23 THE BALANCE OF PAYMENTS

23.1 Meaning of the balance of payments

Learning outcomes

- Outline the role of the balance of payments.
- Distinguish between debit items and credit items in the balance of payments.

If you've ever walked through a retail superstore like a Wal-Mart, a Carrefour or a Tesco, you may have wondered, 'Where did all this STUFF come from?' The cheap tennis rackets, kitchen utensils, picture frames, home entertainment systems and countless other items you pass in the aisles were very likely manufactured in an Asian country; perhaps China, maybe Indonesia or Vietnam or Japan. In 2004, over 70% of the products sold in the more than 3000 Wal-Mart stores in the US were manufactured in China.

Wal-Mart has 'Low prices, every day': What impact does all that spending by Americans on cheap imports from China have on the US economy?

Chinese goods are not only sold in these giant stores known for their low prices. Walk across the street to a tyre shop and see where most of the tyres were made. Then check out the fine print on the frozen seafood at the grocery store. Check the labels on the designer handbags on sale at the mall. What did you discover? Chances are, most of the manufactured goods you've purchased anywhere lately were made in a country other than the one you live in (unless, of course, you live in an Asian country).

The flow of goods across national borders has become ever more imbalanced as the world's economies have integrated in the last several decades. Free trade agreements between nations and the efforts of international organizations like the WTO have reduced or eliminated the barriers to trade that, only a generation ago, ensured that many of the consumable goods produced in Asia today were then made domestically. The liberalization of trade, combined with the extremely low costs of labour, land and capital in less developed countries, have led to a global trading system in which many countries' expenditures on imports have, for years, far outpaced their incomes from the sale of exports.

The balance of payments

The balance of trade in goods between nations is just one of the factors measured in a nation's balance of payments. According to the International Monetary Fund, the 'balance of payments (BoP) is a statistical statement that summarizes, for a specific time period, the economic transactions of an economy with the rest of the world.' Trade in manufactured goods is just one of the components of a nation's BoP. Also included are exchanges

A nation's balance of payments measures all the economic transactions of its economy with the rest of the world, including trade in goods and services, financial transactions involving the ownership of assets, and transfers of capital between nations.

between a nation and all other nations of services, income, gifts, capital, and financial assets (e.g. currencies, government bonds and company stocks). Each of these transactions is recorded for a given year in one of three accounts:

- the current account
- the capital account
- the financial account.

23.2 Components of the balance of payments

To learn more about the balance of payments, visit www.pearsonhotlinks.com, enter the title or ISBN of this book and select weblink 23.1.

Learning outcomes

- Explain the four components of the current account, specifically the balance of trade in goods, the balance of trade in services, income and current transfers.
- Distinguish between a current account deficit and a current account surplus.
- Explain the two components of the capital account, specifically capital transfers and transactions in non-produced, non-financial assets.
- Explain the three main components of the financial account, specifically, direct investment, portfolio investment and reserve assets.
- (HL only) Calculate elements of the balance of payments from a set of data.

Accounts in the BoP

A nation's balance of payments measures the exchanges that take place in three separate accounts.

- The current account measures the balance of trade in goods and services and the flow of income between a nation and all other nations. It also records monetary gifts or grants that flow into or out of a country.
- The capital account measures the transfer of ownership of capital goods between a nation and all other nations.
- The financial account measures the flow of funds for investment in real assets (such as factories or office building) or financial assets (such as stocks and bonds) between a nation and the rest of the world.

The official foreign exchange reserves balance the three accounts in the balance of payments. This measures the net effect of all the money flows from the three accounts above. In years when the sum of all three accounts above is greater than zero, a nation's central bank experiences a build-up of foreign exchange. In years when the above accounts' sum total is less than zero, the central bank must draw on its reserves of foreign exchange to make up the imbalance.

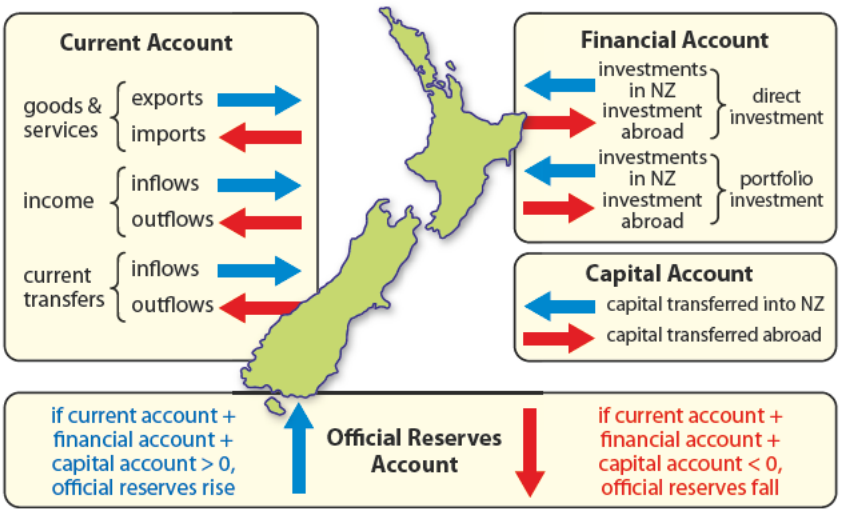
In this chapter we examine New Zealand's balance of payments in some detail to determine how the balance on each of the above accounts is determined. Most of the information that follows is adapted from Colin Danby's *Balance of Payments: Categories and Definitions*.

Balance of payments information is extremely important when it comes to the formulation of national and international policy by any country. Knowledge of foreign investment and payments imbalances informs most policy decision-making in a world where national economies are becoming increasingly interdependent.

Understanding how BoP is measured: debits and credits

Any transaction between a country's residents and the rest of the world results in either a debit or a credit towards one of the accounts in its balance of payments. Whenever a transaction brings money into the country, it is recorded as a credit. This means that someone in the country is getting paid for something. Whenever the transaction involves a flow of money out of the country, it is recorded as a debit. This means that someone in the country is paying someone abroad for something.

Figure 23.1 shows how each of the possible transactions between New Zealand's residents and the rest of the world is recorded in New Zealand's balance of payments. Exchanges that result in money flowing into New Zealand are indicated by green arrows; transactions that send money out of New Zealand are indicated by red arrows.



Current account + Financial account + Capital account + Change in reserves = 0

Figure 23.1 New Zealand's balance of payments accounts.

The balance of payments must always be in balance. This means that the net outcome of all the money flows in Figure 23.1 is a balance of zero. For instance, in a given year, New Zealand's total balance in its current account might be negative (the country has spent more on imports than it earned from exports). The balance in New Zealand's financial and capital accounts must then be positive.

The reason for this is simple. Every dollar New Zealanders spend on foreign goods and services ultimately ends up being spent again on something from New Zealand. The country's currency, the New Zealand dollar (NZD), cannot be spent by foreigners on anything other than New Zealand's goods, services or assets. Therefore, the money spent by New Zealanders on the rest of the world's stuff is ultimately spent on New Zealand's stuff. If NZD held by foreigners are not spent on New Zealand's goods and services (measured in the current account), then they are spent on financial or real assets (recorded in the financial account). In this way, a current account deficit is offset by a financial account surplus, hence the *balance* of payments.

This explanation is, of course, an over-simplification. To better understand the confusing matrix of a nation's economic interactions with the rest of the world, let's first examine each of the accounts and identify its components in detail.

The current account

A nation's current account has four components measuring transactions between the residents of one nation and the residents of all other nations. The account measures:

- the flow of goods
- the flow of services
- the flow of income
- the flow of transfers.

Sometimes a nation's current account balance is referred to as the balance of trade because it records the transactions involving goods and services actually produced by workers in one country and sold to or bought from consumers in another country.

If the sum of the four components of the current account is greater than zero, then a nation has a current account surplus, which means the total income from foreigners spending on its output is greater than its own spending on foreign output. On the other hand, a current account deficit results when residents of a nation spend more on imported goods and services than they earn from their sale of exports to the rest of the world.

Balance of trade in goods

The current account measures the flow of funds between a nation and the rest of the world for the purchase of goods and services and income transfers. The current account includes the visible (goods) and the invisible (services) balance, and is sometimes simply referred to as the balance of trade.

The balance of trade in goods measures the spending by consumers and firms in one nation on another nation's goods (both consumer and capital goods) as well as spending by consumers in the rest of the world on the recording nation's goods.

- **Goods credits** (+). Goods exports count as a credit in the current account because they require that foreigners make payments to the exporting nation. Exports, as a component of aggregate demand (AD), also contribute to employment and output of a nation. However, the level of exports depends primarily on economic conditions abroad, such as foreign incomes and growth in foreign consumer and capital markets. Note that the export of both consumer and capital goods counts as a credit in the current account.
- **Goods debits** (–). Spending by domestic consumers on goods produced in foreign nations counts as a debit in the current account, since it requires a payment to foreign producers. Spending on imports subtracts from domestic AD, since it is a leakage of national income from the importing nation. The main determinant of imports is the level of income of domestic households; as incomes rise, domestic consumers and firms spend more on both imported consumer and capital goods, as well as on domestic output.

Balance of trade in services

Services refer to non-tangible purchases such as tourism, banking, consulting, legal services, and transportation. Services can be imported and exported, although there is no physical movement of a product involved. Many services can be bought and sold remotely thanks to the high-speed communication made possible by broadband internet.

- **Services credits** (+). Services bought by foreigners, either within the nation or from abroad, count as a credit in the current account, since they require that a foreign consumer makes a payment to a domestic producer. Earnings from the tourist industry in Thailand are a credit in Thailand's current account because foreigners are spending on transport, accommodation, entertainment and leisure services within Thailand. On the other hand, an X-ray examination of a patient in the US analysed overnight by a medical student in Mumbai, India, is a service export for India that did not require the presence of a foreign consumer within India's borders.

- **Services debits** (–). Services purchased from foreigners and consumed by domestic households are a debit in the current account because they require a payment to a foreign producer. The spending by a German tourist travelling in Thailand and spending income earned in Germany on Thai services, counts as a debit in Germany's current account. The Chicago hospital that outsources its X-ray analysis to India has imported the service from India, so the US experiences a debit in its current account.

The term 'balance of trade' usually refers to a nation's goods and services balance in the current account. However, these are not the only flows that are measured in this account.

To learn more about the balance of trade, visit www.pearsonhotlinks.com, enter the title or ISBN of this book and select weblink 23.2.

