BANK NOTE 2005

ADVANTAGES OF LONG TERM CONTRACTS FOR BANKNOTES AND SUBSTRATES

(A STRATEGIC FOCUS FOR BANK NOTE AND COIN ISSUE)

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In New Zealand the public sector is now well into the second phase of significant change. The first phase commenced in the late 1980's when the traditional norm of doing the job correctly and lawfully was challenged by concepts of efficiency and effectiveness. More recently the emphasis has shifted to one of getting better performance from the system.

Today I would like to briefly elaborate on the changes made in the delivery of the currency function at the Reserve Bank of New Zealand over the past 15 years, but with particular emphasis on how we have evolved to a more strategic focus, leading us into taking a longer term view of our business.

I do not need to convince this audience of the importance of the currency function for a Central Bank; currency issue expenses are a significant proportion of total bank expenditure and seigniorage income provides non-competitive funding for the whole organisation. In addition reputation risks are high if the expectations of the public are not met for any number of reasons.

In New Zealand bank note and coin issue are the only 'products' in widespread use by the general public that are still subject to monopoly provision. Energy, telecommunications etc, are now all open to competition. However, the absence of competition places a special obligation on the provider as in most economies, efficiency and innovation is driven by the need to compete.

Meeting the currency demands of the public in New Zealand cost the Reserve Bank (NZ) $8.7 million[1] in the year to 30 June 2004. This was **24% of total Bank expenditure** and includes coin issue.

A break-down of the expenditure shows coin issue expenses $4.1 million, note issue expenses $1.3 million and cash operating expenses $3.3 million.

In 1990/91 the currency function consumed 59% of total Bank expenditure, coin issue expenses were $5.8 million, note issue expenses $9.7 million and cash operating expenses $13 million.

In the 1990's the Reserve Bank of New Zealand was significantly restructured resulting in total expenditure falling from $49 million in 1990/91 to $38 million in 1997/98. The currency function played its part primarily due to more competitive tendering for supply and the commissioning of new note processing machines, which enabled more efficient use of staff resources

However, in 1997/98 the currency function was still consuming 38% of total Bank expenditure. We were reasonably 'efficient', but our focus was short-term. Our note printing contract had a three year life with new stock ordered annually. For coins we ran an international tender each year. At that time we believed that the only way of ensuring 'best price' was to go to regular tender. Inventory management was almost entirely driven by the fear of ensuring we had sufficient stock to meet seasonal peaks and unexpected demand, such as a major natural disaster.

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[1] NZ $ = 70 US cents

Our over-riding inventory criterion was to maintain a minimum of 12 months supply of all denominations at all times. Note and coin orders were placed with suppliers in the second quarter of the year for delivery of finished product before year end. Of course, if most countries follow this pattern it will result in the supplier being forced to gear up production for the latter part of year, which is not the most efficient use of their resources and will add to the cost.

Operationally in the late 1990's we were still very much part of the retail cash cycle. Cash positive banks deposited excess cash with us and cash negative banks purchased virtually all their requirements from us. Cross-shipping was significant. We compounded the situation by maintaining sites in the three major cities and allowing free access for repatriation and issue in relatively small amounts.

In 1997/98 we processed 515 million bank notes. The average number of notes in circulation at that time was 67 million.

We told ourselves that the best way to ensure supply and the integrity of note and coin issue was to play a major part in its distribution. The emphasis was on performing our traditional role efficiently.

However, by 1998 the public sector was beginning to enter phase two of its transformation. It was realised that to obtain "better performance" we need to have a strategic as well as a business focus.

The greater emphasis in the RBNZ on a strategic focus led to a fundamental evaluation of our role in the cash cycle. We determined that the vast majority of notes repatriated to the RBNZ were fit and genuine, thus the need to continually check their circulation status was largely unnecessary. In 2000 we closed our two branches and narrowed our cash operation to the destruction of unfit notes and the provision of cash to meet seasonal peaks in demand.

Since we closed our branches we have seen four Christmas peak periods with no reported shortages of currency. The supply chain is working fine without the RBNZ! We have maintained the quality of bank notes in circulation by providing incentives for the retail banks to return unfit notes to us at our cost. We have also taken proactive action to withdraw the lowest value note in circulation by pre-positioning new $5 notes in the cash depots where they are 'swapped' for surplus notes collected from retail bank branches.

Up until this year we have machine processed all bank notes repatriated to the Bank In 2004 this amounted to about 60% of notes in circulation; 15% unfit and destroyed and the remainder reissued. Most fit notes were deposited by the retail banks post the seasonal peak periods. This year we have decided to only machine process a sample of fit notes, our overall target is to process about 30% of notes in circulation (both fit and unfit). We believe that this will be sufficient to ensure good counterfeits are detected and to monitor quality.

