Question 1

(a) How well do currency and bank deposits perform the functions of money?

The term money means a medium of exchange, used for the settlement of transactions and the payment of debt (Crane, Fraser and Martin, 2001: 37).

There are four functions of money (Crane, Fraser and Martin, 2001: 37), currency and bank deposits are performing those functions:

- Medium of exchange

  It is the most essential and sole function of money. It covers anything that is normally accepted by the public in payment for goods and services and discharge of debts.

  Both Currency and bank deposit can perform this function well. People usually use currency for small value transaction of goods and services. For example, when people buy pizza in the fast-food shop, they would use their cash to pay it. When they dealing higher value transaction of goods and services, they might prefer choose bank deposit as payment instrument. For example, people may use direct debt from their bank account to pay monthly rent to the landlord.

- Unit of account or measure of value

  Money gives a single measurement standard that allows us to express all economic goods and services in terms of a monetary value. Base on the monetary value, people can make comparison between the economic values of different goods. Moreover, people can measure the value of a basket of goods and services by the simple addition of their total monetary. Economic aggregates such as gross domestic product could not be calculated in a significant way without a single measure of value.

  Currency seems perform this function better. Currency is measured in dollar. For example, a management textbook costs 80 dollars. An accounting textbook costs 100 dollars. Therefore, comparisons between the economic values of these two books can be made on the basis on monetary value. It can be seen the accounting textbook is more expensive. Bank deposit can be accessed through various payment instruments, such as a cheque. Then people can use that to express all economic goods and service in terms of a monetary value.

- Store of value.

  People can hold money and accumulate their wealth. Money is a component of an individual's asset portfolio. It is the most liquid type of asset that can be held and provides access to goods and services at some time in the future.

  To perform this function, bank deposit seems does better than the currency. As we know, the level of interest rates represents the opportunity cost of holding currency. Therefore, the higher the level of interest rates, the greater the cost of holding currency. It is getting more expensive to hold currency as an asset when interest rates. Also, base on the security factor, bank deposit is safer when performing this function.

- Standard of deferred payment

  Money allows individuals to enter into and settle future contractual arrangements.

  Due to the technology innovation factor, bank deposit may perform this function better. When individual use bank deposit to enter into and settle future contractual arrangement, technology make it more efficient and convenience.

(b) "A nation's money supply is only as good as the debt which backs it". Explain this statement. Does it apply equally to both currency and bank deposits?

A nation's money supply is consisting of current account deposits and currency. The debt behind currency is commonwealth government security (CGS). The debt behind bank deposit is loans. When government dealing with the deficit; it can increase the tax, print currency, or borrow from the public which is selling Commonwealth government security. The RRA exchange CGS and Gold and Foreign Exchange for currency (Crowley, 1997:5). The household sector only could buy currency from the RBA with CGS instead of GFX. When household purchase any amount of CGS, RBA receives bank currency account deposits in payment. Therefore, government can use these currencies which are borrowing from the public to fund a capital account deficit. Additional, the government pays the proceeds to the household sector as wages at once. Then the banks enter the secondary market and buy the CGS from the general public in order to acquire prime asset. The banks issue new current account deposits in payment. In turn, the household sector transfer the any amount of money from their current account deposits in bank fixed term deposits so that they can earn more from the higher interest rate (Crowley, 1997:9). Further, the banks use that amount of money to loan it out to the corporate sector, which is the money supply. Here, corporate sector has had a net inflow of funds in exchange for its debentures, bank money market deposits that it can convert to current account deposits and lend. In other word, the banks create money by making loans. Loan is the debt behind bank deposit.

Next, take a look at the quality of these two debts. The quality of loans might not as good as CGS while consider the risk of bad loan. Take an example of the Asian crisis. The fundamental cause of this crisis is the mismatch between capital account convertibility and weakness in the financial and corporate sectors in the crisis-affected economies. Since the capital accounts were open, the foreign capital inflows hastened in Asia. Yet, in these economies, their abilities in the financial sectors were not vigorous enough to handle these inflows successfully. Principally, they did not distribute capital resource efficiently thought a mechanism to assess values of future profits impassively. Also, short term external loans were often used for financing projects with long gestation periods, a result of a mismatch in maturity had occurred (http://www.asiasociety.org/speeches/chino.html).Therefore, if these kinds of problems exist in institutions, a huge amount of bad loan has generated, and the economy would suffer unimagined loss.