Income balance

When citizens of one country earn income from activities in another country, the transfer of income back to the income earners' country of origin is also measured in the current account. This includes the wage income earned by a country's citizens from employment by foreign companies abroad. For instance, an American teacher working at an international school in Germany may send home a portion of his or her wages to the US; this would be measured in both the US and Germany's current accounts. Income also refers to investment income, such as interest and dividends earned on investments in foreign bonds or stocks. If a British citizen living in the UK has a savings account in a Swiss bank, the interest earned on his savings counts as a credit for the UK current account and a debit for Switzerland's.

- **Income credits** (+). This includes wages earned by a country's workers employed abroad which are sent home, interest on a country's residents' savings and investments in foreign banks and financial markets, and dividends earned abroad from domestic investors purchasing stocks in foreign firms. Each of these transactions requires that foreigners make payments to residents in the country in question, so they are counted as a credit in that country's current account.
- **Income debits** (–). Wages that are paid by firms in one country to foreign workers in that country and which are then sent abroad count as a debit in the current account. In addition, interest paid to foreign savers in domestic banks and dividends paid to foreign shareholders in a domestic company are all considered 'leakages' and therefore are counted as a negative (debit) in the current account.

Substantial transfer payments from one country to another give the recipient nation the ability to import more from abroad. In Chapter 28, we evaluate the intentions of certain types of tied aid in which the donor nation transfers income to a less developed country with conditions, usually requiring that the aid money be spent on imported goods and services produced by the donor nation's firms. In this regard, official transfers may do more harm than good for the recipient nation, whose producers may be harmed by the increased spending on imports by aid recipients.

Current transfer balance

A transfer refers to a payment made from one nation to another that is not in exchange for any good or service, such as a gift or a grant. New Zealand's central bank explains why such monetary, non-production transfers are measured in the balance of payments: 'Current transfers directly affect the level of disposable income and influence the consumption of goods and services for the donor and the recipient economies.'

Transfers are divided into two categories: official transfers are payments from one government to another, sometimes known as 'aid'. Private transfers are payments made by citizens of one country to residents of any other country.

Current transfers can be recorded as either a credit or a debit in the current account.

- **Transfer credits** (+). Official and private transfers from foreign governments or households to the government or individuals in a country count as a credit in the current account. All such transfers require a payment from foreigners to domestic stakeholders, increasing the level of disposable income at home and reducing it in the foreign country.
- **Transfer debits** (–). Official and private transfers by the government or individuals within a nation to foreign governments or households count as a debit in the current account. Both transfers require a payment from domestic stakeholders to interests abroad, and increase disposable income abroad while reducing it at home.

Worked example

To calculate the components of the current account for NZ in 2004, you need to consider the given debits and credits and add them up to find the current account balance (as shown in Table 23.1, column 4).

TABLE 23.1 NEW ZEALAND'S CURRENT ACCOUNT: 2004

Component of current account	Credits / millions of NZD	Debits / millions of NZD	Balance / millions of NZD
goods	29 109	−29 706	−597
services	11 966	−9 777	2 189
income	2 844	−8 851	−6 007
current transfers	1 318	−1 128	190
current account balance			−4 225

Figure 23.2 is an alternative way of showing the same information.

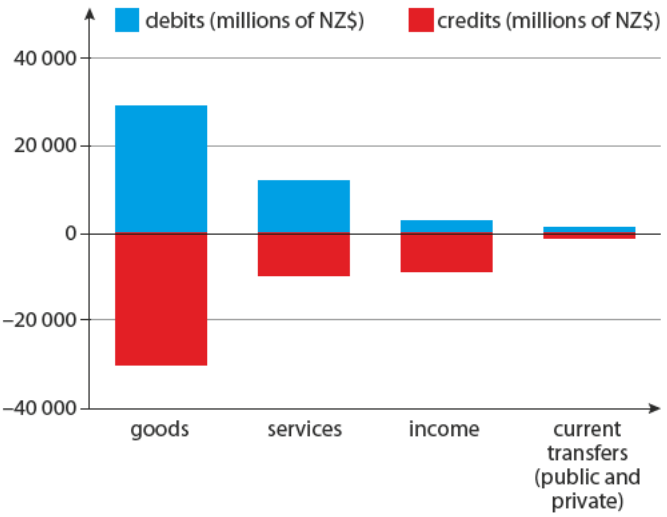


Figure 23.2
New Zealand's current account balance.

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Economics as a science generally focuses on positive analysis. That is to say, it examines the world through an objective lens aimed at examining what is, rather than what should be. An example of a positive statement is: New Zealand spent more on imports in 2004 than it sold in exports to the rest of the world.

Normative statements are more subjective in nature, expressing an opinion or arguing for what should be, rather than what is. For instance, it would be a normative statement to say: New Zealand would be better off with greater balance in its current account.

To what extent is it appropriate for economists to make normative statements such as this? Should economics stick to analysis of what is and leave what should be up to politicians and the media? Or is it appropriate for economists to determine what should be based on their analysis of data such as that of a nation's balance of payments?

The capital account

The capital account measures the transactions involving ownership of capital, forgiveness of debt, or the acquisition and disposal of non-produced, non-financial assets between a nation and all other nations.

Capital transfers

When a nation's government or private sector gives money to another nation for the purchase of fixed assets or directly donates capital goods to residents of another country, this is recorded as a debit by the donor country and a credit for the recipient country. The capital account does not measure the purchase or sale of capital between nations, rather the actual transfer of fixed assets from one nation to another.

- **Capital transfer credits** (+). If the Canadian government were to make a $2 million donation to the Ministry of Education in Tanzania to build schools in rural areas, the transaction would involve the transfer of money from Canada to Tanzania for the purpose of helping Tanzania acquire fixed assets in the form of new school buildings. Tanzania would record this as a capital account credit.
- **Capital transfer debits** (–). If the US development agency, USAID, were to finance the construction of a new port facility in Liberia's capital city, Freetown, the money provided would be recorded as a debit for the US, because it would require transfer of income from the US to a foreign country.

Debt forgiveness

Besides the transfer of cash to acquire new capital or of capital itself, the capital account also measures the forgiveness of debt from lenders in one country to debtors in another. Debt owed by one nation to a lender in another nation, if forgiven by the lender, counts as a credit for the debtor's nation and a debit for the lender's nation in their capital accounts.

- **Debt forgiveness credit** (+). If the government of Rwanda were to be relieved of its debts on a loan made to the previous government by the African Development Bank, this would be recorded as a credit in Rwanda's capital account.
- **Debt forgiveness debit** (–). If a bank in Switzerland which made a loan to the government of Sierra Leone 10 years ago were to decide to forgive the debt still owed by the Sierra Leonean government, the balance owed to the Swiss bank would be measured as a debit for Switzerland.

To learn more about the capital account, visit www.pearsonhotlinks.com, enter the title or ISBN of this book and select weblink 23.4.

The capital account of the balance of payments records the transactions involving ownership of capital, forgiveness of debt, or the acquisition and disposal of non-produced, non-financial assets between a nation and all other nations.

Exchanges of non-produced, non-financial assets

Finally the capital account measures the flow of non-produced, non-financial assets. This includes, as defined by the New Zealand central bank, 'the purchase or sale of intangible, non-financial assets, such as patents, copyrights, trademarks, franchises and licences; and the acquisition of land by a government or international organization or the disposal of such land.'

Worked example

To calculate the capital account balance for NZ in 2004, you need to consider the given debits and credits and add them up (as shown in Table 23.2, column 4).

TABLE 23.2 NEW ZEALAND'S CAPITAL ACCOUNT: 2004

Account	Credits / millions of NZD)	Debits / millions of NZD)	Capital account balance / millions of NZD)
capital account	1576	-814	762

The financial account

A nation's financial account measures the exchanges between a nation and the rest of the world that involve ownership of financial and real assets. Foreigners may buy and sell a country's real assets, including real estate, factories, office buildings and other factors of production. Such transactions are recorded in the financial account because they involve the ownership of assets, not the purchase of the nation's output of goods or services. If an office building in Auckland were sold to a Chinese textile manufacturer, none of New Zealand's output would actually be consumed by China; this explains why such an investment is not measured in the current account. Ownership would be transferred, and there would be a flow of money into New Zealand, moving the country's financial account towards surplus.

In addition to real assets, much of the activity measured in the financial account is the buying and selling of financial assets such as company stocks and government bonds. If an investment bank in New Zealand were to invest in Spanish government bonds, the transaction would require a payment from New Zealand to the government of Spain, but no goods or services would be exchanged, so the transaction is purely financial. Such a bond purchase would be recorded as a credit for Spain and a debit for New Zealand.

The financial account measures two broad types of investment (direct investment and portfolio investment).

Direct investment

FDI refers to the buying and selling of a minimum of 10% of a company's shares by a foreign investor in the domestic economy or by a domestic investor in another nation's economy.

This means acquiring a significant ownership stake in a foreign business. Foreign direct investment (FDI) refers to the buying and selling of a minimum of 10% of a company's shares by a foreign investor in the domestic economy or by a domestic investor in another nation's economy.

Whether direct investment counts as a positive or a negative in the financial account depends on who is buying what.

Direct investment abroad: investors from one country may buy or sell ownership stakes in foreign firms.

- **Credits** (+). When domestic investors sell shares in foreign firms there is an inflow of financial capital, moving the financial account towards the positive.
- **Debits** (–). When domestic investors acquire an ownership stake in foreign companies there is an outflow of financial capital, which moves the financial account towards the negative.

Direct investment at home: foreign investors may buy or sell ownership stakes in domestic firms.

- **Credits** (+). When foreign investment in shares of domestic firms increases, there is a net inflow of financial capital, moving the financial account towards the positive.
- **Debits** (–). When foreigners sell their ownership stake in domestic firms to domestic investors, there is an outflow of financial capital, moving the financial account towards the negative.

The dividends and interest income earned from direct investments abroad or paid to foreign investors at home are counted in the balance of payments in the income section of the current account. But the flow of financial capital into or out of a country for the acquisition of ownership of firms as described above is part of the financial account.

Portfolio investment abroad

Portfolio investment consists of small investors, both domestic and foreign, buying and selling equity shares of companies abroad as part of their portfolio of assets. It

also includes ownership of foreign debt, issued either by governments or private firms. The difference between portfolio investment and FDI is that to be considered FDI, the investment must result in a minimum of 10% equity ownership in the foreign firm, whereas equity ownership of less than 10% is considered portfolio investment. In addition to stocks and shares, portfolio investment includes ownership of foreign debt certificates, both public and private, such as government and corporate bonds and treasury bills.

Portfolio investment measures the investments of foreigners in businesses in the domestic economy and domestic investors investing in businesses and government debt abroad.

