5.5.3 Treasury Policy Critique Exercise Answer

Unit: Unit 1 – Treasury strategy

Module: Module 5 – Treasury structure

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Summary: Answers to treasury policy critique exercise.

PART 1

Answer 1

Domestic environment

- kingdom
- small population
- rapid economic development
- wealthy
- part of regional economic grouping

Business environment

- regulated utility
- rapidly changing technology
- commoditisation of product
- global business environment
- local monopoly – but competition issues?
- profitable, cash generative
- small but rapidly developing market
- government/institutional shareholders 40%, public (retail?) 60%
- chairman related to ruler
- freely exchangeable currency
- no tax
- limited internal expertise

Implications for NTC: Given the rapid development of telecoms worldwide, it is unlikely that NTC's monopoly will survive. So we should expect that in the short to medium term NTC will have to contend with:

- increased competition (especially impact of cellular technology?)
- squeezed margins
- fast-moving technical change
- need to seek growth regionally e.g. by acquisition, joint venture
- need to develop technically, possibly by joint venture, or association
- need to seek diversification in some form
- need to spend on capex to keep up to date

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Answer 2

Key areas currently are:

Cash & Liquidity Management:

- Liquidity management:
  - efficient collection of cash
  - short term investment
  - investment of core balances

- Currency management:
  - USD revenues and costs to convert to local currency
  - exposures from capex
  - tender to contract risk when competing for new business
  - currency USD-linked. Coupled with current profitability and cash generation, this reduces FX risk.

Risk Management:

- Interest risk:
  - relating to investments
  - probably little relating to changing demand for product (i.e. calls) as interest rates change
  - probably to future debt if business expands. If expansion is a certainty and debt is taken on, then the business is exposed now.

Corporate Financial Management:

- Capex:
  - capex evaluation and link to risk management e.g. performance bonds

Treasury Ops & Controls:

- Need to review / amend:
  - governance needs to be considered (nb also risk management link)
  - establish treasury committee

Going forward, if NTC should decide to grow regionally then debt may be required, extending the role of treasury:

Capital Market & Funding:

- Funding:
  - needed for acquisitions and investment in technology

Cash & Liquidity Management:

- Currency management:
  - FX risk becomes more important as margins tighten and competition increases

Risk Management:

- Interest risk:
  - sense inverts from short – medium term deposits to long term debt

Corporate Financial Management:

- Need to review / amend:
  - acceptable level of gearing (currently zero)
  - investment hurdle rate criteria
  - dividend policy (currently very high pay-out rate)
  - tax on overseas earnings (if any)
  - maintenance of equity investment to investor expectations (e.g. does government expect to maintain 10%)

Answer 3

Firstly, consider major risks which may influence the business strategy and the "Expected to take business risk, expected to take action to reduce financial and operational risk…." model, such as:

- regulated utility
- low level of financial risk management expertise at present
- conservative institutional/governmental shareholders (40%)
- potentially naïve "general public" shareholders (60%)

Therefore one would expect NTC to adopt a conservative, low risk policy for the management of treasury.

PART 2

Answer 4

Note that these policies have been drafted by an ex-bank treasury person

Summary Critique

The major problem with the policies is that they seem to have been written without the context of the firm having been considered. Thus the risk to the firm does not seem to have been the backdrop for the generation of the policies. For example, in interest rate risk management, what exactly is the risk that is being protected? Is it earnings or might there be an interest cover ratio targeted? In funding, why is the 30% limit chosen, what risk is addressed with that limit?

From the policy and control perspective:

- Types of exposures and risks defined
  - This has been attempted, with varying degrees of success.

- Risk limits based on quantifiable data lead to hedging actions to reduce risk to acceptable limits
  - Not really achieved. Few risk limits, quantification weak, and no direct visibility of how action reduces risk.

- Approved hedging instruments, counterparties
  - Attempted, subject to detailed commentary above.

- Procedures for reporting limit breaches
  - Absent

- Segregation of duties
  - Absent. Would expect some statement on this, covering transaction authorisation & dealing, transaction entry, approval, settlement, reconciliation and confirmation matching.

- Risk management terms defined and policy builds expectations of what the risk management programme will and will not achieve
  - Attempted in the first statement of all, but then gets lost in the policy statement list.

