section:



3.2 University Council (Council")

Council has ultimate responsibility for ensuring that there is an effective framework for the management of its risks. In this respect Council decides the level and nature of risks that are acceptable, given the underlying objectives of Massey.

Council is responsible for approving the Treasury Framework. While the Framework can be reviewed and changes recommended by the Vice Chancellor, the authority to make or change the Framework can only be made by Council.

In this respect, the Council has responsibility to:

- Approve the annual financial budget and long-term financial plan/strategy of Massey.
- Approve borrowing by resolution during the annual budgeting process or at other times as required.
- Delegate authority to the Finance and Assurance Committee (FAC) and management.

3.3 Finance and Assurance Committee (FAC)

The FAC's terms of reference are to review and monitor the Treasury Framework and treasury activities, and report to Massey's Council. The FAC's responsibilities include:

- Approving the Treasury Framework incorporating the following delegated authorities:
  - borrowing, investment and financial market limits and the respective authority levels;
  - counterparties and credit limits;
  - risk management approach and benchmarks; and
  - guidelines for the use of financial instruments.
- Evaluating and approving amendments to Treasury Framework.
- Receives and reviews internal treasury reports. The FAC receives regular information from the CFO on treasury matters, risk exposures and financial instrument usage in a form that is understood and enables oversight of compliance to the Framework.
- Issues raised by auditors (both internal and external) in respect of any significant weaknesses in the treasury function.
- Receives submissions from the CFO notifying of Framework breaches, other than those breaches considered temporary (refer to responsibilities of DVC University Services (DVC US) below) and requesting approval for one-off transactions falling outside guidelines.
- Receive bi-annual reporting on compliance the Treasury Framework and review the Treasury Policy and Framework triennially.

3.4 Senior Leadership Team (SLT)

The SLT has a review and monitoring function across Massey including management and reporting line functions. The SLT reports and provides recommendations to Massey's Council either directly or indirectly through the FAC. The reports are noted in 3.3 above.

3.5 Treasury Forum

The Treasury Forum facilitates a senior finance management focus on the day-to-day treasury function, and the monitoring, managing of treasury risks within the approved Treasury Framework. The Treasury Forum ensures efficient and effective treasury management and performance.

The forum assists the DVC US and CFO to manage borrowing, investment and financial market risks by discussing/testing, strategies/decisions made.

Responsibilities of the Treasury Forum are;

- Discuss and monitor the liquidity, treasury investment, borrowing, interest rate and foreign currency risk position (actual and projected) against limits, and the treasury strategies being implemented by management.
- Examine economic and financial market trends and their impact on risk positions and recommended strategies.
- Consider treasury strategies and test to financial and treasury objectives.
- Through the CFO, review/discuss the triennial Treasury Framework review.

The Treasury Forum meets on at least a two monthly basis. Permanent members comprise; the DVC US, CFO and National Facilities' Director and external treasury advisor on an ex-officio basis. Other members may be invited by the CFO as necessary to provide advice or expertise to support the Committee. The meeting is chaired by the CFO.

3.6 Vice Chancellor (VC)

While the Council, through the FAC of Council, has final responsibility for the Framework and governing the management of Massey's treasury risks, it delegates overall responsibility for treasury to the VC. The VC delegates day-to-day management responsibility to the DVC US who has delegated this responsibility to the CFO.

In respect of treasury activities, the VC's responsibilities include:

- Ensuring the Treasury Framework complies with existing and new legislation.
- Recommend the annual financial budget and long-term financial plan/strategy to the Council.
- Receive advice of breaches of the Treasury Framework, other than temporary breaches (refer to responsibilities of the DVC US below) and significant treasury events from the DVC US.
- Approve treasury transactions in accordance with delegated authority.
- Approve opening and closing of bank accounts (with either the DVC US or CFO).
- Approve new borrowing and bank loan/facilities in accordance with Council's borrowing resolution.

3.7 Deputy Vice Chancellor University Services (DVC US)

The DVC US is responsible for the management of treasury activities. The DVC US delegates day-to-day treasury responsibilities to the CFO. The DVC US' responsibilities include:

- In conjunction with the VC, develop the annual financial budget and long-term financial strategy/plan.
- Manage the long-term financial position as outlined in the financial plan/strategy.
- Ensure management procedures and policies are implemented in accordance with this Treasury Framework.
- Reporting to the Finance and Assurance Committee on treasury matters.
- Advise the VC and Finance and Assurance Committee of significant treasury events.
- Recommend to the VC authorised signatories and delegated authorities in respect of all treasury dealing and banking activities.
- Approve opening and closing of bank accounts (with either the VC or CFO).
- Approve authorised bank signatories.
- Approve re-financing of existing bank loan/facilities.
- Approve borrowing, treasury investment and risk management strategy.
- Recommend changes to the Treasury Framework to the Finance and Assurance Committee.
- Approve new counterparties and counterparty limits.
- Approve all amendments to Massey records arising from checks to external bank counterparty confirmations.
- Approve treasury transactions in accordance with delegated authority.
- Monitor and review the performance of the treasury function in terms of achieving its objectives.
- Review treasury reporting from the CFO.
- Approve any temporary breaches; any breach of policy rectified within a period of one month from the date of breach can be considered temporary.

3.8 Chief Financial Officer (CFO) (or equivalent role)

The CFO is responsible for the day-to-day management of treasury activities. The CFO's responsibilities are as follows:

- Management responsibility for cash management, liquidity, borrowing, treasury, investment and risk management activities.
- Recommend Framework changes to the DVC US.
- Convene and chair the Treasury Forum at least two monthly.
- Primary responsibility for managing bank relationships.
- Negotiation of bank funding and financial market dealing facilities
- Approve treasury transactions in accordance with delegated authority.
- Approve opening and closing of bank accounts (with either the VC or CFO).
- Propose new borrowing requirements to the DVC US for consideration and approval.
- Review and make recommendations on all aspects of the Treasury Framework to the DVC US, including dealing limits, approved instruments, counterparties, and general guidelines for the use of financial instruments.
- Monitor treasury exposure on a regular basis, including current and forecast cash position, cash and treasury investment portfolio, borrowings, and interest/foreign exchange rate exposures.
- Design, recommend and implement cash management, liquidity treasury investment, borrowing and risk management strategy.
- Design, analyse, evaluate, test and implement risk management strategies to position Massey's interest and foreign exchange rate risk position to be protected against adverse market movements within the approved Framework limits.
- Execute risk management treasury transactions by email instruction to the respective bank in accordance with set limits and authorities.
- Approve cash management, borrowing and treasury investment transactions.
- Review and approve any discrepancies in the monthly bank reconciliations.
- Complete the medium-term cash flow forecasts.
- Monitor credit ratings of approved counterparties.
- Account for all treasury transactions in accordance with legislation and generally accepted accounting principles.
- Review monthly treasury report.
- Check compliance against limits and prepare report on an exception basis.
- Approve or delegate approval of external bank deal confirmations, treasury spreadsheet and reconciliation to the general ledger.
- Approve or delegate approval of the monthly NZD and foreign currency bank reconciliations
- Forecasts future cash requirements.
- Ensure internal communication channels and systems for identifying, notifying and recognising treasury exposures to Finance are efficient, accurate and working.
- Conduct a periodic (triennial) review of the Treasury Framework, Treasury Procedures and counterparty limits.
- Provide Treasury reporting to the DVC US and the Finance and Assurance Committee.

