

➤ Why do we study the labour market?

To gain economic insight and the ability to answer policy questions.

Many questions concerning labour and the economy do not only relate to facts but also to normative questions. Value judgments are required from those involved because many such questions cannot be simply answered by looking at “the facts”.

Making good value judgments requires that one has as much information as possible and in order to make informed decisions, trade-offs arise when attempting to address normative questions. Facts help to crystallise the different trade-offs. Studying the labour market helps to make an informed opinion in such matters.

Acquiring knowledge about the labour market will also help to avoid unintended consequences of certain policy decisions and therefore the need to revise policies only a short time after being introduced.

➤ The difference between positive and normative economics (refer to pages 2 of the textbook)

Positive questions	Normative questions
Look the <i>narrow</i>	Look at the <i>broad</i>
e.g. What is?	What should be?

Unique characteristics of labour market:

- **Labour Market-** is an *imaginary marketplace* where labour is bought and sold. Although governed by the same principles of supply (Ss) and demand (Dd) that govern other goods markets, this market is quite unique.
- The first difference between the labour market and goods market is that the worker is a person and not a product. Principles of fairness or equity and humanness are therefore essential elements of the labour market.
- An employer (purchaser of labour) buys the services of the worker and not the worker. But, the services and the worker cannot be separated. A *contractual relationship*, which differs from what would be found in the product market, comes into being between the buyer and seller of labour.
- Personality traits are also important when the employer “buys” the product. These characteristics cannot always be determined beforehand. Changes pertaining to the worker’s skills, experience may occur.
- Unlike some product markets, there is also more than one market or clearing house.
- The price of labour also tends to be complex, influenced by inflation, personal tax, standard of living, health and safety standards and so on. This is unlike the product market.

Important functions of labour markets:

- They allocate human resources among the alternative users;
- They distribute incomes, either wages or salaries, as incentives and as rewards to workers.

Labour markets should, by their functioning, contribute to the following objectives:

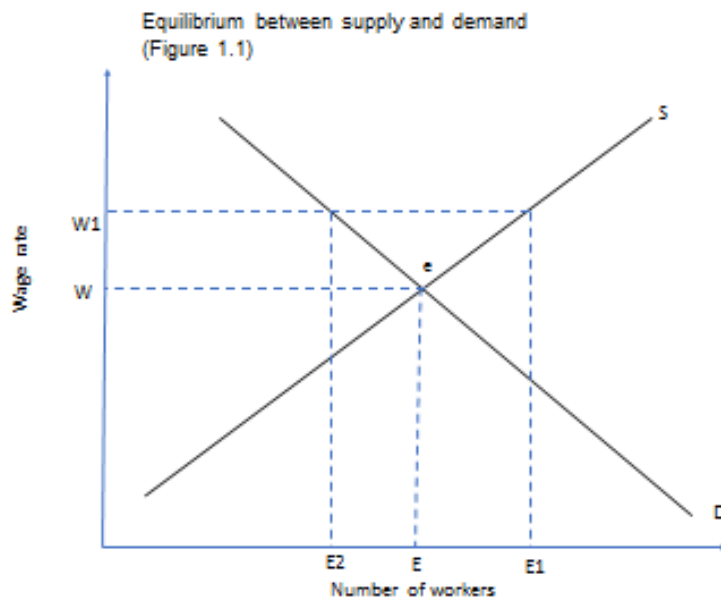
- **Efficiency** – This means maximum output and maximum income.
- **Equity**- This implies equity of opportunity for all in access to jobs, training, treatment at work in payment.
- **Growth**- Labour market operations should increase employment in the future and contribute to- not hinder- higher productivity and incomes.
- **Social justice**- This refers to the extent to which society acts to minimise any negative effects the labour markets may have on workers' welfare, and to redress harm that may have been done.

Why a theory with unrealistic assumptions?

- The assumptions help us to understand better the key issues that are under discussion.
- The assumption of a **perfectly competitive market** is a theoretical norm, against which performance of the actual labour market can be measured. This falls within the neoclassical theoretical framework.
- A perfectly competitive market is characterised by the following **assumptions**:
 - There is full and perfect knowledge of the market
 - Workers and employers are rational
 - Both workers and enterprises have no influence over the market wage
 - There is perfect competition
 - Workers are perfectly mobile.
 - See boxed section in prescribed textbook (Yu and Roos: 2018 4-5)

Graphical analysis of the Labour Market. Figure 1.1 (Yu and Roos, 2018: 5)

- A supply (S) and demand (D) curve is an indication of the basic decisions regarding the labour market of the major market actors.
- Figure 1.1 plots the number of workers supplied and demanded against wages.
- X-axis represents the number of workers (quantity of labour).
- Y- axis represents price or wage rate.
- S- Labour Market supply- represents the relationship between quantity and price.
 - ✓ The higher the wage rate, the higher the quantity of labour supplied
 - ✓ This means that the S curve is UPWARD SLOPING to the right
- The market D curve is DOWNWARD SLOPING.
 - ✓ This is due to the fact that as wage increases, employers try to reduce cost by employing less workers.
- In a perfectly competitive labour market, the equilibrium would be where the quantity supplied of labour equals quantity demanded for labour (or number of employed workers)
- This is at point e on figure 1.1



Characteristics of the South African Labour Market:

- A sharp increase in the Labour S which can be due to a rapid increase in the labour force participation rates of women and Africans.
- Low increase in the D for unskilled and semi-skilled workers.
- Labour D has been most impacted by development *within* and *between* sectors
- Unemployment, specifically among the black population and among females.
- High labour costs and low productivity.
- Labour market segmentation
- Extensive income inequality which continuously increases.
- See page 6-7 of the prescribed textbook for details

■ **The Labour Force-** the population of working-age people that is working or wants to work

■ **The total Labour Force (LF) or Economically Active Population (EAP)-** is the total number of working-age people or potential labour (between ages of 15- 64 years) who present their labour for the production of economic goods and services, whether employed or not.

Factors determining the supply of labour:

- The individual's decision to work or not to work, and the number of hours to work.
 - ✓ The most important determinant of this decision is the wage rate.
 - ✓ Individuals' decisions to work or not to work are measured by the labour force participation rate (i.e. the percentage of working age population that is working or wanting to work).
- The size of the labour force is also determined by the size of the population.
- Population size is in turn determined by factors such as fertility rates, mortality rates and net migration flows.
- Labour supply is not only a matter of quantity but also quality. The skills level of the labour force is also significant.
- See Figure 2.1 for an illustration of the various determinants of the total labour force (Yu and Roos, 2018: 13).

The Labour Force Participation Rate (LFPR)

- LFPR – this is the percentage of the working-age population that supplies its labour for the production of economic goods and services, whether employed or not.
- It is the percentage of the working age population that participates in the labour market.
- See page 17 of the prescribed textbook.
- One of the most notable features of the South African labour market is the very low rate of participation by adults.
- The LFPR in SA is about 55% and this is much lower than most countries
- The low LFPR is often attributed to SAs social welfare that is believed to discouraged people from looking for work.
- On the other hand, there is contradictory evidence showing that social grants may have increased the labour participation rates for women. The access to cash allowed women to leave their children with relatives and seek work.
- LFPR by gender – The LFPR of women has increased relatively more rapidly over time. However, the male LFPR remains higher.
- Factors causing the rapid increase in female labour force participation:
 - Social grants make some money available for transport
 - The increasing relative wages because of reduced discrimination greater demand for female workers
 - The rising levels of education among women
 - Declining birth rates
 - Changes within the household such as; decreasing proportion of women living with employed men because of the increasing number of unemployed men; a decline in the number of women living with men suggesting a decrease in the proportion of married women.
 -

Population and population growth:

- Population growth is a function of three demographic factors:
 - ✓ Fertility
 - ✓ Mortality
 - ✓ Migration
- Population growth rate = Total fertility rate - mortality rate + net migration.
- The difference between fertility and mortality rates is called the natural rate of population increase.

Total Fertility Rate (TFR):

- TFR is the average number of children born alive to a woman in her reproductive years (15-49 year of age).

- An estimation of developing countries' TFR is particularly difficult.
- various stages of the demographic transition are illustrated in figure 2.5
 - ✓ **Stage 1-** characterised by high birth rates and high mortality rates. Because of this, a population may increase slowly or not at all.
 - ✓ **Stage 2-** characterised by a steep decline in mortality rates, particularly among the very young because of an improvement in health services, water and sanitation, and medical care. There may also be an increase in birth rates due to a breakdown in cultural traditions and family life.
 - ✓ **Stage 3-** there is a sharp decline in birth rates, making it difficult for some less developed countries to move from the second stage. This stage is characterized by low fertility and low mortality rates.

The South African whites made the transition to this stage in the 1950s, the Indians/Asians in the 1960s, the coloureds in the 1970s and Africans in the 1990s.

- ✓ **Stage 4-** birth rates decline to below the replacement level, and the population declines. Some highly industrialised countries are at this stage. White South Africans seem to be entering this phase.
- ✓ **The factors influencing fertility rates**
 - ✓ See page 26 of the prescribed textbook.

