

COMMENTARY ON THE STIMULUS MATERIAL

The Introduction (page 2)

As with previous examinations, the Stimulus Material for the Global Economy paper takes the form of five extracts based on data obtained from a variety of sources together with a short introduction written by OCR examiners. The Introduction consists of five paragraphs of tightly worded prose. Each paragraph links with one of the extracts. It is worth reading the Introduction carefully, since it provides a concise summary of themes of the corresponding extract and, more importantly, may provide a useful steer to the reader as to some of the issues on which to focus in preparation for the examination.

Paragraph 1 links with Extract 1 and in the paragraph we are told that until 2008, (ie the first full year of the recent world economic crisis), globalisation increased at a rapid rate. Later in the paragraph we are told that the financial and economic crisis, which started in 2007 and from which we have only slowly recovered, appeared to threaten the pace of globalisation. However, these fears were short-lived, implying that after a brief pause the rapid pace of globalisation was resumed.

But what exactly is globalisation? On the principle that is essential in your preparation for the examination for you to have a clear definition of specialist words, we can define globalisation as *the processes that have resulted in ever-closer links between the world's economies resulting in greater interdependence*. The indicators of globalisation, featured in this paragraph, are rises in:

- global trade (trade **between** countries as distinct from trade **within** individual countries).
- Foreign Direct Investment (investment by foreign companies in productive capacity).
- migration of workers across international borders.

These are identified as the most obvious indicators of globalisation, thus suggesting that there are other unspecified indicators. It is advisable to construct a list of other indicators of globalisation, and how each contributes to globalisation.

We are told that the growth in world trade owes much to the reduction in trade barriers (eg reduction and elimination of tariffs and quotas and, in some cases, non-tariff barriers) but, again, this suggests that there might be other factors at work, and it is essential to consider the other factors that have led to a growth in world trade.

The final idea in this first paragraph concerns the results of globalisation; that is whether or not it is desirable. Notice that the text does refer to the controversy over globalisation (implying that globalisation has disadvantages). The view of most economists is that globalisation - in the form of increased trade and specialisation - produces substantial advantages to the world's economies and to the people in those economies. This is a clear steer towards a possible question requiring you to evaluate globalisation.

Paragraph 2 links with Extract 2 and deals with imbalances in the balance of payments of different countries. In essence, it refers to the persistent surplus on the balance of payments in some countries, notably China, and the persistent deficit on the balance of payments of countries such as the USA.

In terms of textbook theory, trade imbalances are resolved by movements of the exchange rate with surplus countries experiencing appreciation of their currency (a result of excess demand for their currencies), and deficit countries experiencing depreciation (a result of excess supply of their currencies). However, we are told that the current account imbalances have not always responded to changes in exchange rates. This points to possible questions on the following: what other reasons there might be for these imbalances; why these imbalances have not responded to changes in exchange rates; what other factors are at work.

Paragraph 3 provides us with a focus for the study of Extract 3. One feature of developing countries is that a high proportion of Gross Domestic Product takes the form of primary production, either agricultural or minerals. This is usually reflected in these countries' dependence on commodities for export earnings and, in many cases, on a single commodity export. Growth in the world economy is beneficial to such economies - in terms of increased demand for its exports and, at the same time, a rise in the unit prices of exports (ie with a shift to the right in the demand curve, it can sell more and at a higher price). Copper producing countries, like Zambia, benefited from growth in the world economy and, as a result, it showed an improvement in a number of indicators of development. (This is a reference, not just to GDP, but also to variables included in measures of development such as the Human Development Index).

We are told that the fall in commodity prices during the 2007-08 crisis led to a fall in Zambia's terms of trade, and that this was expected to have had a major impact on Zambia's economy. Here, we need a clear definition of terms of trade: *changes in the prices of a country's exports relative to changes in the price of its imports*. A deterioration in the terms of trade means that the country has to export more to buy the same quantity of imports. (In essence, it can buy less with a given volume of exports). Fortunately for Zambia, and other developing countries, the prompt recovery of the world economy meant that the problem was just short-term.

Paragraph 4 provides us with a brief statement of what we can expect in Extract 4. We learn that migration has increased international financial flows in the form of remittances. In everyday language, this refers to migrants sending money back to their family and others in their country of origin. Remittances to the home country are a common feature of all migration, especially remittances prompted by economic factors. We are told that, for many developing countries, remittances are more significant than Official Development Assistance (ie aid from governments in developed countries), and play a major part in reducing poverty and promoting development. However, the final sentence begs the question: what are the costs resulting from dependence on remittances?

Finally, paragraph 5 links up with Extract 5. Zambia has benefited from the increase in global commodity prices in that it receives more revenue from its exports of copper and other commodities. It has undergone a shift in the composition of its aggregate demand. This is likely to refer to the balance between consumption and investment, and between private and public sector demand. This will be explored in detail when we analyse Fig. 5.1. We are told that private sector investment is more important in terms of aggregate demand relative to consumption and public sector investment. This is expected to have major supply-side benefits, thus raising productive capacity. However, as fears of 'resource nationalisation' (state acquisition of foreign owned assets) have deterred some FDI, many economists argue that continued economic growth in Zambia depends upon freeing up the market by means of supply-side reforms.

These are the key issues that have been highlighted in the page 2 Introduction. We now turn to each extract to investigate the issues in greater detail.

Extract 1: Globalisation and World Trade

Introduction

As its title suggests Extract 1 is concerned with globalisation and world trade and, in particular, the following:

- the **features or symptoms** of globalisation.
- the **factors contributing** to the rise of globalisation.
- the **benefits** of globalisation.
- the **drawbacks** of globalisation.

Extract 1 also includes a graph that we need to analyse, and possibly draw conclusions from.

Indicators of Globalisation

As stated in the analysis of the Introduction, globalisation is defined as *the process that has resulted in ever closer links between the world's economies*. The extract lists three of the most important indicators of globalisation, with growth in trade, Foreign Direct Investment (FDI) and migration of workers across national boundaries.

We are told that ***'the value of trade in goods and services as a percentage of world GDP is increasing'***. Because the value of trade has grown in percentage terms, the value of trade must therefore also have grown in absolute terms, as well as a percentage of GDP. This conclusion is based on the assumption that the global economy has grown in the 21st century.

The second bullet point states that ***'FDI as a percentage of world GDP has increased six fold since 1980'***. Remember that FDI refers to *investment by multinational corporations in physical capital (eg new plant and equipment in their overseas operations)*. FDI raises the productive capacity of the country receiving the investment, and thereby improves the supply-side of an economy. In this respect it should be distinguished from portfolio investment, which is merely *a transfer of financial capital across national boundaries*.

The third bullet point tells us that ***'the number of migrant workers has trebled since the 1960s'***. This is another feature of globalisation and means that instead of a national labour market we have a global labour market. Workers cross national boundaries in search of higher rewards and employers can increasingly look to fill vacancies from abroad. This is a process that we have become familiar with in recent years. Firstly, free movement of labour within the EU has led to a growing number of EU citizens from outside the UK working in Britain. Although we tend to think of workers from the poorer countries of Eastern Europe coming to Britain (Polish plumbers, Bulgarian and Romanian fruit-pickers), there are also growing numbers of workers in the UK from some of the more affluent countries of the EU, thanks to our relatively more buoyant economy.

As well as EU workers crossing borders, we have seen growing numbers of non-EU nationals being attracted to the EU. This process is also occurring in other parts of the world (eg Hispanics in North America, Asians seeking employment in Australia).

The extract refers to the above as indicators of globalisation but the fact that the word *include* is used in line 3 suggests that there are other indicators which are not specified in the stimulus material and which you might be asked to identify and explain in the examination. So, what are the other indicators of globalisation?

1. **Global Brands.** The success of global brands (eg MacDonald's, Coca Cola, Ikea, Virgin) is a clear indicator of globalisation. The same product sold under the same brand name throughout the world reflects the global nature of the world economy.
2. **Transfer of technology.** New technology developed in one country is made available in other countries through legal means (multinational investment, licensing the technology to businesses elsewhere in the world) and through illegal means (pirating).
3. **Globalisation of retailing.** Successful national retailers increasingly seek to establish a presence in the countries, with greater or lesser success. Examples include foreign ventures by Tesco, Marks and Spencer, Ikea, Lidl and Aldi.
4. **Global sourcing.** Business enterprises often seek to source materials and components from the lowest cost countries.
5. **The rise of the multinational / transnational Corporation.** Multinationals are a feature of globalisation as large corporations set up production facilities in a number of different countries (eg Toyota, Shell, Tata Steel).
6. **Overseas production.** European producers seek to move to the countries with the lowest production costs to sell back in the home market (eg Dyson vacuum cleaners are produced in low cost Asian countries).
7. **The rapid extension of the internet worldwide** which has dramatically improved the efficiency of communication, and of the buying and selling of goods and services.

Benefits of Globalisation

The second and part of the third paragraph of the extract identifies the benefits of globalisation. Notice the stress is placed on the benefits in terms of economic theory, with no reference to any costs or drawbacks resulting from globalisation. You should also be mindful of the wording in the page 2 Introduction:

Globalisation has attracted much controversy but economists are generally agreed that specialisation and trade can bring benefits to all of the world's economies.

This should be read as meaning that, in general, economists see considerable benefits from the globalisation of the world economy, but there is recognition that there might be some costs or disadvantages to the process. Here we will concentrate on the positive aspects of globalisation recognising that mainstream economic theory provides support for the process. However, in the interests of balance (especially for the all-important evaluative question), we will look at the downsides of globalisation in the next section.

The benefits identified in paragraphs 2 and 3 are:

- opening up of markets.
- promotion of specialisation and division of labour.
- focusing production according to comparative advantage.
- access to larger markets (and by implication economies of scale).
- access to capital goods.
- access to more advanced technology via technology transfer.
- cheaper imports.
- increased economic efficiency.
- reduction of trade barriers.
- more buyer choice from access to a wider range of goods and services.
- lower prices for consumers.
- increased competition.
- incentives for increased competitiveness.
- job creation.
- economic growth.

Let us look at these points in greater detail.

The starting point for the analysis is the reduction and (in some cases) removal of trade barriers (something which is identified in paragraph 3 as a major factor in globalisation). Trade liberalisation results, not only in an increase in the volume of trade, but also in specialisation of production. At this point, **you should revise your understanding of international trade theory and, in particular, the concept of comparative advantage.** Clearly, it is mutually advantageous if countries specialise in those forms of production in which they have a cost advantage. This not only applies in situations of absolute advantage but also in situations of comparative advantage.

A country has an absolute advantage when it is able to produce more of a good or service with the same amount of resources, such that unit cost of production is lower. So, if country A is more efficient at car production, country B more efficient at wheat production, and country C more efficient at the production of clothing, then it would be sensible if each country specialised in the form of production in which it has an absolute advantage and then engage in trade to purchase from other countries the goods in which those countries have an absolute advantage. The result would be an increase in world production and therefore higher incomes and living standards for all.

But economic life is rarely as simple as this. What if one country is absolutely more efficient at the production of a wide range of goods and another country less efficient at producing the same range? Is there any scope for trade in these circumstances? The Theory of International Trade informs us that specialisation and trade can be mutually beneficial, even in the circumstances where one country has an absolute advantage and others have an absolute disadvantage. Both the country which is absolutely more efficient, and the one which is absolutely less efficient can benefit from trade if each specialises in the form of production in which it has a comparative advantage. Comparative advantage is defined as *a situation where one country produces a good or service at a lower opportunity cost relative to others.*

In simple terms, specialisation by comparative advantage means *specialising in those forms of production in which the country's advantage is most marked or where its disadvantage is least marked*. It is possible that trade in these circumstances can be mutually beneficial. In other words, both the super-efficient and the inefficient can benefit from specialisation and trading, assuming that they then trade at an exchange rate which is (ideally) mid-way between their domestic opportunity cost.

However, it should be pointed out that International Trade Theory does allow for situations in which trade is not mutually beneficial. In essence, trade is beneficial if (and only if) the trading possibility curve (a representation of all the combinations of the two products that can be consumed if it engages in international trade) lies between the production possibilities curves of the two countries concerned. There are circumstances where a country might gain more by producing all goods itself, and not engaging in trade. This is because when a country gets an inferior deal from trading, the benefits of specialisation and trade are one-sided (with one country gaining at the expense of the other).

We will return to this point later when looking at the drawbacks of globalisation but, for the moment, it needs to be stressed that, except in unusual circumstances, specialisation according to comparative advantage is mutually beneficial.

Specialisation and trade produce a series of other benefits.

- Trade increases the size of the market for an individual producer, enabling the producer to access a range of economies of scale.
- Consumers have access to goods from world sources. This increases choice and reduces prices, thereby contributing to rising standards of living.
- Businesses can source raw materials and components from the lowest price worldwide.
- Businesses can also acquire factors of production (including labour) at lower costs.
- Accessing goods from abroad increases the level of competition within domestic and international markets, thus keeping prices down.
- Domestic firms are forced to be more competitive if they are to hold their market share.
- Access to export markets enables efficient producers to increase sales.
- Increased sales leads to job creation.
- Finally, as exports are an injection into the circular flow, the increase in trade will increase aggregate demand and thereby stimulate economic growth.

To sum up we can say that economists in the mainstream of economic thought stress:

- the gains from trade.
- the exploitation of comparative advantage.
- greater specialisation so that all countries benefit from increased international trade.
- faster growth that comes from opening the economy to global influences.
- the inefficiencies and uncompetitiveness that come from trade barriers.

Disadvantages of Globalisation

Remember the extract itself makes no references to the drawbacks of globalisation. This is because it is written from the perspective of mainstream economics. However, the page 2 Introduction refers to the fact that globalisation is controversial, since there are critics of globalisation especially on the radical left. The anti-globalisation perspective stresses exploitation, environmental costs, global inequality and relative poverty.