The Fitch rating agency (used here but any could have been used) governance criteria:

- processes for directing and controlling … procedures for making corporate decisions … the framework for monitoring management performance…
  - Attempts these criteria but doesn't do so directly or explicitly.
  - Doesn't provide much assistance or guidance in making decisions
  - Doesn't provide a framework for monitoring performance

Answer 5

1. INVESTMENT OF SURPLUS FUNDS

1.1 *Policy*

Optimise the yield on surplus funds consistent with full capital preservation, maximum liquidity and minimum risk

Investment policy is probably one area where the firm's background is less relevant as in almost every case the firm will never want investment risk with its funds, wanting them all back. However full capital preservation as written here can only mean risk free securities, which are government bonds, held to maturity and in the local currency. Even if these securities exist, this is too severe and some notice of investment risk should be taken. So this statement is too imprecise. Should segment surplus funds into time-availability periods.

1.2 *Permissible Instruments*

Following instruments are permitted;

Money Market Instruments

- Term deposit with bank
- Certificate of Deposit
- Bank Acceptances
- Capital Guaranteed Instruments

Corporate
- Commercial paper
- Corporate Bonds
- Corporate Floating Rate Notes
- Asset backed securities

Government
- Government and Government Agency Treasury Bills
- Government and Government Agency Bonds

Capital guaranteed instruments usually have highly variable yields, usually with a lower limit of zero, so are unsuitable.

Unless held to maturity, fixed rate bonds will change in value if interest rates change, so security of principal may be at risk. Note the assumption that the paper will be held in safe custody or on an exchange account, and that NTC has the infrastructure to manage transactions (bearing in mind its lack of expertise).

Asset backed securities is vague and should be tightened up. Some structures may be complex and require specialist skills to analyse and manage. Additional criteria should be appended to ensure only "simpler" investments are used.

Specifically, money market funds (recall AAA credit with instant access) and repos are not mentioned – check availability.

Tax: proceeds should be free of all income, capital gains and withholding taxes.

1.3 *Country Exposure*
- Investment restricted to OECD and following regional Banks:
  - Bank X
  - Bank Y
  - Bank Z
- Investment in any one country not to exceed 25% of NTC's net worth

Note: There are 30 countries involved: AAA = 9; AA = 10; A = 4; BBB = 5; BB = 2

Given the spread of quality of the thirty countries, 25% of NTC's net worth exposed to any one country seems risky.
Country allocation should be subject to credit criteria.
In the context, using a net worth criterion seems a little odd.
Of course, political consideration regarding regional partners may intrude here!

1.4 *Credit Quality*

(a) Subject to (b) below, all investments must have a credit rating as follows:
- Short term (from one day to one year) = A1/P1 or better
- Medium term (over one year up to 5 years) = A
- Long term (over 5 years) = AA

(b) The company is permitted to invest in instruments issued by an unrated Local Bank or Institution provided that its capital adequacy ratio as per the published accounts has been greater than 10% over the last 3 years.

Political considerations may intrude here as well. Leaving political considerations aside:

- Part (a) specified single A quality for medium term. Is there a strong argument why that should not be Aa?

- Part (b) relating to unrated local institutions mentions only capital adequacy as a criterion. Quality of assets, liquidity and quality of management, though more difficult to assess, are as important. NTC would have to develop a synthetic ratings process to make this consistent with (a).

It would be more desirable if NTC could evaluate local banks on a broad list of criteria (including quality of service!) and select a short list of approved counterparties which can be sanctioned by, say, a Finance Sub-committee and reviewed on a regular basis. NTC should also bear in mind the relationship implications of its deposit profile. Ideally it should build relationships now, with institutions from whom it may need to source debt funding in the future. Again, this could be reflected in policy.

1.5 *Counterparty Limits*

Investment with any one Local Bank or Financial Institution, or subsidiary of an overseas bank must not account for more than 10% of the published net worth of the legal entity with whom funds are placed as at its latest balance sheet date, or 10% of NTC's paid up capital whichever is lower

Parent company net worth may only be taken into account where there is an unconditional guarantee for the branch/subsidiary

The first criterion seems strange. Both measures relate to historic accounting criteria, which are unlikely to reflect economic actuality. And due to the likely difference in scale, the first seem meaningless.