Portfolio investment abroad: the money spent by domestic investors in foreign equity and debt counts as an asset to the investor's home country. Since domestic investors own equity or debt in a foreign firm or government, such investment is considered an asset to the home country and a liability to the foreign firm or government.

- **Credits** (+). When investors sell those assets, foreigners make a payment to the domestic investor, so there is an addition to the financial account.
- **Debits** (–). When domestic investors buy foreign assets, there is a subtraction in the financial account, since it requires a payment to a foreign stakeholder.

Portfolio investment at home: the money spent by foreigners on domestic stocks, shares and bonds counts as a liability for the home country. Since a share of a domestic firm or government's debt is transferred to a foreign stakeholder, such investment is considered a liability to the home country, an asset to foreigners.

- **Credits** (+). A foreign investor buying domestic securities makes a payment to the home country, creating a positive entry in the financial account.
- **Debits** (–). When the foreign investor sells his domestic securities, there is a subtraction from the financial account because domestic firms or the government must make a payment to the foreign investor.

Just as the profit income earned from direct investment is measured in the current account, so are the interest and dividend incomes earned from portfolio investments. However, the financial flows involved in the acquisition of private and public securities and debt are not considered income, so they are measured by the financial account.

Other investment

Other investment usually refers to loans made by banks to foreign borrowers or money saved in banks across national borders.

Loans from domestic banks to foreign borrowers and savings by domestic households in foreign banks count as assets for the home country, since foreign interests owe money to domestic interests.

- **Credits** (+). When a foreign borrower pays back a loan to a domestic bank, it counts as a positive in the financial account since it requires a payment from foreigners to domestic interest.
- **Debits** (–). When a domestic bank makes a loan abroad, it counts as a negative in the financial account since it requires a payment to a foreigner.

Domestic borrowing from foreign banks and foreign savings in domestic banks are considered liabilities for the home nation and an asset for the foreign nation.

- **Credits** (+). Money borrowed from a foreign bank counts as a positive for the domestic financial account, since it requires a payment from abroad to a domestic interest.
- **Debits** (–). When a loan is repaid to a foreign bank, there is an outflow of financial capital, resulting in a shift towards the negative in the financial account.

The financial account of the balance of payments measures the exchanges between a nation and the rest of the world involving ownership of financial and real assets.

As with direct investment and portfolio investment, incomes earned or paid on interest from other investments are measured in the current account under income, but the money transferred for a loan or as savings abroad is measured in the financial account.

Worked example

To calculate the components of the financial account for NZ in 2004, you need to consider the debits and credits and add them up to find the financial account balance (Table 23.3).

TABLE 23.3 NEW ZEALAND'S FINANCIAL ACCOUNT: 2004

Component of financial account	Credits / millions of NZD	Debits / millions of NZD	Balance / millions of NZD
direct investment	3895	−1293	2602
portfolio investment	3920	−6947	−3027
other investments	1850	−289	1561
financial account balance			1136

Foreign exchange reserves

Foreign exchange reserves refer to the assets of other nations held by a country's central bank. Reserves consist primarily of foreign financial assets such as government bonds and foreign currency.

In a given year, if the flow of money into a country due to its exchanges in the current and financial accounts exceeds the flow of money out of the country, the difference is added to the central bank's official reserves of foreign exchange. If the there is a net outflow of money in a year, the difference is made up by a withdrawal from the central bank's reserves of foreign exchange.

In the case of New Zealand, in 2004 the outflow of money in the current account exceeded the inflow money from the foreign ownership of New Zealand's financial and capital assets by 2327 million NZD. The central bank of New Zealand had to draw on its reserves of foreign assets to make up for this imbalance. To fill the hole left from its current account deficit, the central bank sold 2.3 billion NZD of the foreign currency and government bonds it held, resulting in an inflow of 2.3 billion NZD back to New Zealand from abroad.

The country's ownership of assets denominated in foreign exchange actually decreased because of its large trade deficit, but the resulting inflow of NZ dollars from the sale of these assets corrected the imbalance in the current and financial accounts, achieving a balance of zero in these two accounts.

It should be pointed out that, contrary to common sense, a net deficit in the current, capital and financial accounts actually results in an inflow (thus, a positive sign) in the official reserves account, since the deficit country must sell its reserves of foreign currency to make up for the net deficit. On the other hand, if a country has a net balance of payment surplus, as in China, then the change in the foreign exchange reserves is recorded as a negative since China's ownership of assets denominated in foreign currencies actually increases each year China's current account surplus exceeds its capital and financial account deficits. From an accounting standpoint, China's growing ownership of foreign exchange and foreign-denominated assets counts as a negative in China's official reserves account.

The presence of foreign exchange reserves in a nation's central bank allows the government to draw on these reserves to intervene in the market for their nation's currency to influence the exchange rate, or to balance out the financial account in years when the current and

financial accounts do not balance. Additionally, foreign assets can be sold and converted to the domestic currency to finance government spending in times of fiscal need. For instance, in 2009 China launched a $535 billion fiscal stimulus package financed partly by its massive reserves of US dollars accumulated over 20 years of current account surpluses with the US.

Foreign exchange reserves refer to the assets of other nations held by a country's central bank. Reserves consist primarily of foreign financial assets such as government bonds and foreign currency.

Worked example

To calculate the official reserves balance for NZ in 2004, you need to consider the given debits and credits and add them up (Table 23.4).

TABLE 23.4 NEW ZEALAND'S OFFICIAL RESERVES ACCOUNT: 2004

Account	Credits / millions of NZD	Debits / millions of NZD	Change in reserve assets
reserve assets abroad	2327	–	2327

23.3 Relationship between the accounts

Learning outcomes

- Explain that the current account balance is equal to the sum of the capital account and financial account balances.
- Examine how the current account and the financial account are interdependent.
- (HL only) Calculate elements of the balance of payments from a set of data.

Looking at Tables 23.1–23.4, we can see that the large current account deficit is countered by financial and capital account surpluses. This supports the assertion that the sum of the current, capital and financial accounts plus the change in official reserves should equal zero:

current account + capital account + financial account + change in official reserves = 0

Another way to look at this equation is to notice that a nation's current account balance equals the inverse of the capital, financial and reserve account balances.

current account = –(capital account + financial account + change in reserve assets)

Figure 23.3 shows the relationship between the capital and financial accounts and the reserve assets using the figures from Tables 23.2–23.4.

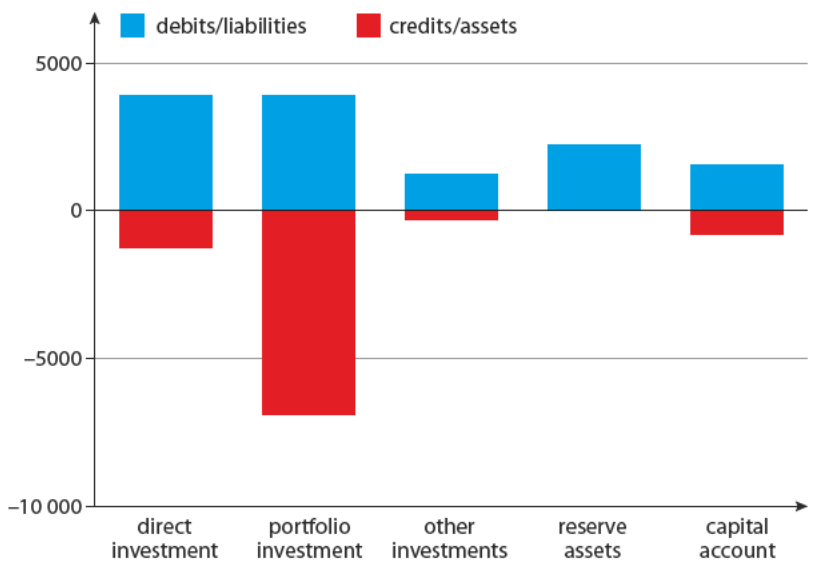


Figure 23.3 New Zealand's financial and capital accounts and reserve assets: balance = $4225 billion.

Worked example

To calculate the official balance of payments for NZ in 2004, you need to consider the components of the balance of payments and add them up (Table 23.5).

TABLE 23.5 NEW ZEALAND'S BOP = 0.

Account	Balance / millions of NZD
current account	−4225
capital account	762
financial account	1136
change in official reserves	2327
total balance of payments	0

Notice that New Zealand's current account balance of −4225 is the inverse the sum of the capital, financial and reserve accounts: 762 + 1136 + 2327 = 4225.

HL EXERCISES

1 Prepare the balance of payments for the country whose international exchanges are shown in the table below.

Category	Balance / billions of $
imports of goods	550
import of services	400
export of goods	380
export of services	550
income	−130
current transfers	70
direct investment	40
portfolio investment	−80
capital transfers	90
transaction in non-produced, non-financial assets	−25
reserve assets	?
balance of payments	?

a Calculate the following balances:

- **i** current account
- **ii** financial account
- **iii** capital account
- **iv** reserve assets
- **v** balance of payments.

b Does the country have a trade deficit or surplus? Interpret the meaning of the current account balance for the nation's households and firms.

c Describe how you determined the change in reserve assets and explain why this number is either negative or positive.