Critics of globalisation argue that:

- There are **environmental costs** associated with rapid global economic growth and the expansion of trade. Increased trade associated with globalisation has increased pollution and helped contribute to CO2 emissions and global warming. Trade growth has also accelerated the depletion of non-renewable resources, such as oil.
- The **benefits** of globalisation **have not been shared equitably throughout world**. Rich countries and multinational corporations gain the most from globalisation, rather than the less developed countries, and their smaller businesses. Globalisation generates winners and losers, and for this reason it is likely to increase inequality, as richer nations benefit more than poorer ones.
- International markets are increasingly **dominated by fewer businesses**, and therefore they are more likely to adopt **monopolistic practices**, leading to higher prices, less choice, and barriers to market entry.
- Globalisation is a **new form of imperialism** led by the USA.
- Globalisation **undermines the power of nation states** by empowering the large multinationals at the expense of governments.
- The large organisations that promote free trade are **not democratically elected** and their decisions are **not made in the public eye**. The policies of these organisations are only aimed at trade with human rights and environmental concerns being ignored.
- Globalisation leads to the **exploitation of cheap (and in some cases child) labour** in sweat shops.
- Globalisation leads to **increased domination of western brands**.
- Globalisation makes it **harder for indigenous cultures to retain their identities**.
- Globalisation can also **increase the pace of deindustrialisation**, which is the slow erosion of an economy's manufacturing base.
- **Jobs may be lost** because of the structural changes arising from globalisation. Structural changes may lead to structural unemployment and may also widen the gap between rich and poor within a country.
- There are **risks associated with the interdependence of economies** so that a downturn in a major economy (eg USA or China or the EU) is soon transmitted to the rest of the world.
- **Over-specialisation**, such as being over-reliant on producing a limited range of goods for the global market, is a further risk associated with globalisation. A sudden downturn in world demand for one of these products can plunge an economy into a recession. Many developing countries suffer by over-specialising in a limited range of products, such as agriculture and tourism.

It is worth reflecting at this point that any economic change (eg an increase in interest rates, currency devaluation, establishment of a national living wage) generates some disturbance and dislocation, as consumers, businesses, and governments adjust to a new economic environment, and there will always be those negatively as well as positively affected. As economists, we need to focus on the objectives of the change and, in particular, the longer term net welfare effect, as the “ripples” die down. Nevertheless, globalisation is a worldwide phenomenon, is on-going, and the intended and unintended consequences are continuous and far-reaching.

Causes of Globalisation

In the extract it is pointed out that the reduction in trade barriers is one of many factors promoting globalisation. The page 2 Introduction to the stimulus material states that the process of globalisation has been driven by a range of factors. This should be taken as a hint of a possible question on **the factors that have led to globalisation in the world economy**. So, as well as understanding how trade liberalisation leads to globalisation, we also need to be able to identify and analyse the range of other factors causing globalisation of the world economy.

Trade barriers take the form of tariffs (taxes on imports), embargoes (prohibitions on trade with specified countries or in specified goods), quotas (limits on the quantity of trade), regulations (designed to make international trade more difficult), and subsidies to enable home producers to undercut foreign rivals. Trade barriers, designed to protect domestic producers at the expense of foreign producers, undermine consumer welfare, and reduce the volume of trade across national borders.

Obviously, any reduction in trade barriers will increase the openness of the economy thus speeding up the process of globalisation. In recent decades, trade barriers have been reduced as a result of regional economic groupings eg the EU. In recognition of the economic benefits, the regional economic groups tend to have free trade within the group as a first objective. A second factor in the reduction of barriers has been a commonly held desire to reduce barriers worldwide. This is reflected in the work of the World Trade Organisation, which seeks to reduce and even eliminate all trade barriers. A third factor to consider is the end of communism in Eastern Europe. The communist countries tightly controlled their own trade and sought to be independent of global influences. Since the end of Communist rule many of these countries have operated in a free market (and some have even joined the EU).

The reduction in trade barriers is perhaps the most important factor in the rise of globalisation but it is not the only factor. The other factors are:

- **A reduction in restrictions on the movement of capital.** Not only is there free movement of capital within regional economic groupings such as the EU, we also have seen a reduction in restrictions of capital movement in the world in general. This has facilitated Foreign Direct Investment and the rise of multinational companies. FDI and multinational corporations can only prosper if they have the means to move capital into and out of countries. When capital can move freely from country to country, it is relatively straightforward for firms to locate and invest abroad, and repatriate profits. Furthermore, as circumstances change in these locations and in business's factor and consumer markets, they can quickly re-organise, and redirect their resources.

- **Developments in information and communications technology.** The internet has enabled fast and 24/7 global communication, and improvements in telephone technology have enabled both businesses and consumers to communicate more easily on a global basis. This has facilitated the growth of commerce on a global basis.
- **A fall in the real transport costs.** Overseas trade is likely to mean increased transport costs, especially if trade is between continents. The rise of bulk carriers and the containerisation of shipping has reduced the real cost of shipping and thereby increased its efficiency. We should also appreciate the growing role of air transport in the movement of goods. Air transport has been essential in the export of perishable horticultural produce from countries such as Kenya, to developed markets in Europe.
- **The liberalisation of domestic markets.** Supply-side policies, which reduce monopoly forces in domestic economies, have opened up markets that were previously too challenging for foreign based producers.
- **Rising living standards** coupled with the development of mass and social media in the less developed world has led to growing demand for western consumer goods. Good examples to consider are the dramatic increase in demand for luxury goods in China, and the rise of the mobile phone market, even in low and middle income African countries.
- The development of complex financial products, such as **derivatives**, has enabled global credit markets to grow rapidly.

Analysis of Fig. 1.1: Trade as a Percentage of GDB for Four Selected Economies

Introductory Comments on Fig. 1.1

You will be required to interpret and analyse Fig. 1.1 which shows trade (exports + imports) as a percentage of GDP in four selected economies: Malawi, Zambia, Brazil and Australia. These four countries are selected as representing countries at four distinct stages in their development as defined in terms of income per head. Malawi is a low income economy with a high dependence on agriculture. Nearby Zambia is classed as a lower-middle income economy and this is a consequence of its rich and lucrative mineral resources. Brazil is a large country in terms of both size and population and is famously one of the BRIC countries. It has experienced rapid economic growth in recent decades and, like China and India, has emerged as one of the potential economic giants in the world. Finally, Australia is classed as a high income country. It is a highly developed country with a diverse economic base.

World Bank Country Classifications

Each year on July 1, the World Bank revises an analytical classification of the world's economies based on estimates of gross national income (GNI) per capita for the previous year. The updated GNI per capita estimates are also used as input into the World Bank's operational classification of economies that determines lending eligibility. As of 1 July 2015, low-income economies are defined as those with a GNI per capita, calculated using the *World Bank Atlas method*, of \$1,045 or less in 2014; middle-income economies are those with a GNI per capita of more than \$1,045 but less than \$12,736; high-income economies are those with a GNI per capita of \$12,736 or more. Lower-middle-income and upper-middle-income economies are separated at a GNI per capita level of \$4,125.

Source: <http://data.worldbank.org/news/new-country-classifications-2015>

As income per head changes over time, some countries will be assigned to different per capita income groups. For instance, in 2015 Bangladesh, Kenya and Myanmar were moved from the low income group to the lower middle income group. Paraguay and Mongolia were re-classified from Lower middle to upper middle income groups, and four countries (Argentina, Hungary, Seychelles and Venezuela) moved from the upper middle to the high income group. This reflects their economic growth and, probably, their general economic development. However, there are cases of countries being re-classified downwards. South Sudan was moved from the lower middle to the low income group.

Note: The data shown in Fig. 1.1 only covers a period up to 2013.

Interpreting Fig. 1.1

As stated above, the graph shows trade in goods and services as a percentage of GDP. You will notice that *trade* is calculated by aggregating exports and imports. This explains why it is possible for trade to be more than 100% of GDP (as shown in the case of Malawi at the end of the series).

As the data shown in Fig. 1.1 is relative rather than absolute, then from the chart alone we cannot draw conclusions about either an absolute growth in trade or an absolute decline in trade. It is possible that a rise in trade as a percentage of GDP could either be the result of:

- a rise in the absolute value of trade; or
- a fall in GDP with trade falling more slowly.

It is also possible that a fall in trade as a percentage of GDP might be the result either of:

- a fall in the absolute value of trade; or
- a rise in the absolute value of trade which was slower than the rise in GDP.

You must be careful not to misinterpret the graph – all we can really be conclusive about is that trade is increasing or decreasing as a percentage of GDP.

Determinants of Aggregate Demand

Because there are two variables at work (value of trade and value of GDP) it would be useful to remind ourselves of the fact that, in macroeconomic theory, GDP is determined by Aggregate Demand. It is worthwhile reminding ourselves of the factors that determine aggregate demand and its components, which are summed up in the expression $C + I + G + X - M$.

Aggregate demand is composed of:

- **Consumer demand from households (C):** spending on goods and services that are used for direct satisfaction.
- **+ Investment demand for firms (I):** investment spending on assets that are used over the years to produce goods and services.
- **+ Government demand (G):** general government final spending, ie current spending on publicly provided goods and services.
- **+ Foreign demand for UK goods and service (X):** UK goods and services sold abroad.
- **- Demand for imported goods and services (M):** foreign produced output that is purchased by UK consumers, government and firms.

Consumer demand is determined by:

- the **level of income**. As income rises, so does consumer demand.
- the **level of taxation and benefits**, which in turn determines disposable income. This is income that we have available to spend.
- the **distribution of income**. As the rich spend a lower % of income than less well-off people, then a more unequal society will spend a lower % of income than a society with equality in income.
- the **cost and availability of credit**. The availability of credit enables us to consume more because we can spend in excess of our income (in the short term). Credit is a product like any other, and therefore its cost will affect demand and therefore consumption.
- the **level of job security**. Job insecurity might make us reluctant to spend on big ticket items.
- **consumer confidence** in the future. We are less inclined to spend if we anticipate economic uncertainty.
- the **desire or incentive to save**. Remember saving is income not spent.
- **inflationary expectations**. Some people might be tempted to buy sooner, if they expect prices to rise. Conversely, others might save in order to ensure that they can afford to make future purchases.
- **social and psychological factors** - attitudes to spending and saving.
- the **level of wealth**. If we have a large stock of wealth to fall back on we will be more inclined to spend.
- the **level of interest rates**. Low rates encourage borrowing to spend. Also low rates mean the opportunity cost of spending is low.

Investment is determined by:

- the **expected yield relative to cost**.
- the **rate of change of national income**, through the 'accelerator' effect.
- the **rate of interest**.
- the **cost and availability of finance**.
- **changes in technology**, and its ability to deliver competitiveness.
- **entrepreneurial confidence** - ie view of future prospects.
- **government policy** - taxation, public spending, regulation.

Government spending is determined by:

- the **tax yield**.
- **promises made by politicians** (which in turn are a reflection of political ideology).
- the **extent of need** in the economy.
- **willingness to incur a public sector deficit**, when tax income is insufficient to cover spending.
- the **level of government debt**. Increasing debt arising from deficit spending may begin to undermine lender confidence, and will incur an increasing interest burden.
- the **cost of borrowing**.

The value of a country's exports is affected by:

- **world demand** for the goods and services supplied by the country concerned.
- **competitiveness** of the country's products: price and quality.
- **relative inflation rates**, which affects price competitiveness.
- **trade barriers**.
- **exchange rate movements**. For example, depreciation will reduce export prices and thereby increase demand.

The value of imports is determined by:

- **domestic demand**.
- the **rate of economic growth**; periods of above-average growth result in higher import levels.
- the **ability of domestic producers to supply** the market.
- **trade barriers**.
- **relative prices**.
- **exchange rate movements**. For example, depreciation will increase import prices and thereby reduce demand.

Changes in any one of the factors that affect the components of aggregate demand will - through the multiplier, affect the level of GDP and therefore the resulting figure for trade as a percentage of GDP.

Fluctuations and the Trend

As with most time series data, the graph shows some fluctuations often around a long run trend. In simple terms, the fluctuations show the 'ups and downs' usually related to the economic cycle, both in the domestic economy and also in export markets. The trend refers to long term movement of the data.

You will notice that, to a greater or lesser extent, there was a decline in trade as a percentage of GDP in each of the four economies during the economic and financial crisis of 2007-08. However, we have to be careful not to attribute the decline in trade as a percentage of GDP solely to the economic and financial crisis – there may have been other factors at work for individual countries. In the case of both Malawi and Brazil, the dip in the graph occurs exactly at the height of the crisis but they both experience recovery by 2009. In the case of Australia, the dip seems to occur after a time lag of one year, and in the case of Zambia, the dip seems to precede the economic crisis. In each case we can attribute the dip to the crisis. Recession in the developed world was transmitted to the four countries via a decline in demand for the exports of these countries, coupled with a drying up of financial flows during the acute banking and financial crisis.

Trends in the Data

Can we perceive any long trends from this initial look at the data?

An upward trend is clearest in the case of **Malawi** - where trade moves from around 70% to around 110% of trade. The latter figure means that the aggregate of exports and imports exceeds the figure for GDP in that year.

Even the lower figure of 70% shows a high relative dependence on external trade. The graph clearly shows that, for the period shown, (of course we do not know what happened before 2007 and after 2013), there was a long term upward trend with just two periods of retreat.

What we do not know from the extract is the cause of this upwards trend; was it a rise in exports, a rise in imports (remember trade is equal to exports plus imports) or a fall in GDP? The following passage from **the American CIA** makes for depressing reading and suggests it was probably the result of **stagnation or economic decline**, coupled with **a rise in imports** (rather than exports).