Although the parent company net worth remark is true, dealings with locally based branches of overseas institutions and with locally-based subsidiaries with overseas parent guarantees effectively give rise to exposure on the country of the parent.

Best practice now requires credit risk to be evaluated quantitatively. An approach based on 1-day or 1-week VaR, rated default rates, and overriding limits on principal per institution would be better.

1.6 *Liquidity*

All instruments must have a recognised and liquid secondary market, sufficient to enable an orderly realisation within 3 months

Three months is much too long for all investment funds, and selling assets rather than holding them to maturity opens up the risk of capital losses.

As suggested at 1.1, investment maturities should be spread over a range and some must be available on demand.

In addition, if NTC arranges an overdraft limit (ideally with set-off) then on-demand balances can be minimised.

1.7 *Currency*
Investment of surplus funds is restricted to Local Currency, US dollars or if in any other currency must be 100% hedged back to US dollars

There is an implied assumption that the USD peg will hold, or that if the peg fails the local currency will depreciate. The sense of this is probably correct – there should be no need for NTC to hold *material* amounts invested in currencies other than those set out; but for small operational surpluses it would be tedious to swap everything back to Local Currency or USD.

1.8 *Placing Process*
Investment of surplus funds should be done on a competitive tender basis, with the highest accepted subject to credit and counterparty limits

Fine in theory, but for small investments (need a limit here) this policy will be time-consuming and inefficient. Also, treasury will need guidance for quoting between instrument types (bank deposit compared to FRN say).

We suggest here the following policy, in the format that should be familiar. It could be fleshed out further to make more detail and cover the points raised above.

Item	Remarks	Policy detail
Policy name	*Give the policy a name*	Investment of surplus funds
Policy objective	*Identify the risks the policy is to address*.	To protect capital, allow liquidity and gain an appropriate yield
Policy direction	*Give the overall direction of approach to these risks*	The policy is to ensure that invested funds are fully secure, available to meet the needs of the business and returning an adequate yield
Risk measurement	*How is this risk measured*	Security is to be measured by rating of investments and limits based on annual earnings. Liquidity is to be measured on time to liquidate and limits based on percentage of cash flow forecast. Yield is measured on actual basis and based on LIBOR
Benchmarking	*Establish externally available benchmarks if possible*	External benchmarks are credit ratings and LIBOR, easily found. Could use CDS rate as a measure of bank credit risk. Yield to be benchmarked to a money market fund.

Item	Remarks	Policy detail
Responsibility / oversight	*At what level / who should have ultimate responsibility for the management of this risk?*	Board must establish policy, delegating routine review to treasury committee and day to day operation to the treasurer.
Procedures	*What controls or procedures can be put in place to control this risk?*	Possible to calculate VAR of loss to establish limits but probably easier to have limits per credit rating, counterparty and country. Liquidity can be managed as say 150% of forecast cash flows although in practice most investments (except time deposits) are generally liquid. Yield becomes secondary in these circumstances.
Decision making	*Provide an overall framework for decision making by managers and staff*	Treasury committee to control limits, treasurer to make day to day investments.
Policy key performance indicators (KPI)	*Select policy KPI(s) to be used to measure the risk and monitor performance*	Investments by credit rating, counterparty and country as percentages of class and earnings. Liquidity by instrument and % of cash forecast. Yield v benchmark
Reporting/ Feedback	*How should performance against the policy KPI(s) selected above be reported/fed back.*	Monthly report to treasury committee of KPIs
Continuous improvement	*What procedures are required to ensure that policy is kept up to date, is adhered to, and has the desired effect*	Semi annual review of policy

2. FUNDING

2.1 *Policy*

The company's total debt should not exceed 30% of its debt plus equity

This has simply not been set in the context of the firm. What is 30% trying to achieve? We have no idea. The whole policy is desperately thin – see comments below.

The definition of leverage is ambiguous, since debt may be defined as gross or net of liquid resources, e.g., cash/near cash. Equity may be defined as book or market.

The 30% (and similar criteria) should not be hard-wired into policy, but placed in an appendix for periodic review.

Missing detail in the policy:

Interest Cover: Companies also often apply an interest cover or fixed charge cover criterion as well as, or instead of, gearing e.g., $\frac{profit}{interest\ paid}$ to be greater than x. Obviously this would have to be consistent with loan documentation and announcements to the market.