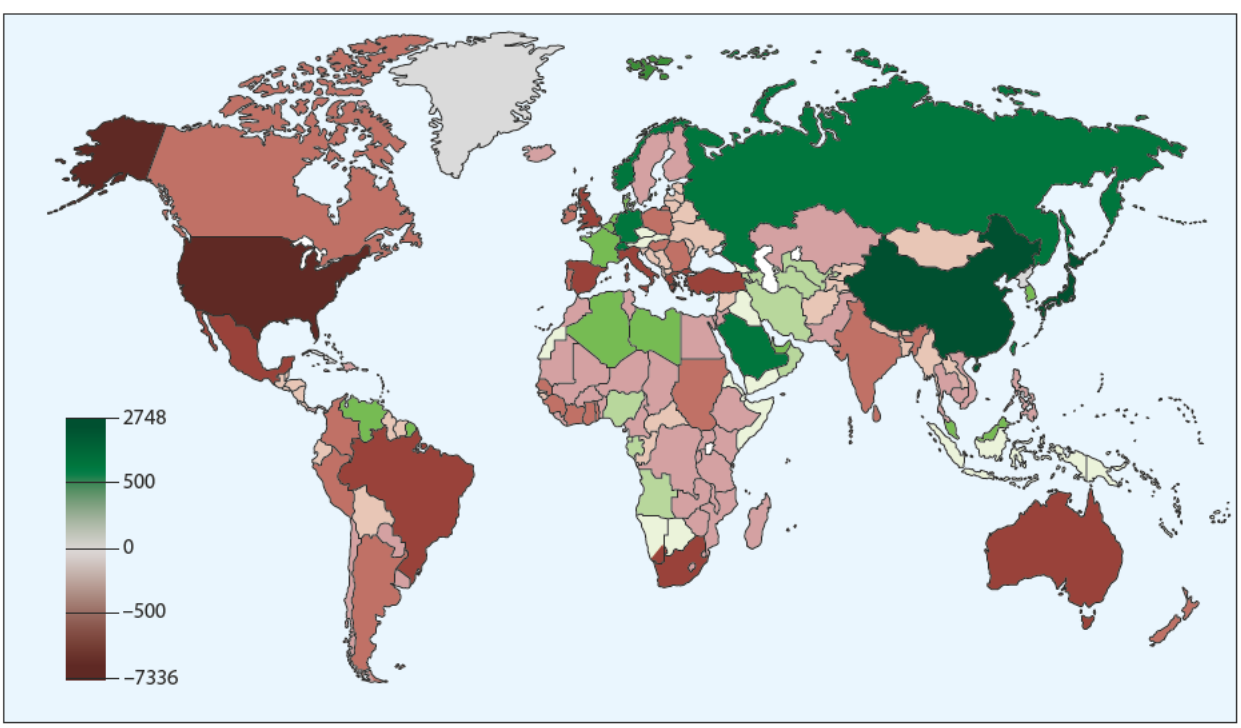
23.4 Current account deficits

Learning outcomes

- Explain why a deficit in the current account of the balance of payments may result in downward pressure on the exchange rate of the currency.
- (HL only) Discuss the implications of a persistent current account deficit, referring to factors including foreign ownership of domestic assets, exchange rates, interest rates, indebtedness, international credit ratings and demand management.
- (HL only) Explain the methods that a government can use to correct a persistent current account deficit, including expenditure-switching policies, expenditure-reducing policies and supply-side policies, to increase competitiveness.
- (HL only) Evaluate the effectiveness of the policies to correct a persistent current account deficit.
- (HL only) State the Marshall–Lerner condition and apply it to explain the effects of depreciation/devaluation.
- (HL only) Explain the J-curve effect, with reference to the Marshall–Lerner condition.

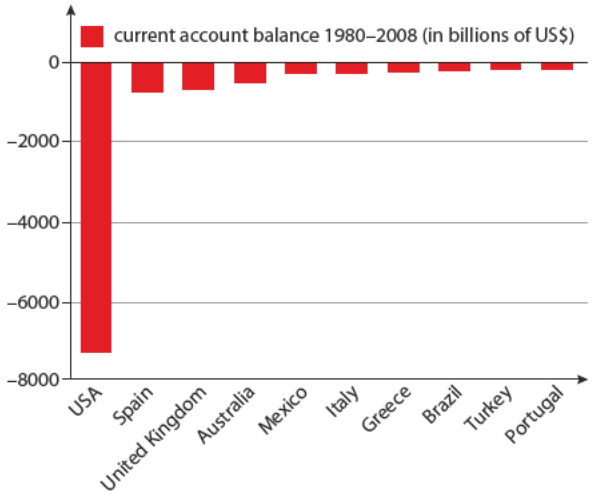
If the total spending by a nation's residents on goods and services imported from the rest of the world exceeds the revenues earned by the nation's producers from the sale of exports to the rest of the world, the nation is likely to be experiencing a current account deficit. The situation is not at all uncommon among many of the world's trading nations. Figure 23.4 shows nations by their cumulative current account balances over the years 1980–2008. The brown countries all accumulated current account deficits over the three decades, with the largest by far being the US, which has a cumulative deficit of $7.3 trillion. The green countries are ones which have had a cumulative surplus in their current accounts, the largest surplus belonging to Japan at $2.7 trillion, followed by China at $1.5 trillion.

Figure 23.4
Current account deficit and surplus nations.



The top 10 current account deficit nations are shown in Figure 23.5. It is obvious that the US alone accounts for a larger current account deficit then the next nine countries combined. At $7.3 trillion dollars in deficits over 28 years, the US deficit surpasses Spain's (at number 2) by 1000%.

Figure 23.5
The top 10 current account deficit nations.



A nation experiences a current account deficit when it spends more on imported goods and services from the rest of the world than it earns from the sale of its exports to the rest of the world.

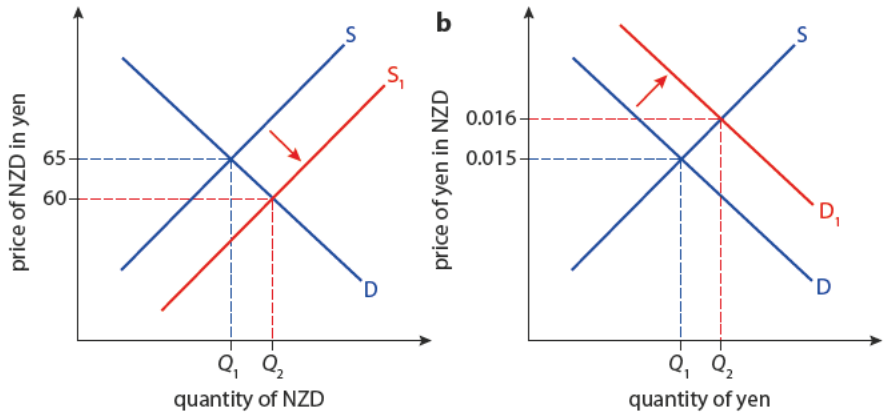
The consequences of a nation having a current account deficit are not immediately clear. And it is debatable whether a trade deficit is necessarily a bad thing. Let's examine some of the facts and implications about current account deficits, and evaluate the pros and cons for countries that run deficits in the short run and in the long run.

Effect of a current account deficit on the exchange rate

You have already learned about the determinants of the exchange rate of a nation's currency relative to another currency (Chapter 22). One of the primary determinants of a currency's exchange rate is the demand for the nation's exports relative to the demand for imports from other countries. With this in mind, let's examine the likely effects of a current account deficit on a nation's currency's exchange rate.

When households and firms in one nation demand more of other countries' output than the rest of the world demands of theirs, there is upward pressure on the value of trading partners' currencies and downward pressure on the importing nation's currency. In this way, a movement towards a current account deficit should cause the deficit country's currency to weaken (Figure 23.6).

Figure 23.6
A persistent current account deficit puts downward pressure on the deficit country's currency. **a** Market for NZD in Japan; **b** market for JPY in New Zealand.



Suppose New Zealand's imports from Japan begin to rise due to rising incomes in New Zealand and a corresponding increase in demand for imports. Assuming Japan's demand for New Zealand's output does not change, New Zealand will move towards a deficit in its current account and Japan towards a surplus. In the foreign exchange market, demand for Japanese yen (JPY) will rise while the supply of NZD now made available to buy JPY increases, depreciating the NZD.

The downward pressure on exchange rates resulting from an increase in a nation's current account deficit should have a self-correcting effect on the trade imbalance. As the NZD weakens relative to its trading partners' currencies, consumers in New Zealand start to find imports more and more expensive, while consumers abroad, over time, find products from New Zealand cheaper. In this way, a floating exchange rate system should, in the long run, eliminate surpluses and deficits between nations in the current account. The persistence of global trade imbalances illustrated in Figure 23.5 is evidence that in reality, the ability of flexible exchange rates to maintain balance in nations' current accounts is quite limited.

Implications of a persistent current account deficit (HL only)

When a country experiences deficits in the current account for year after year, there are some predictable consequences that may have adverse effects on the nation's macroeconomy. These include foreign ownership of domestic assets, higher interest rates, currency depreciation and foreign indebtedness.

Effect on foreign ownership of domestic assets

By definition, the balance of payments must always equal zero. For this reason, a deficit in the current account must be offset by a surplus in the capital and financial accounts. If the money spent by a deficit country on goods from abroad does not end up returning to the deficit country for the purchase of goods and services, it will be re-invested into that country through foreign acquisition of domestic real and financial assets, or held in reserve by surplus nations' central banks.

Essentially, a country with a large current account deficit cannot export enough goods and services to make up for its spending on imports. Instead, it ends up exporting ownership of its financial and real assets. This could take the form of FDI in domestic firms, increased portfolio investment by foreigners in the domestic economy, and foreign ownership of domestic government debt, or the build-up of foreign reserves of the deficit nation's currency.

Many people in New Zealand, the US, and other countries with large financial account surpluses argue that foreign ownership of domestic assets poses a threat to their countries' economic and political sovereignty. To what extent is the freedom of a nation's people determined by the level to which foreign interests have control over the country's domestic financial and real assets? Does political, social and economic freedom become jeopardized as foreign interests gain greater ownership of the domestic economy?

Effect on interest rates

A persistent deficit in the current account can have adverse effects on the interest rates and investment in the deficit country. A current account deficit can put downward pressure on a nation's exchange rate, which causes inflation in the deficit country because imported goods, services and raw materials become more expensive. In order to prevent massive currency depreciation, the country's central bank may be forced to tighten the money supply and raise domestic interest rates to attract foreign investors and keep demand for the currency and the exchange rate stable. Additionally, since a current account deficit must be offset by a financial account surplus, the deficit country's government may need to offer higher interest rates on government bonds to attract foreign investors. Higher

The interest rate effect of a large current account deficit should be negative (i.e. cause interest rates to rise in the deficit country). However, in recent years, the country with the largest trade deficit, the US, has actually experienced record low interest rates even while maintaining persistent current account deficits. This can be understood by examining the macroeconomic conditions of the US and global economies, in which deflation posed a greater threat than inflation over the years 2008–10. Among international investors, the fear of deflation combined with low confidence in the private sector has kept demand for US government bonds high even as the US trade deficit has grown, allowing the US government and central bank to keep interest rates low and continue to attract foreign investors.

borrowing rates for the government and the private sector can slow domestic investment and economic growth in the deficit nation.

Under normal macroeconomic conditions, a build-up of US dollars among America's trading partners would require the US to raise interest rates to create an incentive for foreign investors to re-invest that money into the US economy. However, in the environment of uncertainty and low confidence in the private sector that has prevailed over the last several years, America's trading partners have been willing to finance its current account deficit without requiring high interest rates. In fact, the US has borrowed at record low interest rates during this period.