In addition, the CFO may undertake any of the responsibilities of the DVC US in relation to treasury as delegated by the DVC US.

3.9 Financial Operations Manager (or equivalent role)

Responsibilities are as follows:

- Execute cash management, treasury investment transactions in accordance with set limits and authorities.
- Settle all cash management, borrowing, treasury investment, interest rate and foreign currency transactions.
- Update treasury spreadsheet(s) for all new, re-negotiated and maturing transactions.
- Receive external bank deal confirmations. Check all deal confirmations against emailed deal instructions and report any irregularities immediately to the CFO.
- Handle all administrative aspects of bank counterparty agreements and documentation such as loan agreements and ISDA documents.
- Reconcile monthly summaries of outstanding financial contracts from banking counterparties to internal records.
- Complete the weekly cash position report.
- Complete the short-term cash flow forecasts.
- Provide daily (as required), weekly, monthly, quarterly treasury reporting to Financial Services and CFO.
- Prepare monthly treasury report.
- Act as the back-up treasury dealer in absence of the CFO.
- Complete monthly treasury spreadsheet reconciliation to general ledger.
- Complete monthly interest accrual and treasury journals.

3.10 Team Leader - Accounts Receivable and Treasury (TL–AR&T) (or equivalent role)

- Back-up to Financial Operations Manager.
- File external bank confirmation and deal ticket.
- Manage the operation of all bank accounts.
- Reconcile monthly NZD bank reconciliations.
- Reconcile monthly foreign currency bank reconciliations.

3.11 Financial Reporting Manager (or equivalent role)

- Approves monthly interest and treasury journals.
- Review and approve monthly bank reconciliations.

3.12 Delegation of Authority and Authority Limits

Treasury transactions entered into without the proper authority are difficult to cancel given the legal doctrine of “apparent authority”. Also, insufficient authorities for a given bank account or facility may prevent the execution of certain transactions (or at least cause unnecessary delays).

To prevent these types of situations, the following procedures must be complied with:

- All delegated authorities and signatories must be reviewed at least annually to ensure that they are still appropriate and current.
- A communication must be sent to all bank counterparties at least annually to confirm details of all relevant current delegated authorities empowered to bind Massey.

Whenever a person with delegated authority on any account or facility leaves Massey, all relevant banks and other counterparties must be advised in writing in a timely manner to ensure that no unauthorised instructions are to be accepted from such persons.

Massey's Council has the following responsibilities, either directly itself, or via the following stated delegated authorities.

Activity	Delegated Authority	Limit
Approving and changing Framework	University Council/FAC	Unlimited
Approving borrowing programme	University Council	Subject to statutory and TEC limitations. (1)
Acquisition and disposition of investments other than financial investments	University Council	Subject to statutory and TEC limitations.
Approval for charging assets as security	University Council	Subject to statutory and TEC limitations.
Approval for use of risk management instruments	University Council	Subject to statutory and TEC limitations.
Approval of strategies/transactions including interest rate option instruments	University Council	Subject to statutory and TEC limitations.
Approval new borrowing and bank loans/facilities/risk management	VC and DVC US	Per borrowing resolution
Provision of negative pledge arrangements to bank counterparties	VC	Unlimited
Overall day-to-day treasury	VC CFO (delegated by VC and DVC US)	Subject to Framework
Re-financing existing borrowing and bank loans/facilities	DVC US	Subject to Framework
Approving transactions outside Framework	DVC US	Unlimited
Adjust debt interest rate risk profile	CFO	Per risk control limits
Managing debt and investment maturities in accordance with approved risk control limits	CFO	Per risk control limits
Maximum daily transaction amount (investing and cash management)	University Council VC (delegated by Council) DVC US CFO	Unlimited $70M $40M $20M (term up to 12 months)
Maximum daily transaction amount (borrowing, interest rate risk management) excludes roll-overs on floating rate, borrowing, and interest rate roll-overs on swaps	University Council VC (delegated by Council) DVC US CFO	Unlimited $50M $30M $5M (term up to 10 years)
Maximum daily NZD transaction amount (foreign exchange rate management)	University Council VC (delegated by Council) DVC US CFO	Unlimited $30M $15M $5M (term up to 12 months)
Transfer and register of security	University Council	Subject to statutory and TEC regulations
Authorising lists of signatories	DVC US	Unlimited
Opening/closing bank accounts	Any two of VC, DVC US, CFO	Unlimited
Triennial review of Framework	DVC US	N/A
Ensuring compliance with Framework	CFO	N/A

(1) Section 282 (4) (d) of the Education and Training Act 2020 states that an institution shall not exercise the power to borrow, issue debentures, or otherwise raise money without the written consent of the Secretary of Education. The term borrowing includes any form of

borrowing and includes such items as bank loans, finance leases and arrangements with another party for the deferral of payments for the purchase of material assets or expenditure.

All management delegated limits are authorised by the VC.

4.0 DEBT MANAGEMENT

4.1 General Framework

Massey is currently a net investor of funds but may move at some time into a borrowing position due to the need to fund capital investments.

Short-term operational funding requirements to fund gaps or cash flow deficits are discussed in Section 8.0, Cash Management.

All borrowing requires the written approval of the Secretary to the Minister of Education under Section 282 (4) of the Education and Training Act 2020. Subject to subsection (5) of this section, an institution shall not exercise any of the following powers without the written consent of the Secretary:

(a) The power to sell or otherwise dispose of assets or interests in assets:

(b) The power to mortgage or otherwise charge assets or interests in assets:

(c) The power to grant leases of land or buildings or parts of buildings:

(d) The power to borrow, issue debentures, or otherwise raise money.

Within statutory, TEC, and bank lender requirements, the borrowing programme is approved by resolution of the Council, during the financial budgeting process, or otherwise as required. There may be prior scrutiny by the FAC. The objectives of a borrowing programme are to ensure that Massey has sufficient funds to prudently carry out its short and long-term activities.

Approved borrowing instruments are set out in Section 6.1.2.

Where possible, Massey will utilise its treasury investment portfolio to meet capital investment requirements, unless there is a compelling reason to borrow specifically. Investment funds are sourced from University reserve funds, trust funds and operational cash surpluses.

4.2 Borrowing Objectives

Massey's borrowing objectives are as follows:

- All borrowing and risk management activities are in compliance with statutory and TEC regulations, and approved by resolution of Council;
- Provide on-going liquidity and funding support to enable Massey to achieve its education objectives and financial plan/strategy;
- Minimise costs and risks in the management of its borrowing;
- Minimise exposure to adverse wholesale interest rate movements;
- Arrange and structure long-term borrowing at the lowest achievable interest margin. Optimise flexibility and spread of debt maturities; and
- Comply with statutory, TEC, bank lenders, financial ratios and limits.