Maturities: Companies with a continuing need for debt and with a number of facilities usually have a policy to spread repayments as evenly as possible over the future, i.e. specify their ideal maturity ladder for repayments. Companies will also usually have some policy about the degree of match between loan maturity and the life of the assets financed by the loan.

Documentation: There is no mention of facility documentation and potential terms. Policies should be developed for:

Guarantees: When to give if at all; which entities can guarantee, and in favour of whom.

Letters of Comfort: As for guarantees.

Physical security: As for guarantees

Covenants: e.g. negative pledge
material adverse change
disposals
cross-default threshold
financial performance benchmarks.

The company's policies should reflect its perceived position in the market, and state which terms are unacceptable e.g., provision of security and which are negotiable e.g., negative pledge. Although as NTC has yet to borrow, development of the policy may have to take place in conjunction with negotiating the first facility.

As the number of facilities increases, it is important that they have similar terms so that the process of checking compliance with the terms and conditions of loans does not become too complex, and to minimise the chance of an inadvertent default.

2.2 *Permitted Sources of Finance*

- Overdrafts and short-term borrowings (i.e. up to twelve months)
- Medium-term bank borrowings (i.e. in excess of one year and up to five years)
- Operating and Finance Leases
- Hire Purchase
- Export Credit Guaranteed financing

It would be worthwhile including the domestic or international bond markets, commercial paper and private placements as an additional source of finance.

3. INTEREST RATE RISK MANAGEMENT

3.1 *Policy*

To protect the investment of the company from adverse interest rate movements, and in the case of Finance/Borrowing to hedge against rising interest rates

Materiality of interest amount will influence the extent of hedging. For instance, if NTC has budgeted for a particular level of interest income (or expense) then if the opportunity arises to lock into that budgeted level early in the year, it may be appropriate to do so for the sake of certainty, even at the risk of missing out on profits from future rate rises.

Hedging interest risk means having a view about future interest rates. As for currency, it is highly desirable to have an agreed view, revised regularly, which provides a guideline for treasury decisions.
Some companies use very broad policy guidelines for interest rate risk e.g., at least one third or one half fixed. Of course, for most companies the risk is on borrowings e.g.: " We aim to keep one-third of our funding at fixed or capped rates of interest to protect ourselves from possible rises in interest rates". Even these policies are weak because we don't understand what risk is behind this policy and exactly what is being protected with these statements. In the case of NTC, while it is cash rich then protection of earnings is a possible risk that might merit addressing. On the other hand the company may soon need to borrow for investment or a share buy back in which case a different risk may need attention.

3.2 *Permitted Instruments*

- Forward rate agreements (FRA)
- Interest rate swaps (IRS)
- Caps/Floors/Collars

Some companies prohibit collars because of the downside risk, should the underlying disappear and the "sold option" side of the collar be exercised. However this is equally true of swaps (which are zero-width collars). It is essential that notional principal hedged is monitored against current and forecast borrowings or deposits, so that if the underlying exposure disappears, the over-hedge can be reversed promptly.
The policy on sold options should be made clear.
Policy in this area might refer to the existence of agreed ISDA documentation

4. SHARE REPURCHASE

4.1 The Treasurer will evaluate on a six month basis the appropriateness of a share repurchase

It seems slightly odd to phrase this as such. Where is the firm's context in this? Overall capital structure efficiency and fitness for purpose should undoubtedly be kept under review, on a quarterly or half-yearly basis. Rather than allocating this to the treasurer personally, it might be better allocated to a Board Committee.

Share repurchase is an alternative use of capital investment capacity. It can make sense if the company has excess liquidity, is short of profitable investment opportunities or if the company's shares are undervalued. Of course the company needs a discount rate on which to base its decision and this discount rate is related to the company's cost of (equity) capital.