Effect on indebtedness

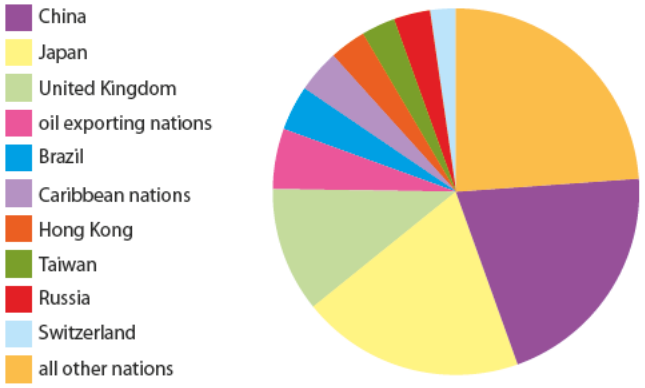
A large current account deficit is synonymous with a large financial account surplus. One source of credits in the financial account is foreign ownership of domestic government bonds (i.e. debt). When a central bank from another nation buys government bonds from a nation with which it has a large current account surplus, the deficit nation is essentially going into debt to the surplus nation.

For instance, as of August 2010, the Chinese central bank held $868 billion of US Treasury Securities (government bonds) on its balance sheet. In total, the amount of US debt owned by foreign nations in 2010 was $4.2 trillion, or around 40% of the country's total national debt and 25% of its GDP.

On the one hand, foreign lending to a deficit nation benefits the deficit nation because it keeps demand for government bonds high and interest rates low, which allows the deficit country's government to finance its budget without raising taxes on domestic households and firms.

On the other hand, every dollar borrowed from a foreigner has to be repaid with interest. Interest payments on the national debt cost US taxpayers over $400 billion in 2010, making up around 10% of the federal budget. Nearly half of this went to foreign holders of US debt (Figure 23.7), meaning almost $200 billion of US taxpayer money was handed over to foreign interests, without adding a single dollar to aggregate demand in the US.

Figure 23.7
Foreign-owned US debt (2010): $4.2 trillion.



Some argue that personal debt is higher in countries with higher levels of national debt because the government sets an example for the nation's households. If a government accumulates large amounts of foreign debt, are individuals in society more likely to accumulate debt themselves? To what extent is the behaviour of individuals in society modelled after the behaviour of the government?

The opportunity cost of foreign-owned national debt is the public goods and services that could have been provided with the money that instead is owed in interest to foreign creditors. If the US current account were more balanced, foreign countries like China would not have the massive reserves of US dollars to invest in government debt in the first place, and the taxpayer money going to pay interest on this debt could instead be invested in the domestic economy to promote economic growth and development.

Effect on international credit ratings and demand management

A large current account deficit requires a nation to run a financial account surplus. As explained above, a surplus in the financial account may consist of foreign ownership of the deficit nation's government debt. Over time, budget deficits financed through foreign borrowing reduce the attractiveness of the deficit country's government bonds to foreign investors, harming its international credit rating, forcing the government to offer ever increasing interest rates to foreign lenders.

In 2010, Spain's credit rating was downgraded by the international credit ratings agency Moody's. As a result, Spain's borrowing costs rose.

The outlook for Spain's already troubled economy has darkened after Moodys' downgraded its credit rating by one notch, stripping the country of its triple-A debt status.

The move to cut Spain's local and foreign currency government bond ratings to Aa1 from Aaa followed similar action taken by major rating agencies Fitch and Standard & Poor's, reflecting concerns about weak growth prospects and the country's "deteriorating" public finances.

Moody's accepted that while Spain's high external debt and persistent current account deficit are slowly being corrected, they still remain larger than for most of its EU competitors.

Spain's economy is expected to grow more slowly than Germany, France and the UK where borrowing costs are lower. Spain's cost of borrowing has doubled in a year and it now pays twice as much to investors for its benchmark 10-year bonds than Germany.

Adapted from news sources, September 2010

Higher rates must be offered to investors in Spain, reducing the Spanish government's ability to manage the level of AD in the nation through fiscal policy to promote its macroeconomic objectives. A more balanced current account in which Spain's export revenues were higher would reduce the pressures on the budget deficit, improve Spain's credit rating and give the government greater flexibility in its use of demand-management policies.

In April 2011, when US sovereign debt reached over $14 trillion, one credit rating agency lowered the credit outlook for the US to negative. While the US kept its AAA rating, the negative outlook says that there is a 33% chance the rating will need to be lowered in the next two years. Are the days of cheap borrowing by the US coming to an end? It would seem so.

Methods to correct a persistent current account deficit (HL only)

The existence of a persistent current account deficit can have many detrimental effects on a nation's economy. For this reason, a government or central bank may find it necessary to intervene to promote greater balance in the nation's current account. At the very least, reducing a current account deficit promotes domestic employment as it leads to an increase in the nation's net exports, meaning more demand for the nation's output and a reduction in unemployment.

Expenditure-switching policies

Any policy by a government aimed at reducing domestic spending on imports and increasing spending on domestically produced goods and services is known as an expenditure-switching policy. Such policies could also be called protectionist since essentially they are aimed at reducing demand for imports and increasing domestic employment, albeit in the name of promoting a balanced current account.

Exchange rate manipulation

As you know, it is possible for governments and central banks to intervene in foreign exchange markets to manipulate the value of their own currency relative to their trading partners (Chapter 22). A central bank may supply a greater quantity of its own currency on forex markets by demanding more of other currencies so as to devalue its currency and make imports less attractive to domestic consumers. Alternatively, it may lower domestic interest rates to make foreign investment less appealing, reducing demand for its currency and lowering the exchange rate.

Either of these policies will make imports more expensive to domestic households, who will switch their expenditures to domestically produced goods and services. Likewise, foreign consumers will find the nation's output more affordable, and over time exports should rise, moving the current account towards balance.

Increased protectionism

Another method for switching expenditures from imports to domestically produced output is to increase the barriers to trade with other nations. Import tariffs or quotas, or subsidies to domestic producers will all make domestically produced goods more attractive to consumers at home and reduce demand for imports.

In the short run, net exports may rise and the current account move towards surplus, but in the long run, such policies promote inefficiency among domestic producers who enjoy artificially high prices due to government protection. Over time, the comparative advantage of foreign producers is likely to increase as domestic firms can get away with being productively inefficient. Instead of focusing on efficiency, domestic producers have strong incentives to devote resources to preserving or expanding protectionist laws. In the meantime, foreign producers grow stronger and more efficient by competing in the world market. Protectionism leads only to a misallocation of resources and ultimately the costs it imposes on society are greater than the benefits it brings.

Expenditure-reducing policies

A second set of policies available to governments hoping to reduce a current account deficit involves the reduction of overall expenditures by firms and households in the nation. This reduces spending on imports and thus restores balance in the current account. Clearly, expenditure-reducing policies have adverse effects on domestic output and employment, and are thus not desirable except as a last resort.

Contractionary fiscal policies

Raising taxes on domestic households and firms reduces disposable income and reduces overall AD, including demand for imports. Reductions in government spending would also reduce disposable incomes and overall AD in the nation. In addition, the fall in import demand, the lower rate of inflation (or, if the decline in AD is great enough, the deflation) that occur as a result of contractionary policies actually make the country's exports more attractive to foreign consumers, further improving the current account deficit.

Contractionary monetary policies

Another means of reducing overall demand for imports in a nation is to raise interest rates to discourage consumption of imported durable goods (financed by borrowing) and firms' investment in imported capital goods. Higher interest rates also have a disinflationary (or deflationary) effect, making the nation's exports more attractive to foreign consumers.

On the other hand, higher interest rates may attract foreign investors, shifting the nation's financial account further towards surplus and appreciating the currency as foreign demand

for domestic assets rises. This could have the opposite effect of that intended by the central bank, as a stronger currency might make imports even more attractive, offsetting any improvement in the current account achieved by reducing consumption of durable goods and investment in foreign capital goods.

Expansionary supply-side policies

Contractionary fiscal and monetary policies will surely reduce overall demand in an economy and thereby help reduce a current account deficit. But the costs of such policies are likely to outweigh the benefits, as domestic employment, output and economic growth suffer due to reduced spending on the nation's goods and services. A better option for governments worried about their trade deficit is to pursue supply-side policies that increase the competitiveness of domestic producers in the global economy.

In the long run, the best way for a nation to reduce a current account deficit is to allocate its scarce resources towards the economic activities in which it can most effectively compete in the global economy. In an environment of increasingly free trade between nations, countries like the US and those of Western Europe will continue to confront structural shifts in their economies that at first seem devastating. However, over time, such shifts are likely to be seen as both inevitable and beneficial to the overall level of efficiency and welfare in the global economy.

The auto industry in the US has changed forever due to competition from Japan. The textile industry in Europe long since passed its apex of production, and the UK consumer will never again buy a television or computer monitor made in the UK. The reality is, much of the world's manufactured goods can and should be made more cheaply and efficiently in Asia and Latin America than they ever could be in the US or Europe.

The question Europe and the US should be asking, therefore, is not 'how can we get back what we have lost and restore balance in our current account', but 'what can we provide for the world that no one else can?' By focusing their resources towards providing the goods and services that no Asian or Latin American competitor is capable of providing, the deficit countries of the world should be able to reduce their current account deficits and at the same time stimulate AD at home, while increasing the productivity of the nation's resources and promoting long-run economic growth.

That may sound easy to say, and it is fair to ask 'how can they achieve this?' This is where supply-side policies come in. Smart supply-side policies mean more than tax cuts for corporations and subsidies to domestic producers. Smart supply-side policies that would promote more balanced global trade and long-run economic growth include the following.

Investments in education and healthcare

Nothing makes a nation more competitive in the global economy than a highly educated and healthy workforce. Exports from Europe and the US will increasingly come from the highly skilled service sector and less and less from the manufacturing sector. Highly educated and skilled workers are needed for future economic growth and global competitiveness, particularly in scientific fields such as engineering, medicine, finance, economics and business.

Public funding for scientific research and development

Exports from the US and Europe have increasingly depended on scientific innovation and new technologies. Copyright and patent protection ensure that scientific breakthroughs achieved in one country are allowed a period of time during which only that country can enjoy the sales of exports in the new field. Green energy, nano-technology, and

biomedical research are emerging technologies that require sustained commitments from the government sector for dependable funding.

Investments in modern transportation and communication infrastructure

To remain competitive in the global economy, the countries of Europe and North America must assure that domestic firms have at their disposal the most modern and efficient transport and communication infrastructure available. High-speed rail, well-maintained inter-state or international highways, modern port facilities, high-speed internet and telecommunications; these investments allow for lower costs of production and more productive capital and labour, making these countries' goods more competitive in the global marketplace.