In January this year we commenced new operating procedures that require the commercial banks to repatriate fit $20 notes to us in sealable see-through bags. These bags are visually checked and weighed and are immediately available for re-issue. A

typical allocation to a staff member is 150,000 forms which would normally take about 7 to 8 hours to fully process through the system; eliminating breaking the seal on the bag, bulk check and machining allows an operator to process the same number of notes in about 30 minutes.

When we closed our branches in 2000, we provided the commercial banks with 'compensation' payments based on the funding cost of a proportion of their cash holdings. The prime motivation for this payment was to ensure that the banks would hold sufficient stock to supply the public. We told the banks that the payment would be temporary to give them time to set-up their distribution systems. The final compensation payment was made earlier this month.

The question of subsidising cash distribution or funding of cash holdings is a thorny one. Many countries have depot systems in place rather than a cash subsidy. However, in our experience, Government subsidies in one form or another, lead to inefficiency. Central Banks should not feel 'guilty' about just issuing currency and letting market forces and public demand drive its distribution. Certainly in New Zealand where the retail banks are announcing record profits it is difficult indeed to justify state subsidies for their cash business.

The replacement of all New Zealand's bank notes with polymer substrate notes in 1999 has also assisted significantly in maintaining the overall quality of notes in circulation. After five years of circulation we withdrew as unfit, just under 15% of notes in circulation in 2004.

The initial contract with our current bank note printer was signed in 1998 for a three year term and included the supply of substrate and some new security features. This was in line with our policy at that time of tendering our note printing order every three years. The price per thousand notes was set with limited scope for increase. Subsequently we have rolled-over this contract and it is still in force seven years on.

For coin issue we traditionally tendered on an annual basis. However, in 2001 for the first time we tendered for a two year supply. This contract has been extended and is also still in force.

In early 2004 we contracted with both our note printer and coin mint for a two year supply of most denominations with indications of when minimum stocks would be required. This included keeping supplies of finished notes outside New Zealand for contingency purposes. Timing flexibility was given to our suppliers to obtain substrate and coin blanks and manufacture the finished product.

To date these arrangements have worked very well for us as we have been able to adjust delivery times to suit us and the factories in line with demand and our stock levels.

There are a number of considerations for a small importing Central Bank in maintaining inventory to meet demand and obtain supply at best quality and price.

- We are a monopoly supplier of a product that is widely used on a daily basis. Interruption to supply, even to a single denomination, can cause problems for the community.

- There is a significant demand for notes and coins at Christmas and to a lesser extent Easter. In New Zealand the value of currency in circulation rises by about 17% in December each year.

- We do not have our own production facility for notes or coins, thus we cannot be assured of priority if a shortage occurs.

- The setting up of factory production runs, which includes obtaining bank note substrate and coin blanks is seemingly geared to large orders. For small countries this means that we are continuously trying to balance receiving sufficient stock to meet seasonal peak demands and following best practice in minimising stock holdings.

- There is evidence from places like Kobe in Japan that there will be a flight to cash in a major disaster situation. Unfortunately New Zealand is sited between two major tectonic plates and is prone to earthquakes. Y2K fears also suggested that there may be a flight to cash if electronic systems fail. We do not have a firm view on the quantum of demand in such circumstances but Business Continuity Planning is a major consideration for us.

- While the demand for various denominations is reasonably constant, it can change, sometimes unexpectedly. Examples in NZ was a move by the gaming industry to use $1 and $2 coins in most machines in place of 20 cent pieces in the mid-1990's and more recently some retail banks changing their ATM default note from $20 to $50.

As mentioned our key inventory criteria is to ensure that we meet seasonal demand and have a reserve supply in case of unexpected demand. Because we are a monopoly supplier and funding is not an issue, it is natural for us to err on the conservative side and carry more stock than would be considered prudent by most private sector businesses. On the other hand we also need to consider that our product is under threat from counterfeiting and note series life is now much shorter and security upgrades are becoming more common.

In addition, the increasing demand for public sector efficiency drives us to frequent tender to demonstrate that we are obtaining best price. The question is, are frequent tenders conducive to good inventory control? Perhaps our industry is becoming totally price driven with Central Banks at one end of the spectrum and our suppliers at the other.

In my observation over recent times our industry has seen a proliferation of features on bank notes from suppliers with arguably only short-term interests at stake. These features add significant cost to our product and are likely to confuse the public.