“Landlocked Malawi ranks among the world's most densely populated and least developed countries. The country's economic performance has historically been constrained by policy inconsistency, macroeconomic instability, limited connectivity to the region and the world, and poor health and education outcomes that limit labour productivity. The economy is predominately agricultural with about 80% of the population living in rural areas. Agriculture accounts for about one-third of GDP and 90% of export revenues. The performance of the tobacco sector is key to short-term growth as tobacco accounts for more than half of exports.

The economy depends on substantial inflows of economic assistance from the IMF, the World Bank, and individual donor nations. In 2006, Malawi was approved for relief under the Heavily Indebted Poor Countries program. Between 2005 and 2009 Malawi's government exhibited improved financial discipline under the guidance of Finance Minister Goodall GONDWE and signed a three year IMF Poverty Reduction and Growth Facility worth \$56 million. The government announced infrastructure projects that could yield improvements, such as a new oil pipeline for better fuel access, and the potential for a waterway link through Mozambican rivers to the ocean for better transportation options.

Since 2009, however, Malawi has experienced some setbacks, including a general shortage of foreign exchange, which has damaged its ability to pay for imports, and fuel shortages that hinder transportation and productivity. In October 2013, the African Development Bank, the IMF, several European countries, and the US indefinitely froze \$150 million in direct budgetary support in response to a high level corruption scandal, called “Cashgate,” citing a lack of trust in the government's financial management system and civil service. Most of the frozen donor funds—which accounted for 40% of the budget—have been channelled through non-governmental organizations in the country. The government has failed to address barriers to investment such as unreliable power, water shortages, poor telecommunications infrastructure, and the high costs of services. Investment had fallen continuously for several years, but rose 4 percentage points in 2014 to 17% of GDP.

The government faces many challenges, including developing a market economy, improving educational facilities, addressing environmental problems, dealing with HIV/AIDS, and satisfying foreign donors on anti-corruption efforts.”

Source: <https://www.cia.gov/library/publications/the-world-factbook/geos/mi.html>

From this brief look at Malawi it is tempting to conclude that the rise in trade as a percentage of GDP is due more to stagnation or even decline in the economy coupled with dependence upon imports than any export led growth.

The trend in terms of the graph is less clear in the case of mineral rich **Zambia**. There seems, after a downward trend up to 2009, a slight upward trend to 2012 and then a significant reversal. However, we must bear in mind that the vertical axis does not show an absolute figure for trade, but merely trade as a percentage of GDP. It is possible that the dip after 2012 shows, not a decline in trade, but a decline in percentage terms as the domestic economy (GDP) expanded.

According to the World Bank:

“Zambia has had a decade of rapid economic growth. A combination of prudent macroeconomic management, market liberalization policies, and steep increase in copper prices helped drive investments in the copper industry and related infrastructure to achieve an average annual growth of about 6.4% during the last decade. Though the economy is dependent on copper, the agriculture sector is the major employer (70% of the population). However, the sector’s potential to contribute to the country’s development remains largely underexploited.

The recent rebasing of the national accounts has given a new perspective to the structure of the economy. The Central Statistical Office of Zambia has just finalized the rebasing of the national accounts to 2010 (from 1994). Preliminary estimates put the economy at 25% larger than in the old accounts. Mining, construction and trade gained more prominence as agriculture declined.

However, Zambia’s economic growth has not translated into significant poverty reduction. Sixty percent of the population lives below the poverty line and 42% are considered to be in extreme poverty. Moreover, the absolute number of poor has increased from about six million in 1991 to 7.9 million in 2010, primarily due to population growth. The urban picture is far better than the rural: in the Copperbelt and Lusaka provinces, for example, poverty incidence is fairly low (22% and 34% respectively), whereas in the rest of the country, which is dominated by agriculture, poverty rates are greater than 70%.”

Source: <http://www.worldbank.org/en/country/zambia/overview>

It would appear that the continuing high dependence on trade is the result of the country’s dependence on copper exports. With a high percentage of exports coming from this sector, the country is vulnerable to changes in the global economy.

It is possible to perceive a slight upward tilt in the graph for **Brazil**, although clearly trade is less important for Brazil than for the two African countries. This probably reflects the fact that Brazil is a large country with a large domestic market, in terms of both consumption and investment.

For background to the Brazilian economy consider the following account:

“Characterized by large and well-developed agricultural, mining, manufacturing, and service sectors, and a rapidly expanding middle class, Brazil's economy outweighs that of all other South American countries, and Brazil is expanding its presence in world markets.

Since 2003, Brazil has steadily improved its macroeconomic stability, building up foreign reserves, and reducing its debt profile by shifting its debt burden toward real denominated and domestically held instruments.

Since 2008, Brazil became a net external creditor and all three of the major ratings agencies awarded investment grade status to its debt. After strong growth in 2007 and 2008, the onset of the global financial crisis hit Brazil in 2008.

Brazil experienced two quarters of recession, as global demand for Brazil's commodity-based exports dwindled and external credit dried up. However, Brazil was one of the first emerging markets to begin a recovery. In 2010, consumer and investor confidence revived and GDP growth reached 7.5%, the highest growth rate in the past 25 years. After reaching historic lows of 4.5% in early 2014, the unemployment rate remains low, but is rising. Brazil's traditionally high level of income inequality has declined for each of the last 15 years. GDP growth has slowed since 2011, due to several factors, including: overdependence on exports of raw commodities, low productivity, high operational costs, persistently high inflation, and low levels of investment. Brazil's fiscal and current account balances have eroded during the past four years as the government attempted to boost economic growth through targeted tax cuts for industry and incentives to spur household consumption. After winning re-election in October 2014 by a historically narrow margin, President Dilma ROUSSEFF appointed a new economic team led by Finance Minister Joaquim LEVY, who introduced a fiscal austerity package intended to restore the primary account surplus to 1.2% of GDP and preserve the country's investment-grade sovereign credit rating. Brazil seeks to strengthen its workforce and its economy over the long run by imposing local content and technology transfer requirements on foreign businesses, by investing in education through social programs such as Bolsa Familia and the Brazil Science Mobility Program, and by investing in research in the areas of space, nanotechnology, healthcare, and energy."

Source: <https://www.cia.gov/library/publications/the-world-factbook/geos/br.html>

In the case of Australia, it is possible to argue that, over the period shown, trade remains virtually unchanged at a figure between 40 and 45% of GDP. This is relatively high and reflects the fact that Australia is an open economy with close links, not just with the UK, but with the rest of the developed world.

"Following two decades of continuous growth, low unemployment, contained inflation, very low public debt, and a strong and stable financial system, Australia enters 2015 facing a range of growth constraints, principally driven by a sharp fall in global prices of key export commodities. Although demand for resources and energy from Asia and especially China has grown rapidly, creating a channel for resources investments and growth in commodity exports, sharp drops in current prices have already impacted growth. The services sector is the largest part of the Australian economy, accounting for about 70% of GDP and 75% of jobs. Australia was comparatively unaffected by the global financial crisis as the banking system has remained strong and inflation is under control.

Australia has benefited from a dramatic surge in its terms of trade in recent years, although this trend could reverse or slow due to falling global commodity prices. Australia is a significant exporter of natural resources, energy, and food. Australia's abundant and diverse natural resources attract high levels of foreign investment and include extensive reserves of coal, iron, copper, gold, natural gas, uranium, and renewable energy sources. A series of major investments, such as the US\$40 billion Gorgon Liquid Natural Gas project, will significantly expand the resources sector.

Australia is an open market with minimal restrictions on imports of goods and services. The process of opening up has increased productivity, stimulated growth, and made the economy more flexible and dynamic. Australia plays an active role in the World Trade Organization, APEC, the G20, and other trade forums. Australia entered into free trade agreements (FTAs) with the Republic of Korea and Japan, and concluded an FTA with China, in 2014, adding to existing FTAs with Chile, Malaysia, New Zealand, Singapore, Thailand, and the US, and a regional FTA with ASEAN and New Zealand. Australia continues to negotiate bilateral agreements with India and Indonesia, as well as larger agreements with its Pacific neighbours and the Gulf Cooperation Council countries, and an Asia-wide Regional Comprehensive Economic Partnership that includes the ten ASEAN countries and China, Japan, Korea, New Zealand and India. Australia is also working on the Trans-Pacific Partnership Agreement with Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the US, and Vietnam."

Source: <https://www.cia.gov/library/publications/the-world-factbook/geos/as.html>

The Impact of the Economic and Financial Crisis of 2007-08

The final paragraph of Extract 1 refers to the impact of the financial crisis of 2007-08. The crisis started in the financial sector in the USA but, as is often the case, it spread to other sectors of the US economy and to other countries. The crisis in the banking system (including the collapse of major investment banks) reduced the amount of real investment in the economy. This led to problems in the real (as distinct from the financial) economy, resulting in a severe recession. The crisis was transmitted to America's trading partners, with indirect or knock-on effects even on those economies whose direct links with the USA were limited. Trade across national borders declined and so the recession became worldwide.

In a recession (defined as two or more quarters of negative growth) output declines, workers are made redundant, unemployment rises, government tax receipts fall, government spending on welfare benefits rise, and the amount of investment in the economy is reduced. In these circumstances, there is a danger that governments will be forced to listen to demands for tariff protection for domestic producers. As trade liberalisation was identified as perhaps the most important factor in the rise of globalisation, there was a strong possibility that the rise of globalisation would be reversed. Fortunately, governments avoided some of the mistakes of the 1930s when protectionism intensified and prolonged the depression that occurred during this decade. So, after a brief pause, the pace of globalisation was resumed. This can be seen in Fig. 1.1 which does show that, after a slight downturn, the importance of trade with the national economies continued to increase.

Evaluation of Fig. 1.1

We started this look at Fig. 1.1 with the caveat that it does not show the absolute value of trade, but instead it shows trade (defined as exports plus imports) as a percentage of GDP. (Note that trade is composed of $X + M$, whereas, as one element of GDP, it is composed of X minus M). This limits the value of Fig. 1.1. As we saw above, a rise in trade as a percentage of GDP might be the result of:

- a rise in exports (leading to export led growth).
- a rise in imports (which is a leakage from the circular flow).
- a contraction of the economy (GDP).

The fact is Fig. 1.1 does not, by itself, inform us about the causes of the rises and falls shown.

However, what it does tell us is the relative importance of trade to the four economies concerned. The two poorest countries (Malawi and Zambia) are highly dependent upon trade, and this makes them vulnerable to changes in the global economy. Australia has a high dependence upon trade, although not nearly as great as the first named countries. In addition, Australia is a high income economy with an increasingly diverse economic base. Brazil is the least dependent upon trade, and in view of its status as a leading emerging economy this might be surprising at first. However, it needs to be remembered that Brazil is a large economy (large land mass, large population, diverse economy) and, therefore, is less reliant on trade.

Concluding Remarks - Potential Questions

From our analysis of the extract we can say that there are potential questions on:

- **indicators** of globalisation.
- **causes** of globalisation.
- **consequences** of globalisation.

In all three cases you need to consider **not only just the points in the extract, but also what is being implied** ie what are the indicators of globalisation not mentioned in the extract, what factors contributing to globalisation are not mentioned, and finally **why is globalisation controversial**.

Furthermore, Extract 1 distinguishes between these countries in terms of income category, and therefore you would be well advised to **consider the impact and significance of globalisation for low, middle and high income countries**.

Extract 2: Globalisation and Balance of Payments Imbalances

Introduction

Extract 2 is relatively short, and it appears that much of the text is taken up by two graphs that require interpreting and analysing. However, the central message of the extract lies, not in the graphs, but instead in the final paragraph. The graphs are merely the prologue to the final paragraph.

In essence, we learn from the extract that:

- Globalisation has increased global imbalances.
- China runs a persistent surplus.
- The USA (and, by implication, other advanced, high income economies) run a persistent deficit.
- Exchange rate movements have not corrected the imbalances.
- The high income economies of the west have financed their trade deficits by international financial flows from developing countries, which have been attracted by good returns.

Note the overall conclusion of the extract: financial flows from poorer countries have enabled the richer countries to continue their excess spending. Let us have a look at these points in great detail.

Trade Imbalances

The opening paragraph (and the graph that follows) makes the simple point that globalisation has brought, not just an increase in world trade, but also balance of payments imbalances. Notice that here we are talking about imbalance on the current accounts of specific countries. The current account concerns trade in goods and services (ie both the so-called visible trade and the invisible trade).

The current account balance is calculated as follows:

Total value of exports of goods & services (X) minus Total value of imports of goods & services (M)

If $X = M$ then the current account is said to be in balance.

If X exceeds M then the country is selling more abroad than it buys and it is said to be in surplus.

If X is less than M the country is selling less abroad than it is buying and it is said to be in deficit.

We are told that China has a surplus on its current account ($X > M$). This reflects the rapid growth of the Chinese economy making use of its vast factor resources and, in particular, its low cost labour. Chinese producers have been able to undercut producers in the high income economies of the west, and with much improved quality competitiveness, have represented excellent value for money. Critics of China would argue that the success of the Chinese economy has owed much firstly, to its ability and willingness to manipulate and, in particular, suppress the exchange rate in order to gain a cost advantage, and secondly indulging other unfair practices (exploitation of labour, ignoring environmental consideration), which enhance further its competitiveness. It might also be argued that Chinese production outstrips Chinese consumption (given low wages) and that the country enjoys a massive surplus over its domestic demand. This can be expressed in terms of the equation for aggregate demand:

$AD = Y = C + I + G + (X - M)$. Therefore $Y - (C + I + G) = (X - M)$.

Where Y is national income / national output, $C + I + G$ is domestic demand, and $X - M$ is the balance on the current account. We can express this in words as: **The current account balance is equal to National Income / National output minus less domestic demand for goods and services.**

In the case of China, Y (national output) exceeds domestic demand. In plain language, Chinese production greatly outstrips Chinese demand for goods and services and so China enjoys a massive trade surplus.