Possible consequences of HIV/Aids on the South African economy:

- Demographic impact
- Dependency ratio
- Supply of Labour
- Employment
- Depletion of human capital
- Poverty and inequality
- Insurance industry and benefit schemes
- Direct health costs
- Other consequences for government
 - ✓ Fiscal difficulties
- Impact on the workplace
 - ✓ Production costs
- Other macroeconomic effects
 - ✓ Economic growth
- See page 27-28 of the prescribed textbook for details

Factors influencing immigration and emigration:

- Cited causes include, crime and violence, affirmative action and racism.
- Most important causes of emigration from SA:
 - ✓ Real wage differentials between SA and the destination country
 - ✓ Immigration restrictions in the destination country
 - ✓ Political uncertainty in SA

Migrant labour within South and southern Africa:

- *Temporary migrant workers-* workers who live in rural areas and neighbouring countries and who work and live in urban areas on a temporary basis.
- *Commuters* – workers who live in rural areas and commute to work in urban areas, but return home every evening or weekends.

The advantages and disadvantages of migrant labour from neighbouring countries for South Africa-
See page 33-35

➤ Advantages

- Migrants can create jobs
- Occupy positions to which unemployed South Africans do not aspire
- Reduces rapid growth of urban slums and provides a significant income for the rural areas of origin

➤ Disadvantages

- Has negative effects on the production potential of rural areas (See page 34-35 for further explanation on the negative effects).

Worker preferences: indifference curves:

- The utility function : $U=f(Y,L)$ summarises that an individual enjoys satisfaction from leisure and income.
- Indifference curve- shows that preferences of an individual for various combinations of income and leisure time that yield the same level of utility.
- Figure 2.6 is an example of an indifference curve (IC).
- Income per day is on the vertical axis and leisure time is on the horizontal axis.
- The level of satisfaction or utility is constant along the IC.

Properties of the indifference curve:

1. **Negative slope**

Which indicates that as individuals increase their leisure (i.e. take time off work), their income decreases due to fewer hours spent working. Similarly, as leisure time decreases, income increases due to longer hours spent at work.

2. **Convex to the origin**

The curve is bowed inward. The slope varies at different points along the curve. When income is relatively high, and leisure hours are relatively low, leisure is considered scarce, and the individual is willing to give up a large amount of income to obtain an extra hour of leisure and maintain the same utility.

Alternatively, when the income is relatively low and leisure hours are relatively high, leisure is considered as abundant, and the individual would give up a small amount of income for an extra leisure hour, to maintain the same utility. (See page 37 for further explanation)

2. **Higher indifference curves mean higher utility levels**

Illustrated in figure 2.9.; The leisure-income bundles on the IC that yields a utility of U_2 are more preferred than the bundles lying on IC that yields a lower utility of U_1 .

4. **Indifference map**

Any individual will have large number of ICs, depending on how much money is available. An increase in the hourly rate of an individual will result in the individual moving to a higher IC by enjoying more income and more leisure simultaneously. (See fig 2.9. and page 28 for illustration)

4. Indifference curves do not intersect

See page 38 and figure 2.10 for further explanation.

4. Different work-leisure preferences

The work-leisure trade-off is not the same for different individuals. A leisure lover easily gives up a larger amount of income to enjoy more leisure compared to a workaholic. This is illustrated by the steep IC in figure 2.11(a) in the text book.

On the other hand, the workaholic's IC is relatively flat, showing that this individual will give up small amounts of income for an extra leisure hour as work is very important to the individual. See figure 2.11(b)

Budget constraint:

- Although every individual has many ICs, he or she is constrained by the amount of money that is available and the number of hours available in a day. This is illustrated by the budget constraint (BC) line, showing various combinations of income and leisure hours that an individual can enjoy, given a specific wage rate.
- See figure 2.13 for an illustration of the BC line.
- The BC line is downward sloping.
- The BC line shifts parallel upwards if there is an increase in non-labour income. See page 41 and figure 2.14 for an illustration and explanation.
- The BC line can swivel or rotate upwards along the y-axis as the hourly wage increases. See figure 2.15.

Utility Maximisation:

- The individual's preferences (shown by the IC) and their BC line can be combined to determine the individual's utility maximising position.
- Figure 2.16 shows how maximum utility is achieved at the point where the IC just touches the BC line, at point "O". This is called the **utility maximising point**.
- All leisure bundles on the IC "U1" and "U2", although feasible, the individual cannot achieve maximum utility. By moving to line "U3" income and leisure time are increased. **Maximum utility** is achieved at the point where the IC just touches the BC- shown by point "O".

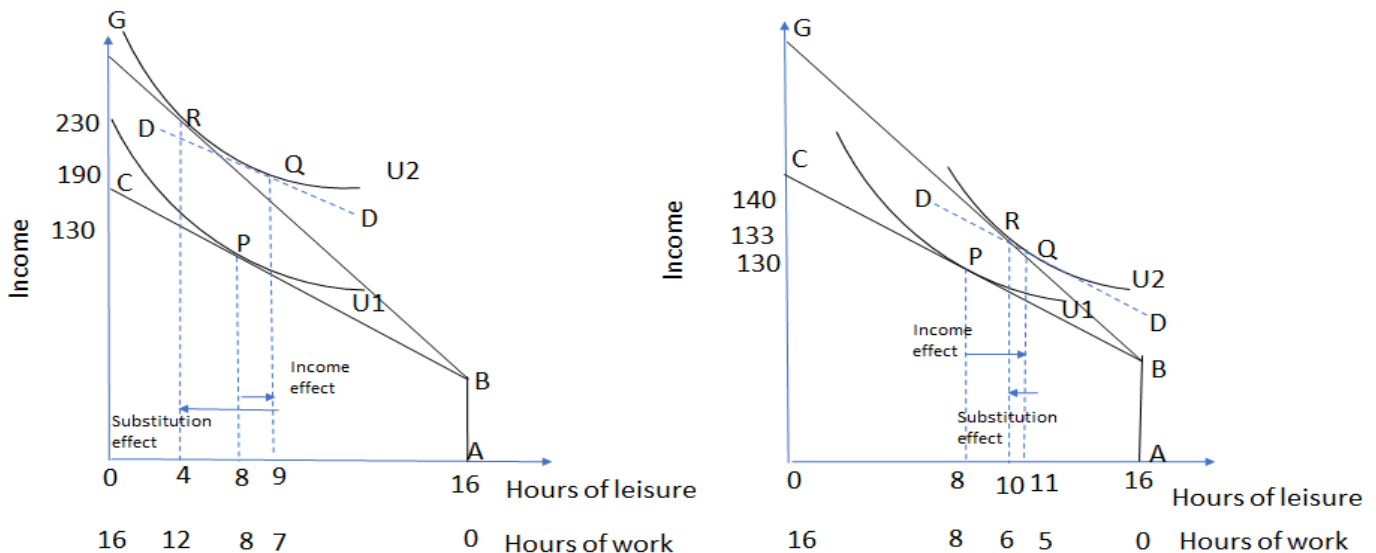
Income effect with a non-labour income increase:

- The impact of an increase in non-labour income is examined.
- The impact of the increase in non-labour income on work hours could be positive or negative, depending on whether leisure is regarded as a normal good or inferior good.
- The *income effect* represents the impact of the change in non-labour income on work hours (holding wage constant).
- In figure 2.18(a) it is assumed that leisure is a normal good. That means demand for leisure increases as income increases.
- The new equilibrium "R" lies to the right of the original equilibrium point "P".
- In figure 2.18(b) it is assumed that leisure is an inferior good. That means demand for leisure decreases as income increases.

- The new equilibrium “R” lies on the left of the original equilibrium “P”.
- In both cases in figure 2.18 the income effect takes place.
- The substitution effect happens only when there is a wage change.
- An increase in non-labour income would lead to a leftward shift of the supply curve if leisure is a normal good, but a rightward shift of the curve if leisure is an inferior good, as shown in figure 2.19.

Substitution and income effects with a wage increase:

- The impact of the increase of the hourly wage rate
The effect of an increase in wage on work hours (Figure 2.20)



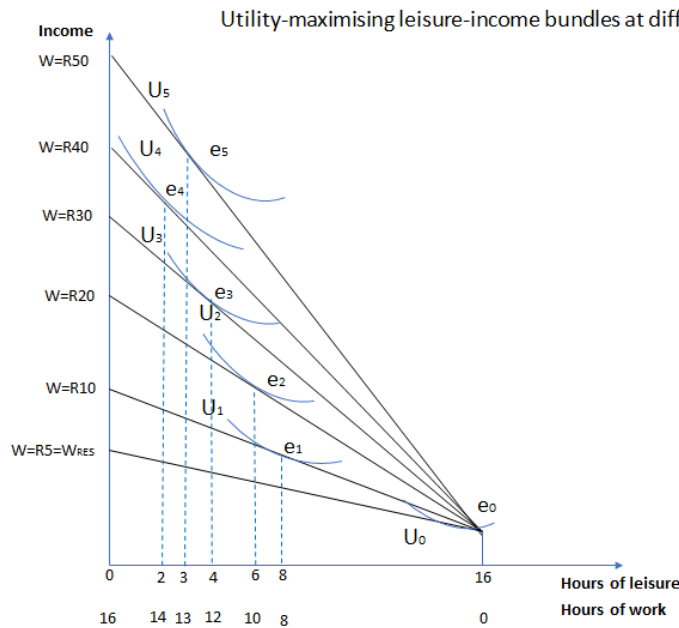
a. Substitution effect dominates

b. Income effect dominates

- Figure 2.20 shows that the individual initially works 8 hours per day, earning a total of R130, obtaining utility of “U1” and equilibrium “P”. An increase in the hourly wage causes the BC line to swivel along the y-axis from BC to BG.
- The impact of wage increase on work hours could be positive or negative depending on whether the substitution effect or income effect is more dominant.
- In figure 2.20(a), the wage increase results in the person moving from the equilibrium “P” to “R”. At point “R” the person works longer hours but enjoys shorter leisure. Their utility also increases from “U1” to “U2”.
- In figure 2.20(b), the person moves from “P” to “R” as a result of wage increase. At point “R” the person works shorter hours but increased leisure hours. Their utility also become higher at “U2”.
- Figure 2.20(a) and 2.20(b) show that the relationship between the wage rate and work hours is ambiguous because of the relative strength of the income and substitution effects.
- The movement from “P” to “R” represents the total effect of wage increase on work hours. This happens in a 2-step procedure to break down the impact of wage increase into income and substitution effects.