There is a further possibility which raises more fundamental issues of financial strategy. NTC currently has no debt. However its performance means that it has considerable debt capacity. By gearing up the balance sheet it could buy back additional shares, thus further increasing the earnings per share of remaining shareholders. However, this increase in return is matched, in theory, by an equivalent increase in risk. Thus, in theory, (and assuming there is no tax) there is no benefit to shareholders in gearing the company to do this unless shareholders decide that they want a more risky investment.
NTC is not subject to tax and therefore would not benefit from tax relief on debt interest. So, in theory, pushing up gearing to buy back shares and push up earnings per share merely pushes up risk to shareholders, for no benefit to NTC. In practice, of course, it might work if shareholders are less experienced and recognise extra return more easily than they recognise extra risk. Alternatively, NTC might gear up an overseas acquisition, assuming the latter had the tax capacity to absorb the interest deduction.

The quote below is from a Marriott Corporation Annual Report and Accounts.

“Marriott measures returns on capital against the cost of capital to ensure profitable investment. Capital expenditure and acquisition proposals by a business unit are approved only if projected cashflows exceed the minimum return required for that business, indicating the project will create value for shareholders.

Marriott fully commits its investment capacity to opportunities offering attractive returns. Investment capacity is used for expansion of existing businesses, acquisitions of closely related businesses, cash dividends and share repurchases.

Marriott views selective share repurchases as an efficient and flexible means of distributing cash to its shareholders. When the market price of Marriott stock does not properly reflect the company's underlying value, purchasing shares is a profitable use of investment capacity”.

5. FX Risk Policy

5.1 *Policy*

A - To protect operating profits and cash/flows by hedging all firm and highly probable currency transactions as soon as they arise

B - To facilitate the availability of upside gains while protecting the downside

From your work elsewhere, you will be aware that this also looks a little thin. Where, again, is the context of the overall from risk? Could some risk be borne by the firm? If there is a USD peg, why bother with hedging anyway?

Hedge Currency: Is the hedge into Local Currency or USD?

Is there an implicit assumption about the relationship between Local Currency and USD? If so, it should be stated!

Firm/Probable: The terms "firm", "probable" and “arise” may need closer definition.

For NTC, "firm" transactions are largely limited to capex. Revenues from the operating business may fall mostly into "probable" i.e. estimated calls in the coming month(s). So a key question is how far ahead to hedge "probable". It is likely, for example, that calls will be made ad infinitum, is the exposure therefore infinite. Some scale needs to put on the time when NTC can change its prices or business model to adapt to the new FX rates background.

Origins of FX Exposure: NTC's currency exposure arises from three areas:

- operations
- capex
- investment

If it is possible organisationally and from an accounting/control perspective, it might be more economical to hedge only the *net* cashflows arising from these three areas overall, rather than to treat each area in isolation; but this approach may equally not work. Indeed, it may be that individual exposures within each area fail to net either, depending on contract terms. So the treasurer needs to analyse each position carefully before formulating policy. If need be, a net external transaction can be split out back to back internally, but operating units need to be happy with the rate they get as a result. In addition, IFRS hedge accounting requirements (if they are a concern) may restrict NTC’s ability to deal net.

It would also be desirable economically to evaluate the spot and forward hedging decisions. For example, if a EUR capex payment is anticipated 12 months ahead one should compare the cost of buying the EUR via a forward purchase and depositing local currency in the meantime, with buying the EUR now and investing until required – noting the potential conflict with currency investment policy.

5.2 *Permitted Instruments*

- Spot foreign exchange transactions
- Currency deposits
- Outright forward contracts
- Forward contract / option-dated delivery
- Purchasing currency options

Purchased Currency Options: Use of options implies a cost, and thus having a view on the future movement of currencies. The cost / benefit analysis should be agreed with, say, the Finance Sub-committee of the Board and revised on a regular basis. This agreed view then becomes the operational guideline on which treasury decisions can be based; for instance the cost of the option premium against the expected return, given the view about future levels of exchange rates.

5.3 *Limitations on the Use of Options*

Currency options are to be used only to hedge commercial transactions. In no case should an option be written. The strike price of the option should not be in excess of 5% of the forward rate at which forward cover can be effected.

As drafted, the policy fails to permit the sale of options, even as part of an option strategy with finite losses. This may be too restrictive, but bear in mind the limited expertise available in treasury.

Is it possible to put some absolute or relative limit on the volume of options purchased?

Are European or American options envisaged?

If American, are any guidelines needed for closing out ahead of maturity?

The limit on the strike price seems strange – an option strategy is there to do a job and it might well be appropriate to layer in “disaster cover” cheaply in some circumstances.