If the political is stability, the quality of CGS may good and highly marketable. When government sells the CGS to increase funds, it just borrowing from general public and does not add to net foreign debt. One of the advantages of CGS is the government. From this point of view, it can be seen as an advantage of CGS. However, when government sells

CGS, it has to compete with private sector for limit domestic savings. Therefore, the funds in the domestic market are scarce and domestic investors might be forced to borrow funds from overseas. In addition, as the government sells the CGS, the interest rate is increased. Higher interest rate encourages overseas investment, capital inflow and allows the exchange rate to appreciate. The attendant worsening of competitiveness then reduces net exports. Therefore, some problems with the current account may arise, such as capital uncertainty.

Question 2

(a) Distinguish between the terms payment and payment instrument. Using examples to illustrate the differences

The term of payment means the payer transfer a sum of money to the payee. It is an act of paying money. In general, this act can be taken through either banknotes or deposit balances which held at a financial institution or at a central bank.

Payment instrument is an instrument that can be used for the transmission or payment of money or monetary value. To be noticed, payment instrument does not include an instrument that is redeemable by the issue in the issuer's in goods or services. Such as a credit card voucher or letter of credit. However, it includes check, draft, money order, and traveler's check

For example, Jeff gave Ben 200 dollars cheque in payment for the second hand TV. Here, the amount of money, $200 is the payment that Jeff paid to Ben. This payment has made by cheque. A check is the payment instrument that used in this example.

(b) Clearly identify the components of a payment system and explain the role played by the banking system in each of these components

Payment system involves various instruments, banking procedures and interbank funds transfer systems. Its purpose is to ensure the money can be circulated (RBA, 1997:16). The role player by the banking system is discuss.

There are four components in a payment system. They are source of value, payment instrument, clearing and settlement.

1) Source of value

   Payer can make transaction by using their own source of value. In doing so, they can deposits to accounts or by using credit, normally provided by a third party.

   - Deposit

     Even through accounts with credit unions and building societies are useful, however, bank deposits is the core source of value for most retail and commercial payments.

   - Credit

     When institutions provide credit as a source of value, their requirements are those applying to all credit providers under the Uniform Consumer Credit Code, consumer protection provisions of the Trade Practices Act and the provision s of voluntary industry codes of conduct. For example, the Code of Banking Practice.

     The requirements apply to providers of credit despite of if it is intended as a source of value. Also, it does not have any particular restrictions on offering credit in direct association with a payment instrument.

     When cardholders use credit as source of value for payment, they do not incur exposures to card issuers, which is more secure compare to deposit. The matter of deposit protection does not appear in this case.

2) Payment Instruments

   Payment instrument is a mechanism that can be used for the transmission or payment of money or monetary value. People can transfer their ownership of bank deposit to the other party by using any payment instrument. Payment instrument has two characteristics. One is a legal instruction to transfer ownership of a deposit. Second is a mechanism for completing the transfers. There are various types of legal instruction, such as a cheque, a telephone call, an encoded instruction sent by an electronic alternative. The Banking Act (1959) concerns to all financial institutions are issuing deposits with a payment instrument attached to them. As long as banks have monopoly over the creation of current account deposits with a payment instrument attached, the will go on to have a unique role in the financial system.

3) Clearing

Clearing includes a range of transportation, processing and accounting operations. Issuers of payment instruments may use an agent to clear for them. Also, if there are high volumes of transaction exist in the institutions; they may engage to clear in their own right.

Even the property of a legal instruction is an essential condition for current account deposit or any other form of debt to serve as money, but it is not sufficient. The legal instruction has to accompany by a mechanism to affect the efficient transfer of ownership. The Banks' Clearing House System (BCHS) is the mechanism. The transfer of ownership of current account deposits between transacting parties can be ensured assisted.

4) Settlement

The Cash in bank is settled by the RBA. Cash is deposits held by banks in account with the RBA. An agreement between banks to enter arrangement with each other to settle the imbalances that arise from the flow of payment instructions, issued by the owners of current account deposits must exist. Therefore, BCHS can be operated more efficient. The settlement of these imbalances requires transfer of assets between banks to match the value of deposit gain or losses underlying the imbalances. In a word, only the central bank can ensure that the system as a whole is proficient of completing settlement obligations, because only it can meet the liquidity needs of the system at all times and supply ' lender of last resort' services to individual institutions.

(c) Discuss changes that have occurred in relation to retail payments over the last five years. Why have these changes occurred and what are the likely future trends which may emerge in the retail payments area? Use graphs/data to support your discussion.

1. What are the changes have occurred over the last five years.

From 1999 to 2003, there are changes in various payment instruments.

- Currency

A large share of consumer payments in Australia maintains to be made using currency. Even though a range of payment instruments are increasing, such as credit cards, debit cards, and electronic transfers. Cash continue to be an important instrument of payment in Australia. However, the way people obtain their cash has changed (RBA, 2004:1). Even though the data on cash transactions are not available, but it can be observed from the usage of ATMs.