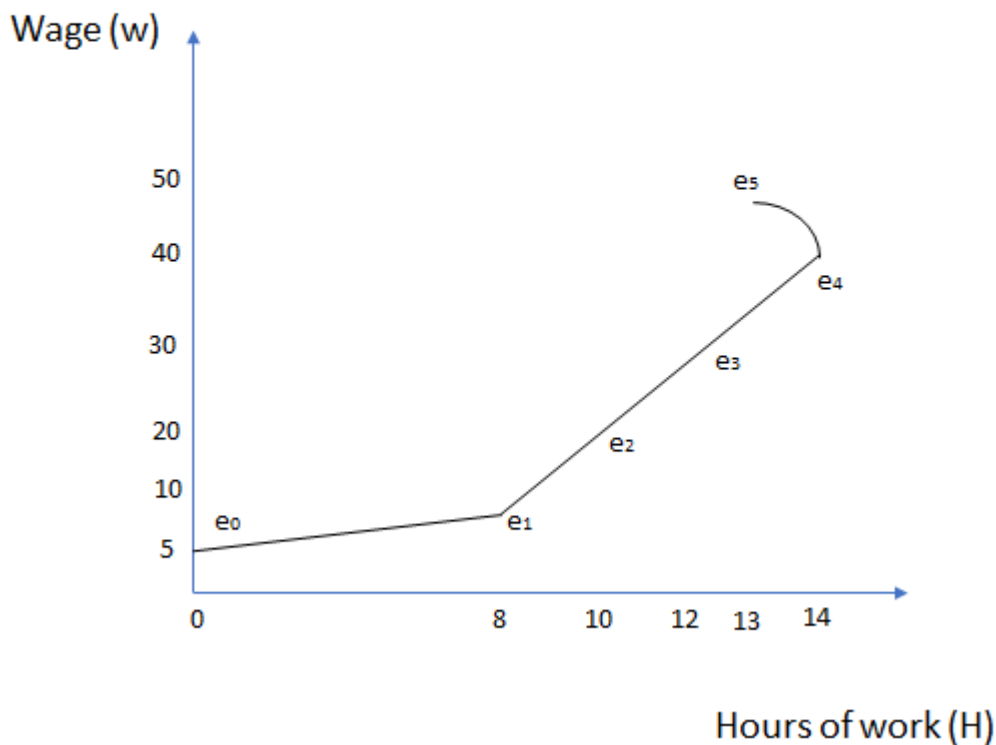
The individual labour supply curve:

- To determine what happens to the labour supply as wages increase or decrease. This assumes that an individual can choose how many hours he or she wants to work.
- This is illustrated in figure 2.24. Each higher wage rate results in a steeper budget line.



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- The tangencies of these budget lines with the ICs result in a series of utility-maximising points (**NB**. See page 48-49 of the text book).
- Hours of work can be plotted against wages using the information in figure 2.24 and this is done in figure 2.25.

Derivation of individual labour supply curve (Figure 2.25)



The market supply of labour:

- These factors result in the backward –bending part of the labour supply curve disappearing.
- Therefore, for the labour market overall, higher wages normally result in a higher number of workers supplied.
- In other words, the market labour supply curve is strictly upward sloping.
- The magnitude of the changes in supply can vary. This will depend on the responsiveness (elasticity) of the supply of labour to changes in wages.
- The more elastic the supply of labour, the more the supply of labour will increase with an increase in the wage rate.
- Factors that have an impact on labour supply are summarised in Table 2.12

The demand for labour:

- The demand for labour is a *derived demand*. This means that it depends on the consumer demand for the product produced by that labour or service provided by that labour.
- The demand for labour therefore is influenced by the price of labour and by increases or decreases in the demand for the product or service produced by the labour.
- It is also influenced by other factors such as the market value of the product and by how much of the product is produced by the labour (or the productivity of each worker).
- The relationship between labour demand and price of labour (i.e. the wage rate) can change over time.
- If the wage rate increases sharply, an employer can start replacing labour with machinery.
- The short-run and the long-run demand for labour differ.

The responsiveness of demand for labour to economic growth seems to change over time.

The measurement of employment:

- Population census and community survey
 - May not be precise and reliable
 - It does not measure properly the number of people in the informal sector as there are not enough detailed questions to determine informal sector activities.
- Sample surveys among businesses
 - Statistics South Africa uses the *Quarterly Employment Statistics (QES)* to measure employment among businesses in the *formal* sector in South Africa.
 - The QES excludes working proprietors and own-account workers and other employees who are not remunerated through the firm's payroll.
 - Employment by small enterprises and casuals, subcontracted and irregular forms of employment are often unrecorded.
- Household labour surveys
 - This is another source of data on employment.
 - Different names are used to indicate the use of different survey methodologies:
 - The October household survey (OHS)
 - The labour force survey (LFS)
 - The quarterly labour force survey (QLFS)
- It is difficult to measure employment in SA due to problems in measuring informal activities, small enterprise employment, irregular forms of employment and employment in some important service sectors.

Please read page 59-60 of the prescribed textbook for details on the different measures of employment and their shortcomings.

Employment in South Africa :

- Underemployment
 - Visible underemployment- people are working fewer than normal hours and are looking or desire more or full-time work.
 - Invisible underemployment- misallocation of labour resources such as underutilization of skills.
- Labour absorption capacity- this is the percentage of new entrants to the labour force that finds a job in the formal sector of the economy.
 - When deriving this capacity, only employees in the formal sector are counted.
- There has been a drop in the number of new entrants to the labour force who find work.
- Employment elasticity of economic growth- it shows the sensitivity of employment to changes in economic growth. It is also called :
 - The employment coefficient
 - The employment output ratio
 - It is the extent of the responsiveness of employment to changes in economic growth
 - It is measured as : $\text{Employment elasticity of economic growth} = \frac{\% \text{ change in employment}}{\% \text{ change in economic growth}}$
- Capital and labour intensity- The extent to which an economy is becoming more or less labour intensive can be measured in two ways:
 - By determining how many jobs are being created by every million rand of production
 - By considering changes in the capital-to-labour ratio over time
 - The capital-to-labour ratio is the ratio of the capital employed at any particular date which is calculated as follows: **$\text{Capital/labour ratio} = \frac{\text{fixed capital stock}}{\text{total employment}}$**
- One of the most important factors that influences the capital-to-labour ratio or the substitution of labour by capital, is the relative cost of labour and capital. The more expensive the labour relative to the cost of capital, the more labour will be substituted by capital.

The informal sector:

- The way in which the informal sector has been defined and measured has changed over time.
- The informal sector has been defined in the following ways (see page 73 of the textbook):
 - Dualistic approach
 - Continuum approach
 - The statistically unrecorded part
- The informal sector plays an important role in any developing country, especially where there is no developed system of social security.
- Although to some extent, the informal sector alleviates the problem of economic inactivity, it does not solve the problem of poverty and low standards of living.
- Studies have found that the informal sector in South Africa is relatively small compared to other developing countries, however this conclusion is not shared by all researchers.

Deriving the Demand for Labour:

- Labour demand curve is a **derived demand** from the demand for the product produced or service provided by the employee.
- The demand for labour **is indirectly determined** by economic conditions (e.g. expansionary or restrictive fiscal and monetary policies, domestic or foreign economic conditions which in turn determine the demand for goods and services).
- The demand for labour is also **directly determined** by the cost of labour, and the productivity of labour. These determinants influence the price at which the final product can be sold.
- The market demand for labour can be deduced from the demand for labour by the individual employer.
- It is assumed that **perfect competition** takes place, unless stated otherwise.

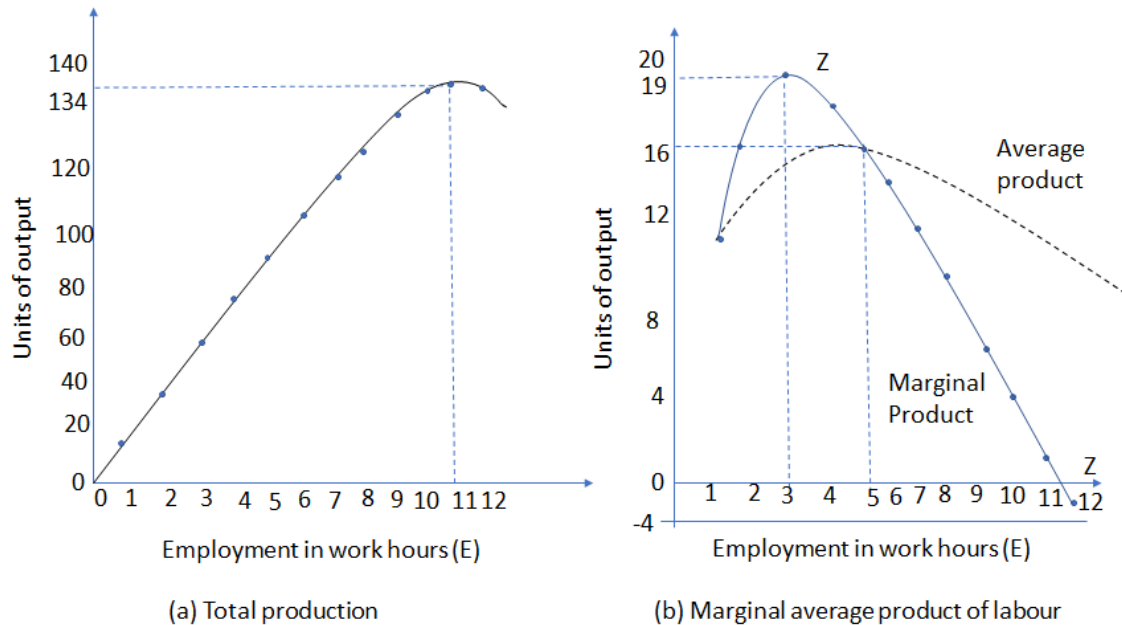
The production function:

