

The Austraclear New Zealand System

Stephen Anderson describes the Austraclear New Zealand system.

Introduction

The Austraclear New Zealand System is one of a number of payment systems in New Zealand. It is a real-time trade matching, transfer, clearance and settlement system for securities and includes a cash transfer facility that provides irrevocable bank funds between members.

Original Base

The Austraclear New Zealand System has evolved from the original Austraclear System developed by Austraclear Ltd in Australia. Austraclear Ltd developed the Austraclear System to facilitate the matching, clearing and settlement of securities transactions in the Australian financial market. The shareholders in Austraclear Ltd are the major financial institutions in the Australian market. Austraclear Ltd was formed in 1984.

Reserve Bank of New Zealand Involvement

Representatives from Austraclear Ltd visited New Zealand in early 1989 and discussed the demand for a system like Austraclear in New Zealand. As the result of interest shown, a New Zealand consultative committee was formed. This committee was made up of members from banks and institutions.

In late 1989, the Reserve Bank expressed interest in being the provider of the Austraclear System in New Zealand. With the agreement of the consultative committee, the Reserve Bank commenced negotiations with Austraclear Ltd. These were finalised in early 1990 and the System became operational in New Zealand in June 1990. The Reserve Bank is the provider of the Austraclear New Zealand System to the New Zealand financial market.

The Reserve Bank has various licensing and contractual arrangements with Austraclear Ltd for the provision of the System and support of the System that allows the Reserve Bank to provide the System in New Zealand.

The Reserve Bank sees the provision of the Austraclear New Zealand System as making a contribution to the soundness and efficiency of the financial system. It provides electronic delivery versus payment (DVP) for securities transactions, and irrevocable bank funds. Neither of these features is currently available in any other electronic form. Both features reduce risk and are desirable in a sound financial system.

The Bank's direct involvement in the provision of the System has allowed it to introduce features that it sees as desirable from a policy perspective. However, the Bank also expects the System to operate on a self funding basis and the users of the System to pay for the service they are receiving. Membership of the system currently stands at 45. The membership consists of banks, financial institutions, brokers, trusts and corporates.

Features of the System

The basic structure of the System revolves around a securities portfolio and a cash 'scoreboard' for each member. The securities in the portfolio of each member reflect the securities held for them in the depositories operated by the Reserve Bank in Auckland and Wellington. The cash 'scoreboard', or cash account, reflects the payment activity of each member for the day.

Each cash account for each member is also linked to the member's bank. At the end of each day, the sum of that day's cash transactions is reported to the member's bank and the member's bank passes that entry in its records.

Members and their banks access the System from PCs in their own offices and are linked to the System through leased lines or access it on a dial-up basis.

Austraclear is a 'double sided' system. That is, each member must enter an instruction which must then be matched with a corresponding instruction entered by the other party. The full details of each instruction must match before the transaction will proceed. This is an important feature of the System which also allows it to be used for trade confirmations. Transactions do not proceed until both parties have agreed to the details.

Two other features of the System are of major significance. They are delivery versus payment (DVP) for securities transactions and payment in irrevocable bank funds. Payment in irrevocable bank funds is dealt with later.

Delivery versus payment (DVP) is achieved by the simultaneous recording of changes of beneficial ownership in securities held in the System depository with the recording of a transfer of funds in the respective member's cash accounts. This simultaneous exchange of securities and funds is achieved provided the seller has the securities in their portfolio and the purchaser has funds available. Sophisticated automation and queuing mechanisms check to ensure these conditions are met even if neither of these conditions can be met at the time the transaction is matched. This allows transactions to be entered at any time up to and including settlement date.