The number of new features and their innovative titles is staggering; blind code, microperf, STRAP, metallized ink, blind embossing, foil stamping, kinegrams, holograms, micropattern, OVI etc.

Do we really need all these features? While 'digifeiting' or casual counterfeiting is very difficult to identify and to counter with traditional police methods, are Central Bank's penchant for regular tenders driving bank note printers into devising new features just to sell their product by obtaining a marketing edge?

Central Banks have a quant custom of sending specimen notes to each other at time of first issue. When we receive these notes I make a habit of attempting to list the security features before looking at the accompanying explanatory material. As yet I have not been able to successfully identify all features in most notes. How much more confusing for the general public, tourist, or the key 'second line' of retailers and bank tellers?

In New Zealand surveys tell us that 70% of the population have never in their lives attempted to verify a suspicious bank note. The main security feature mentioned is the good old watermark or shadow image. Is it a coincidence that this is the feature that has been around the longest?

We believe that there is a case to consider longer term arrangements with suppliers. Contracts can be written that limit price escalation, ensure commitment to R & D, provide for customer satisfaction ratings and quality standards and perhaps more importantly for the small importing Central Bank, provide an opportunity to introduce innovative supply options both for substrate and finished product.

A longer term supply agreement could lead to both parties working together to meet the efficiency, supply and business continuity requirements of the Central Bank. We can potentially also write into a contract a guaranteed life for our notes, a commitment to reduce or stabilise counterfeiting levels and provide more effective stock control. Such desirable goals are unobtainable in a frequent tender situation. Also longer term arrangements would allow hedging or forward exchange contracts to be written to provide protection against adverse movements in metal prices and currency movements.

Another most important consideration of modern times is the proliferation of machines of all kinds that dispense or accept currency for all sorts of businesses. Any change to currency that effects the operation of these machines has major repercussions in terms of cost and convenience. Potentially this fact can severely limit a Central Bank's ability to upgrade their note series. A longer term view that includes input from the private sector machine companies obviously makes good sense.

To be effective, a strategic focus needs to be longish term and tied appropriately into the governance and funding framework of the Organisation. At the RBNZ governance is well-defined, meshing in with funding and monetary policy target agreements with the Government, the role of the Board and independent non-executive directors, public reporting and accountability.

Our funding agreement, which is designed to give us operational independence from the Government, provides the Bank with a fixed amount per annum for a period of five years. We are currently in the process of negotiating with the New Zealand Treasury and the Minister of Finance a funding base for the five year period from July this year to 30 June 2010. Our financial performance is monitored by a committee of Parliament, thus the funding level is critical to us to ensure we have enough resources to meet our functional objectives for a five year period without overspending; quite a difficult task!

Because expenditure on the currency function is so significant I am under some pressure to estimate as accurately as possible likely expenditure on note and coin issue for the next five years. For the first time in our 'modern' history our overall expenditure is likely to increase as savings from 'efficiency initiatives' are now less apparent.

This task has been made more complex as we have decided to restructure our lower value coinage next year. We intend to downsize our cupro-nickel 50, 20 and 10 cent coins and replace them with smaller plated steel coins. We also plan to withdraw our lowest value coin, the 5 cents, from circulation.

Fortunately these changes are quite cost effective to implement at the present time given the strong market prices for copper and nickel that will provide income from the scrap value of the demonetised coins. As part of this project we are looking at the options available to lock-in the current high metal prices through hedging contracts.

By the June financial year 2007/08 we project that expenditure on the currency function will be just 18% of total Bank expenditure.

As part of our strategic planning for the next 5 years we have attempted to benchmark ourselves against our peers. This is not an easy task for many of our functions, however, for the currency side of the Bank, which is more akin to a business producing a product (albeit with a monopoly); some benchmarking can be more meaningful. The difficulty we have had is finding relative comparisons in the Central Banking world.

Attached to the written text of this presentation is a comparative table of some key figures for our currency function. Perhaps most significantly it shows that the total cost to run the currency function declined by 70% between 1991 and 2004, although the value of notes and coin in circulation increased by 130%.

For bank notes, the issue cost per note in circulation has fallen 90% in the past 15 years and note operating costs have declined by 74%.

At the RBNZ organisational transformation based on business management principles has led to very significant efficiencies. For the future, to obtain better performance, we believe that we need to continue to think and act strategically with a longer term vision for our functions and our operations. For the currency function the opportunities to obtain better performance are very real and obtainable and we believe that longer term supply arrangements will play an increasing role in containing costs and meeting our obligations to the public.