- It is assumed that there are 2 inputs in the production process: Number of work hours hired by the firm (E) and the aggregate number of units of capital (K) which includes land and machines.
- In the derivation of the short-run labour demand, capital is assumed to be fixed.
- Total production (TP) of an employer normally increases as more labour hours are appointed.
- However, if other factors of production such as space, machinery, etc. are not increased, the workers will start crowding each other as more and more additional workers are employed. This crowding will result in smaller and smaller additions to total production as workers start crowding each other.
- Eventually, there will be a point where **the employment of more workers will NOT lead to increased production**. The additional workers might even end up standing around with nothing to do, as there are insufficient machines or space for them to use.
- The above conclusion is the basis of the **law of diminishing marginal product**.
- **Marginal product of labour (MPE)** is the change in production due to employing one additional unit of labour, holding capital constant.
- *the assumption* is that all workers provide equal labour.

The Law of diminishing marginal product:

- the **law of diminishing marginal product** refers to the amount of extra (or marginal) production when successive additional extra units of one input (e.g. labour) are added, keeping other inputs constant.
- Read page 78-79 of the prescribed textbook
- the **law of diminishing marginal product** states that as successive units of one input are added to a fixed amount of capital, total production reaches a level beyond which marginal product of that variable input declines.
- Figure 3.7 a (Total production curve) illustrates the **law of diminishing marginal product**

Figure 3.7 Total production and marginal production



- One labour hour produces 11 units of wheat
- Additional labour hour produces 27 units (16 extra units are the marginal product of the 2nd worker)
- The third additional labour hours increases production to 46 units (19 extra units produced by employing 3rd additional labour)
- The fourth additional labour hour produces 64 units (18 extra units produced by employing worker 4)
- Total product increases from 11 to 134 and then diminishes from 134 to 133 as the employer keeps appointing an additional labour hours.
- Simply stated, the law of diminishing marginal product means that as successive units of one input (e.g. labour) are added to a fixed amount of another input (capital), a level of total production is reached beyond which the marginal product of that variable input declines.
- Figure 3.7 b (Marginal product curve) illustrates how marginal product increases with the addition of a second worker and thereafter the increase in total product starts to diminish.
- If another worker is added after the eleventh work hour, the marginal product of that worker will be negative. i.e that worker will cause total production to decline to less than 134 units.
- **Average production** is total production divided by the number of workers.
- The segment labelled “ZZ” in figure 3.7 b, forms the basis for the short-term demand for labour (but only after another factor (product price) has been added).

Short-run demand for labour:

- Now we consider what happens when prices are added.
- The prices that are added are the price for the product and the labour price (i.e. wage).
- The price of the product multiplied by the quantity produced equals the **revenue of the producer**.

- The **value of marginal product of labour** (VMPE) is the change in the total revenue resulting from employing an additional worker, holding capital constant.
- In other words, the **value of marginal product** is marginal product of labour multiplied by the price of the product. i.e. $VMPE = P \times MPE$
- The increase in revenue (VMPE) becomes smaller and smaller as more workers are employed due to the law of diminishing marginal product. This means that every additional worker benefits the employer less and less.
- *Another assumption* is that in a fully competitive market, the number of units supplied by any one employer to the market will not change the price of the units.
- To maximise profit, the employer will employ additional workers for as long as their contribution to the total income of the firm is MORE than what they cost the firm.
- The employer will not employ additional workers if they cost more than what they produce for the firm.
- Employers will employ additional workers for **as long as that worker's VMP is higher than his or her marginal cost** (i.e. wage).
- Employer appoints additional workers **up to the point where VMP is equal to marginal cost**.
- If marginal cost declines, employer will be willing to employ more workers, because marginal cost will be lower than the VMPE. Employer will be making additional profit from employing more workers.
- Figure 3.8 (VMPE),
- Shows a downward sloping VMPE .
- Illustrates that as each additional worker is employed, his additional contribution to total production will be smaller than that of the previous worker.
- Figure 3.8- assuming that wage rate is R95, the employer hires 3 labour hours.
- The employer will make zero profit if he employs more than 3 labour hours, because at this point, VMPE of the third work hour is equal to wage rate. ($VMPE = w = 95$)
- If employer appoints the 4th labour hour, the employer will reduce his profits. (the VMP of the next worker will be less than the prevailing wage rate of R95)
- If wage falls to R40, the 4th to 9th labour hour will produce more than the R40, which means more profit for the employer.
- **The firm's short run demand for labour can be indicated by the downward sloping VMPE curve.**

The long-run demand for labour:

- The decision regarding how much capital and how much labour to use depends on the price of both capital and labour.

Isoquant curve

- Isoquant curve illustrates the following: Assuming that labour and capital can be substituted, a firm can use various combinations of labour and capital to produce the same amount of output.
- This is illustrated in figure 3.11
- Points A, B, D, E and G produce the *same* level of production by using different combinations of capital and labour.
- To produce a higher level of output, the firm will have to increase the combinations of both capital and labour, moving from a lower “q1” isoquant to a higher “q2” isoquant.

Properties of isoquants

1. They are downward sloping, indicating that as input of employment increases, the input of capital declines, producing the same output.
2. Higher isoquants are associated with higher levels of output.
3. They are convex to the origin, indicating that capital and labour are not perfect substitutes.
4. They do not intersect

Isocost curve

- Figure 3.13 illustrates the firm’s cost of production which consists of the cost of capital (R) and the cost of labour (W).
- The firm’s total production cost is $C = WE + RK$
- Line BD shows all the capital and labour combinations with equal cost.
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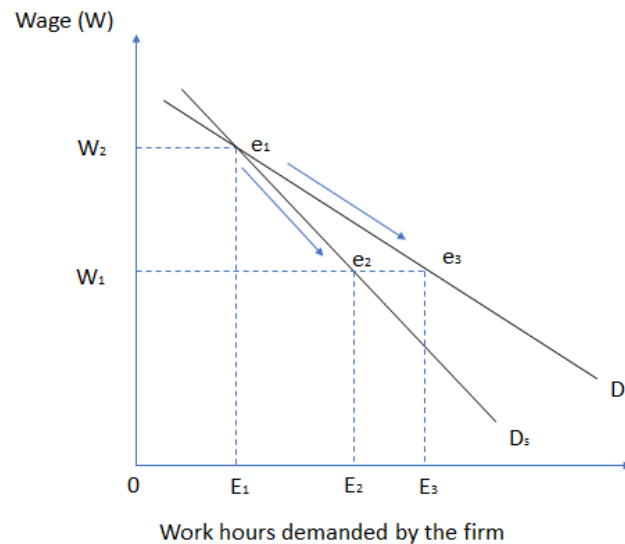
Profit maximisation

- Profit is maximised at the point where a firm produces a specific level of output at the lowest cost.
- At point e1 (which is the best combination of capital and labour to produce q1), the isoquant curve is tangential to the isocost curve. Figure 3.16
- Points T and S are not profit maximising positions as they lie on a higher isocost line (and represent a more costly option).

The elasticity of labour demand:

- In the short term, the demand for labour is affected only by a change in wages
- This affects the employer’s production costs, which in turn influence the price of the product and therefore the demand for the product.
- In the short term, the employer cannot replace labour with machinery to recover the increase in wages
- However, in the long term, the employer might replace labour with capital (machinery).
- The elasticity of labour demand measures the responsiveness of the quantity of labour demanded to changes in the wage rate, **or** the percentage change in work hours demanded by the firm associated with a one percentage change in wage rate.
- This means that over the long term, the demand for labour will be more sensitive (or more elastic) to changes in wages than in the short term.
- The firms’ long-term curve is therefore described as being more elastic than the short-term curve. See figure 3.21.

Figure 3.21 The firm's short-run and long-run labour demand curves



- Line D_s represents the short-term (inelastic) demand for labour and D_t the long-term (elastic) demand.

The market labour demand curve:

- This CANNOT be an aggregation of the individual demand curves, because as the output of the market as a whole changes, it will impact on the price of the product.
- Labour demand curve is D_1 . Assuming there is a decline in the industry wage rate (from R30 to R15), the industry increases its output and thus its quantity of labour demanded (from 20 to 40). The VMPE or labour demand curve shift to the right.
- However, the industry price of the product would have to be reduced in order for the firms to sell the higher output.
- The lower price reduces the VMPE shifting the labour demand curve to the left from D_1 to D_2 .
- This means that the demand for labour only increases only to 30 and not to 40.
- This means that for the whole market, when the wage drops to R15, the quantity of labour demanded by the firms in the market increases to 60 ($=30+30$) instead of 80 ($=40+40$).
- The market labour demand curve, which is steeper is at ZZ instead of DD . See figure 3.23b
- The steeper curve means that the demand for labour will not be affected as much by a wage increase as when an individual employer is involved.
- Wage increase through sectoral bargaining institutions, such as bargaining councils, thus reduce employment to a lesser extent than if the same wage increases were achieved through bargaining councils at individual company level.
- However, on a broader scale, because employers are able to increase prices in response to a wage increase across the sector, it has a negative impact on the non-participating consumer and work-seeker, and eventually probably the economy.