Types of Securities

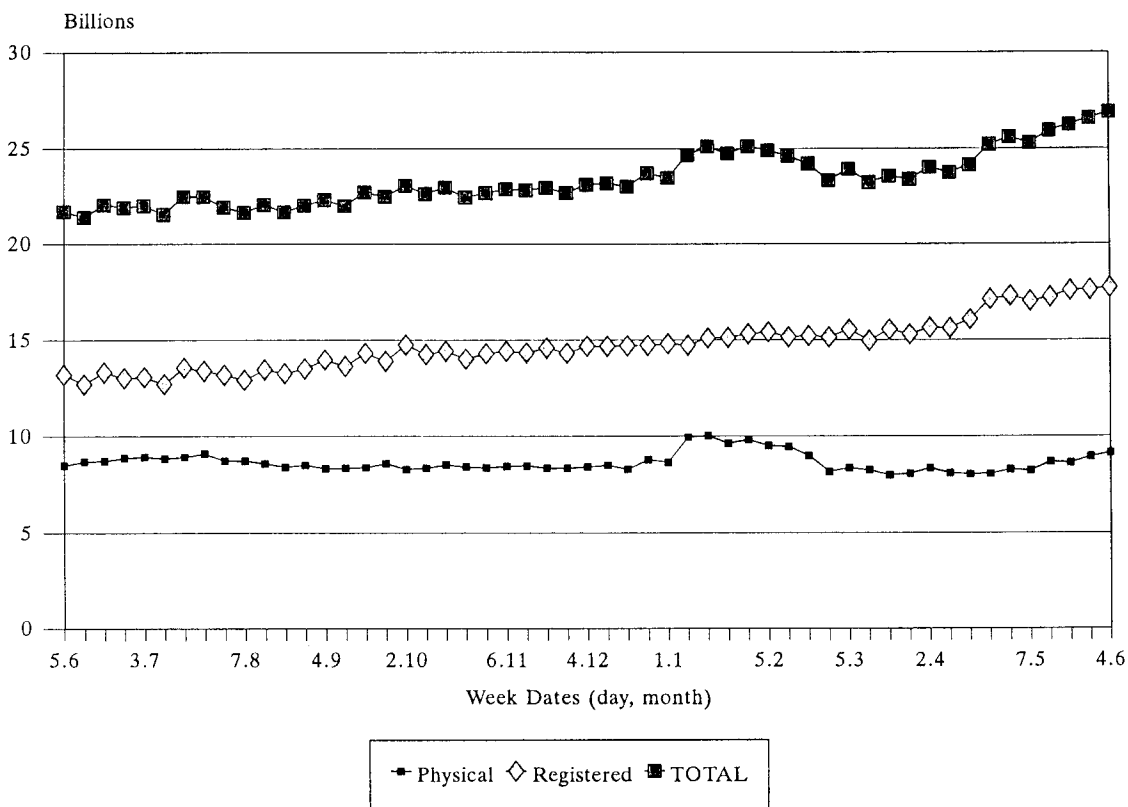
The following types of securities are currently held in the Austraclear depository:

- Bank Accepted and Endorsed Bills of Exchange
- Commercial Bills of Exchange
- Certificates of Deposit

- Promissory Notes/Commercial Paper
- Government and Local Authority Securities
- Corporate Bonds and Notes
- Equities

The total face value of these securities in mid June 1993 was \$27 billion. The graph below shows the growth in the depository inventory over the last year.

Austraclear System Depository Inventory Value



Types of Transactions

The System provides for the following types of transactions:

- Settlement of Securities Transactions
- Pledging of Debt and Equity Securities
- Forward Rate Agreements
- Cash Transfers
- Collection of Security Income and Maturity Proceeds

The System is also used by The London Clearing House Ltd to accept pledges of securities to cover positions by members of the New Zealand Futures and Options Exchange as well as for collecting margin calls for activity on that Exchange.

Payment Instructions through the System

All payments, whether for the settlement of securities transactions or just cash transfers, are irrevocable once they are accepted by the System. This is possible because transactions are not accepted by the System unless the paying member has sufficient credit provided by their banker within the System to allow the transaction to be completed.

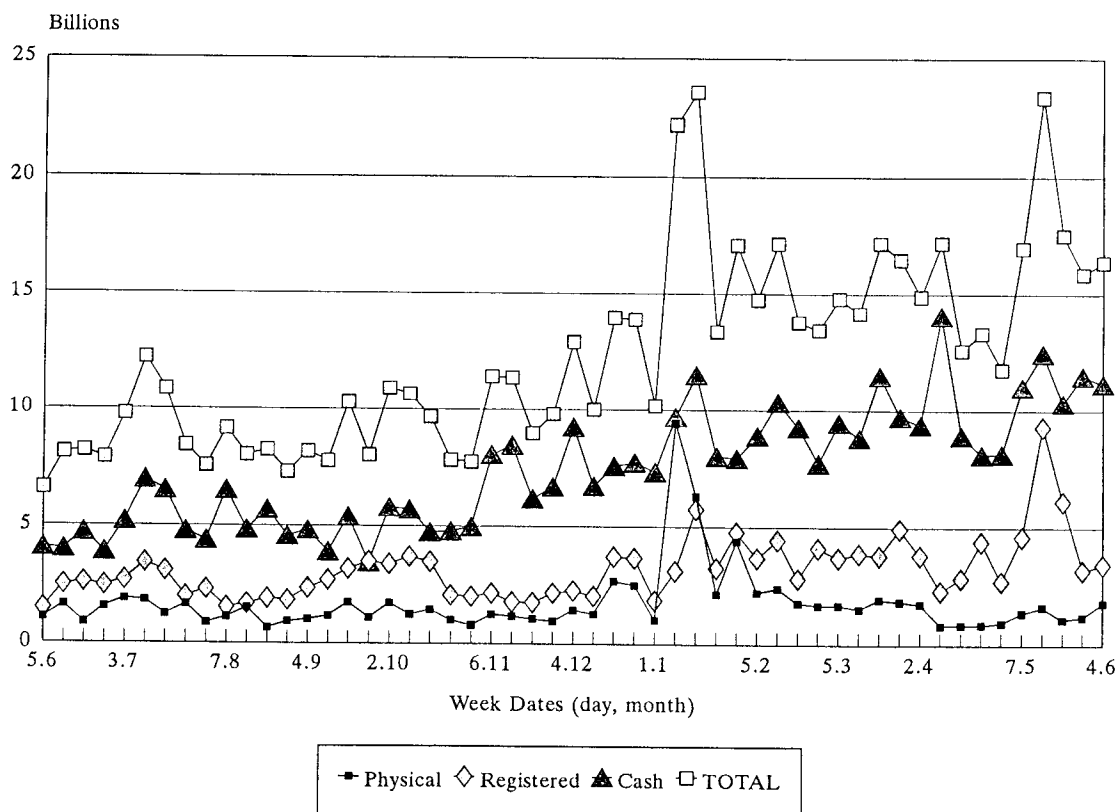
The irrevocable nature of the payment, together with the delivery versus payment (DVP) mechanism for security transactions, means that Austraclear provides a quality securities settlement and cash payment facility of international standards.