4.3 Liquidity/Funding Risk

4.3.1 Risk Recognition

Funding gaps or deficits in various future periods identified in debt forecasts are reliant on the maturity structure of cash, treasury investments and committed bank loans/facilities.

Liquidity risk management focuses on the ability to access cash, treasury investments, and committed bank funding at that future time to fund the gaps. A liquidity buffer amount is also maintained to manage any unforeseen or unknown requirements.

Funding risk management centres on the ability to re-finance or raise new debt at a future time at the same or more favourable pricing (fees and interest margins) and maturity terms, of existing bank loans/facilities. The management of funding risks is important as several risk factors can arise to cause an adverse movement in borrowing margins, term availability and general flexibility.

A key factor of funding risk management is to spread and control the risk to reduce the concentration of risk at one point in time so that if any of the above events occur, the overall borrowing cost is not unnecessarily increased and desired maturity profile compromised due to market conditions.

4.3.2 Liquidity/Funding Risk Control Limits

The liquidity and funding risk control limits are as follows:

- Sufficient liquid funds and/or committed bank facilities are available for at least 110% of the next month's net cash expenditure requirements. Liquid funds are either held in overnight bank cash deposits, registered certificates of deposit and bank term deposits maturing within a 30 day period.
- Funds from related parties (e.g. trust funds) should not be included within the liquidity measure unless formal documentation of a committed debt facility/loan is executed between the parties and free cash has been allocated to provide liquidity to Massey by that party.
- The VC has the discretionary authority to re-finance existing debt on more favourable terms. Such action is to be reported and ratified by Council at the earliest opportunity.
- The maturity profile of the total committed funding in respect to all bank loans and committed facilities, is to be controlled by the following system and apply when external core debt exceeds $10 million:

Period	Minimum	Maximum
0 to 2 years	20%	60%
2 to 5 years	20%	60%
5 years plus	0%	40%

The amount and expiry date of all bank loans, committed bank facilities, term debt will not exceed the maximum amount and term of the Consent to Borrow or Ministerial Determination of Exempt Borrowing (whichever is applicable).

Core debt is defined as external debt expected to remain outstanding for greater than 12 months.

Approved borrowing instruments are set out in section 6.1.2.

The maximum borrowing term is 10 years. Terms beyond 10 years will require specific Council approval.

A maturity schedule outside these limits will require specific Council approval.

4.4 Financial Arrangements

Financial arrangements between Massey and a third party, including hire purchase and any leasing transactions, may not be entered unless approved by the DVC US.

4.5 Borrowing Ratios and Limits

Borrowing will be managed within the financial ratios and limits required by bank lenders and the TEC. Financial ratios and limits are outlined in Appendix 1.

The CFO ensures that these requirements are complied with. Where these limits are likely to be exceeded, prior approval of Council, TEC and bank lenders is necessary.

In approving new debt Council considers the impact on its borrowing ratios and limits.

4.6 New Borrowing

In evaluating strategies for new borrowing (in relation to source, term, size and pricing) the CFO, takes into account the following:

- The TEC business case, strategic/capital plan and approved borrowing programme;
- The size, economic life, income earned, of the specific project/asset/expenditure;
- Current and forecast impact on borrowing ratios and limits;
- Available terms from bank lenders and other sources;
- Repayment terms and requirements;
- The overall debt maturity profile, to ensure concentration of debt is avoided;
- Prevailing interest rates and margins relative to term for borrowing;
- The market’s outlook on future interest rate movements as well as its own;
- The terms and conditions such as cost/risk/certainty/flexibility;
- Security arrangements; and
- Legal documentation and financial covenants.

Massey’s ability to attract cost effective borrowing is driven by its ability to maintain a strong financial standing and operating position, maintain and manage its strong relationship with the Ministry of Education, TEC, and financial institutions.

4.7 Security Arrangements

Massey generally offers an unsecured/negative pledge security arrangement for all its borrowing and risk management obligations.

Borrowing will only be secured by way of a charge over land and buildings upon approval of Council. Physical assets may be charged where:

- There is a direct relationship between the borrowing and the purchase or construction of the asset, which it funds;
- Massey considers a charge over physical assets to be appropriate; and
- Any pledging of physical assets must comply with requirements of the Treasury Framework.

4.8 Debt Repayment

Funds from fees/interest income, operating surpluses and asset sale proceeds, will be applied to the reduction of debt and/or a reduction in borrowing requirements, unless Council specifically directs that the funds will be put to another use.

Massey will manage debt on a net portfolio basis and will only externally borrow when it is commercially prudent to do so.

5.0 INVESTMENT MANAGEMENT

5.1 General Framework

Massey will utilise its treasury investment portfolio to meet operational funding and future capital spending requirements unless there is a compelling reason to borrow specifically. Investment funds are sourced from University reserve funds, trust funds and operating cash surpluses arising from normal operations.

Section 305(4) of the Education and Training Act 2020 provides that Massey must invest funds in accordance with s65I (1) and (2) of the Public Finance Act 1989. The intention is that Massey's investment powers are conservative and expected to be risk averse. Massey recognises that all investments held, should be low risk which generally means lower returns.

5.2 Investment Objectives

For the foreseeable future, Massey will be in a net investment position and until such time that Massey becomes a net borrower, treasury investments will be prudently invested as follows:

- Massey's primary objective when investing is the protection of its investment capital. Accordingly, Massey may only invest in approved creditworthy counterparties. Creditworthy counterparties and investment restrictions are covered in section 6.3. Credit ratings are monitored and reported quarterly to Council.
- Treasury investments will be arranged to provide sufficient liquid funds for planned expenditures and allow for the payment of obligations as they fall due.
- Massey invests in approved financial instruments as set out in section 6.1.2.
- Massey's treasury investment maturity and interest rate profile will be managed within the parameters outlined in section 6.1.3.
- Other than Trust funds, all interest income is credited to general funds which are held in a Crown Bank Account.

5.3 Trust Funds

Where Massey holds funds as a trustee or manages funds for a Trust then such funds must be invested on the terms provided within the Trust Deed. If the Trust's investment Framework is not specified, then this Framework should apply.

5.4 Related party lending

Under the Education and Training Act, s305 (4)(b), Massey is permitted to provide funding to related entities and subsidiaries for purposes that are not for monetary gain, i.e. educational. If the purpose is for monetary gain, approval from the Minister of Education is required.

6.0 RISK RECOGNITION/IDENTIFICATION/MANAGEMENT

The definition and recognition of interest rate, liquidity, funding, treasury investment, counterparty credit, market, operational and legal risk will be as detailed below.

6.1 Interest Rate Risk

6.1.1 Risk Recognition

Interest rate risk is the risk that treasury investment returns or borrowing costs (due to adverse movements in market interest rates) will materially exceed or fall short of planned/budgeted projections, adversely impacting revenue, cost control and capital investment decisions and feasibilities.