More factors that determine elasticity of labour demand:

- The market labour demand curve is downward sloping, meaning there is an inverse relationship between the wage and the quantity of labour demanded.
- Factors that influence labour demand in South Africa includes; the rate and nature of economic growth, trade liberalisation, the impact of unions and bargaining councils on labour costs, labour legislation that increases the indirect costs of labour or hinders productivity increases. See pages 95-97.
- For other factors affecting the market labour demand, see Table 3.20 on page 96.

: Wages and the cost of labour

The determination of wages

There are many ways to determine wages in a market economy

Some of the most important ways of determining wages are as follows:

Determination of wages in a perfectly competitive labour market

- This is when an individual employer and individual employee agree, for example by making use of an employment contract.
- This is an example of market forces operating and an assumption of a perfectly competitive (PC) market.
- This is the *predominant method* for wage determination in certain sectors. e.g. agriculture, domestic service, casual and unregulated employment, and enterprises that are not covered by the trade unions or bargaining councils.
- Even so, some of the above listed sectors are unable to set wages freely. The wages are set according to a minimum wage.
- In PC markets, employment and wage levels are determined by the equilibrium between labour demand and labour supply.
- Wage rates are driven up when there is excess labour demand because of increased production. As wage rates go up, the supply of labour will increase until equilibrium is reached.
- Wages are driven down due to an excess supply of labour (unemployment). Decreased wage rates result in a decline in labour supply and increased labour demand, until equilibrium is reached.

Determination of wages in a monopsony labour market

- A monopsony is a market characterised by an employer setting wages by adjusting the number of workers he or she hires.
- This occurs when there is one employer or there is collusion amongst employers in a certain market to fix wages.

- A monopsony can develop in instances where there is a large company employing majority of workers in a particular occupation.
- Another instance where a monopsony can develop is where employers unite where paid wages are concerned. e.g. bargaining councils.
- Equilibrium might be reached where both wages and employment are lower than they would have been in a PC market.

Determination of wages in a segmented labour market

- Some segments of the labour market cannot be explained by the above-mentioned models.
- An example is that of tightly controlled access for medical doctors in the labour market.
- Furthermore, factors and internal rules within organisations instead of market forces determine wages and allocation of labour. e.g. appointment within an organisation is determined by internal promotion rather than open competition among all candidates.
- Discrimination against certain groups can also persist over time.
- The **segmented labour market theory** was developed to explain these phenomena.
- According to this theory, the labour market is permanently divided into a number of segments, each with its own characteristics and mode of operation, and with little or no mobility between them.
- In these segments, market forces **do not always** play the major allocative or pricing role. This allocative or pricing roles can be played by institutional forces, such as collective bargaining, which introduces rigidities such as employment security and seniority.
- The interaction between employer and unions also introduces wage structures that are not always related to economic factors and these wage structures differ from one market segment to another depending on the relative union and employer strength.
- **Another characteristic** of segmented labour markets is that access to better segments is controlled and mobility is very restricted. e.g Medical doctors and attorneys.

The dual Labour Market

- This is a special case of **the segmented labour market** which is characterised by two distinct non-competing markets, i.e. the primary and secondary labour markets.
- The primary segment is characterised by formal employment, high earnings, good working conditions and employment stability.

It often consists of large enterprises or segments of the labour market where trade unions play a major role.

The primary market can be divided into a number of internal labour markets, which could refer to individual enterprises or occupations. e.g labour markets for doctors, lawyers and multinational enterprises.

Characteristics of the primary labour market:

- i) Strict access, usually only possible from the bottom level.
- ii) Skilled jobs are more often than not filled by promotion from within the firm
- iii) Bureaucratic, inflexible company rules govern the promotion process. The rules and bureaucracy are possibly established through collective bargaining.
- iv) Due to significant job security, the internal labour market lacks the mechanism for allocation and pricing of labour.

Employers in the primary market spend a lot of money training their workers, partly due to pressures to improve skills and productivity which can be attributed to high and rising wages.

- The secondary segment is where workers “on the outside” have little or no job security, little promotion prospects and poor working conditions.
- Jobs tend to be informal and pay low wages and are unstable.
- Secondary segment enterprises are usually over-competitive, small-scale, labour intensive, and have low levels of unionisation.
- Employers have little motivation to train workers.
- The low level of skills means that employers have little incentive to stabilise employment patterns.
- Examples of secondary segment jobs are domestic workers, janitors, cleaners and other menial jobs.
- Workers in the secondary market tend to be trapped “on the outside” with little chance of entering the internal labour market, and education and training by the government doing very little to increase the workers’ earnings
- The **dual market theory** suggests income inequality cannot be significantly reduced by investing in education and training unless workers in the secondary market are

assimilated into the primary market. e.g. through policy measures that reduce discrimination.

Also see boxed section on pages 106-107.

Determination of wages through collective bargaining

- This is where unions and employers or groups of employers bargain collectively on wages and other conditions of employment.
- This can occur at enterprise or sectoral level. e.g within a bargaining council.
- Power balance between the parties is one of the factors that determine the outcome of collective bargaining. Market forces also play an important role.

Government involvement and influence

- This can take place in a variety of forms:
 - i) the government can set an example as the largest employer in determining the wages of its employees
 - ii) legislature and determining minimum wages
 - iii) and legislative measures which protect and encourage centralised collective bargaining.
- Legislation affecting other employment-related issues can also impact wages.
- For example, legislation reducing working hours can affect wages as unions try to prevent a reduction in the take-home pay of their members or as employers try to avoid an increase in the hourly production cost.

Communes and Communism

- The “pure” commune is based on two principles:
 - i) There is social, collective or public ownership of physical capital and property. This is a system called *socialism*. This principle was extended to include state ownership in the Soviet Union and entail authoritarian central economic planning and decision making.
 - ii) Consumption, which also includes payment for production efforts (e.g. wages), separated from productive effort.

The pure commune functions in terms of the principle *from each according to his ability- to each according to his need*.

Wages would therefore not be determined through the normal way of joint operation of market forces, productivity and collective bargaining.

Other methods of wage determination

- These methods entail the use of incentive pay systems, e.g. representation at the decision-making levels in the company, merit awards, productivity or production-linked pay, or profitability-linked remuneration.

Earnings in South Africa

- The main source of data on these earnings is Statistics SA surveys. Another source is the record of graduates' earnings compiled by the HSRC. Private organisations also compile this data.

Average salaries and wages in South Africa

- Between 2005 and 2016, current earnings in the formal sector increased faster than inflation. During this period, labour productivity also increased.

Non-wage labour costs

- This refers to worker benefits such as overtime pay, housing allowance, transport allowances and unemployment insurance contributions, medical aid, etc.
- See page 110 of the textbook.

The income of graduates

- Graduates in the public sector earn less than their counterparts in the private sector, although the gap appears to be narrowing.
- While male graduates in the public sector earn about half of their self-employed counterparts.
- Self-employed graduates earn more than those in the private sector.
- Those with postgraduate qualifications earn the highest.

Share of employee remuneration in national income

- SA's national income and production accounts measure the total share of employee remuneration in the national product.

Wages and inflation

- Real wages of workers in South Africa have increased over time.

- This means that money wage (also known as nominal wages) increased at a higher rate than the inflation rate.
- The question in economics then becomes: Whether the high increase in money wages (often due to collective bargaining) might not cause inflation to increase, **or** whether wage increases are high only because inflation is high.
- Before attempting to analyse this question consider how inflation is measured- see boxed section on pages 112-113.
- **Definition of inflation**- annual rate of increase in the general price level
- Price levels are determined by using a price index (i.e. the CPI)
- The Consumer Price Index (CPI) is the most common measure of inflation.
- CPI shows how the average price level of all goods and services bought by a typical household changes over time (i.e. a “basket” of goods and services).
- The inflation rate obtained by including the complete basket is called Headline CPI, or the official inflation rate.
- CPI is generally used to determine the national inflation rate of the country.
- CPI excludes the investment component of home ownership.
- Producer Price Index – is another measure of inflation that might be used for specific purposes such as determining the inflation rate for producers.
- Wage levels are usually adjusted upwards during inflationary times to keep up with increases in the cost of living.
- Price increases therefore result in wage increases.
- At the same time, an increase in wages might also cause prices to rise because wages are an important cost element in determining prices.
- Even if unionised sectors do not make up the majority of workers, wage and therefore cost increases might be transmitted to other sectors (i.e. have a spillover effect).
- Wages and price levels are influenced by many factors.
- For example, wages are influenced by prices, education level, discrimination, productivity, legislation, and so on.
- Prices are influenced by the exchange rate, monopoly conditions, prices that are set by public enterprises, government expenditure, high growth in money supply, etc.
- In general, the following can be concluded regarding wage and inflation:

- i. Over the long term, expansionary fiscal or monetary policies or supply shocks can significantly impact the rate of inflation;
- ii. Unions do not appear to be the basic cause of inflation;
- iii. Unions do appear to perpetuate existing inflation and increase the difficulty of reducing inflation once it has begun.