The USA (and many other high income countries of the west) shows a corresponding deficit on the balance of payment current account.

Textbook analysis informs us that current account deficits can be caused by:

- **high levels of consumption** causing excessive demand for imported goods and services.
- **high levels investment** resulting in the import of capital goods.
- **a change in comparative advantage** causing cheaper goods and services to be imported rather than being produced domestically.
- **an overvalued currency** causing consumers to buy cheaper imported goods and services.
- **structural weaknesses in the economy** (in the form of lack of investment, high labour costs, low productivity, poor infrastructure), resulting in domestic firms losing market share against imported goods and services.

The US deficit in part reflects the inability of domestic users to compete with Chinese rivals but occurs also because of excess consumption in the USA. Again we can show this by use of the equation for aggregate demand and national income. In the case of the USA domestic demand ($C + I + G$) exceeds national output, and so the USA is buying more from abroad than it is selling and is, therefore, running a deficit.

Analysis of Fig. 2.1: Current Account Balances of China and the USA

Fig. 2.1 shows the current account balances of China and the USA over a period of time (2007 to 2013). Notice that by the time you take the examination this data will be three years out of date. The obvious point to make about the graph is that it shows:

- China running a persistent surplus as shown by the fact that the graph for China is continuously positive.
- The USA running a persistent deficit as shown by the fact that the graph for the USA is continuously negative.

Although China runs a surplus and the USA a deficit we can perceive changes over time. In the case of China there is a downward trend in the data, admittedly with some short term fluctuations. It would appear that the Chinese surplus is getting smaller, albeit remaining huge by normal standards. In the early years of the time series, China ran a surplus of around \$400 billion per year, but by 2013 this was down to around \$200 billion. A possible explanation for this is that the global recession reduced western demand for Chinese goods.

The USA has a continuous deficit over the time series but the size of the deficit is smaller at the end of the series. At the start it was around \$700 billion but fell to around \$400 by 2013. The period of sharpest fall coincides with the onset of the global recession and can be attributed to a decline in USA demand for foreign goods during the crisis years of 2007/8. Admittedly, there appears to be some increase in the size of the deficit in the opening years of the current decade, but there was no return to the enormous deficit of 2007.

After saying all this it should be stressed that, even though both the size of the Chinese surplus and the size of the USA deficit fell, we should not forget that China still had a surplus and the USA still had a deficit.

Finally, it is worth noting that the two lines of data in Fig. 2.1 seem at first sight to highlight broadly the same data ie the Chinese surplus “equals” the US deficit. However, a more careful look at the graphs shows that, both at start of the time series and at its end, the scale of the US deficit exceeded the scale of the Chinese surplus. You will also note that the US deficit fell by over \$300 billion dollars over the same period (2008-09) that the Chinese surplus fell by less than \$200m. Clearly, while there is likely to have been a close correlation between these two data sequences, we can deduce that there are clearly other strong influences at work here, which will have affected each sequence separately.

Exchange Rate Movements and Analysis of Fig. 2.2

There is a very telling comment in the final sentence of page 6:

Changes in its effective exchange rate did not always have the expected impact on the USA current account deficit.

Let us analyse what is meant by this sentence. Firstly, we need to understand what is meant by the effective exchange rate of the US dollar. The examiners have helpfully defined the concept at the bottom of page 2:

The effective exchange rate is a weighted average value of a country's currency (in this case the US dollar) relative to all major currencies, with weights determined by the importance of trade conducted in each currency.

In other words, this is not a crude average of the value of the \$ against all currencies, but each foreign currency is weighted to take into account the relative importance of that currency in US trade. It would mean that the main trading currencies (the currencies of China, the Eurozone, Japan, the UK, and America's immediate neighbours, Canada and Mexico), would be assigned a greater weighting than the currencies of remote and poorer currencies with which the USA has only limited trade links. Therefore, it is important to remember that the data shown in Fig. 2.2 does not refer to the US dollar against the Chinese currency alone, but to the US dollar against a representative basket of foreign currencies.

Fig. 2.2 shows the effective exchange rate of the US as an index number. Using 2010 as the base year (=100) we see movements above and below the base year value of the \$. Hence, a figure of 95 (as in 2011) means that the \$ is valued at 5% below the base year. A figure of 104 (as in 2007) means that the value of the \$ is 4% above the base year.

The graph shows a typical picture for any time series. There is a perceivable trend and some fluctuations around the trend. The trend seems to be downwards from a high point of around 104 to a low point of 95. It is not a continuous downward trend, and we can see periods (eg 2009 and after 2011) when it rises. But it is possible to argue that the fall in the dollar value shown in Fig. 2.2 is reflected in the fall in the US deficit.

Exchange Rate Movements: The Theory

The Main Determinants

Textbook theory informs us that the main determinants of the exchange rate are supply and demand for the currency and this in turn reflects the relative demand for exports and imports (ie the balance of payments) (see below). But, underlying these factors is what is known as the economic fundamentals:

- the rate of inflation.
- interest rates.
- the rate of economic growth.
- labour productivity.
- investment levels.
- quality of infrastructure.
- macro-economic competence.
- measures of international competitiveness.

The existence of these economic fundamentals means that exchange rates move slowly towards their long run equilibrium and this process should be appreciated in the analysis that follows. In addition to the balance of payments and the so called economic fundamentals, the exchange rate is also affected (in the short run at least) by speculation.

The key point to remember is the current account balance is but one factor in determining the exchange rate.

The Balance of Payments and the Exchange Rate

The point is that there will be:

- downward pressure on a currency when the country concerned is experiencing a balance of payments deficit.
- upward pressure on a currency when the country is experiencing a balance of payments surplus.

The explanation for this is quite simple. Demand for the \$ on foreign exchange markets comes from foreign based people, companies and governments seeking to buy US goods and services. The supply of the \$ comes from the US people, companies and governments seeking to buy foreign goods and services.

In a deficit situation, Americans are seeking to buy more foreign goods and services than they are selling. Therefore, the supply of \$ is greater than the demand for \$. In this situation, the value of the \$ will fall in foreign exchange markets.

If the US was in a surplus situation, then Americans will be selling more goods and services than they are seeking to buy. Therefore, the demand for \$ will be greater than its supply and this will put upward pressure on the \$.

Putting together Figures 2.1 and 2.2 we can argue that there is a causal link between the US deficit shown in Fig. 2.1 and the depreciation of the currency shown in Fig. 2.2.

We now turn to the consequences of currency movements.

Consequences of Currency Movements

Textbook theory informs us that depreciation of a currency results in that country's:

- exports becoming less expensive abroad leading to an extension of demand for its exports.
- imports becoming less price competitive resulting in a contraction of demand for imports.

Putting these points together we can argue that depreciation should have increased US price competitiveness, and thereby boosted US exports and reduced US imports. This should have eliminated the deficit. After all, the great argument put in favour of floating currencies is that the strain of adjustment is taken by the exchange rate ('let the exchange rate take the strain').

At this point we need to address the point made in the short paragraph below Fig. 2.1 – changes in the exchange rate did not have the expected impact on the US deficit. **This suggests a possible question on why the exchange rate movement did not correct the US balance.**

Why Did the Exchange Rate Movement Not Have the Expected Impact on the USA's Deficit?

We can put forward various explanations for the failure of the exchange rate to adjust to correct the US deficit on its current account. Some of the explanations are based on textbook theory, whereas others make use of the information provided in the text and, in particular, the points made on page 7 below Fig. 2.2.

It could be argued that movements in the exchange rate did contribute to an improvement in the US current account. We have a depreciation of the US dollar shown in Fig. 2.2 and a substantial reduction in the size of the US deficit shown in Fig. 2.1; an improvement in the current account as predicted in economic theory. However, either the depreciation was insufficient to eliminate the deficit, or we have not allowed sufficient time for exchange rate movements to correct the problem. One reason why the depreciation might have been insufficient is the oft made allegation that the Chinese government seeks to keep the value of its currency at an artificially low level in an attempt to steal an advantage on rivals. So, perhaps the low value of the Chinese currency distorted the weighted average that made up the effective exchange rate of the US dollar. It must also be pointed out that the current account is only one factor in determining the exchange rate and, therefore, economic fundamentals might have prevented the dollar falling to its long run equilibrium to correct the deficit.

A second point concerns the circumstances in which a depreciation will or will not correct a deficit. The fact is that economic theory does **not** predict that depreciation will **always** correct a deficit. The theory is quite explicit that it will correct the deficit only in specific circumstances.

This is known as the Marshall-Lerner Condition. Current depreciation will correct a deficit if, and only if, the Marshall Lerner Condition is satisfied. The condition is satisfied if the sum of the **Price Elasticity of Demand for Exports** and the **Price Elasticity of Demand for Imports exceeds 1 (One)**.

In other words, demand for exports and for imports has to be sufficiently elastic to respond to the change in relative prices. In an extreme situation, where demand for both exports and imports is perfectly inelastic, depreciation has no impact on the volume of exports and imports, but the change in relative prices means that revenue from export sales declines and, at the same time, the cost of imports has risen. In these circumstances, depreciation actually worsens the current account.

Economists are agreed that satisfying the Marshall-Lerner Condition is a **necessary** condition for there to be an improvement in the current account following depreciation. However, many economists would argue that it is not a **sufficient** condition for there to be an improvement in the current account following depreciation. For there to be a substantial increase in exports (and even a substantial fall in imports) following depreciation, supply of domestically produced goods needs to be sufficiently elastic to take advantage of the change in relative prices. If supply is inelastic, there will not be a sufficient rise in exports, or fall in imports, to take advantage of the change in relative prices.

How Can the US Continue To Pay for Imports from Abroad?

This question is answered in the final paragraph of the extract. Remember, the balance of payments is a set of accounts which seeks to capture all transactions between an economy and the rest of the world. The current account deals with the financial flows resulting from the sale of exports and the purchase of imports. The other elements of the Balance of Payments consist of capital flows for long term real investment, and financial flows.

The Capital Account identifies transactions in physical capital between residents of a country and the rest of the world. It itemises transactions in fixed assets, and is relatively small.

The Financial account measures transactions in financial assets, including investment flows and central government transactions in foreign reserves. It is a record of the flows of money into and out of the country for the purposes of investment, or as deposits in banks and other financial institutions.

What we are told in this final paragraph is that international financial flows from the developing world (especially surplus countries, such as China) flooded into the USA attracted by high returns on US government bonds and the US housing market, and the greater security that came by depositing money in an advanced and financially sophisticated country. This was especially the case in the period before the financial crash of 2007/8. Thus, the USA provided an outlet for the savings of people, companies and governments in the developing world. As a result, money flowed into the USA from developing countries with a surplus (ie from poorer countries to richer countries). The Americans were able to continue to import in order to finance high levels of consumption and this was a major reason why the USA current account deficit persisted.

Extract 3: Primary Commodity Dependence and the Terms of Trade

Introduction

This extract focusses on aspects of the Zambian economy, and, in particular, its dependence on primary commodities. We are told on page 9 that 75% of the export revenues of Zambia come from exports of copper. It would appear that Zambia is not only dependent on primary commodities in general, but on a specific primary product. This means that Zambia will be greatly affected by changes in the demand for copper and by changes in the world price of copper. Zambia will prosper if demand and prices are high, but will suffer if there is a downturn in the copper market. Furthermore, Zambia only represents about 4% of world copper production (2014), and therefore it has very little ability to exert any influence over world prices.

Zambia

Although you do not have to be an **expert** on the Zambia economy to do well in this examination, it is useful to gather some information about Zambia over and above that presented by examiners in the stimulus material. Refer to the following account:

Zambia has had one of the world's fastest growing economies for the past ten years, with real GDP growth averaging roughly 6.7% per annum. Privatization of government-owned copper mines in the 1990s relieved the government from covering mammoth losses generated by the industry and greatly increased copper mining output and profitability, spurring economic growth. Copper output increased steadily from 2004, due to higher copper prices and foreign investment, but weakened in 2014 when Zambia was overtaken by the Democratic Republic of Congo as Africa's largest copper producer.

Zambia's dependency on copper makes it vulnerable to depressed commodity prices, but record high copper prices and a bumper maize crop in 2010 helped Zambia rebound quickly from the world economic slowdown that began in 2008.

Despite strong economic growth and its status as a lower middle-income country, widespread and extreme rural poverty and high unemployment levels remain significant problems, made worse by a high birth rate, a relatively high HIV/AIDS burden, and by market-distorting agricultural policies. Economic policy inconsistency and poor budget execution in recent years has hindered the economy and contributed to weakness in the kwacha, which was Africa's worst performing currency during 2014.

Zambia has raised \$1.75 billion from international investors by issuing separate sovereign bonds in September 2012 and April 2014, significantly increasing the country's public debt as a share of GDP. On January 1, 2015, a new mineral royalty tax regime dramatically increased mining taxes, and has led to an economic impasse between the government and the mines. If left intact, the new tax could result in the closure of less profitable mines, the loss of thousands of jobs, and the loss of additional foreign investment.

GDP - real growth rate: 5.4% (2014 est.) 6.7% (2013 est.) 6.8% (2012 est.)

GDP - per capita (PPP): \$4,100 (2014 est.) \$3,900 (2013 est.) \$3,600 (2012 est.)

GDP - composition, by sector of origin: agriculture: 10.8% industry: 32.9% services: 56.3% (2014)

Agriculture - products: corn, sorghum, rice, peanuts, sunflower seeds, vegetables, flowers, tobacco, cotton, sugarcane, cassava (manioc, tapioca), coffee; cattle, goats, pigs, poultry, milk, eggs, hides

Industries: copper mining and processing, emerald mining, construction, foodstuffs, beverages, chemicals, textiles, fertilizer, horticulture

Industrial production growth rate: 3.6% (2014 est.)