Volumes and Values of Transactions

Daily transaction numbers vary between 300 and 500 and the average total value of daily transactions is over \$3 billion.

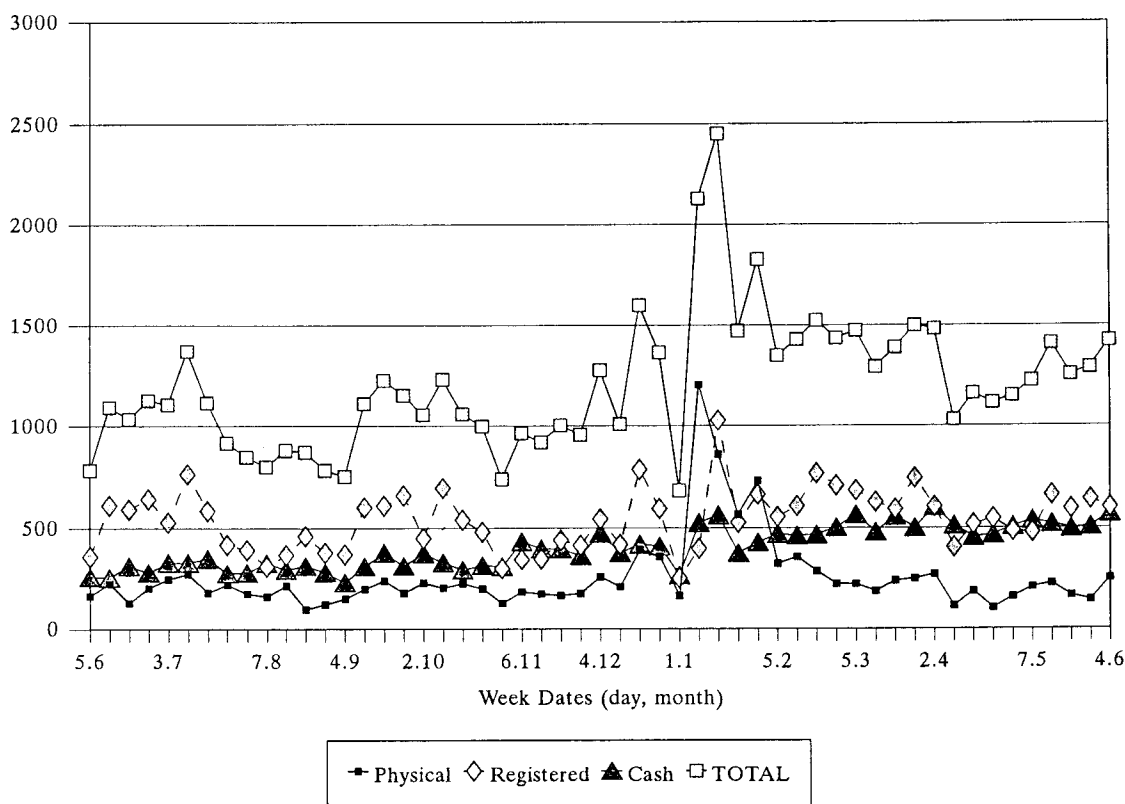
The graph below shows the number of trade settlements on a weekly basis from 5 June 1992.

Austraclear System System Turnover



As with settlement transactions, the total value of daily transactions also varies depending on activity in the financial markets. The graph below shows the value of transactions by week from 5 June 1992.

Austraclear System Number of Trades



It is interesting to note the increasing value of cash transfers since October 1992 when the status of these transactions was altered to make them irrevocable.

Future Developments

In July 1993, electronic tendering will be available on the System. This will allow security issuers to receive bids electronically rather than having to operate a tender box or some other manual system.

The major advantage of this function is that physical location will be no impediment (assuming the bidder is a member of the System). This should bring useful efficiencies to the tender process and minimise the risk of error in bids.

In the medium term future it is intended the System operate on a 'real-time' basis. That is, there will be finality of payment between banks for each transaction. This will have the effect of eliminating interbank settlement risk because transactions will not proceed until funds are available for both the customer/bank transaction and the bank-to-bank transaction. For the bank-to-bank transaction, this means that each bank has sufficient funds available at the bank's banker, the central bank. The move to real-time gross settlement of the Austraclear New Zealand System will be a significant contribution towards achieving the goals set out in the article on payments system reform elsewhere in this Bulletin.