First-round inflation- refers to external price shocks, such as rapid currency exchange depreciation or a spike in the internationally-set price of oil.

Second-round inflation- refers to how the domestic economy responds to the external price shocks, and the SARB can influence this by way of interest rate.

Wage differentials

A competitive labour market is characterised by wage or pay differentials.

Wage differentials (WD) exist between industries, different classes of employees in the same industry or between geographic areas.

WD can also refer to differences in wages paid for similar work, in which case this is likely to be discriminatory.

A few reasons for these differentials are as follows

- a. Unfair discrimination
- b. Educational differentials
- c. Intersectoral differentials
- d. The degree of unionisation
- e. Size of enterprise
- f. Age or experience
- g. Working environment
- h. Occupational differentials

NB. – Please make sure that you go through the above listed reasons in the text book. Make sure you understand what they are. You can write a few lines on each. (pages 114-117 of the prescribed textbook).

The trade-off between wages and employment

The impact of wage increases on employment (see pages 117-119)

Hypothesis- an increase in wages leads to a decrease in employment.

Critique- other factors do play a role, such as developments in productivity.

The impact of high unemployment on wages- Unemployment will lead to competition for jobs. (see page 119 for discussion)

Will high wages increase economic growth? (see page 119-120)

The impact of labour laws on the cost of labour.

Various labour laws can increase the cost of labour and thus have a negative impact on employment. However, the broad impact the legislation should be considered more thoroughly.

Basic conditions of employment act (BCEA)

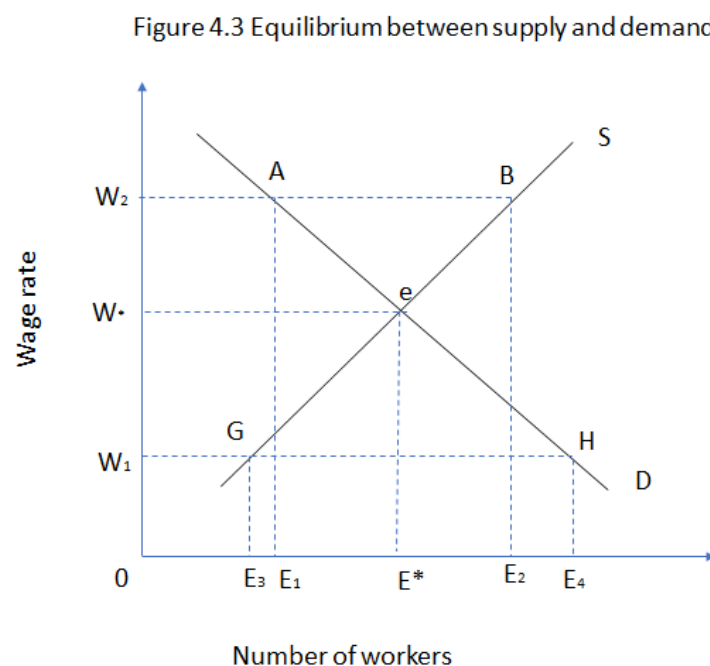
Hours worked

Minimum wages

Labour relations act (LRA) and other laws (employment equity act (EEA))- See page 122 of the textbook for discussion

Determination of wages in a perfectly competitive labour market

Figure 4.3- Equilibrium between supply (S) and demand (D) curve



- The functioning of the perfectly competitive market can be studied by considering the interaction of the supply and demand curves.
- Assumptions of a perfectly competitive labour market
 - In this market, all workers and all jobs are homogeneous.

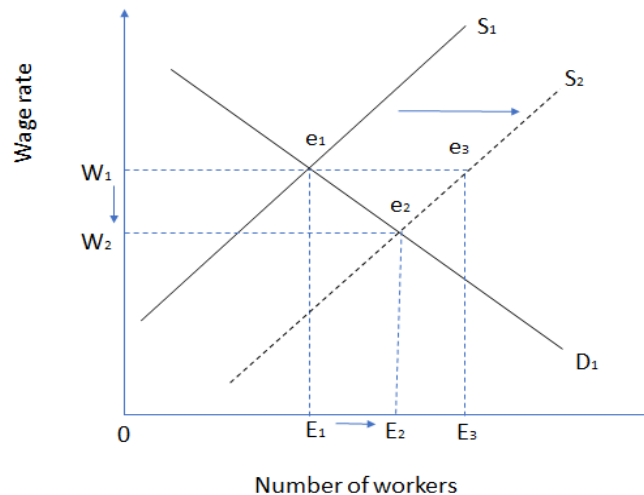
- Information on the labour market and the availability of skills and of vacancies is immediately available without cost.
 - Workers are perfectly mobile.
 - There are no wage differentials
-
- Supply curve is labelled S and demand curve is D, the market will stabilise where S is equal to D, at point e (equilibrium).
 - At point e the wage is W^* and employment E^* . This equilibrium point is also known as the *market clearing* level.
 - Consider wages that is higher than W^* , (e.g. W_2). Reading the graph from point A and B, quantity supplied has increased to E_2 and quantity demanded has decreased to E_1 .
 - The excess of the labour supplied (i.e. Oversupply of labour) is the distance between points B and A ($E_2 - E_1$).
 - Some job-seekers will be willing to accept a lower wage and at this lower wage and employers will demand more workers.
 - This reduces both the wages and oversupply. This will happen until equilibrium is reduced at point e.
 - It also means that a lower wage rate than W^* , such as W_1 , will mean an undersupply, excess demand or shortage of labour (which is equal to $E_4 - E_3$ at W_1 , by looking at G and H), and employers will bid wages up to the equilibrium or market-clearing level.

Shifts in the S and D curves

- Assuming that there is an exogenous shock to the labour market
- E.g. immigration, increasing the number of workers

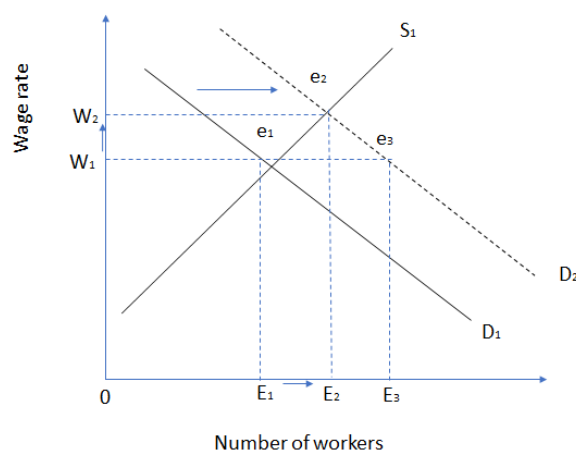
- This would shift the labour supply curve from S_1 to S_2 (Figure 4.4).

Figure 4.4 Impact of increase of market labour supply on wage and employment



- While still at wage W_1 , there will be an oversupply of workers, shown by the excess ($E_3 - E_1$).
- Workers will bid down wages and the quantity supplied of labour will decrease.
- Because of lower wages, employer will employ more workers, i.e. increasing the quantity demanded. Eventually a new equilibrium will be reached where quantity supplied, and quantity demanded are equal, i.e. at point e_2 .
- Wages will be at level W_2 , and employment at E_2 , that is, wage decreases, and employment increases because of the increase of market labour supply.
- Similarly, the demand curve can also move to the right or left.
- For example, the increase in labour productivity will increase the demand for labour, causing the rightward shift of the labour demand curve. This will cause excess demand for labour, which will increase the wage rate (from W_1 to W_2) and employment (from E_1 to E_2). This is shown in Figure 4.5.

Figure 4.5 Impact of increase of market labour demand on wages and employment



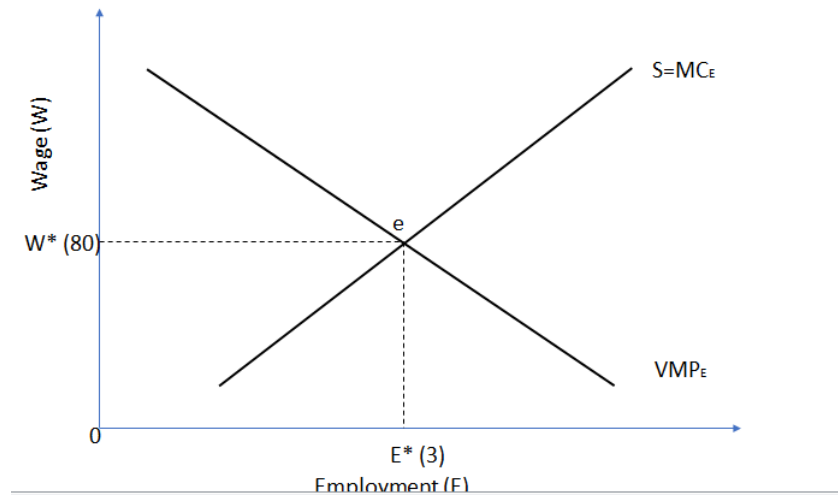
- It is also possible for both market labour supply and labour demand to change simultaneously. For example, if both labour supply and labour demand increase, both forces have the same positive impact on employment but their combined impact on the equilibrium wage is uncertain, as an increase in labour supply reduces, *ceteris paribus*, while an increase in labour demand increases wages *ceteris paribus*.
- Whether the equilibrium wage would rise, fall or remain unchanged depends on the relative magnitudes of the changes in labour supply and demand.