Source of information: <https://www.cia.gov/library/publications/the-world-factbook/geos/za.html>

Key Development Indicators - Analysis of Fig. 3.1

Introduction

The short first paragraph above the table sets the scene for the extract. We know that many developing countries are heavily dependent on the export of primary commodities for foreign exchange earnings. In the case of Zambia, 75% of export earnings come from sales of copper. A rise in copper prices will bring more foreign earnings for Zambia, including a rise in tax revenues. The rise in export earnings will increase average living standards in Zambia, and the subsequent rise in tax receipts will enable the government to spend more on infrastructure, education and health, crucial public investment for longer term economic development.

Fig. 3.1 provides us with key development indicators for Zambia. This data would be included in broader measures of development, such as the Human Development Index. Most of the indicators show substantial progress in Zambia between 2001 and 2013, both in terms of the main economic indicator (GNI per capita) and of the social indicators (on health and education). Let us have a look at each in turn.

Life Expectancy at Birth (Years)

Life expectancy is a key indication of health and welfare. As with most developing countries, life expectancy is low by the standards of high income countries such as the UK; nevertheless there has been substantial progress in life expectancy. What the table tells us is that the expected life of an average Zambian born in 2001 was 42 years but for one born in 2013 it had risen to 58 years. This can be attributed to higher living standards, improved nutrition and better standards of health care. With additional tax revenues, the government has been able to fund more health care.

Primary School Enrolment (%)

The figures show primary school enrolment as a percentage of the population in the primary school age group. In 2001, 83.8% of the number of people of primary school age went to school. This is high by the standards of many developing countries and it means that the country is able to invest in its young people (its human capital) and thereby increase labour productivity. By 2007 it had risen above 100%. Helpfully, the examiners have included a footnote which informs us that the reason why more than 100% of the age group was enrolled in primary school was that enrolments included some adults who were catching up on lost years of schooling. What we do not know is what the balance was between those of primary school age in school, and those adults who were catching up. Either way we can say that Zambia has been able to use its tax receipts to finance more primary schooling.

Mean Years of Schooling

In the first decade of this century the mean number of years of Zambia youngsters was 7.9 (eg from 5 to 13 years old). However, in 2013 this was down to 6.5 (eg 5 to 11 years old). The reduction in the length of schooling is a disappointing development, and we should also point out that the data suggests that, for most Zambians, education was confined to primary education (ie “learning the basics”) with little opportunity for secondary and higher education, which is a critical requirement for high productivity employment and income.

Expected Years of Schooling

It was expected that Zambians would receive 6 years of schooling in 2001, and 6.5 years of schooling in 2007. In fact, the average Zambia received more than the expected number of years of schooling.

By 2013 it was expected that the average Zambian would receive 13.5 years of schooling (ie 5 to 18 years old). This was a very dramatic increase, suggesting that the average Zambian was expected to receive secondary and even higher education, but the average Zambian actually received less than half what was expected for 2013.

GNI Per Capita, PPP (US\$)

Notice that GNI per head is quoted in US dollars at purchasing power parity (PPP). In essence, this means that, in 2013 for example, \$3,810 worth of Zambia currency would buy the same amount of goods and services in Zambia as \$3,810 would in the USA. The use of PPP is to facilitate a meaningful comparison with other countries. How we should read the data is that average living standards in Zambia had risen substantially, although they remained well below those of the USA, or other advanced countries.

Analysis of Fig. 3.2: Zambia's Terms of Trade

Fig. 3.2 consists of a graph of the terms of trade index of Zambia over the period 2001 to 2012. Terms of trade are defined as *the price of a country's exports relative to the price of its imports*.

If the unit price of exports is rising faster than the unit price of its imports then terms of trade are said to be improving. An improvement might also come from a fall in the unit price of exports which is slower than the fall in the unit price of imports. What an improvement means (and why it is important) is that with a fixed quantity of exports the country is able to buy an increasing quantity of imports.

If the unit price of exports is rising more slowly than the unit price of imports, then terms of trade are said to be worsening. Alternatively, if unit export prices are falling more rapidly than unit import prices, then terms of trade are also worsening, ie a fixed quantity of exports buys less in terms of imports.

The terms of trade index is calculated as follows:

$$\frac{\text{Index of average Export prices}}{\text{Index of average Import prices}} \times 100$$

The resulting figure is an Index number enabling us to make comparisons over time. In Fig. 3.2 the graph starts below 100 but rises to 100 (corresponding to the base year of 2000) after 2003. It then rises rapidly to 2006 when the index approaches 200. We can attribute this rise to the fact that copper prices were rising rapidly and far more quickly than the price of the goods and services that Zambia imported. To illustrate the significance of the data, we can say that by 2006 a fixed quantity of Zambian copper exports could buy almost twice as much in the way of imports as it could at the start of 2004. This would have been a major factor in the improvement in Zambian living standards and in the rise in Zambian government tax receipts to finance (for example) infrastructure, education and health care in the country.

After 2007, Zambia's terms of trade index shows a fall down to just below 160 in 2009. This can be attributed to a fall in the price of copper relative to the price of Zambia's imports. This would be a setback for the Zambian economy and would mean a fall in living standards and a fall in tax receipts.

Over the remaining years of the time series, the terms of trade index fluctuates, but throughout it remains substantially above its 2003 level. What this figure is designed to illustrate is that movements in the terms of trade can have a major impact on the Zambian economy and living standards. Any downturn in world demand and / or price for copper will have a large impact on the Zambian economy. The problem is even more acute because of Zambia's over-reliance on this single commodity.

Zambia and Multinational Companies

Introduction

The final paragraph of the extract deals with the relationship between the Zambian government and the multinational companies that extract copper from the ground. We are told that, although copper mining provides 75% of export earnings, the industry only generates 10% of tax receipts. We need to consider why the copper industry provides a disproportionately low proportion of the country's tax receipts, and what the consequences are of the industry's failure to provide more in the way of tax revenue.

Disadvantages of Multinational Corporations

Mineral production in Zambia is in the hands of multinational companies. We know that the presence of multinational corporations in developing countries is controversial. On the one hand, they provide investment, technology transfer, employment, export earnings and also a source of growth. However, there are also disadvantages to the presence of multinationals in developing countries, in particular, it is argued that multinational corporations:

- **repatriate profits to their home country**, which is likely to be an advanced, high income country.
- **often do not use local employees** or, if they do, they confine them to unskilled, low income jobs.
- **damage the environment**.
- **have the power to move their reserves between countries** gaining financial advantage but causing currency fluctuations.
- **pose the risk of closure and withdrawal** when more profitable locations emerge.

- **put pressure on the government** of a developing country (remember the sales revenue of large multinationals exceeds the GDP of many developing countries).
- **use transfer pricing** to evade (or avoid) taxation.

The last two points are especially valid in the context of the extract.

Tax Evasion and Avoidance

We have to ask ourselves why the copper industry contributes a disproportionately low amount of tax revenue. One possibility is that powerful multinational companies put pressure on the government of the developing country to offer a favourable tax regime ie the company will invest in Zambia only if its government offers a favourable tax regime.

At the same time, multinational companies engage in various techniques to avoid and evade taxes. Always remember that tax evasion involves not declaring income (or in this case profit) in order to evade paying taxes and, as such, it is illegal. Tax avoidance involves the exploitation of loopholes in tax law to reduce tax liability. In essence, it means arranging your affairs in such a way that less is payable. Tax avoidance is perfectly legal, although, in another context the UK Chancellor of the Exchequer George Osborne speaks about aggressive tax avoidance which he regards as dubious or immoral, even it is not illegal.

A well-known method of reducing the tax bill for a multinational company involves rigging the prices of goods and services sold by one subsidiary of the multinational company in one country to another subsidiary of the same multinational company located in another country. By doing this the multinational seeks to reduce declared profits in the high tax country and increase declared profits in a lower tax country.

We do not know the exact means by which the multinational companies reduce their tax bill, but the implication of the text is that they either engage in unlawful tax evasion or, alternatively, exploit loopholes in ways that might be regarded as immoral, even though not contrary to the law.

Impact of Tax Evasion and Avoidance

Why the accounting practices of multinational companies are important in this context, is that copper production is such an important part of the Zambian economy and of tax receipts from copper production. They are crucial to the expansion of infrastructure, and education and health services that are vital for Zambia's development. The Zambian government looks to the copper industry to provide tax receipts in order to improve Zambia's performance in the key indicators that make up the Human Development Index and, thereby, enhance the prospects for longer term economic development.

Zambian Reaction

The Zambian government is concerned about the failure of the copper industry to provide an appropriate share of tax revenue for the Zambian government and, as a result, is trying to devise strategies to increase the tax yield from this key industry.

In 2011 Zambia suspended the export of copper, in a sense, as punishment to the multinational companies for their tax evasion and / or avoidance. Obviously, this could only be temporary since it involved 'cutting off their nose to spite their face'. Zambia needs the copper industry to provide investment, jobs, export earnings and economic growth and development. Furthermore, such a measure even if implemented temporarily, might discourage further inward investment in this and indeed other sectors. The rationale for the suspension was that it provided a breathing space whilst Zambia devised a more long term solution to the problem.

The longer term solution involves what is called 'resource nationalisation'. This is not a term found in textbooks, but you can deduce the meaning of the term from its components:

- 'Resource' refers to *natural and man-made productive assets, including, in this content, mineral resources.*
- 'Nationalisation' means *state ownership and control.*

You can look up resource nationalisation in your search engine and there are a number of learned papers on the topic but as an introduction consider this very short entry in Wikipedia:

Resource nationalism is the tendency of people and governments to assert control over [natural resources](#) located on their territory. The approach of [peak oil](#) has led many governments to take ownership or control of [fossil fuel](#) reservoirs for strategic and economic reasons, although resource nationalism applies to other resources, such as metals. Resource nationalism conflicts with the interests of [multinational corporations](#).

Source: https://en.wikipedia.org/wiki/Resource_nationalism

Resource nationalisation might mean the state asserting ownership of the mineral resource - for example - in the UK, coal and oil in the ground are owned by the crown. Similarly, this will mean that even if the multinational company owns land in Zambia, it has to pay a royalty to the government for each tonne of copper extracted.

Resource nationalisation can also take the form of state appropriation of the man-made assets of a business (eg capital equipment). However, in this case we are told the Zambia government is seeking a 51% controlling stake in mining operations (ie control of financial assets). This is designed to ensure that more of the profits from mining operations remain in Zambia and, at the same time, add to tax revenue in the interest of Zambia's development.

But there are drawbacks to this policy of resource nationalisation. State appropriation of privately owned shares in mining companies will discourage future investment in Zambia by foreign owned firms. Increased taxes on mining operations similarly deter multinational companies who might be tempted to move operations to other parts of the world. But, whether this is a real threat depends on the availability of copper resources in other parts of the world. Zambia's share of world copper production is very small, reflecting possibly relatively higher costs of production, or simply low output potential.

Conclusion

Extract 3 is concerned with the copper industry and its role in the growth and development of Zambia. The country is heavily reliant on copper production for export earnings, tax revenue and growth, but development is about more than just GDP per head, and Fig. 3.1 is a useful reminder of indicators of development eg measured through the Human Development Index.

The success of the copper industry has enabled Zambia to make good progress in terms of development. We know, from Extract 1, that it is now classed as a lower-middle income country, rather than a low income country. Consistent with this classification, the indications in Fig. 3.1 show considerable progress in development.

However, over reliance on copper production makes Zambia vulnerable to swings in world demand for copper and in prices on the world market. This is shown in Fig. 3.2 which records the terms of trade of Zambia.

Despite its growth and success, the copper industry makes a disappointing contribution to the tax revenue of the Zambian government and this is attributed to the accounting practices of powerful multinational corporations. The preferred solution of the Zambian government is resource nationalisation (ie greater state ownership), but these measures can be criticised in terms of their impact on inward investment and, more widely, on the supply-side of the economy.

Extract 4: Migration and Remittances

Introduction

Extract 4 is concerned with one lasting economic aspect of the migration of people across international boundaries, namely, remittances. This refers to money sent back home to family and friends by migrants from the country they are working in. This is not a new phenomenon, since migrants who succeed in their country of adoption have long sent money back to their extended family in their homeland. For example, British and Irish migrants who succeeded in the New World sent money back home. On a larger scale, men like Andrew Carnegie left an impoverished childhood in 19th century Scotland, made a fortune in the US steel industry, and then engaged in philanthropic activities founding libraries in many British towns. We live in a time of renewed migration, perhaps on an unprecedented scale, as people leave war and poverty in parts of the developing world to seek refuge and / or a better life in the developed world. It is likely that at least some of the 2015/6 migrants will be 'sending money back home' in future years. These remittances are seen as beneficial in relieving poverty and aiding development in the developing world, but there is a downside to migration. The disadvantages might well outweigh the benefits that come from migration and remittances.

International Financial Flows

The extract opens with the statement that one of the consequences of globalisation has been a surge in international financial flows to both developed and developing countries. We saw earlier, in Extract 2, that the current account surpluses of countries such as China are often returned to the USA and other developed countries, in the form of investment by these emerging economies in the advanced, high income countries. In this extract we are concerned more with the flow of funds from the developed world to the developing world. The flow takes a number of forms as shown in Fig. 4.1:

- **Foreign Direct investment (FDI)** is defined as *investment made by a multinational corporation in a country other than where its operations originated. It is investment in real or physical capital (ie in new productive capacity) abroad.*
- **Debt and portfolio investment** refers to *the purchase of financial assets (buying shares, property, bonds and other financial securities).* So, whereas FDI is concerned with real investment which adds to the stock of productive assets, this is concerned with purely financial transactions which do not, in themselves, add to the stock of real assets. The debt element in the term refers to borrowing, rather than the cumulative amount of debt.
- **Official Development Assistance (ODA)** is defined as *foreign aid given by governments to developing countries in the form of grants and loans.*
- **Remittances** refer to *money sent back home to another country by migrants usually to members of their extended family.*

We are informed that it is estimated that 232 million people worked outside their home country (meaning their country of birth). In 2013 over \$400 billion of remittances were received by developing countries (low and middle income countries). If all 232 million migrants people were from the developing world, and if the \$400 billion came only from first generation migrants, then we could say that each migrant sent, on average, the equivalent of \$1,725 back home in the form of remittances.