	1999	2000	2001	2002	2003
Value of ATM withdrawals (Monthly total for May- $billions)	6.8	7.3	9.4	11.0	11.1

(Source: APCA annual report 2003)

The table above shows the value of ATM withdrawals has increase over the last five years. It has been risen about 4.3 billions dollars during that period. Cash withdrawals at ATMs, a rough proxy for the value of cash payments, reaching about 11 billions in 2003.

- Cheque

Even paper cheque is one of the most important payment instruments for consumers and businesses in Australia in terms of their total expenditures. However, there is a rapid decline in the use of cheques in the Australian economy. The table below shows the changing usage of cheque.

	1999	2000	2001	2002	2003
No. of payment transactions (Business day average for month of may- millions of items)	*3.2*	*3.1*	*2.7*	*2.5*	*2.3*
Value of payment transactions **(**Business day average for month of may-$billions)	*12.3*	*9.7*	*8.3*	*7.6*	*7.2*

Source: APCA Annual Report 2003 P14

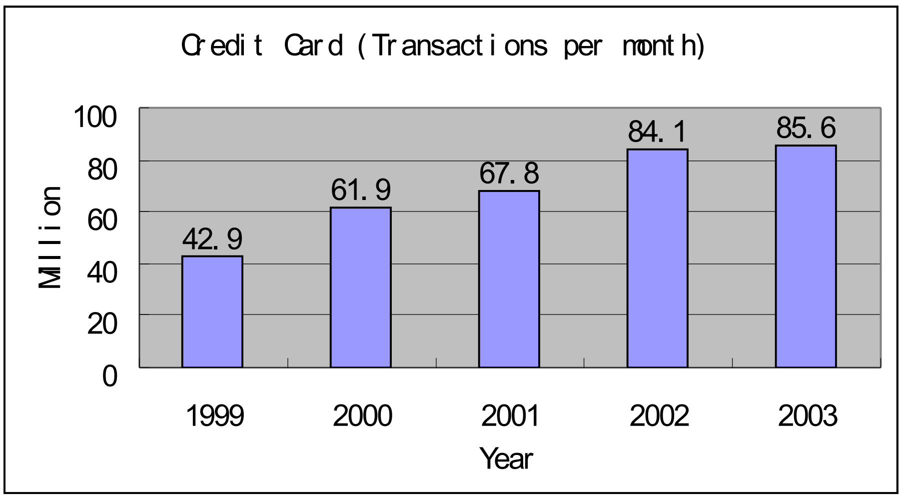
From the table, we can work out the use of cheques is decrease year by year. The detail is summary below.

	1999-2000	2000-2001	2001-2002	2002-2003	1999-2003
% of decrease in No. of payment transactions	*3.12%*	*12.9%*	*7.40%*	*8.00%*	*28.12%*
% of decrease in Value of payment transactions	*21.13%*	14.43%	8.43%	5.26%	41.46%

From 1999 to 2000, the percentage of decrease in number of payment transactions is the least (3.12%). However, when we look at the percentage of decrease value of payment transactions during that period, it owns the largest figure (21.13%). The number of payment transactions has fallen about 28% over the five years. Further, the value of payment transactions has gone down almost 42%.

- Credit card

Consumer payments largely make up of retail purchases and payment of household expenses, such as rent and utility bills. At the point of sale, the well-liked payment instruments are cash and credit card and debit cards. Particularly, the usage of credit card has been rising speedy in recent year while usage broadens into other areas ofspending (RBA, 2003:3). The changes can be seen from the diagram below. Figures for credit cards sourced from the APCA (http://www.apca.com.au/Public/apca01_live.nsf/WebPageDisplay/Stats_CardVolume).



The use of credit cards both as a payment mechanism and a means of borrowing has received much attention in recent years. The growth in credit card transactions rose strongly since 1999. The number of payment transactions on credit card has reached about 85.6 millions in 2003. To be notice that the number of usage has been increased around 99.5 percent from 1999 to 2003.

	1999	**2000**	**2001**	**2002**	**2003**
Value of payment transactions (Monthly total for May -$billion)	*4.3*	*7.0*	*8.0*	*11.2*	*11.7*

Source: APCA Annual Report 2003 P14

Value of credit card payment also rose significantly over the last five years. From observing the table above, it seems like there was a remarkable increase from 1999 to 2000, which was about 63% increased. Moreover, from 1999 to 2003, the vale of credit payment transactions has risen nearly 4 times high.

- Debit card

A proprietary debit card is issued by Australian financial institutions and widely accepted in retail payment transactions. The cardholder can use it in ATMs and EFTOS devices. Nowadays, card transactions are processed electronically. The number of debit card has gradually increased yearly. See the tables below.