Determination of wages in a Monopsony market

- A monopsony market occurs when there is only one employer or where there is collusion or cooperation between all or most employers in a certain market to fix wages at a certain level and not to hire away each other's employees.
- A monopsonist is therefore a wage setter and can influence wages by adjusting the number of workers he or she hires.
- A bargaining council is also a form of monopsony as all employers in the council form a united front in respect to wages and can be regarded a single employer.
- A monopsonist market drives wages up if it expands employment.
- The monopsonist ends up having to entice each worker into the labour market by paying a higher wage than the previous wage, because the *reservation wage* of that worker is higher than that of the previous worker.

Figure 4.6 Discriminating Monopsonist

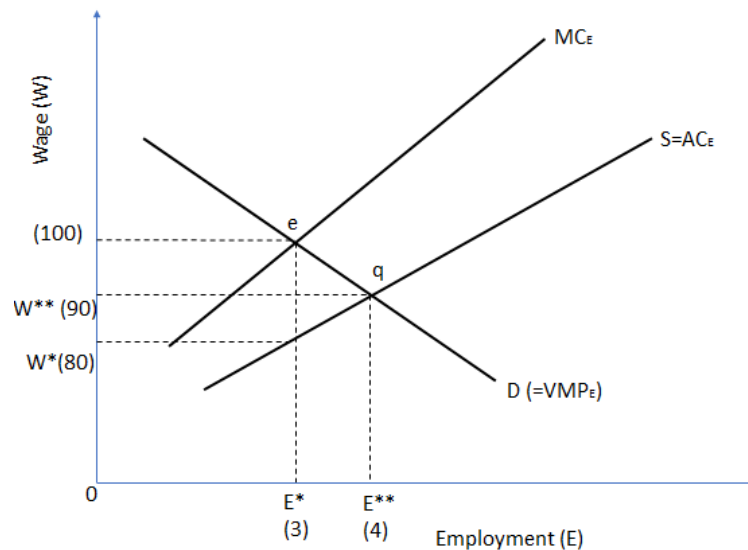
Figure 4.6 The perfectly discriminating monopsonist



- The monopsonist pay workers their reservation wages, which means each next worker will get more than the previous worker.
- The graph illustrates that the Marginal Cost (MC) of the discriminating monopsonist will be equal to the supply curve of labour.
- Representing the fact that the employer pays the worker his or her reservation wage and can hire different workers at different wages.
- The value of marginal product of labour (VMP_E) of the monopsonist is indicated in figure.4.6
- Equilibrium is where the marginal product obtained from employing an additional worker is equal to the marginal cost (MC) of employing that worker (i.e. the wage of that worker).
- This is where $VMP_E = MC$, indicated by point e .
- Note that only the last worker to be employed will earn this wage (W^*), and all the other previous workers will earn a lower wage.

Figure 4.7- Non-discriminating monopsonist

Figure 4.7 The non-discriminating monopsonist



- A non-discriminating monopsonist is the employer that pays all his workers the same wage for the same job even if they were able to recruit some at a lower wage rate.
- The cost of employing an additional worker becomes quite expensive for non-discriminating monopsonists.
- First, the non-discriminating monopsonist has to pay the additional worker a higher wage in order to attract him/ her.
- Second, since the non-discriminating monopsonist is a non-discriminatory employer, in addition to the above payment, he will have to increase the wages of all other workers to that same level.
- The employer's total cost of employing an additional worker (the marginal cost) will therefore be: the wage of the additional worker *plus* the cost of increasing the wages of all existing workers.
- The marginal cost of employing that additional worker will therefore be higher than the wage of the particular worker.
- The wage of this worker is also the wage of all the workers, which is the average wage.
- If the marginal cost of the last worker is higher than his wage, then the marginal cost will also be higher than the average cost of all workers.
- This is shown in figure 4.7, where MC_E is the marginal cost curve and AC_E is the average cost curve.
- The MC_E curve lies above the AC_E curve to indicate the higher marginal cost involved in employing additional workers.

- In order to maximise profits, the monopsonist must make sure that its $MC = VMP_E$ (which is the marginal product). This it will employ E^* workers.
- Profits will be maximised because if the monopsonist employs fewer than E^* workers, the value of marginal product produced by the employment of an additional worker will be greater than the marginal cost and the employer can make more profit by employing more labour.
- However, if he employs more than E^* workers, the marginal cost of the last worker will be higher than the value of marginal product. The employer will then reduce the number of workers to reduce costs until the marginal cost of a worker is equal to the value of marginal product produced by the worker.
- In an employer employs E^* workers, he will pay the same wage of W^* to all his workers.
- However, if it were a perfectly competitive market, equilibrium would have been at point q, i.e. Where supply and demand intersect in which case wages would be higher at W^{**} and not W^* , and employment higher at E^{**} and not E^* .
- Clearly, in a monopsony market both wages and employment could be lower than they would be in a perfectly competitive market.

Unions, collective bargaining and minimum wages

➤ Introduction

- One of the most important factors impacting on the free operation of market forces is labour unions.
- They negotiate wages and conditions of employment with one or more employers.
- The outcome of such collective bargaining usually determines minimum wages in an enterprise or even the whole sector.
- However, where unions are absent or not strong enough to ensure proper collective bargaining, the government might intervene to set minimum wages for vulnerable workers.
- There is fear that strong unions might cause wide differentials between the wages of unionised and non-unionised sectors and increase unemployment.
- There is also much debate about whether unions promote or inhibit productivity and flexibility in the workplace.

The right to bargain collectively

- An individual employee and an individual employer do not have equal bargaining power.
- The situation is worsened when the worker is unskilled or when unemployment is high. Because of this unequal bargaining power, it is accepted in most countries and in terms of international labour standards that mechanisms should be implemented to protect the individual employee against exploitation.
- This includes the right to form unions and employee organisations that can bargain with the employer for acceptable conditions of employment.

Factors that determine the outcome of collective bargaining

- The most important factors that determine the relative power of the collective bargaining parties and, therefore, the outcome of collective bargaining are as follows:
 - The *unemployment position* and the effect of the outcome of collective bargaining on employment do not always seem to be important considerations in collective bargaining in SA.
This is in contrast with other countries where employment considerations appear to be much more prominent.
 - *Demand conditions, profitability and productivity* also have an important influence on collective bargaining.
 - The *elasticity of demand* for the employer's product is also an important consideration.
 - In *monopolistic conditions* employers will also grant wage increases more readily because they can usually recover higher costs arising from wage increases by increasing the prices of their products.
 - The *export orientation* of both employers and unions has a significant influence on collective bargaining.
 - The employer's *capacity to deal with a strike*.
 - The *standard of living* of the workers.

- NB! See pages 132-134 of the prescribed textbook for details of the discussion regarding these factors.

The union movement

There is more than one definition of a **trade union**. It is an association of employees that seeks to represent its members' interests within the workplace and regulates the relationship between employees, employers and employer's organisations.

Reasons for joining a trade union

- *Protection from exploitation*: workers bond collectively with other workers to join a trade union to stand against exploitation.
- *Economic needs*: workers focus on their remuneration packages to ensure they earn enough to cover increased living costs.
- *Job security*: many workers join unions to protect their jobs.
- *Political reasons*: unions played a vital role in bringing about the democratisation of South Africa.
- *Social needs*: some workers join unions for comradeship and community acceptance
- *Self-fulfilment*: some trade union members undergo training and may develop skills that they would not have been able to develop in their ordinary daily jobs. For example, some trade union representatives or shop stewards move to management positions within their companies.

Types of trade union

- Craft or skills-based trade unions
- Industrial or sectoral trade unions
- General trade unions
- See page 135 of the prescribed textbook for details.

Factors that have an impact on the strength and influence of unions

- The **strength and impact** of unions are influenced by the following factors:

- Union density: this is the extent to which unions have built a solid base by representing a significant proportion of the workforce.
- The union capacity and organisational capability
- Labour institutionalisation
- Globalisation
- More insecure and atypical employment
- Small business
- Geographic dispersion of production
- Skills composition
- Structural adjustments
- See section 5.3.3 of the textbook for a detailed discussion.

The changing economic environment often linked to globalisation, has created a number of threats for unions and unions have responded to such threats in a variety of ways.

The union movement internationally and in South Africa

- Three trade union federations comprise the bulk of the union membership in SA
 - The Congress of South African Trade Unions (Cosatu)
 - The Federation of Unions of South Africa (Fedusa)
 - The National Council of Trade Unions (Nactu)

The impact of unions

The impact of unions on wages and the cost of labour

- Most researchers accept that unions cause an increased wage differential between unionised and non-unionised sectors.
- The theoretical explanation is that if a union bids up wages in the unionised sector, it may lead to lower employment in that sector.
- This in turn may mean an oversupply of labour in the non-unionised sector, which leads to lower wages there.
- Unions may therefore cause an increase in the wage differential between unionised and non-unionised sectors.
- This is illustrated in figure 5.4.