However, there are methodological problems with this calculation. Firstly, we should not presume that all 232 million came from developing countries. We know many British people work in the USA and in other EU countries and there are many Spanish, Eastern European and other EU citizens working in the UK. However, perhaps we should accept that a large percentage of the 232 million were born and brought up in developing countries but are now working in more developed countries.

Secondly, in addition to the 232 million first generation migrants, there are many more who are second or third generation migrants or who are descended from the original migrants. The migrants will have continuing links with their homeland, and will feel a desire, or even obligation, to send some of their earnings to help family and friends back home. Perhaps some the \$400 billion in remittances came from descendants of migrants of earlier ages.

In the first paragraph it is stressed that remittances:

- have become increasingly important for developing countries.
- far exceed ODA.
- account for more than 10% of GDP in many developing countries.

These points will be explored in detail below.

Analysis of Fig. 4.1: International Financial Flows to Developing Economies

The figure shows international financial flows over the period 1999-2013 (with estimates of remittances in four subsequent years). The international financial flows take four different forms corresponding to the four types identified and explained above. Note that no indication is given as to whether the amounts involved are in nominal or real billions of dollars. The commentary that follows assumes that the changes shown are real, and therefore reflect volumes of demand and purchasing power.

As in the case of all time-series graphs, we should distinguish between the long term trend and fluctuations around the trend. You will notice that the trends (the long term movement of each graph) are distinctly upward. Admittedly, the rate of increase is different for each of the four curves but, nonetheless, they all tilt in an upward direction. In addition to the trend, there are also some fluctuations around the trend, and it is noticeable that the curves displaying the greatest fluctuations are FDI and debt and portfolio investment. Let us have a look at each in greater detail.

ODA shows a steady rise (with minor fluctuations) from about \$50 billion in 1999, to around \$130/140 billion in 2014. ODA refers to aid given by foreign governments to assist development in low and middle income countries. There is a UN target set for high income countries to offer 0.7% of their GDP in ODA, but we know that many high income countries fail to meet their obligations. The UK is one of the more generous countries; it has achieved its target and the government has sought to legislate to ensure a commitment to meeting this target. This commitment was heavily criticised by the right wing of the Conservative Party and by the right wing press. It should also be stated that there are moves, at present (2015), to widen the definition of suitable recipients to include UK local authorities who will have to cope with the surge in migration from war-torn Syria. Although few would deny that the new migrants need assistance it is disputable whether the government should divert funds earmarked for developing countries to UK local authorities.

Although some might criticise UK government aid for being too miserly, the fact is the UK has been more generous than some other countries. The failure of others to fulfil their obligations, under what is a modest UN target, means that ODA has risen only slowly and is far below the other forms of financial flows.

We can deal with FDI and debt and portfolio investment together since the same pattern emerges. There has been a rapid and substantial growth in these types of flow into developing countries. From around \$160 billion (FDI) and under \$50 billion (debt and portfolio investment) they have grown to nearly \$750 billion and over \$400 billion, respectively. However, both these types of financial flow show substantial fluctuations around the trend. In many respects, this is not surprising since FDI and debt and portfolio investment originate in the private sector of the developed world. It is inevitable that these forms of flow would be subject to fluctuations linked to the business cycle of the developed world. Hence, we can see a dramatic downturn in these flows in the aftermath of the economic and financial crisis of 2007/8 when bank failures led to a great reluctance to offer credit and make investment. There appears to have been a return to growth in these flows as the advanced economies started to recover, but it is noticeable that there is another but smaller downturn around 2011-12. (This was the time when economists started to worry about double and even triple dip recessions).

The conclusion that can be drawn from this inspection of the FDI and debt and portfolio investment curves is that these financial flows that originated in the private sector of developed economies:

- were greater in size when aggregated than the remaining two types of flow,
- grew substantially over the period as globalisation intensified, but
- were subject to fluctuations and, therefore, were less reliable than either ODA or remittances.

The curve for remittances shows a steady almost continuous upward trend with only a slight dip in the aftermath of the crisis that engulfed much of the world after 2008. So, from about \$70 billion in 1999 it rose to over \$400 billion in 2013, with a projection of a further rise to just under \$500 billion by 2017. Obviously, the projection is based on an assumption, such as the absence of another severe downturn in the economy.

In most years, **remittances** come second to FDI as a source of financial flow to developing countries (debt and portfolio investment overtook remittances during the boom that preceded the crisis of 2008/9). Remittances far exceed ODA, and therefore we can say that in terms of giving aid, the savings of migrants in the developed world play a more substantial role than the efforts of overseas governments.

Not only are remittances a key form of financial flow; they are more reliable since they are not subject to the degree of fluctuation that we see with the two forms of private sector financial flow. The greater reliability of this form of financial flow is especially important in maintaining and even enhancing the living standards of developing countries, whereas private sector investment is subject to volatility and therefore cannot be depended on.

We will cover the content of the paragraph at the bottom of page 10 towards the end of our discussion of Extract 4.

Analysis of Fig. 4.2: Top Ten Recipients of Remittances

Introduction

Fig. 4.2 consists of two bar charts each showing the top ten countries in terms of remittance receipts. The left hand bar chart shows the top ten recipients in terms of the amount of money received in remittances, whereas the right hand chart shows the top ten recipients ranked in terms of remittances as a percentage of GDP. You will notice that the left hand bar chart consists of **estimates** for the year 2014, whereas the right hand bar chart refers to **actual percentage figures** for the year 2013. In other words, the two bar charts refer to different years.

Even though the two bar charts refer to different years, it is likely that if the same year was used for both rankings, then the results would not have been very different. However, what you notice is that there is a complete absence of correlation between the two bar charts. This is not surprising when you consider the characteristic features of the countries listed in the two top tens.

Top Remittance-Receiving Countries, 2014, US\$ Billions

The countries listed in the left hand bar chart tend to be countries with large populations, in many cases exceeding 100 million people. These countries would therefore have a high total GDP (even though GDP per head would be low by the standards of the developed world). In other words, India might have a low GDP per head, but its sheer population size will mean that total GDP would be high. These are also countries with a large diaspora population (ie a large number of people living outside the country's border). For instance, the countries of south Asia (India, Pakistan and Bangladesh) all have large populations but lost large numbers of people through emigration to the UK, Middle East and elsewhere.

For example, India has a population of 1.276 billion and a Gross Domestic Product of \$2,067 billion. We therefore can calculate GDP per head of \$1,620, and remittances to India as a percentage of GDP equalling:

$$\frac{\$70 \text{ billion}}{\$2,067 \text{ billion}} \times 100$$

$$= 3.4\%$$

The same calculation can be made for each of the other countries in the left hand bar chart. They would also show that, although remittances constitute a large sum of money, remittances as a percentage of GDP (and remittances per head of population) come out as much lower than the percentages shown for other countries in the right hand bar chart.

The exceptional country in this first list (in the sense that it does not have a large population) is Lebanon. It has a population of 4.5 million people and a GDP of \$45,731 million. Therefore, it is significantly smaller than the other nine countries in the list. But perhaps its high figure for remittances reflects the fact that Lebanon has been in the recent past a war-torn country which has both lost people (many of whom are likely to be among the most skilled and who can therefore easily find work elsewhere) and, at the same time, has received and provided some support to very high numbers of refugees from Palestine and, in more recent years, Syria.

Top Remittance-Receiving Countries, 2013, Percentage of GDP

The rank order of countries in terms of remittances as a percentage of GDP is entirely different.

Some of the countries may be unfamiliar to you and therefore you are advised to undertake some brief research to find out about them.

One thing that does stand out from the list is that, in the main, they are countries with relatively small populations, with low absolute GDP, and they have probably lost a large percentage of people through emigration. Again, many of these will have been amongst the most skilled and enterprising. As a result, remittances might be small in absolute terms but are, nevertheless, a high proportion of a low GDP and therefore of spending power in the country.

If we consider the extreme example of Tajikistan, 49% of its income comes from remittances made by its migrants who now work abroad. This country is dependent for nearly 50% of income and expenditure, on money sent back home by its people who live and work abroad.

Let us take a brief look at three of these countries:

Tajikistan

Tajikistan's economic situation remains fragile due to the uneven implementation of structural reforms, corruption, weak governance, seasonal power shortages, and its large external debt burden.

Tajikistan has one of the lowest per capita GDPs among the 15 former Soviet republics. The 1992-97 civil war severely damaged an already weak economic infrastructure and caused a sharp decline in industrial and agricultural production.

Because of a lack of employment opportunities in Tajikistan, more than one million Tajik citizens work abroad - roughly 90% in Russia - supporting families back home through remittances that amount to nearly 50% of GDP.

Less than 7% of the land area is arable and cotton is the most important crop. Tajikistan imports approximately 60% of its food, mostly by rail. Mineral resources include silver, gold, uranium, and tungsten. Industry consists mainly of small obsolete factories in food processing and light industry, substantial hydropower facilities, and a large aluminium plant - currently operating well below its capacity. Some experts estimate the value of narcotics transiting Tajikistan is equivalent to 30-50% of GDP.

Tajikistan has sought to develop its substantial hydroelectricity potential through partnership with Russian and Iranian investors. The government is pinning its drive for energy independence on completion of the Roghun dam, which will take at least 8 to 11 years to construct, according to a World Bank feasibility study that was published in July 2014.

Its population is 8.6 million.

Source: <https://www.cia.gov/library/publications/the-world-factbook/geos/ti.html>

Kyrgyz Republic

Kyrgyzstan is a poor, mountainous country with an economy dominated by agriculture and minerals extraction. Cotton, tobacco, wool, and meat are the main agricultural products, although only tobacco and cotton are exported in any quantity. Other exports include gold, mercury, uranium, natural gas, and—in some years—electricity. Bishkek remains embroiled in a legal battle with Canadian investors in the Kumtor gold mine, the nation's largest. Kyrgyzstan has sought foreign investment to develop hydroelectric potential as a source of export revenue. The economy also depends heavily on remittances from Kyrgyzstani migrant workers, primarily in Russia.

Following independence, Kyrgyzstan rapidly carried out market reforms, such as improving the regulatory system and instituting land reform. Kyrgyzstan was the first Commonwealth of Independent States (CIS) country to be accepted into the World Trade Organization. The government has sold much of its ownership shares in enterprises. Drops in production had been severe after the breakup of the Soviet Union in December 1991, but by mid-1995, production began to recover and exports began to increase. The overthrow of President BAKIEV in April 2010 and subsequent ethnic clashes left hundreds dead and damaged infrastructure. Under President ATAMBAEV, Kyrgyzstan has developed a plan for economic development in coordination with international donors. In December 2014 Kyrgyzstan agreed to join the Eurasian Economic Union in early 2015. The keys to future growth include progress in fighting corruption, improving administrative transparency, restructuring domestic industry, and attracting foreign aid and investment.

Its population is 5.4 million.

Source: <https://www.cia.gov/library/publications/the-world-factbook/geos/kg.html>

The Gambia

The Gambia has sparse natural resource deposits and a limited agricultural base. It relies heavily on remittances from workers overseas and tourist receipts. Remittance inflows to The Gambia amount to about 20% of the country's GDP. The government has invested strongly in the agriculture sector because three-quarters of the population depends on the sector for its livelihood and agriculture provides for about one-fifth of GDP. The agricultural sector has untapped potential - less than half of arable land is cultivated. Small-scale manufacturing activity features the processing of peanuts, fish, and hides.

The Gambia's natural beauty and proximity to Europe has made it one of the larger tourist destinations in West Africa, boosted by government and private sector investments in eco-tourism and upscale facilities. Tourism normally brings in about one-fifth of GDP, but suffered in 2014 from tourists' fears of the Ebola virus in neighbouring West African countries.

The Gambia's re-export trade accounts for almost 80% of goods exports and China was its largest trade partner for both exports and imports in 2013.

In 2012 the IMF renewed an extended credit facility of \$28.3 million for three years. Unemployment and underemployment remain high. Economic progress depends on sustained bilateral and multilateral aid, on responsible government economic management, and on continued technical assistance from multilateral and bilateral donors.

International donors and lenders continue to be concerned about the quality of fiscal management. The Gambia's debt interest payments are projected to consume about 31% of government revenue in 2015.

Its population is 1.8 million.

Source : <https://www.cia.gov/library/publications/the-world-factbook/geos/ga.html>

In the two tables that follow we have calculated remittances to the first top ten in terms of percentage of GDP and have calculated the remittances in \$ billion to the second top ten. This is designed to facilitate comparison.

Country	Remittances US \$ billions Source: Stimulus material	GDP 2014 US \$ billions Source: World Bank	Remittances as % of GDP
India	70	2,067	3.4
China	64	10,360	0.6
Philippines	28	285	9.8
Mexico	25	1,283	1.9
Nigeria	21	569	3.7
Egypt	20	287	7.0
Pakistan	17	247	6.9
Bangladesh	15	174	8.6
Vietnam	12	186	6.5
Lebanon	9	46	19.6

Notice that even within this group there are major differences in remittances as a percentage of GDP.