The primary objective of interest rate risk management is to reduce uncertainty relating to interest rate movements through fixing of treasury investment returns or borrowing costs. With the treasury investment portfolio utilised for capital spending purposes matching investment maturities to expenditure is of primary importance. Certainty around borrowing costs is achieved through the active management of underlying interest rate exposures.

6.1.2 Approved Financial Instruments

Approved financial instruments are as follows:

Category	Instrument
Cash management and core borrowing	Bank overdraft Committed bank cash advance/revolving facilities Bank term loans and term loan facilities Finance and operating leases
Cash management – investment (terms of no more than 30 days)	Overnight and bank term deposits Bank certificates of deposit (RCDs) Treasury bills
Treasury investment (terms of no more than 2 years)	Overnight and bank term deposits Bank certificates of deposit (RCDs) Treasury bills NZ Government NZ Government guaranteed securities.
Interest rate management (borrowing only)	Forward rate agreements ("FRAs") on: – Bank bills Floating and fixed rate bank loans Interest rate swaps – Forward start swaps – Swap extension, shortening, blend & extend strategies
Foreign exchange management	Spot foreign exchange Forward exchange contract (including par forwards) Foreign currency deposit account Foreign exchange shortening or extension strategies

Any other financial instrument must be specifically approved by Council on a case-by-case basis and only be applied to the one singular transaction being approved. This includes specifically;

Interest rate options on:
- Bank bills (purchased caps and one-for-one collars)
- Government bonds
- Interest rate swaptions (purchased swaptions and one-for-one collars only)

In using interest rate options, the following conditions apply;

- Interest rate options must not be sold outright. However, 1:1 collar option structures are allowable, whereby the sold option is matched precisely by amount and maturity to the simultaneously purchased option. During the term of the option, only the sold side of the collar can be closed out (i.e. repurchased) otherwise, both sides must be closed simultaneously. The sold option leg of the collar structure must not have a strike rate "in-the-money".
- Purchased borrower swaptions mature within 18 months.
- Interest rate options with a maturity date beyond 12 months that have a strike rate (exercise rate) higher than 2.00% above the appropriate swap rate, cannot be counted as part of the fixed rate/hedged percentage calculation.

All investment securities must be secured or senior/unsecured in ranking. No other financial investments are permitted.

6.1.3 Interest Rate Risk Control Limits

Treasury Investment Interest Rate/Maturity Limits

The following control limits are designed to manage interest rate and maturity risk on the treasury investment portfolio.

A primary objective of the treasury investment portfolio is to match the portfolio's maturity term to planned expenditure thereby ensuring that investments are liquid when required. The control limits are as follows:

Term	Minimum	Maximum
0 – 6 months	20%	100%
6 – 12 months	0%	50%
1 – 2 years	0%	30%

Borrowing Interest Rate Limits

The following risk control limits will only apply where 12 month forecast core debt exceeds $10 million. Massey debt/borrowings should be within the following fixed/floating interest rate risk control limit:

Master Fixed / Floating Risk Control Limits	
Minimum Fixed Rate	**Maximum Fixed Rate**
50%	90%

"Fixed Rate" is defined as an interest rate repricing date beyond 12 months forward on a continuous rolling basis.

"Floating Rate" is defined as an interest rate repricing within 12 months.

The percentages are calculated on the rolling 12 month forecast core debt level calculated by management (signed off by the VC). This allows for pre-hedging in advance of projected physical drawdown of new/refinanced debt. When approved forecasts are changed, the amount of fixed rate/hedging in place may have to be adjusted to ensure compliance with the Framework minimums and maximums.

The fixed rate amount at any point in time should be within the following maturity bands:

Fixed Rate Maturity Sub-Limit		
Period	**Minimum**	**Maximum**
1 to 3 years	20%	60%
3 to 5 years	20%	60%
5 to 10 years	0%	40%

- Floating rate debt may be spread over any maturity out to 12 months. Bank advances may be for a maximum term of 12 months.
- Forward start period on swaps and collar strategies to be no more than 24 months, unless the swap/collar starts on the expiry date of an existing swap and the notional amount is no greater than that of the existing swap/collar.

6.2 Foreign Exchange Risk

6.2.1 Risk recognition

Foreign exchange risk is defined as the adverse impact on the NZD expenses and asset purchases (e.g. purchase of library supplies) from foreign exchange rate movements. Foreign exchange exposure based on continually updated forecast payments is recognised on the basis of:

- Forecast payments, based on 12-month rolling payment forecasts for each currency, reviewed and updated on a monthly basis. Any foreign currency receipts are netted against same currency payments.
- Value in currency of payment.
- Month or date of purchase.
- Value expressed in NZD calculated at market exchange rates prevailing on the day of recognition.
- Foreign currency exposures are recognised and managed when total annual net payments for an individual currency exceed NZD2.0m.

6.2.2 Annual Budget Exchange Rates

When setting exchange rates in the annual financial budgeting process, Massey's policy is to apply the contracted exchange rates per forward contracts held and maturing in the budgeted financial year. Any additional budgeted payments that are not hedged are to be applied at the market forward month-end exchange rate on the day the budget is finalised.

6.2.3 Risk Management Policies and Limits

The DVC US is responsible for hedging strategies/decisions. The DVC US has discretionary authority to position hedging percentages near to the minimum or maximum of the risk control limits depending upon foreign exchange market trends/influences and anticipated changes to payment forecasts.

Forecasts of exposures: It is the CFO's responsibility to ensure that up-to-date and accurate rolling 12-month forecasts are available each month.

Massey's Framework is to maintain hedging contracts in place for all net foreign currency payments at all times to conform to the following risk control limits:

Foreign Exchange Hedging Risk Control Limits		
	Minimum	**Maximum**
Confirmed/Contracted	100%	100%
Forecast/Uncontracted Period		
0-3 month	50%	80%
3-6 month	25%	50%
6-12 month	0%	25%
Conditional long-term Hedging		
12-18 month*	0%	25%

*Hedging only allowable when achievable rate is 15% (10% & 7.5%) above 7-year rolling average spot rate for the NZD/USD (NZD/EUR & NZD/AUD) exchange rate.

Confirmed/contracted foreign currency exposures are fully protected upon an approved purchase order being raised, the exposure is legally committed and the currency type, amount and timing are known.
The DVC US is able to approve a foreign exchange hedging position outside the above limits that self corrects within 30-days. It is reported as an approved exception to the Policy. However, maintaining a foreign exchange hedging position breach beyond 30-days requires specific Council approval.

Approved instruments are noted in Section 6.1.2.

Massey will not borrow in a currency other than the New Zealand Dollar.

6.3 Counterparty Credit Risk

Counterparty credit risk is the risk of losses (realised or unrealised) arising from a counterparty defaulting on a financial instrument where Massey is a party. The credit risk to Massey in a default event will be weighted differently depending on the type of instrument entered into.

Credit risk will be regularly reviewed by the FAC. Treasury related transactions would only be entered into with organisations specifically approved by Council.

Counterparties and limits can only be approved on the basis of a long-term Standard & Poor's credit rating (or Fitch, Moody's equivalent) being A or above, and a short-term rating of A-1 or above.