Benefits of reducing a current account deficit

Reducing a current account deficit will have many benefits for a nation like the US, Spain, the UK or Australia. A stronger currency ensures price stability, low interest rates allow for economic growth, and perhaps most importantly, less taxpayer money has to be paid in interest to foreign creditors. Governments and central banks may go about reducing a current account deficit in many ways: exchange rate controls, protectionism, contractionary monetary and fiscal policies, or supply-side policies may all be implemented to restore balance in the current account. Only one of these options promotes long-run economic growth and increases the efficiency with which a nation employs its scarce factors of production.

To access Worksheet 23.1 on currency manipulation, please visit www.pearsonbacconline.com and follow the onscreen instructions.

Supply-side policies are clearly the most efficient and economically justifiable method for correcting a current account deficit. Unfortunately, they are also the least politically popular, since the benefits of such policies are not realized in the short run, but take years, maybe decades, to accrue. For this reason, time and time again governments turn to protectionism in response to rising trade deficits.

The Marshall–Lerner condition and the J-curve effect (HL only)

The Marshall–Lerner condition: If $PED_X + PED_M > 1$, then depreciation or devaluation of a nation's currency shifts the balance on its current account towards surplus.

When a nation runs a persistent deficit in its current account it should put downward pressure on the country's exchange rate (page 492). In a system of floating exchange rates, such fluctuations between the currencies of deficit and surplus countries should correct the imbalances by altering relative prices of imports and exports in a way that moves both deficit and surplus countries towards a more balanced current account. However, such shifts do not always occur.

Whether or not depreciation of a nation's currency reduces a trade deficit depends on the combined elasticity of demand for imports and exports. If $PED_X + PED_M > 1$, then depreciation in the currency will move a country's current account towards surplus. This is known as the Marshall–Lerner condition (MLC). If the MLC is not met, then depreciation of a nation's currency will worsen a country's current account deficit.

Common sense might indicate that if a country's currency depreciates relative to other currencies, this should lead to an improvement in the country's balance of trade. For Country Z whose currency is the dollar, the reasoning is as follows.

- A weaker dollar means foreigners have to give up less of their money in order to get one dollar's worth of Country Z's output.

- At the same time, since Country Z's dollar is worth less in foreign currency, imports become more expensive, as Country Z's residents have to spend more dollars for a certain amount of another country's output; hence, imports should decrease.
- The decrease in imports and increase in exports should reduce Country Z's current account deficit.

Fewer imports and more exports should mean an improvement in the country's balance of trade, but this is not necessarily the case. What matters is not whether a country is importing less and exporting more, but whether the increase in revenues from exports exceeds the decrease in expenditures on imports. Here is where the Marshall–Lerner condition can be applied.

The following is an example of a situation in which the MLC is met and depreciation of Country Z's dollar results in an improvement in the current account.

- Import spending exceeds export revenues in Country Z, causing depreciation of Country Z's dollar.
- If foreigners' demand for Country Z's exports is relatively elastic, then a slightly weaker dollar should cause a proportionally larger increase in foreign demand for Country Z's output, causing export revenues in Country Z to rise.
- Likewise, if Country Z's residents' demand for imports is relatively elastic, then a slightly weaker dollar should cause their demand for imports to decrease proportionally more than the increase in price of those imports, reducing overall expenditures on imports.
- If the combined elasticity of demand for exports and imports is elastic (i.e. the coefficient is greater than 1), then depreciation of Country Z's currency will shift its current account towards surplus. In this case, the MLC is met.

So what if the MLC is not met? Demand for exports and imports may not always be so responsive to changes in prices brought on by changes in exchange rates. Imagine a scenario in which a weaker dollar does little to change foreign demand for Country Z's output. In this case, income from exports may actually decline (since it now takes fewer units of foreign currency to buy Country Z's exports) as Country Z's dollar depreciates.

Likewise, if Country Z's residents' demand for imports is highly inelastic, then more expensive imports have a proportionally small effect on import demand. In which case, expenditures on imports may actually rise as they become more expensive. If the combined price elasticity of demand for exports and imports is inelastic, depreciation of the currency actually worsens a trade deficit. Country Z's import expenditures rise while export revenues fall, worsening the current account deficit.

The MLC is basically an application of the total revenue test of elasticity (Chapter 4). If demand for a country's exports is inelastic, a fall in price leads to a decrease in total revenues from the sale of exports. The same depreciation that caused the price of exports to fall causes the price of imports to rise, and if demand for imports is inelastic, then their higher prices causes total expenditures on imports to rise. Thus, the MLC is not met (Figure 23.8, overleaf).

If MLC is met, depreciation of a nation's currency causes revenues from export sales to rise and expenditures on imports to fall, moving the country towards a trade surplus (Figure 23.9, overleaf).

Figures 23.8 and 23.9 show how price elasticity is a critical element in any decision to devalue currency. In reality, the MLC can be met even when the elasticities of demand for exports and imports are separately somewhat inelastic. For example a PED_X of 0.5 and a PED_M of 0.6, both relatively inelastic by themselves, combine to have a value of 1.1, enough to satisfy the MLC.

To access Worksheet 23.2 on the MLC, please visit www.pearsonbacconline.com and follow the onscreen instructions.

Figure 23.8
The effect of depreciation on imports and exports depends on their PED: if demand is inelastic, depreciation may worsen a current account deficit. **a** Market for Country Z's exports; **b** market for imports in Country Z.

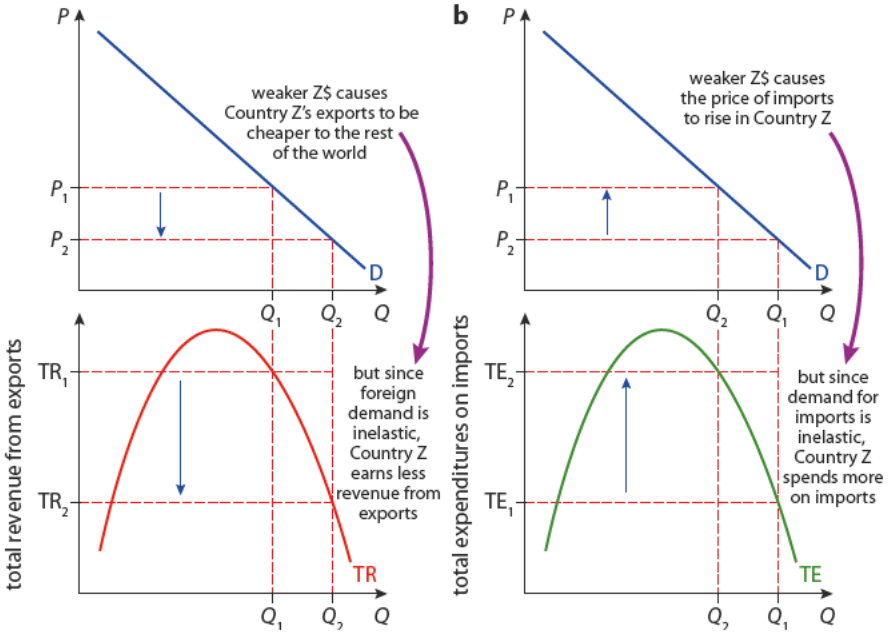
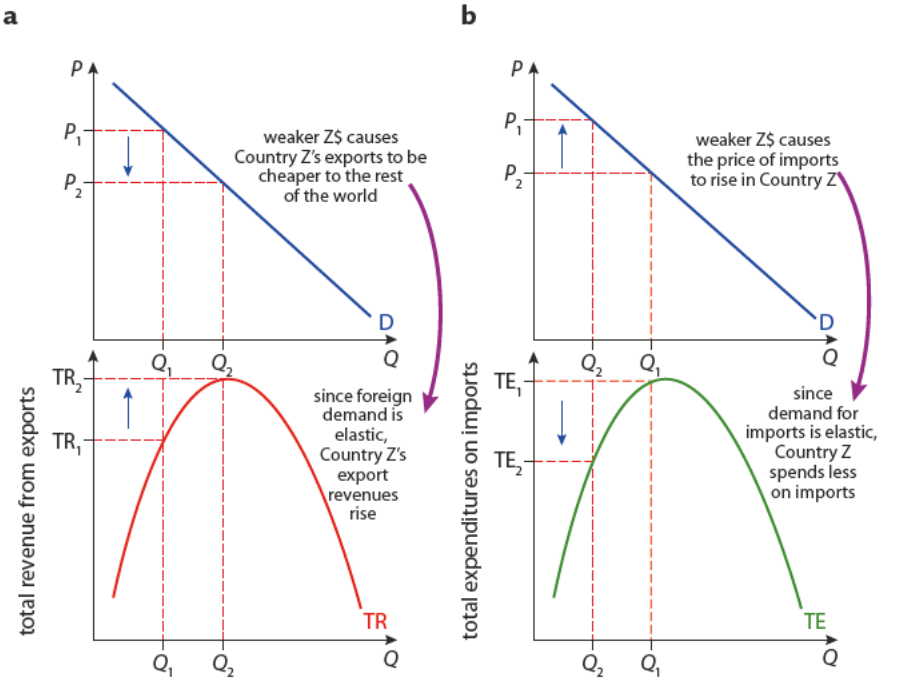


Figure 23.9 The effect of depreciation on imports and exports depends on their PED: if demand is elastic, depreciation may move a country towards a current account surplus. **a** Market for Country Z's exports; **b** market for imports in Country Z.



The J curve

The MLC analysis above suggests that a country with an inelastic import and export demand combination would never want to devalue its currency, because that would lead to a worsening of its current account. However, PED changes over time. As consumers have time to adjust to changes in the price of particular goods, they are able to change their behaviour to consume either more or less of the good in question depending on how the price changed.

For example, when the price of a particular brand of toothpaste goes up, consumers who are used to buying that toothpaste may continue to do so for a while until they have found

a suitable substitute. Over time, the responsiveness of consumers to a change in price increases as consumers can alter their decisions about what and where to buy.

When the exchange rate between two nations changes, consumers in both nations will be more responsive to the changing price of imports as time goes by. For example, if the value of the Swiss franc were to fall relative to the British pound, British consumers would not immediately notice that Swiss goods were getting cheaper in the UK. Chocolate consumers in the UK would continue to buy, say, French and Belgian chocolate in the short run. However, over time, they would begin to take notice of the relatively cheaper Swiss chocolates, and therefore become more responsive to the lower price of Swiss imports in the long run. Likewise, Swiss consumers would find British goods more expensive, but Swiss consumers who are used to buying British beers would be more responsive to the higher prices over time, once they've been able to find suitable substitutes, such as Belgian and German beers.