Country	Remittances as % of GDP Source: Stimulus material	GDP 2014 US \$ millions Source: World Bank	Remittances US \$ millions
Tajikistan	49	9,242	4,529
Kyrgyz Republic	32	7,404	2,369
Nepal	29	19,636	5,694
Moldova	25	7,944	1,986
Tonga	24	434	104
Haiti	21	8,713	1,830
Armenia	21	10,885	2,286
The Gambia	20	807	161
Lesotho	20	2,088	418
Samoa	20	801	160

Note we have used World Bank figures for GDP in 2014, whereas the table refers to remittances as a percentage of GDP in 2013. However, if we assume that the remittance percentage remains unchanged from year to year, the calculation is still valid. What it is designed to demonstrate is that the large developing economies with large populations received a large amount of money in remittances. In comparison, the smaller countries shown received a smaller amount of money in total, but this represents a higher percentage of GDP and, therefore, also represents a more significant influence on economic performance and development.

Consequences of Remittances and Emigration

Introduction

So far we have considered the data that will inform your answer to a possible question. We now have to turn to the main focus of the extract which is contained in the paragraph at the bottom of page 10. This concerns the consequences of remittances (which are surely positive) but also the consequences of emigration (which can be positive but also can be negative).

Consequences of Remittances

Firstly, remittances represent an injection into the country. They are, after all, treated as an invisible earnings on the balance of payments current account. As an injection into the circular flow, remittances will have a multiplier effect on the economy, raising the level of aggregate demand and therefore national income.

Secondly, remittances help to maintain or even raise the living standards of people in low and middle income countries. In this respect they can play a major role in reducing poverty in the developing world. This is because the incomes of family members who remain in the home country are 'topped up', often substantially, by those who travelled abroad.

Thirdly, remittances provide developing countries with much needed foreign exchange with which to purchase imported goods. Shortage of foreign exchange is a particular problem for developing countries, and impedes development because of difficulties in buying much needed equipment.

Perhaps the only drawback to remittances is that by providing families in developing countries with additional income they might reduce the incentive to work.

Consequences of Emigration

Although emigration does not feature strongly in the extract, it has to be remembered that remittances are a long term consequence of emigration. Therefore, as well as the positive benefits of remittances, we should also be aware of consequences - to a developing economy - of the migration of a proportion of its people.

Migration across national frontiers is motivated by both push factors (which tend to be concerned with problems in the home country) and pull factors (the lure of a more rewarding life elsewhere, and usually in an advanced or high income country). We saw, in 2015, politicians and others make a distinction between: economic migrants (people who migrate to achieve a higher standard of living), and refugees (escaping persecution and/or war). As we are concerned with economic analysis we will focus primarily on economic migrants who are behaving in ways predictable in market economics, ie they are moving from low wage economies to high wage economies.

Economic migrants reduce the population of their home country. In extreme examples, such as 19th century Ireland, the population has never recovered from the devastation of the potato famine and from the emigration that followed. So the Irish population is now lower than it was in the early 19th century. However, except in cases like war-torn Syria in the current decade, it is unlikely that emigration will lead to a significant reduction in the domestic population. It is more likely that emigration will reduce the rate of growth of the domestic population.

It is argued that emigration from poorer countries can be seen as beneficial, especially in terms of easing the problem of overpopulation. The concept of overpopulation derives from the population analysis of Thomas Malthus in the late 18th century. Malthus argued that population growth also leads to a crisis brought about by famine, disease, or war. Concern about the problem of population growth led others to develop the concept of overpopulation – ie if some countries fail to develop because of labour shortage in relation to other resources, and others suffer as a result of excessive population in relation to resources, then surely there is an optimum population size for any country given its resources. If countries are overpopulated relative to resources, then logically some population loss will be useful in terms of a larger share of the cake for those who remain.

It could also be argued that short term emigration is beneficial to a developing country in that it equips its returning workers with skills that will be in great demand if and when they return.

However, we must also consider the negative consequences of emigration to developing countries. The loss of people through emigration has a damaging impact on the economy in the form of:

- **labour shortages.**
- **reduced demand.**
- **loss of skills.**
- **lost production.**
- **decline in investment.**
- **slower growth.**

In addition to the decline in the quantity of the labour force, it is likely that emigration will have a negative effect on the quality of labour. This is because a disproportionate number of migrants will be younger, more skilled, and perhaps more enterprising than the population that remain behind. We are informed in the extract that almost all doctors trained in Grenada, Dominica and Ghana now live and work abroad. It is likely that the same comment could be made about people in similar professions who grew up in many small developing economies - for example - those featured in Fig. 4.2 particularly the right hand bar chart. The extract also informs us that the smaller developing countries have the highest rate of skilled emigration. Therefore, they lose their high skilled and professional workers who seek high incomes abroad. The home country loses their skills, but at least if they send money back home there is some compensation.

Concluding Remarks

In this extract we have looked at remittances made by emigrants (and their descendants) from developing countries to family and friends back home. We have seen remittances are **a major source of international financial flows** – they are **far more important than Official Development Assistance** (ie aid) and, although they are **less important than overseas private sector investment** in developing countries, they have the great virtue of being **more reliable and less prone to fluctuations**.

Remittances are **beneficial to developing countries**. We saw that the **large developing countries** receive **the largest amounts** in remittances. However, it is the **smaller developing countries** that **benefit most in proportionate terms** from remittances.

Finally, we looked at the benefits and costs of remittances, bearing in mind that remittances are a **consequence of emigration** from a country.

Extract 5: Structural Issues in the Zambian Economy

Introduction

This extract is essentially about economic growth and how to achieve it. The first part of the extract, including Fig. 5.1, is concerned with changes in the components of aggregate demand. Here, the focus is on the demand side of the economy and therefore on short run economic growth ie output that can be achieved in the context of existing aggregate supply. The second part of the extract, including Fig. 5.2, is concerned with supply-side policies and is therefore concerned more with long run economic growth.

Overview of Progress in the Zambian Economy

The opening paragraph of the extract highlights the successes of the Zambian economy. In particular, we are informed that Zambia:

- has enjoyed more stable economic growth than much of the rest of Africa.
- was less affected by the financial and economic crisis.
- has averaged over 6% pa in terms of economic growth, since 2009.
- has seen a reduction in inflation from around 10% to 6.5% in 2013.
- has benefitted from a tripling of copper prices 2009-2011.

Economic growth is the route to higher living standards and 6% pa should be seen as a considerable achievement. This is the reason why Zambia is now classed as a lower middle income country rather than a low income country. The reduction in inflation is also of great benefit to the Zambian economy and, at this point, it is useful to remind ourselves of why inflation is considered harmful.

The Costs of Inflation

We can identify the disadvantages and costs of inflation as follows:

1. The cost associated with inflation are categorised as:

- **Shoe leather costs** which refer to the cost, time and effort involved in shopping around to buy at the most competitive price. In a period of price instability we are likely to spend more time searching for the best deal, sometimes at the expense of more productive activity.
- **Menu costs** which are the cost to firms of actually changing prices.
- **Administrative costs** which refer to the costs in terms of staff time incurred as a result of adjusting accounts.

2. Fiscal drag. Inflation results in a rise in the % of income taken in taxation.

- **Higher nominal income drags** more people into the tax net and a higher % of their income is subject to tax - and for the better off, more people are subject to the higher rate income tax. Their real income may not have changed at all.
- **Price rises** will mean an increase in ad valorem expenditure taxes eg VAT (which is expressed as a % of value added).
- **Higher company profits** resulting from higher prices will mean companies pay more in Corporation Tax.
- To quote Milton Friedman "**Inflation is one form of taxation that can be imposed without legislation**".

3. Arbitrary Redistribution of income

Inflation results in:

- **a reduction in the real value of savings.**
- **a decline in real incomes** for consumers whose income is fixed or is unable to rise in line with inflation.
- **a rise in nominal interest rates.**
- **a decline in the real value of debts.**
- **falling real returns for investors** as interest rates lag behind inflation rates - this will benefit borrowers but may discourage saving.

Therefore, inflation produces an arbitrary redistribution of real wealth and income:

- from lenders to borrowers ie from savers to those in debt.
- from the private to the public sector.
- from the economically weak to the economically powerful.

4. The Impact on Trade

The cost of inflation is especially high if the inflation rate is high relative to elsewhere in the world.

This leads to:

- **a loss of international competitiveness.**
- **a fall in exports and a rise in imports.**
- **a worsening of the balance of payments.**
- **currency depreciation.**

5. Disruption of Business Planning

High and volatile inflation creates uncertainty, thus making planning and budgeting difficult. This could have a detrimental effect on investment in the economy. Firms may be reluctant to invest if they are uncertain of the cost of a project, and of forecast levels of customer demand. Firms will demand a higher rate of return before they go ahead with capital spending. A low rate of capital investment damages the productive potential of the economy and may reduce productivity growth. High levels of inflation reduce confidence in the economy and reduce investment by making it difficult to predict the future.

6. Inflationary Noise

This is the distorting effect that inflation causes. Inflation distorts the operation of the price mechanism and results in an inefficient allocation of resources. When inflation is volatile, consumers are unlikely to have sufficient information on relative prices to make informed choices about which products to purchase and supply. A rapid increase in prices may distort the price mechanism in its role of allocating and rationing resources.

The fact that the inflation in Zambia is now at the lower level of 6.5% (still relatively high by UK standards, but not disastrously high) will facilitate further business investment and hence growth in the Zambian economy. Furthermore, it will signal to potential investors that the Zambian government is committed to creating a business friendly economy.

The Price of Global Copper Prices

The recent success of the Zambian economy can be attributed, in part, to the tripling of global copper prices from 2009-11. We saw, in Extract 3, that Zambia, being a major copper producer, benefits greatly from a rise in copper prices. Not only does it increase the returns from past investment, but it also increases the export earnings of Zambia, improves its terms of trade, allows for increases in wages of miners and, particularly important in the context of the extract, provides a further incentive for investment in copper production. The additional investment will provide a multiplier boost to the aggregate demand, as well as increasing productive capacity, which will in turn lead to higher real growth.

Sources of Growth

As this extract is essentially about economic growth (and how it is achieved) it is advisable to remind ourselves of the textbook theory of growth. Firstly, economists make a distinction between short run and long run economic growth.

Short run economic growth (or actual economic growth) is defined as: *the actual annual percentage increase in an economy's output*. Short run growth is affected by changes in aggregate demand which is increased by:

- higher consumer spending.
- increased capital investment.
- rise in government spending on goods and services.
- reduction in spending on imports.
- increased spending on exports.

Bear in mind that short run growth is constrained by established conditions of aggregate supply (ie movement along the aggregate supply curve).

Long run economic growth (or potential economic growth) is defined as *the rate at which the economy's potential could grow as a result of changes in the economy's capacity to produce goods and services*. Economic growth, in the long run, has nothing to do with changes in aggregate demand and everything to do with changes in aggregate supply, which can be increased by:

- increased supply of factor inputs.
- investment in human capital.
- investment in capital goods.
- technological advances.
- higher productivity.
- improvement in economic efficiency.

We are told, in paragraph 2, that Zambia has gone some way towards reducing its dependence on private and public sector consumption, and instead towards a greater reliance on private sector investment. We can understand this point in terms of a simple equation:

$Y = C + I$ where Y is output, C is consumption and I is investment in real capital.

This can be re-written as $Y - C = I$

Logically the more the output that is consumed, the less is made available to accumulate capital for the future. By devoting resources to investment, the country is building up its productive capacity to facilitate growth in the future.

We are told that the growth rate of private sector investment fell after 2010. However, the growth of public sector investment increased. These are issues to explore in greater detail when we look in detail at Fig. 5.1 but, for the moment, we need to consider the significance of this fact. You might be tempted to argue that it does not matter whether the investment is undertaken by the private sector or by the public sector, ie investment is investment no matter who undertakes it. However, public investment has a poor track record in many countries. In many cases, public sector investment has taken the form of inappropriate investment in politically motivated or prestige projects, where there is little if any market demand. Sometimes it is simply wasted as a result of lack of access to spare parts when machines break down, or when money is lost in corruption. There is a strong case for arguing that private sector investment motivated by profit and guided by the market produces better results. The only type of public sector investment that is justified is investment in the infrastructure (roads, railways, power supplies, information technology, health or education). If the additional public sector investment is devoted to these projects, then it will be of long term value to the economy.

We now turn to a more detailed look at Fig. 5.1

Analysis of Fig. 5.1

Overview

Fig. 5.1 provides details of the components of aggregate demand in terms of:

- the % contribution of each component to GDP.
- the % change in the size of each component.
- the % contribution of each component to real GDP growth.

In looking down the list of components think of the equation:

$$AD = C + I + G + (X - M).$$

Essentially, gross capital formation plus consumption is $C + I + G$, whereas the external sector is $X - M$.

With this in mind we can make sense of the first column. Focus on the numbers on bold type. If we add the figures of gross capital formation and consumption we arrive at the following percentages in 2001:

$$18.9\% \text{ plus } 97.3\% = 116.2\%.$$

This means that $C + I + G$ exceeded GDP by 16.2%. How was this possible? The answer lies in the fact that imports exceeded exports by an amount equal to 16.2% of GDP. So, Zambia consumed and invested 16.2% more than its GDP, and this is something that is surely not sustainable.

If we look at the same components of GDP in 2009 we find that the sum of gross capital formation (21.1%) and consumption (76.3%) comes to 97.4%. In other words, $C + I + G$ come to less than GDP thus providing a surplus for exporting more than it was importing.

In both years the sum of the figures in bold type comes to 100% - the big difference being that:

- in 2001 $C + I + G$ exceeded GDP and the external sector showed a negative balance.
- in 2009 $C + I + G$ was less than GDP and the external sector showed a positive balance.