Bank borrowing will be from NZ registered banks that have a long-term Standard & Poor's (or Fitch, Moody's equivalent) credit rating of A or above.

The following matrix guide will determine limits.

Counterparty/Issuer	Minimum long term / short term credit rating	Investments maximum per counterparty ($m)	Risk management instrument maximum per counterparty ($m)	Total maximum per counterparty ($m)
NZ Government	N/A	Unlimited	none	Unlimited
NZ Registered Bank [name]*	A/A-1	60.0	10.0	70.0
*Subject to a maximum exposure no greater than 50% of the cash and treasury investment portfolio being invested in one bank counterparty at any one point in time, except for Massey's transactional banking counterparty which may have a maximum exposure up to 100% (excluding Term Deposits) for up to five business days. Where the cash and treasury investment portfolio is $25 million or less, the 50% maximum exposure limit does not apply. This summary list will be expanded on a counterparty named basis which will be authorised by the DVC US.				

In determining the usage of the above gross limits, the following instrument weightings will be used:

- Investments (e.g. Bank Deposits) – Transaction Notional × Weighting 100%.
- Interest Rate Risk Management (e.g. swaps, FRAs) – Transaction Notional × (Maturity (years) × 3%).
- Foreign Exchange – Transactional face value amount x (the square root of the Maturity (years) x 8%).

Each transaction should be entered into the treasury spreadsheet and a quarterly report prepared to show assessed counterparty actual exposure versus limits.

Individual counterparty limits are kept on a spreadsheet by management and updated on a day-to-day basis. Credit ratings should be reviewed by the CFO on an ongoing basis and in the event of material credit downgrades; this should be immediately reported to the DVC US and assessed against exposure limits. Counterparties exceeding limits should be reported to the Council.

If a credit ratings downgrade is to a level below A, the deposit and/or financial instruments are closed down and replaced. If this were to occur, management would propose a solution to Council to progressively reduce the exposure in the most cost-effective manner.

Investments are normally held to maturity date. Where investments are liquidated before legal maturity date, approval is obtained from the DVC US.

To avoid undue concentration of exposures, financial instruments should be used with as wide a range of approved counterparties as possible. Maturities should be well spread and matched to expenditure requirements. The investment process must take into account the liquidity of the market securities where appropriate.

6.4 Operational Risk

Operational risk is the risk of loss as a result of human error (or fraud), system failures and inadequate procedures and controls.

Operational risk is very relevant when dealing with financial instruments given that:

- Financial instruments may not be fully understood;
- Too much reliance is often placed on the specialised skills of one or two people;
- Most treasury instruments are executed by email; and
- Operational risk is minimised through the adoption of all requirements of this Framework.

6.4.1 Dealing Authorities and Limits

Transactions will only be executed by those persons and within limits approved by Council.

Any use of interest rate option instruments must have specific approval of Council.

6.4.2 Segregation of Duties

As there are a small number of people involved in the treasury function, adequate segregation of duties among the cash management, treasury investment, borrowing and risk management functions of deal execution, confirmation, settling and accounting/reporting is not strictly achievable. The risk will be minimised by the following process:

- The CFO reports directly to the DVC US.
- There is a documented approval process for cash management, borrowing, treasury investment and interest/foreign exchange rate activity.
- The Financial Operations Manager reports immediately to the CFO if Policy limits are breached.

6.4.3 Procedures

All treasury instruments should be recorded and diarised within a treasury spreadsheet, with appropriate controls and checks over journal entries into the general ledger. Deal capture and reporting must be done immediately following execution/confirmation. Details of procedures including templates of deal tickets should be compiled in a treasury procedures manual separate to this Framework.

Procedures should include:

- Regular management reporting.
- Regular risk assessment, including review of procedures and controls as directed by Council or FAC.
- Organisational, systems, procedural and reconciliation controls to ensure:
    - All cash management, borrowing, treasury investment and risk management activity is bona fide and properly authorised;
    - Checks are in place to ensure accounts and records are updated promptly, accurately and completely;
    - Risk positions are updated, reviewed and reported on a regular basis; and
    - All outstanding transactions are re-valued regularly and independently of the execution function to ensure accurate reporting and accounting of outstanding exposures and hedging activity.

6.4.4 Organisational Controls

- The CFO or equivalent has responsibility for establishing appropriate structures, procedures and controls to support cash management borrowing, interest rate and investment activity.
- All cash management, borrowing, treasury investment and risk management activity is undertaken in accordance with approved delegations authorised by Council.

Cheque/Electronic Banking Signatories

- Positions approved by the VC as per register.
- Dual signatures are required for all cheques and electronic transfers.
- Cheques must be in the name of the counterparty crossed “Not Transferable”, “Account Payee Only”, via the Massey bank account.

Authorised Personnel

- All counterparties are provided with a list of personnel approved to undertake transactions, standard settlement instructions and details of personnel able to receive confirmations.

Recording of Deals

- Deal summary records for cash management, borrowing, treasury investments, interest and foreign exchange rate management (on spreadsheets) are maintained by the Financial Operations Manager and updated promptly following completion of transaction.

Confirmations

- All inward deal confirmations are received and checked by the Financial Operations Manager against email instructions and the treasury spreadsheet records to ensure accuracy.
- All deliverable securities are held on file.
- Deals, once confirmed, are filed (email and attached confirmation) by the TL-AR&T in deal date/number order.
- Any discrepancies arising during deal confirmation checks which require amendment to Massey records are signed off by the VC.

Settlement

- All cash management, borrowing, interest and foreign exchange rate and treasury investment payments are settled by direct debit authority or through electronic funds transfer in case required by the bank

Reconciliations

- Bank reconciliations are performed monthly by the TL-AR&T, reviewed and approved in the system by the Financial Reporting Manager. Any unresolved, unreconciled items arising during bank statement reconciliation which require amendment to Massey records are signed off by the Financial Reporting Manager.
- A monthly reconciliation of the treasury spreadsheet to the general ledger is carried out by the Financial Operations Manager and reviewed and approved by the Financial Reporting Manager.

- Interest income from the treasury spreadsheet is reconciled to bank statements by the TL-AR&T, when completing the monthly bank reconciliations.
- Monthly treasury journals are completed by the Financial Operations Manager and approved by the Financial Reporting Manager.

6.5 Legal Risk

Legal and regulatory risks relate to the unenforceability of a transaction due to an organisation not having the legal capacity or power to enter into the transaction usually because of prohibitions contained in legislation. While legal risks are more relevant for banks, Massey may be exposed to such risks, in the event that Massey is unable to enforce its rights due to deficient or inaccurate documentation.

Massey will seek to minimise this risk by:

- Ensuring all Massey authorities regarding treasury transactions are approved as required by legislation.
- The use of standing dealing and settlement instructions (including bank accounts, authorised persons, standard deal confirmations, contacts for disputed transactions) to be sent to counterparties.
- The matching of third-party confirmations and the immediate follow-up of anomalies.
- The use of expert advice.