The PED for both imports and exports increases over time. Therefore, following depreciation of a nation's currency, it is likely that in the short run, demand for imports and exports will be inelastic, the MLC will not be met, and therefore the weaker currency actually moves a country towards a current account deficit. As time passes, however, and the currency remains weak, consumers at home and abroad begin to alter their demand based on the changing price of imports and therefore PED becomes more elastic, the MLC is met, and the nation whose currency weakened moves towards a current account surplus.

The implication is that in the short run, depreciation of a nation's currency is likely to move its current account towards a deficit, whereas in the long run, the current account balance should begin to improve. This is illustrated in a simple diagram known as the J curve (Figure 23.10).

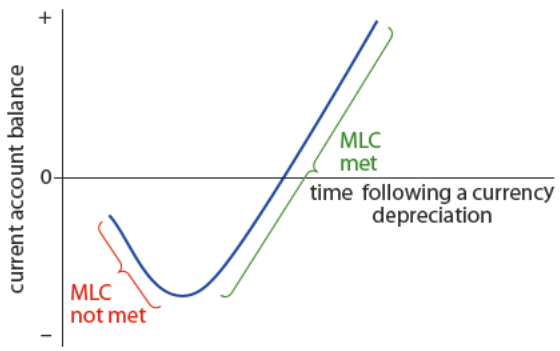


Figure 23.10
The J curve shows how depreciation of the nation's currency is likely to affect the current account balance over time.

The J curve is simply a line showing the change that is likely to occur in a nation's current account following a currency depreciation over time. Due to the inelasticity of demand for imports and exports in the short run, a weaker currency moves the current account deeper into deficit for a while. But over time, consumers at home and abroad adjust to the changing prices of imports and exports and the current account deficit begins to decline as the balance of trade moves towards surplus.

23.5 Current account surpluses

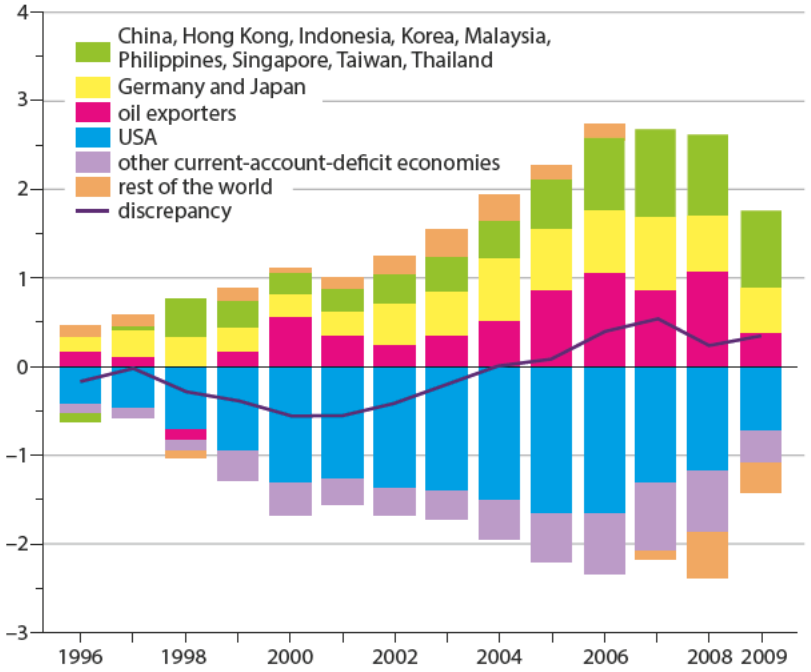
Learning outcomes

- Explain why a surplus in the current account of the balance of payments may result in upward pressure on the exchange rate of the currency.

- (HL only) Discuss the possible consequences of a rising current account surplus, including lower domestic consumption and investment, as well as the appreciation of the domestic currency and reduced export competitiveness.

Selling more goods and services to the rest of the world than a nation consumes in imports results in a surplus in the nation's current account. It is said that one country's deficit is another country's surplus. This could not be more clearly illustrated than in Figure 23.11 showing the combined current account surpluses and deficits of the world over the last several years.

Figure 23.11
Global trade imbalances have grown over the last 15 years.

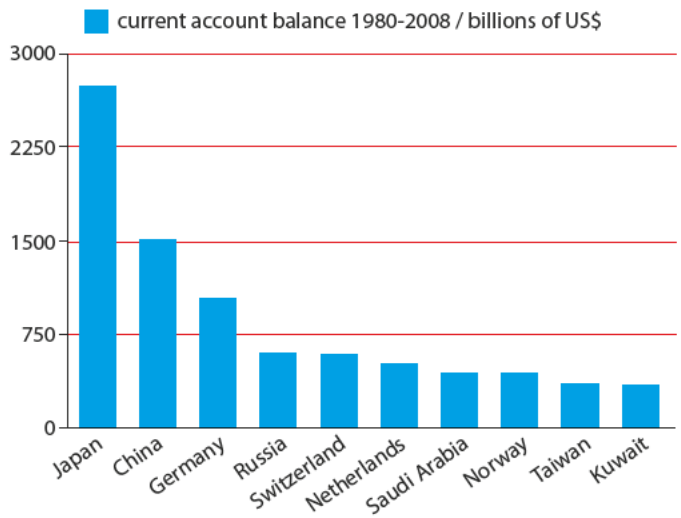


International Monetary Fund, BoP textbook

The coloured bars above the zero line represent the total trade surplus (in trillions of dollars) of the handful of countries that have the largest current account surpluses. These include China, Germany, Japan and the oil-exporting nations of the Middle East. The bars below the zero line represent the trade deficit nations, most notably the US.

The ten countries with the largest current account surpluses over the last three decades are shown in Figure 23.12.

Figure 23.12
The top 10 current account surplus nations over the last 30 years.



The major source of the trade surpluses in Japan, China, Taiwan, Germany and Switzerland is the export of manufactured goods and services, while the surpluses of Russia, Saudi Arabia, Norway and Kuwait are accounted for by large exports of oil, gas, and other primary commodities.

The consequences of a persistent surplus in a nation's current account are basically the reverse of those occasioned by a persistent deficit. They include currency appreciation, increased ownership of foreign financial and real assets, as well as lower overall levels of domestic consumption and the increased likelihood of protectionist policies being imposed by trading partners attempting to reduce their trade deficits.

A nation's current account of the balance of payments is in surplus when the nation's total export revenues exceed its expenditures on imports.

Effect of a current account surplus on the exchange rate

If a nation consistently sells more of its output to foreigners than it demands of foreign output, demand for the exporting nation's currency will eventually rise and appreciate. In addition, since the surplus nation demands relatively little of foreign goods, the supply of its currency in foreign exchange markets will fall, contributing to the currency's appreciation.

Over time, an appreciating currency will reduce the export industry's competitiveness with the rest of the world and force domestic producers to become more efficient or shut down as foreign demand for their goods eventually falls.

This adjustment assumes, of course, that exchange rates are floating and the currency is allowed to appreciate. China, the country with the largest current account surplus (in 2009, $297 billion, down from $426 billion in 2008) prevents its currency from appreciating as it would under a floating exchange rate system by intervening in the forex market to peg the exchange rate to the US dollar. By closely managing the RMB's value through its use of its foreign exchange reserves to buy and sell dollars and RMB in the forex market, the Chinese government ensures that the country's large trade surplus does not cause an appreciation of its currency, which would reduce demand for Chinese exports and slow the country's economic growth.

Under a system of floating exchange rates, current account surpluses should be kept in check by the appreciation of the surplus nation's currency and the corresponding decrease in demand for its exports and the increasing appeal of imports among domestic consumers. However, in a global economy in which governments actively intervene in foreign exchange markets to devalue their own currencies, massive imbalances can persist for years and even decades.

Effect of a current account surplus on domestic consumption and savings (HL only)

Persistent current account surpluses imply that households in the surplus nation are consuming at a lower level over time than households in countries with current account deficits. The reason for this may not be immediately clear. Essentially, the high levels of investment in foreign assets, plus the large reserves of foreign exchange held in the central bank of a surplus nation add up to a form of forced savings among the surplus country's households.

Think of it this way: money earned from the sale of exported goods but *not* spent on imported goods is money saved by the nation with the trade surplus. The financial account

deficit needed to maintain a current account surplus reduces households' consumption by re-investing money earned from export sales in foreign assets rather than spending it on goods and services.

China's national savings rate is around 45%. This does not mean that the average Chinese household saves 45% of its income earned in the workplace. It means that of the Chinese GDP of $5 trillion, nearly half was invested in real and financial assets at home or abroad (in 2009). Only around 40% of China's GDP was accounted for by household consumption. Compare this to the US, where 12% of GDP was accounted for by savings and investment, and 70% was made up of household consumption.

The high levels of savings and investment at home and abroad necessary to maintain China's massive current account surplus result in less of the country's hard-earned income going towards domestic consumption or spending on imports. Another way to think about this situation is as follows. Nearly half of the stuff produced in China is exported to and consumed by the rest of the world, but China imports far less than it exports, meaning nearly half of China's output is *not* consumed by Chinese households, but by foreigners. A trade deficit nation, on the other hand, may actually be able to consume *more* than it produces, since many of the goods and services its households enjoy are produced abroad and are imported using money borrowed from foreigners in the financial account.

To access Worksheet 23.3 on China's billions, please visit www.pearsonbacconline.com and follow the onscreen instructions.

Evaluating the global trade imbalance

Many people around the world are worried about the large imbalances that exist in nations' current and financial accounts. Figure 23.11 shows the roughly three trillion dollar surplus that has emerged over the last decade among a handful of exporting nations, compared with the equally large deficits of another handful of importing nations. Many consider this to be a worrying trend. If the trend continues and these imbalances grow ever larger, the implications for the global economy could be severe.

Continued decline in secondary and tertiary sectors in the West

Some worry that the continued dependence on imports will completely wipe out any remaining manufacturing-sector jobs in Western Europe, the US and other countries with large trade deficits. The loss of manufacturing jobs due to free trade, argue some, has wiped out the middle class and lowered median incomes for hundreds of millions of Americans and Europeans who only 20 years ago could have counted on a strong domestic manufacturing sector for life-long employment offering generous wages and benefits.

This era of globalization is characterized by a growing trend in outsourcing and off-shoring jobs in both the secondary and tertiary sectors from the deficit nations to the surplus nations. Many foresee only growing imbalances as more and more of the world's output is produced in Asia, Latin America, and perhaps, in the future, Africa.

Persisting poverty in the developing world

From the exporting nations' perspectives, persistent trade surpluses promise continued economic growth, but such export-oriented growth may come at the expense of improvements in the typical household's standard of living if this growth is continually fuelled by more and more investment abroad.