Gross Capital Formation

Gross capital formation means investment in real or physical capital - factories, mines, agriculture, plant and equipment and the infrastructure (roads, railways, energy generations and distribution, telephone communications). We know that one major drag on growth and development in developing countries is the absence in many countries of a surplus of output over consumption, and therefore the result is a low level of investment. The good news to report about Zambia is that over the period 2001 to 2009 gross capital formation rose as a percentage of GDP. Zambians were able to devote a higher percentage of their resources to investment and this will have increased the productive capacity of the economy, thus facilitating longer term economic growth.

In addition, over the first decade of the 21st century, the balance between public and private sector investment shifted decisively in favour of the private sector, so that by 2009, 83.4% of all gross capital formation came from the private sector (compared with 41.8% in 2001). If we take the view of pro-market or supply-side economists, then we can argue that this is beneficial, as private sector investment is usually more productive than public sector investment. The logic behind this is that private sector investment is guided by market forces, whereas public sector investment may, at least partly, be politically or ideologically driven. As it is often argued, politicians and civil servants who determine the direction of public sector investment are not very good at “picking winners”. Against this point it must be remembered that the public sector investment is crucial for improvement of the infrastructure, the poor quality of which is identified as a constraint on growth in Fig. 5.2.

Although Zambia's record on investment is especially impressive in the first decade of the century, the picture is not so good in the opening years of the current decade. You will notice the % change in gross capital formation (ie its growth in real terms) fell from 14.7% in 2010 to 4.6% in 2011, followed by a slight recovery to 6.5% in 2012. What we do not know is whether this is merely a short term downturn in investment, or part of a long run trend. If it is the latter, then this suggests a slowing of long run growth, as Zambia fails to add to its stock of capital assets at a rate needed to ensure sustainable growth.

As well as a slowing down in the rate of growth of gross capital formation, the data also shows a shift from private to public sector investment. Notice that public sector investment continues to rise at an impressive rate (eg 30% in 2011 vs. 2010) whereas the growth of private sector investment slows from 15% in 2010 to -0.5% in 2011 (ie capital consumption exceeded new investment) and to 1.8% in 2012. The fall-off in private sector investment is especially worrying, and perhaps this prompted the supply-side statement that we see in Fig. 5.2 (to which we will return).

The final columns of Fig. 5.1 record the contribution of gross capital formation to economic growth.

Notice that in 2010, the component contributed 4.0 percentage points to overall growth of 6.6%, a 61% contribution. However, the decline of private sector investment in 2011 meant that private sector investment made a negative contribution to growth of real GDP, and overall investment only made a 21.5% contribution to growth of GDP. The position in 2012 is only slightly better – investment only made a 28.4% contribution to real GDP growth and this includes the 6.0% contribution of private sector investment.

In conclusion, we can say that in the opening years of the current decade the investment record of the Zambian economy was disappointing, and this was especially true of the private sector. But, once again, we do not know if this was a short term downturn or a long run problem. If it is the latter, then it is essential for the Zambian government to devise strategies to stimulate private sector investment. There is certainly a commitment to this approach, as we will see when we discuss Fig. 5.2.

Consumption

The best way to think about the distinction between investment and consumption is that the former is concerned with goods which provide for the future (eg machines that will have a life stretching into the future, stocks are goods set aside for the future) whereas the latter is concerned with goods available to satisfy us today. As stated above, the greater the quantity of output that is consumed, the less is available for investment in the future.

We see in Fig. 5.1 that consumption (both public and private) was at a very high level in 2001. 97.3% of GDP was consumed in that year and, inevitably, this meant that Zambia had to run a large current account deficit - as it imported more goods and services than it exported. The position was much improved in 2009 when consumption in total came to 76.3% of GDP, and a small surplus was achieved on the current account.

The greatest reduction in the share of GDP was private consumption which fell from 87.2% to 57% of GDP over these eight years. If the reduction in share of GDP in the form of private consumption was the result of higher living standards, then this is to be welcomed. If, on the other hand, it is the result of squeezing of consumers then it is to be regretted. Although Zambia is not one of the poorest of African countries, nevertheless it remains a country with living standards substantially below those of the UK.

In the years 2010 to 2012, consumption overall rose by 7-8% per annum. Private consumption rose at a slightly higher amount of around 9% in two of the three years. Public sector consumption, which is spending on consumables used in the public sector (eg civil servant salaries, stationery, energy), rose by around 3-5% per year.

In terms of contribution to GDP growth we can see that consumption (and especially private consumption) was the major factor in overall growth. This means that, in the early years of the present decade, Zambia was experiencing consumer-led growth. As this growth was rooted in changes in aggregate demand it was short rather than long run economic growth. The latter is determined by changes in aggregate supply (ie shifts in the aggregate supply curve).

The External Sector

This refers to X - M component of GDP. Exports add to GDP whereas imports reduce GDP. In 2001, Zambia ran a balance of payments deficit equal to -16.2% GDP. As we saw above, this reduced GDP, and reflected the fact that domestic demand (C + I + G) exceeded national output.

A deficit on the current account is caused by imports outstripping exports. We can see in the data for 2001 that exports equalled 28.1% of GDP, whereas imports were a massive 44.3% of GDP. These imports enabled consumption and investment, but they would have created a problem in terms of financing the excessive purchases from abroad. Deficits either reduce the country's foreign currency reserves, or add to the country's external debt, or bring about a depreciation of its currency.

Progress was made by 2009 when exports rose as a % of GDP, and imports fell significantly as a percentage of GDP. Note, we cannot state categorically that exports rose and imports fell in absolute terms, because the figures given are merely % of GDP, and we are not given absolute values for any of the components. The fact that, by 2009, Zambia is showing a surplus in its external sector means that X-M is making a positive contribution to the economy.

But once again, the situation in the years 2010-2012 shows some deterioration in the external sector. We can see that in each of the years 2010 to 2012, import volumes grow faster than exports and, given the small size of the surplus in 2009, we can say that the external sector returned to deficit. This point is confirmed by the negative figures for this sector's contribution to GDP growth shown in the last three columns on the right. The rapid rise in imports might suggest levels of consumption which are not being satisfied by domestic production.

Using the Aggregate Demand formula $AD = Y = C + I + G + (X - M)$, we can see that imports reduce aggregate demand for domestically produced goods and services and, as such, detract from growth of GDP. Exports, on the other hand, are positive factors in terms of aggregate demand and GDP. If imports exceed exports, then X - M is negative, and so the external sector would make a negative contribution to growth.

Real GDP Growth Rate

We do not have growth figures for the years 2001 to 2009 but we can see that, in the period 2010-12, real GDP in Zambia grew consistently at about 6.5% per year. In many respects this is very impressive, but as we have seen, over these three years, there was a slowing down in the rate of gross capital formation (investment) and a more rapid rise in consumption, a worrying trend for future growth.

In many respects, consumption is desirable, since it adds to living standards today and even in a low middle income economy like Zambia any improvements in living standards is desirable. But as Zambia's post 2010 problem seems to be consumption-led, it is storing up problems for the future – higher inflation, balance of payments deficit, and slower growth.

Consequences of Economic Growth

As an important theme in this extract, it is worthwhile reviewing the consequences of economic growth in terms of costs and benefits.

Benefits of Growth

- Higher real GDP per head means higher average living standards and the effects of growth are cumulative. If a country grows at 3% pa, the economy and living standards will double in 24 years.
- Growth creates new jobs leading to lower unemployment.
- With a given population, increased GDP implies higher labour productivity leading to rising hourly wage rates.
- Growth allows governments to redistribute income from rich to poor.
- Growth has a positive impact on government finance - it leads to an increase in tax revenues for government through an increase in the tax base. Also, it permits increased government spending on merit goods and other services and / or a reduction in national debt.
- Growth results in increased profits, improved business confidence, an increase in capital investment, and a spur to technological innovation. Again, the effects of growth are cumulative - it encourages further investment in capital equipment through the accelerator process.
- Higher profits that firms can generate from a richer population will allow greater investment, leading to development of a greater range of goods and services.

Despite the benefits of economic growth there are potential costs.

Costs of Growth

- If AD increases faster than AS, then short run economic growth will be unsustainable. The output gap will narrow causing inflation to increase.
- If economic growth is unsustainable, then high inflationary growth may be followed by a recession. This occurred in the UK in the late 1980s and early 1990s.
- Increased economic growth causes an increase in spending on imports, therefore risking a deficit on the current account.
- Increased economic growth will lead to increased output and therefore increased pollution and congestion. This will cause health problems, such as asthma and stress, and therefore will reduce the quality of life.
- Higher rates of economic growth have often resulted in increased inequality, however the degree of inequality is essentially a political decision, which, in turn, may determine things such as tax rates, spending priorities and the nature of economic growth.

The Key Structural Issues Facing the Zambian Economy - Fig. 5.2

Overview

The rest of the extract is taken up with a statement entitled “Demand and supply-sides of the Zambian economy” (Fig. 5.2). This was probably abridged and simplified by OCR examiners from an official statement about the growth prospects of Zambia. The statement can be divided into the following parts:

- the supply-side constraints of the Zambian economy.
- government strategy.
- the mining sector.
- economic zones.

We will now explain each of the above in turn.

The Supply-side Constraints of the Zambian Economy

As we are aware, a constraint is defined as a limiting factor; in this case, something that holds back the economic growth of a country. The constraints are identified as:

- **Poor access to credit.** Credit is essential for a functioning market economy. Credit is used to finance the purchase of stock, the production of goods (production in advance of sales), and the distribution of goods (to meet the gap between distributing goods to customers and receipt of sales revenue). Credit from banks is also needed to provide debt finance for smaller items of capital investment and also to enable consumer to make larger purchases. Without adequate sources of finance from banks and other financial intermediaries, the economy will be slowed down. If poor access is the problem, then the solution must lie in development of the banking system in Zambia.
- **Poor infrastructure.** Infrastructure refers to roads, railways, telecommunications, broadband facilities, energy distribution, and water and sewage. In other words, those vital services which are essential for a functioning economy and a civilised life. Inadequate infrastructure is a common problem facing developing countries, and by slowing up transport and communications it adds to business costs and slows up the pace of change in an economy. Improvements to infrastructure require investment, some of which will have to be undertaken by the state.
- **Excessive bureaucracy.** This refers to the burden placed on business by the state. Bureaucracy involves a cost for business in the form of imposition of taxes on business organisations and consumers. In this **respect** it can stifle business flexibility and competitiveness, especially in developing countries.
- **Regulation and licensing requirements.** This follows on from the previous point and it refers to the cost imposed on business by laws and regulation, and the impediments to business enterprise imposed by the need to obtain licences to undertake various business activities. In a market economy, licensing should be limited only to those activities which pose an immediate threat or nuisance to the public. All other activities should be left unimpeded by a system of licenses.

If these are the problems or constraints then what solutions does the Zambian government deploy?

Government Strategy

We are told that the Zambian government is committed to accelerating private sector investment in order to increase and diversify economic growth. As we saw above, good progress was made between 2001 and 2009 in:

- raising gross capital formation as a percentage of GDP.
- shifting the balance of investment from the public to the private sector.
- eliminating a current account deficit.

However, from 2010 progress seems to have been halted and even reversed. You will notice that in 2011, critically, private sector investment was negative (more capital was consumed than accumulated).

There was slight improvement in 2012 but private sector investment was still negligible and dwarfed by public sector investment. As stated in Fig. 5.2, the government is seeking to accelerate private sector investment, since it realises that this is a source of economic growth.

In order to stimulate private sector investment, it is necessary to create a good business environment. This means pursuing business friendly policies and reducing the cost of doing business (ie improving infrastructure and reducing bureaucracy and regulation). This is reminiscent of the supply-side policies that have been favoured by recent governments in the UK. It certainly does not mean proposing a policy of “resource nationalisation” that we came across in Extract 3.

The Mining Sector

We know from Extract 3 that copper mining is a vital part of the Zambian economy, and it is good to read that various companies have plans to undertake, not just copper mining, but also processing. If we add up the proposed investment in the industry, then it comes to in excess of \$5 billion over the next few years. This will lead to a multiplier increase in national income, and will also create new jobs and boost growth.

However, the investment is to be undertaken by Chinese, Brazilian and South African companies. Although multinational company investment is valuable in providing funds and expertise that might not exist locally, there are problems associated with multinational company investment in developing countries. Profits from these ventures will be remitted back to the country of origin of the multinational company. Furthermore, the impact of this investment will be reduced by the employment in key roles by foreign workers who invariably send much of their income back home. Finally, as we saw in Extract 3, although copper mining is a crucial part of the Zambian economy, it provides a disappointingly low share of tax receipts.

Economic Zones

The final short paragraph makes reference to the creation of two economic zones being developed in the Zambian capital, Lusaka. There are no further details given, but an economic zone normally means a defined area in which there are tax breaks available and / or favourable treatment in the form of relaxation of regulation that would apply elsewhere. The purpose of an economic zone is to generate growth in the defined area and for the benefits to trickle down to the rest of the economy. However, there is a danger that instead of spreading growth, the result might be an enclave of growth surrounded by a larger area of impoverishment and underdevelopment still relying on the traditional economy. In other words, there is a danger that it will lead to the perpetuation of a dual economy. The danger of a dual economy is all the greater because of the decision to locate both zones in the capital city rather than across the country as a whole.

Concluding Remarks

The essential point that comes from Extract 5 is investment, especially private investment, which is crucial for long run economic growth. We saw, in Fig. 5.1, that great strides were made in the first decade of the century, but the period 2010-2012 saw some reversals. We do not know if the disturbing trends shown in Fig. 5.1 are long term or merely a temporary problem. However, the Zambian government is anxious to stimulate the supply-side of the economy. Fig. 5.2 highlights supply-side measures designed to increase the rate of economic growth in Zambia.