6.5.1 Agreements

Funding arrangements, investments and financial instruments can only be entered into with banks that have in place an approved and executed legal agreement or ISDA Master Agreement.

Massey's internal/appointed legal counsel must sign off on all legal documentation.

6.5.2 Financial Covenants and Other Obligations

Massey must not enter into any transactions where it would cause a breach of bank or TEC financial covenants/ratios under existing contractual arrangements.

Massey must comply with all obligations and reporting requirements under existing funding facilities and legislative requirements.

7.0 MEASURING TREASURY PERFORMANCE

In order to determine the success of Massey's treasury function, the following benchmarks and performance measures have been prescribed.

Those performance measures that provide a direct measure of the performance of treasury staff (operational performance and management of investment, borrowing and interest/foreign exchange rate risk) are to be reported to Council or the Finance and Assurance Committee on a regular basis.

Operational Performance

All treasury limits must be complied with, including (but not limited to) counterparty credit limits, control limits and exposure limits.

All treasury deadlines are to be met, including reporting deadlines.

Management of Treasury Investment Returns

The actual investment income for Massey should be above the budgeted YTD/annual interest revenue amount.

Management of Borrowing Costs

The actual borrowing cost (taking into consideration any costs/benefits of entering into interest rate management transactions) should be below the budgeted YTD/annual interest cost amount.

Management of Foreign Exchange Rate Risk

The actual monthly NZD, conversion rate should outperform the budget foreign exchange rate.

8.0 CASH MANAGEMENT

The CFO has the responsibility to carry out the day-to-day cash management activities. All cash inflows and outflows pass through bank accounts controlled by the finance function.

- The CFO will calculate and maintain rolling cash flow forecasts on a daily (three month forward), weekly (12 months forward) and annual (five years forward) basis. These cash flow forecasts determine Massey's borrowing requirements and surpluses for investment. Forecasts are linked to approved financial budgets and plans where relevant.
- The Finance Officer, Treasury, electronically downloads all bank account information daily.
- The TL-AR&T, co-ordinates all daily cash inflows and outflows with the objective of managing the cash position within approved parameters.
- The TL-AR&T, upon approval of the CFO executes all cash management and treasury investment transactions.
- Massey will hold $100 in the current account, with surplus cash automatically swept to an interest-bearing overnight call account.
- Sufficient liquid funds and/or committed bank facilities are available for at least 110% of the next month's net cash expenditure requirements. Liquid funds are either held in overnight bank cash deposits, registered certificates of deposit or bank term deposits maturing within a 30-day period.
- An amount is maintained to manage unknown and unforeseen cash requirements.
- Interest rate management on cash management balances is not permitted.

To ensure an efficient and effective cash management function the CFO:

- Matches future cash in/out flows to smooth the overall timeline profile.
- Minimises fees and bank charges by optimising bank account/facility structures.
- Maximises the return from available funds by ensuring significant payments are made within the vendor's payment terms, but no earlier than required, unless there is a financial benefit from doing so.
- Reports detail actual cash flows during the month compared with those budgeted.
- Maintains accurate cash flow forecasts using spreadsheet modelling.

9.0 REPORTING – PERFORMANCE MEASUREMENT

When budgeting borrowing costs/investment returns, the actual amount of existing bank loans, investments and risk management instruments must be taken into account.

9.1 Treasury Reporting

9.1.1 Reporting

The following reports are produced:

Report Name	Frequency	Prepared by	Recipient
Call Account Analysis Investment Schedule Investment Movement Treasury Spreadsheet	Weekly	FOM FOM FOM FOM	CFO CFO CFO CFO
Treasury Exceptions Report	As required	CFO	DVC US
Treasury Report Investment limits Borrowing limits Funding and Interest Position Funding facility/usage New treasury transactions Cash flow forecast report Liquidity position Foreign currency Counterparty credit Financial ratios (bank and TEC) Reconciliation of Investments Investment Schedule	At each Treasury Forum meeting	FOM/CFO FA FOM	DVC US Treasury Forum CFO CFO
Treasury Report Investment limits Borrowing limits Funding and Interest Position Funding facility/usage New treasury transactions Cash flow forecast report Liquidity position Foreign currency Counterparty credit Financial ratios (bank and TEC) Derivative valuations Treasury performance Market/strategy commentary/update	As required.	FOM/CFO	DVC US/Finance and Assurance Committee

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9.2 Accounting Treatment of Financial Instruments

Massey uses financial market instruments for the primary purpose of reducing its exposure to fluctuations in financial market pricing.

The accounting treatment for such financial instruments is to follow PBE IPSAS accounting standards or the equivalent for the public sector.

9.3 Valuation of Financial Instruments

All financial instruments are re-valued at market prices, every three months for risk management purposes.

Underlying rates to be used to value instruments are as follows:

- Official daily settlement prices for established markets;
- Official daily market rates for short term instruments (e.g. FRA settlement rates calculated by Reuters from price maker quotations as displayed on the BKBM page);
- Relevant market mid-rates provided by a bank(s) at the end of the business day (5.00pm) for other over-the-counter instruments; and
- For markets that are illiquid, or where market prices are not readily available, rates calculated in accordance with procedures approved by the FIS.

10.0 FRAMEWORK REVIEW

This Treasury Framework is to be formally reviewed every three years, or earlier should significant changes require.

The CFO has the responsibility to prepare a review report that is presented to the FAC. The report will include:

- Recommendation as to changes, deletions and additions to the Framework;
- Overview of the treasury function in achieving the stated objectives; Summary of breaches and one-off approvals to highlight areas of tension;
- Analysis of bank and lender service provision, share of financial instrument transactions etc.;
- Comments and recommendations from the internal/external auditors on the treasury function, particularly internal controls, accounting treatment and reporting; and
- An annual audit of the treasury spreadsheets and procedures should be undertaken.

The FAC receives the report, approves the changes and/or rejects recommendations for changes.

APPENDIX 1:

Bank and TEC Financial Ratios and Limits (as at the date of the Framework)

Bank Lenders Financial Ratio

- A requirement of the Bank of New Zealand is that the ratio of total debt to total debt plus total equity should not exceed 0.075, but tested only at the end of each calendar month (where "total debt" is defined as the aggregate principal amount of all indebtedness for borrowed money (which would be disclosed by a statement of financial position if one were prepared as at that date in accordance with NZ GAAP); and "total equity" is defined as the aggregate of: consolidated retained earnings; consolidated reserves; and any other amount that, in accordance with NZ GAAP, would be classed as Equity as at that date - less any amount included that is attributable to: any revaluation of assets; goodwill or other intangibles; or minority assets).

- Total debt servicing should be governed by a times covered requirement. Interest paid to EBITD should be no less than 3 times covered.