Financial account deficits in these nations mean that households are forced to consume less than they would be able to if their currencies were allowed to appreciate and the current

account were in better balance. Increased imports to countries like China and its Asian neighbours may mean slower growth as their export sectors adjust to more competition from abroad, but it would also mean higher standards of living for the households in these nations as they begin to enjoy the increased purchasing power of their stronger currencies and the variety of imported goods available from the rest of the world.

The threat to economic sovereignty

Perhaps most worrying to some, particularly in the US, is the continued increase in foreign ownership of domestic assets and the corresponding threat to economic sovereignty that results from persistent financial account surpluses. We must keep in mind that a surplus is not always good, just as a deficit is not always bad. America's growing financial account surplus means that increasingly, ownership of American corporations, factories, office buildings, real estate, and the national debt itself is in the hands of foreign interests.

Additionally, the build up of US dollar assets in Asian central banks is frightening to Americans who realize that should these governments decide to reduce their holding of US dollars, the corresponding increase in supply of the currency on foreign exchange markets would cause such a massive depreciation of the US dollar that Americans would find the imports they so desperately depend on becoming increasingly expensive. Take into account the $200 billion of taxpayers' money being paid in interest to foreign holders of US government bonds each year, and the desire to achieve greater balance in the nation's current and financial accounts becomes quite understandable.

Blame it on the RMB

So how can better balance be achieved? It may sound harsh to make this claim, but until China relinquishes control over the value of its currency, the trade imbalances of today are likely to continue.

Twenty years ago, the growth of Chinese exports posed little threat to the more developed economies of the world. China was just like other developing economies of the time (Russia, Brazil, Indonesia, India): a huge country with a tiny economy. But as China's exports have moved up the value chain, from toys and T-shirts to airplanes and auto parts, its continued growth has posed ever-increasing threats to the more developed economies of the world.

Today, China competes for business not only with other low-income countries flush with cheap labour (e.g. India and Brazil), but with the manufacturing giants of the 20th century as well (e.g. Germany and the US). As China has risen to the ranks of the largest and most advanced economies in the world, its policy of directly managing the exchange rate of the RMB relative to the US dollar has caused increasing disruption in the efficient allocation of the world's resources across national borders.

A weak RMB hurts American producers *and* those in other less developed countries, who find it ever harder to compete with China's low-cost producers, whose costs are kept even lower thanks to the artificially weak RMB. To compete with China, other low-cost, developing countries have had to resort to currency devaluations of their own, further accelerating the flow of productive resources from Europe and the US to Asia and Latin America.

Only when the RMB is allowed to appreciate against the dollar and the currencies of China's other trading partners will the massive imbalances of the last decade begin to diminish. Following such an adjustment, the price of Chinese goods in Europe and America would certainly rise in the short run but, over time, other less developed economies whose growth has been stifled by the weak RMB will begin to meet the global

demand for low-cost, labour-intensive goods. Perhaps with a stronger RMB, China's textile industry would decline as Cambodia, Lao People's Democratic Republic, and Bangladesh offer cheaper exports to the West. In the meantime, high-tech industries that have recently declined in the West and relocated to China will be more likely to remain in Europe or America, allowing those countries to once again provide more of the advanced goods and services in which they truly hold a comparative advantage to the global marketplace.

China might stand to benefit as well. Revaluing the currency should improve buying power, making imported consumer goods more affordable. It could also reduce the inflationary pressure that is expected to grow as China seeks out greater quantities of imported resource materials to feed its manufacturing colossus.

Until the Chinese government decides it can safely loosen the noose on the RMB, however, the imbalances that have seen the decline in manufacturing in the West and the corresponding rise of foreign indebtedness and dependence on imports will continue. For now, unfortunately, it does not appear such a correction will begin any time soon.

CASE STUDY

BoP surplus hit in Sept quarter on rising spend abroad

MUMBAI: Despite doubling of net portfolio inflows, India's overall balance of payments surplus slumped in the July–September quarter because consumption surged and long-term stable FDI slowed down.

Preliminary data released by the Reserve Bank of India (RBI) on Friday showed current account deficit – net of cross-border transactions of goods and services – during July–September 10, which rose to $15.8 billion compared to $9.2 billion in July–September 09.

This was because imports rose faster than exports and net services income was lower during the period.

There was a sharp rise in portfolio inflows, but net capital flows remained almost at same levels as last year as other flows, particularly FDI were muted and outward investment increased. Net FDI inflow in the period was $2.5 billion against $7.5 billion a year ago.

The net capital inflow in the period was $20.4 billion against $19.3 billion in corresponding period last year.

After taking into account the larger current account deficit, the increase in foreign exchange reserves on balance of payments basis was $3.3 billion in July–September 10 against $9.4 billion in the year-ago period.

The current account records transactions related to purchase of goods and services or income from a service, while capital account inflows include investments or debt creating flows.

The balance of payments is the sum of the current and capital account transactions in a given period.

The RBI, in its latest Financial Stability report released on Thursday, had warned about a potential threat to the external sector. 'Accelerated capital flows to the economy have helped finance the widening current account deficit. However, a potentially worrying feature of capital flows to India has been the dominance of portfolio flows and debt flows as compared to the more stable investment flows on gross basis,' it said. 'Such flows require watchful management as they are prone to sudden stops and reversals.'

'The deficit is being increasingly financed by short-term capital, rather than FDI, which is enlarging short-term debt and raising external vulnerability,' said Tushar Podar, chief India economist, Goldman Sachs, in a recent note to clients. 'We flag the deterioration in external balances as the biggest risk to India's growth story, and one that investors should follow closely.'

The trade deficit (excess of imports over exports) was higher at $35.4 billion in July–September against $29.6 billion a year ago.

The surplus on the invisibles account (items like software, travel and tourism income and remittances by the Indian diaspora) was lower at $19.6 billion compared to $20.4 billion in the same period last year.

Remittances also dropped to $13 billion from $13.8 billion but net software earnings for the quarter rose to $12.3 billion from $10.8 billion.

Economic Times, India, 1 January 2011

EXERCISES

2 According to the article above, India has a current account deficit. What must be true about India's capital and financial account balances? Why must this be true?

3 The article says 'a potentially worrying feature of capital flows to India has been the dominance of portfolio flows and debt flows as compared to the more stable investment flows on gross basis'. Why would inflows of FDI be more likely to contribute to long-term economic growth in India than the short-term investments and the accumulation of debt for India?

4 India has a deficit in the balance of trade in goods, but a surplus in the balance of trade in services. Why, then, does India still have a current account deficit overall?

PRACTICE QUESTIONS

1 **Item 1** **Fighting the slowdown in Chile**

- A reduction in inflationary pressures because of slow growth of international demand, and a deceleration of the world economy, has allowed the Central Bank of Chile to cut interest rates to their lowest level for 14 years. The low interest rates have in turn contributed towards the peso (the Chilean currency) hitting a record low; and the **depreciation** of the peso is raising import prices.
- The Chilean government would like to see foreign trade add to growth, and is planning to eliminate its remaining controls on **capital flows** to stop the decline in FDI, and to provide funds for businesses.
- A bilateral free trade agreement with the USA will help in the long run, but Chile's economy could use a boost now, which may leave expansionary monetary policy as the main instrument available.

Adapted from *Business Week*

Item 2 **Chile's real GDP and current account balance**

Real GDP (annual % change)			Current account balance (% of GDP)		
2000	2001	2002	2000	2001	2002
5.4	4.0	3.3	−1.4	−2.2	−2.6

a With reference to Item 1, explain the following terms which are in bold in the passage:

i depreciation (2 marks) [AO1]

ii capital flows. (2 marks) [AO1]

b With reference to Item 2, briefly describe what has happened to the current account balance since 2000. Using any of the data provided, give one possible reason for this change. (4 marks) [AO2]

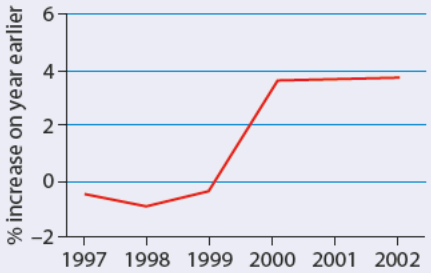
To access Quiz 23, an interactive, multiple-choice quiz on this chapter, please visit www.pearsonbacconline.com and follow the onscreen instructions.

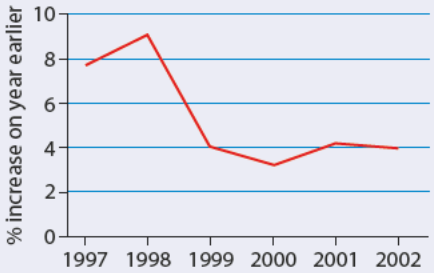
c Explain the relationship between low interest rates and the depreciation of the peso. (4 marks) [AO2]

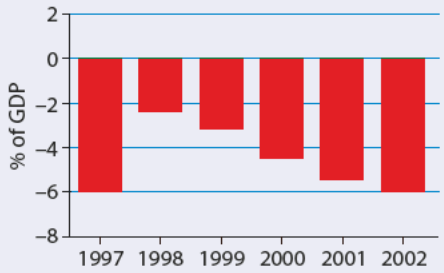
d Use the data and your knowledge of economics to evaluate the decision of the Chilean government to enter trade agreements and reduce controls on capital flows. (8 marks) [AO3]

2 **OECD survey, Czech Republic**

According to the OECD's latest survey of the Czech Republic, structural reforms with their emphasis on supply-side measures aided a strong recovery in 2000 and early 2001 after the **recession** from 1997–99. Efforts to fight inflation through monetary policy have also been quite successful. However, the large **current account deficit** is putting downward pressure on the exchange rate and this may be inflationary. This, along with a loose fiscal policy is posing a challenge to monetary policy in stabilizing demand in the medium term. In order to maintain its inflation targets, it is recommended that the Czech Republic continue using supply-side measures along with fiscal tightening.







adapted from *The Economist*, 4 August 2001

a Define following terms that appear in bold in the text:

i recession (line 3) (2 marks) [AO1]

ii current account deficit (line 4). (2 marks) [AO1]

b Analyse the relationship between GDP and the current account balance between 1999 and 2001. (4 marks) [AO2]

c Using an exchange rate diagram, explain why 'the large current account deficit is putting downward pressure on the exchange rate'. (4 marks) [AO2], [AO4]

d Using the data and your knowledge of economics, discuss possible consequences of a persistent deficit balance in the Czech Republic's current account. (8 marks) [AO3]