	No. of debit cards(millions)
1999	15.7
2000	17.8
2001	19.4
2002	19.7
2003	20.6

	1999-2000	***2000-2001***	***2001-2002***	***2002-2003***	***1999-2003***
% of increase on the No. of debit cards	*13.57%*	*8.98%*	*1.54%*	*4.56%*	*31.21%*

Source: APCA Annual Report 2003 P14

From 1999 to 2003, the numbers of debit card has increased about 5 millions. Even Australia is having experiences growth over the last five year. However, it seems less growth from 1999 to 2002. The trend of increased percentage is declining gradually. But there was more growth from 2002 to 2003. Nevertheless, the number of debit card has increased about 31 percent over the last five year.

2. Why have these changes occurred?

There are some factors generated these changes have occurred.

- Technology

Technology is bringing closer the potential for the real world to approach the conceptual world, especially in the area of transaction. Paper instruments such as cheques have been substituted to a significant extend by more efficient electronic alternatives. People are increasingly to conduct their banking and payments activities through internet. Cheques are one of the most important payment instruments for consumers and businesses in Australia. However, it is decreasing gradually over the last five year. As we know, the cheques normally use for making high-value transactions. Due to the development of technology, people can make their payment online which is more convenience fort paying larger amount of money. There are more advantages that technology bring to the payer and stimulate the usage of credit card. For example, people feel more comfortable when they do not need to present their card to make the payment. This "non-face to –face" transaction encourage people to use credit card as a payment instrument. In addition, Australia is having experienced extremely rapid growth in EFTPOS terminals installed at retail outlets. Also, it has the highest rate of EFTPOS terminal penetration of all industrialized nations except New Zealand. People used to access cash over the counter at a branch or by cashing a cheque traditionally. After the ATM and EFTPOS have introduced, people can use an ATM to withdraw cash or using an EFTPOS terminal. Therefore, people can make their payments more convenience. While the financial intuition branch charge service fee of counter withdrawal, people can obtain their cash without paying service fee, not only through ATM but EFTPOS. That may be one of the reasons why usage of credit card and debit card are increasing in past 5 years.

- Regulation

The way that financial institution organized the payment system has changed. Financial institution allows people to make their payment and obtain cash through various channels. People can obtain their cash in ATM or by using EFTPOS. Also, people can make a withdrawal at an Australia Post office by using giro Post. For example, if a student wants to pay her tuition fee, she can use her credit card to pay online or via telephone. Also, she can mail a cheque or pay it thought EFTOPS at the cashier. People have no more being restricted to make their payment in a particular way.

- Customer need

When people choosing their payment instruments, they face inherent trade-offs between cost, convenience, speed and risks. If people choose cheque as payment instrument, they might question about those issues. If I decide to choose cheque as payment instrument for paying my tuition fee, I have to pay additional 5 dollars for the cheque, and 50cents for mail. Indeed, it takes time too. Also, it might takes risk when I lost the cheque. Moreover, not all people own their cheque book, and then they have to go to issue a cheque in the bank. That is not convenience. In this case, it is no doubt that debit card and credit card are better choice.

- Fees

As discuss above, people have to afford a cost when they choosing cheque asa payment instrument. Therefore, they might avoid this cost by using other payment instrument. When people want to pay for their transaction, they can use debit card or credit card through internet to avoid the cost of cheque.

3. The future trends which may emerge in the retail payments area.

The usage of paper cheque may continue to decrease in future due to the innovatve of technology. The merchant service fees for credit cards may increase in the future (Morgan , 2004:1). It might decrease the usage of credit card. Instead, people may engage to use other payment instrument. Such as currency and debit card. Therefore, the number of payment transaction on cash and debit card might increase in the future.

Reference

Crane, Fraser& Martin. (2001), *Financial Institutions and Markets*, 5th edition, LBC Information Services,

Reserve Bank of Australia. (1997) “Innovation *and Technological Change in Financial Intermediation and the Payment System*”, RBA Bulletin,

Reserve Bank of Australia (2003). “The *Changing Australian Retail Payments Landscape”*, RBA Bulletin.

Reserve Bank of Australia (2004).” *How Australians withdraw cash”*. RBA Bulletin.

Reserve Bank of Australia (2004).” *Merchant Service Fees for Credit Cards”*. RBA Bulletin.

APCA (2003) *“APCA Annual Report*”. APCA

http://www.apca.com.au/Public/apca01_live.nsf/WebPageDisplay/Stats_CardVolume (Accessed 25 August 2004)

http://www.asiasociety.org/speeches/chino.html(Accessed 25 August 2004)