TEC Ratios (to 31 December 2024)

Measure	TEC breach level targets
Net surplus ratio [1]	At least 0%
Interest cover ratio [2]	No less than 2.5 times
Cash flow from operations ratio [3]	At least 111%
Liquidity ratio [4]	At least 5%
Debt equity ratio [5]	No more than 7.5%

[1] Surplus as a percentage of total revenue (no covenants set for 2021 and 2022)

[2] EBIT divided by interest expense (no covenants set for 2021 and 2022)

[3] Operating cash receipts divided by operating cash payments

[4] Liquid resources divided by cash outflow from operations (no covenants set for 2021 and 2022)

[5] Total borrowings divided by total borrowing plus equity

Monitoring Reporting

In addition to the financial covenants above, the Consent provides for Massey to provide its full Audit (Finance) and Risk Committee meeting papers to the TEC should Massey borrow or draw down funds on any facility This requirement will be reviewed in June 2023.

APPENDIX 2:

Glossary of Terms

Bank Registered Certificate of Deposit
Registered certificates of deposits (RCD) are securities issued by banks for their borrowing needs or to meet investor demand. RCD are paperless securities that are priced on a yield rate basis and issued at a discount to face value. They are generally preferred over term deposits as investors can sell them prior to maturity.

Basis Point(s)
In financial markets it is normal market practice to quote interest rates to two decimal places e.g. 6.25% - one basis point is the change from 6.25% to 6.26%, one hundred basis points is the change from 6.25% to 7.25%.

Bid–Offer Spread
The exchange points (FX) or basis points (interest rates) difference between the bid and offer rate when quoted by a bank is known as the "bid-offer spread". Banks make their profits from dealing at their own bid and offer prices, thus earning the spread.

Bid Rate
Exchange rates and interest rate securities/instruments that are traded between banks are always quoted as a two-way price. One rate is where the quoting bank will buy – the bid rate, the second rate or price where the bank will sell at – the offer rate.

BKBM
The Forward Rate Agreement (FRA) settlement rate as determined at 10:45am each business day on Reuters page BKBM.

Call Option
The owner or buyer of a call option has the right, but not the obligation, to buy the underlying debt security/currency/commodity at the price stated in the option contract.

Cap
A series or string of bought interest rate put options whereby a borrower can have protection against rising short-term interest rates, but participate in the lower rates if market rates remain below the "capped rate." A cap is normally for more than one 90-day funding period.

Certificate of Deposit "CD"
A debt instrument (normally short term) issued by a bank to borrow funds from other banks/investors.

Closing-Out
The cancellation/termination of a financial instrument or contract before its maturity date, resulting in a realised gain/loss as the current market rate differs from the contract rate.

Collar
Two option contracts linked together into the one transaction or contract. A borrower's collar is normally a bought "cap" above current market rates and a sold "floor" below current rates. Over the term of the collar contract, if rates go above the cap the borrower is protected and pays an interest cost no more than the cap rate. Likewise, if market rates fall below the floor, the borrower pays the floor rate and does not participate in the lower market rates. Also called a "cylinder".

Collateral
A legal term, means "security".

Commercial Paper (CP)
The debt security instrument issued by a prime (and normally credit-rated) borrower to raise short-term funds (30, 60, 90 or 180 days). Also called "one-name paper" and "promissory notes" issued by competitive public tender to investors, or by private placing to one investor.

Corporate Bonds
The security instrument that is issued by a borrower whereby they promise to repay the principal and interest on the due dates. A bond's interest rate is always fixed. Bonds issued by private sector entities (including banks).

Coupon
The interest rate and amount that will be paid on the interest due dates of a bond. The coupon will normally differ from the purchase or issue yield/interest rate on a bond instrument.

Counterparty
The contracting party to a financial transaction or financial instrument.

Covenants
Special conditions and financial ratios required to be met or maintained by a borrower for a lender under the legal security documents.

Cover
A term used to describe any action of entering financial instruments that reduces risk or puts protection in place against adverse future price movements.

Credit Margin
The amount Massey pays above the BKBM-Bid Interest Rate to reflect the banks perceived credit risk. Credit margin excludes establishment and commitment fees.

Credit Risk
The risk that the other party to a financial transaction (bank deposit, interest rate swap contract) will default on or before the maturity date and not be able to fulfil their contractual obligations.

Debenture
A debt instrument similar to a bond whereby a borrower (normally a finance company) borrowers for a longer term at a fixed rate. Also a legal instrument provided as security to a lender.

Delta
"Greek" letter that measures how the price of an option (premium) changes given a movement in the price of the underlying asset/instrument.

Derivative(s)
A "paper" contract whose value depends on the value of some "underlying" asset e.g. share market stocks, bank bills, bonds or foreign currency. Also called a "synthetic." The value of the assets will change as its market price changes; the derivative instrument will correspondingly change its value.

Discount
A bond or bank bill is discounted when the interest rate is applied to the face value of the security and the net proceeds after deducting the interest is paid out to the borrower. Investors pay for the discounted (NPV) value at the commencement of the investment and receive the interest coupon payments along the way and the full face value at the maturity date.

Duration
Not the simple average maturity term of a debt or investment portfolio, but a measure of the interest rate risk in a portfolio at a particular point in time. The duration of a portfolio is the term (measured in years and months) if the total portfolio of bonds/fixed interest investments was revalued at market rates and expressed as one single bond. The profit/loss on revaluation of a one basis point movement being the same in both cases.

Event Risk
The risk of a major/unforeseen catastrophe e.g. earthquake, political elections, adversely affecting the financial position or performance.

Exchange – Traded
A currency, debt or financial instrument that is quoted and traded on a formal exchange with standardised terms, amounts and dates.

Exercise Date/Price

The day and fixed price that an option contract is enforced/actioned or “exercised” because it is in the interests of one of the parties to the contract to do so.

Fair Value
The current market value of an off-balance sheet financial instrument should it be sold or closed-out on the market rates ruling at the balance date.

Federal Reserve
The US Government’s central bank and/or monetary authority.

Fixed Rate
The interest rate on a debt of financial instrument is fixed and does not change from the commencement date to the maturity date.

Floating Rate
The interest rate on a loan or debt instrument is re-set at the ruling market interest rates on the maturity date of the stipulated funding period (usually 90-days).

Floor
The opposite of a “cap.” An investor will buy a floor, or a series/string of call options (the right to buy) to protect against falling interest rates, but be able to invest at higher interest rates if rates move upwards. A borrower may sell a floor as part of a collar structure to generate premium to pay for the “linked” bought cap.

Forward Foreign Exchange Contract
An agreement between Massey and a counterparty (usually a bank) to exchange one currency for another currency at an agreed future date (other than spot) at an agreed rate.

Forward Rate Agreement
An agreement between Massey and a counterparty to protect Massey against future adverse interest rate movements. Massey and the counterparty agree to a notional future principal, the future interest rate, the benchmark dates and the benchmark rate (BKBM)

Forward Start Interest Rate Swap
May also be called a Deferred Start Swap. An interest rate swap (given below) of which the start date is in the future. E.g. a 5-year swap starting one year from today.

Funding Risk
The risk that a borrower cannot re-finance its debt at equal or better terms at some date in the future, in terms of lending margin, bank fees and funding time commitment. Funding risk may increase due to the company’s own credit worthiness, industry trends or banking market conditions.

Hedging
The action of reducing the likelihood of financial loss by entering forward and derivative contracts that neutralise the price risk on underlying financial exposures or risks. The gain or loss due to future price movements on the underlying exposure is offset by the equal and opposite loss and gain on the hedge instrument.

Government Bonds
New Zealand Government bonds are denominated in New Zealand dollars and have a maturity date of greater than one year. There are two categories of New Zealand Government bonds. The first category has a fixed interest coupon paid semi-annually in arrears. The bonds are redeemable at par on maturity. The other category is inflation-indexed bonds (IIB).

Implied Volatility
Used in option pricing. To estimate the future volatility of the underlying asset or instrument, the option pricing models use historical volatility (expressed as a percentage) as a key variable to calculate the option premium amount. The movement in option prices is therefore a good indicator of future market volatility, as volatility is “implied” in the option ***price.***

Interest Rate Collar Strategy
The combined purchase of a cap or floor with the simultaneous purchase of another floor or cap.

Interest Rate Options
A contract that gives the holder (in return for the payment of a premium) the right but not the obligation to borrow (described as a cap) or invest (described as a floor) at a future date. Massey and the counterparty agree to a notional future amount, the future interest rate, the benchmark dates and the benchmark rate (BKBM).

Interest Rate Swap
An agreement between Massey and a counterparty whereby Massey pays (or receives) a fixed interest rate and receives (or pays) a floating interest rate. The notional principal, start date of contract, duration of contract, fixed interest rate and benchmark rates (BKBM) are agreed to by Massey and the counterparty.

ISDA
International Security Dealers Association: a governing body that determines legal documentation/standards for over-the-counter swaps/options/FRAs and other derivative instruments for interest rates, currencies, commodities etc. Corporate users of such instruments sign an ISDA Master Agreement with banking counterparties that covers all transactions.

"In-the-Money" Option
An option contract that has a strike price/rate that is more favourable or valuable than the current market spot or forward rate for the underlying currency/instrument.

Inverse Yield Curve
The slope of the interest rate yield curve (90-days to 10 years) is "inverse" when the short-term rates are higher than the long-term rates. The opposite, when short-term rates are lower than long-term interest rates is a normal curve or "upward sloping." In theory, a normal curve reflects the fact that there is more time, therefore more time for risk to occur in long term rates; hence they are higher to build in this extra risk premium.

Liability Management
The policy, strategy and process of pro-actively managing the treasury exposures arising from a portfolio of debt.

LIBOR
London Inter-bank Offered Rate, the average of five to six banks quote for Eurodollar deposits in London at 11:00 am each day. The accepted interest rate-fixing benchmark for most offshore loans.

Limit(s)
The maximum or minimum amount or percentage a price or exposure may move to before some action or limitation is instigated. Also called "risk control limits".

Liquidity Buffer
A combination of approved financial investments and committed unutilised bank facilities.

Liquidity Risk
The risk that Massey cannot obtain cash/funds from liquid resources or bank facilities to meet foreseen and unforeseen cash requirements. The management of liquidity risk involves working capital management and external bank/credit facilities.

Marked-to-Market
Financial instruments and forward contracts are revalued at current market rates, producing an unrealised gain or loss compared to the book or carrying value.

Medium Term Notes
A continuous program whereby a prime corporate borrower has (MTN) issuance documentation permanently in place and can issue fixed rate bonds at short notice under standard terms.

Netting
Method of subtracting currency receivables from currency payables (and vice versa) over the same time period to arrive at a net exposure position.

Option Premium

The value of an option, normally paid in cash at the commencement of the option contract, similar to an insurance premium.

Order
The placement of an instruction to a bank to buy or sell a currency or financial instrument at a pre-set and pre-determined level and to transact the deal if and when the market rates reach this level. Orders are normally placed for a specific time period, or "good till cancelled." The bank must deal at the first price available to them once the market level is reached. Some banks will only take orders above a minimum dollar amount.

"Out-of-the-Money" Option
An option contract which has a strike price/rate that is unfavourable or has less value than the underlying current spot market rate for the instrument.

Over-the-Counter
Financial and derivative instruments that are tailored and packaged by the bank to meet the very specific needs of the corporate client in terms of amount, term, price and structure. Such financial products are non-standard and not traded on official exchanges.

Pre-Hedging
Entering forward or option contracts in advance of an exposure being officially recognised or booked in the records of Massey.

Primary Market
The market for new issues of bonds or MTNs.

Put Option
The right, but not the obligation to sell a debt security/currency/commodity at the contract price in the option agreement.

Revaluation
The re-stating of financial instruments and option/forward contracts at current market values, different from historical book or carrying values. If the contracts were sold/bought back (closed-out) with the counterparty at current market rates, a realised gain or loss is made. A revaluation merely brings the contract/instrument to current market value.

Revolving/Evergreen Facilities
Massey will have the annual right to seek the bank lender's consent to extend the Facility's term for a further year.

Roll-over
The maturity date for a funding period, where a new interest rate is reset and the debt re-advanced for another funding period.

Secondary Market
The market for securities or financial instruments that develops after the period of the new issue.

"Short" Position
Selling of an asset or financial instrument in anticipation that the price will decrease or fall in value to buy later at a profit.

Spot Exchange Rate
An agreement between Massey and a counterparty (usually a bank) to exchange one currency for another currency in two working days' time at an agreed rate.

Strike Price
The rate or price that is selected and agreed as the rate at which an option is exercised.

Strip
A series of short-term interest rate FRAs for a one or two year period, normally expressed as one average rate.

Swap Spread

The interest rate margin (in basis points) that interest rate swap rates trade above Government bond yields.

Swaption
The purchase of a swaption gives Massey the right but not the obligation to enter into an interest rate swap, at a future date, at a specific interest rate.

Time Value
Option contracts taken for longer-term periods may still have some time value left even though the market rate is a long way from the strike rate of the option and the option is unlikely to be exercised.

Tranches
A loan may be borrowed in a series of partial drawdowns from the facility, each part borrowing is called a tranche.

Treasury
Generic term to describe the activities of the financial function within Massey that is responsible for managing the cash resources, financial investments, debt, and interest rate risk.

Treasury Bills
New Zealand Government Treasury bills are denominated in NZ dollars, are sold at a discount to the nominal value and carry no coupon. The bills are redeemable at par on maturity. Treasury bills are normally issued with a maturity date between one month and one year.

Vanilla Foreign Exchange Option
The purchase of a foreign exchange option gives the holder (in return for the payment of a premium) the right, but not the obligation to buy (described as a call) or sell (described as a put) one currency for another currency at a future date at an agreed rate.

Vega
Another "Greek" letter that is the name given to the measure of the sensitivity of the change in option prices to small changes in the implied volatility of the underlying asset or instrument price.

Volatility
The degree of movement or fluctuation (expressed as a percentage) of an asset, currency, commodity or financial instrument price over time. The percentage is calculated using mean and standard deviation mathematical techniques.

Yield
Read - interest rate, always expressed as a percentage.

Yield Curve
The plotting of market interest rate levels from short term (90-days) to long term on a graph i.e. the difference in market interest rates from one term (maturity) to another.