Assumptions

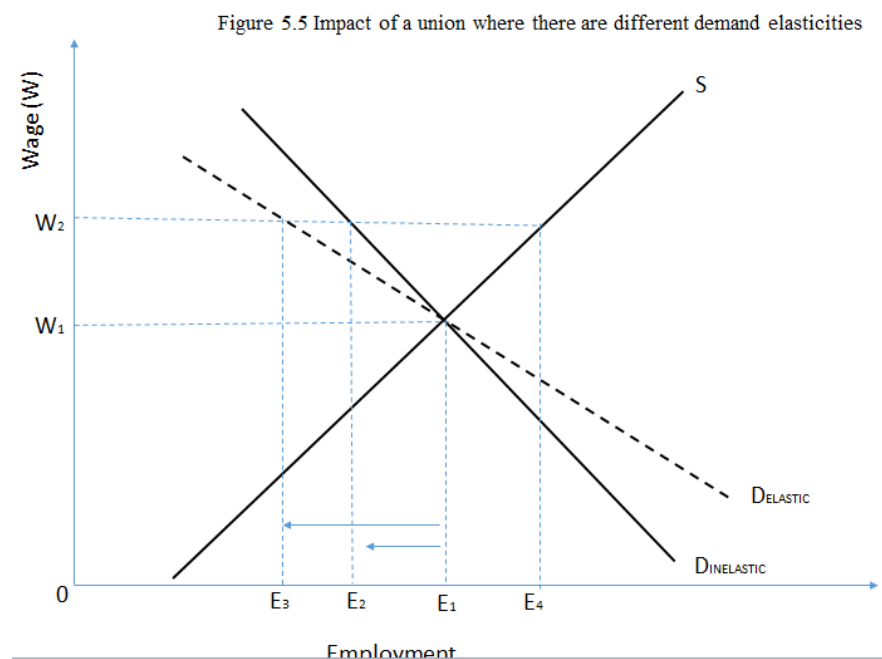
- Exactly $\frac{1}{2}$ the labour market is unionised and the other $\frac{1}{2}$ is not.
 - Labour supply is perfectly inelastic in both sectors.
 - The total labour market equilibrium to start with: in both halves, wages are W and number of workers employed is N . In other words, the overall employment equals $2N$.
 - Unionised $\frac{1}{2}$ (fig 5.4 a) succeeds in increasing wages to W_u
- Further assume that the union in the unionised half (Figure, 5.4(a)) succeeds in increasing wages to W_u . The real union/non-union wage gap is thus $(W_u - W)$
 - However, the wage increase results in employment in the unionised $\frac{1}{2}$ of the market being reduced from N to N_u workers.
 - This will leave $(N - N_u)$ workers unemployed.
 - Assuming mobility is costless, all of the unemployed in the unionised sector now migrate to look for work in the non-unionised $\frac{1}{2}$ of the market. This is illustrated by the rightward shift of the labour supply curve in the non-unionised sector (See Figure 5.4(b)).
 - This will force wages down to W_N in the non-unionised part (which is clearly lower than W_u in the unionised part).
 - Employment in the non-unionised sector increases from N to N_N .
 - Since labour supply is perfectly inelastic, all unemployed from the unionised sector successfully find work in the non-unionised sector, that is $(N - N_u)$ equals $(N_N - N)$.
 - Hence overall employment remains unchanged at $2N$.
 - Instead of the union / non-union wage gap of $(W_u - W)$, it now seems as if the union has caused a wage gap of $(W_u - W_N)$ between the unionised and non-unionised sectors.
 - However, this is the measured gap, which has been caused by surplus labour in the unionised sector migrating to the non-unionised sector.
 - The measured differential of $(W_u - W_N)$ is much larger than the actual differential of $(W_u - W)$. It therefore overstates the impact of the union.
-
- *Spillover effect*- the decline in non-union wages caused by displaced union workers supplying their services in the non-unionised labour market.

- *Threat effect*- another effect union wages might have on non-union wages. It is the increase in the non-union wages that is offered by an employer in the non-unionised sector in response to the threat of unionisation.
- *The superior worker effect*- the higher wages paid by the union firms will cause workers to queue up for the “good” union jobs.

➤ Impact of the elasticity of demand

The extent to which unions impact on employment by increasing the cost of labour depends on the elasticity of demand for labour.

Figure 5.5 (Page 142)



- Line $D_{ELASTIC}$ represents a relatively elastic (responsive) demand for labour.
- Line $D_{INELASTIC}$ represents a relatively inelastic demand for labour.
- The supply of labour is S , which result in an equilibrium wage of W_1 and employment of E_1 .
- If the union increases wage to W_2 , the impact on employment differs, depending on the elasticity of the labour demand curve.
- If demand is elastic ($D_{ELASTIC}$), employment will decline relatively sharply to E_3 .
- However, if the demand for labour is inelastic ($D_{INELASTIC}$), employment will show a smaller decline to E_2 .

➤ The elasticity of labour demand has a direct bearing on union behaviour:

- The elasticity will be higher if the firm is easily able to substitute capital for labour as wages increase.
- The elasticity of labour demand will be higher if the demand for the output is more sensitive (i.e. more elastic) to price changes.
- The elasticity of labour demand will be higher if labour cost constitutes a large proportion of the total cost of the product.
- The elasticity of demand for labour will be higher if the supply elasticity of other factors of production is higher.

➤ Research results on the wage advantage of unions

To attempt to determine the influence of unions on wages, researchers usually use 2 methods of empirical studies:

1. Different enterprises within industry – these studies concentrate on a single industry and compare wages for different enterprises under varying degrees of unionisation in that industry.
2. Interindustry – this type of study compares different industries with varying degrees of unionisation to determine the impact unions have on wages. (Page 143 of the textbook)
 - see page 143 for research results

➤ Impact on inflation

- Unions appear to perpetuate existing inflation and increase the difficulty of reducing inflation once it has begun.

➤ South African evidence

- It appears that unions have caused a higher wage differential in this country than in other countries. See pages 144-145 for discussion.

The impact of unions on flexibility and productivity

- Even if unions are responsible for an increase in wages, the cost effect can be neutralised or reduced if unions also bring about an equal or higher increase in productivity, as this will reduce unit labour costs.
- The negative side
 - Unions may impose work rules that diminish productivity in an enterprise.
 - They may also engage in so-called “feather-bedding” practices by forcing an employer to employ more employees in a particular occupation than required.
 - Unions may refuse to have new shift systems implemented or may hamper the introduction of new technology.
 - Unions may insist on promotion in line with certain criteria unrelated to merit and efficiency, such as seniority and affirmative action etc.
 - Strikes can have a negative influence on output and eventually on productivity although the data on strikes may be misleading as a measure of the cost of a strike.
- The possible positive effects of unions include:
 - Union wage increases may accelerate the search for cost-reducing and productivity-increasing technologies or may prompt employers to ensure that workers are more productive because of the higher direct and indirect expense entailed in employing unionised workers.
 - Unions may improve job satisfaction by acting as a collective voice for dissatisfied employees.
 - Enterprises may be forced to adopt better methods of dealing with personnel and production to meet union wage demands and to maintain profitability.
 - A wage increase can under certain circumstances, lead to an equivalent productivity increase.
 - Unions may also encourage further training initiatives by the employer either in response to union demands in this regard, or because the employer tries to improve productivity to counter the impact of high wage increases.
- The results of overseas empirical studies in regard to whether unions improve or detract from productivity are *inconclusive*.

The impact of unions on equality objectives

- Unions in general reduce the level of wage inequality within a firm and also among firms in a particular sector.
- However, they increase inequalities between unionised and non-unionised firm, and between unionised workers and the unemployed.

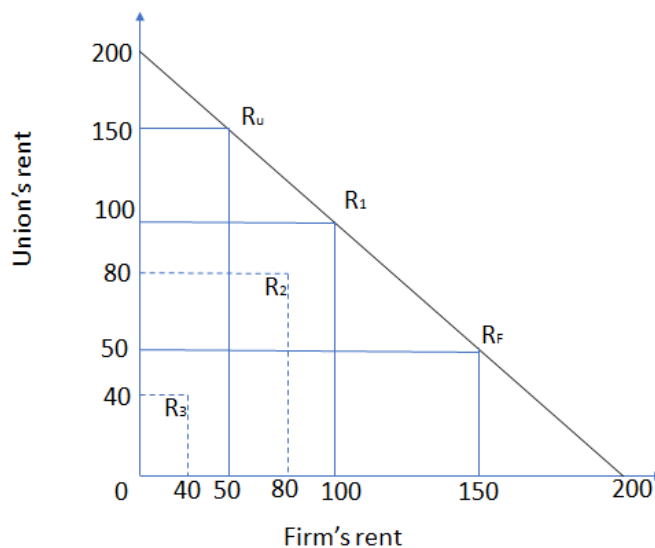
The influence of strike action

- The ultimate sanction of unions to enforce their demands for higher wages, i.e. strikes, has both costs and benefits.
- The loss of working time because of strikes does not necessarily imply a proportional loss of production.

The Hicks strike models

- Figure 5.6 explains that strikes are not Pareto optimal.

Figure 5.6 The Hicks paradox



- Assume that there are R200 worth of rents to be shared the trade union and the firm.
- The downward-sloping line shown in the figure illustrates the various ways in which these rents can be shared.
- The firm makes an offer at point R_F , keeping a bigger share of R150 and giving the union the remaining R50.

- In contrast the union prefers point R_u by getting R150 for its members (employees) and giving the firm R50.
- The two parties do not reach an agreement and so the strike takes place.
- As a result of the strike, workers may lose their income; the firm's profit may decline and even lose customers.
- Because of these costs, the size of the economic rents decreases from R200 to R160.
- If parties eventually agree to share rents equally, they would settle at point R2 (each party gets R80).
- If each party insists on getting a bigger share, the strike will persist and become more costly, and the size of economic rents will shrink further, for example from R160 to R80.
- Assuming the parties finally agree to share rents equally, the final settlement takes place at point R_3 , with each party getting R40.
- Had the two parties agreed to a prestrike settlement at point R_1 by sharing the rents equally (R100 each), both parties would have been better off, compared to points R_2 and R_3 .
- Therefore, it can be said that strikes are not Pareto optimal.
- The **Hicks model**, which relates to the determination of *strike duration* is represented in

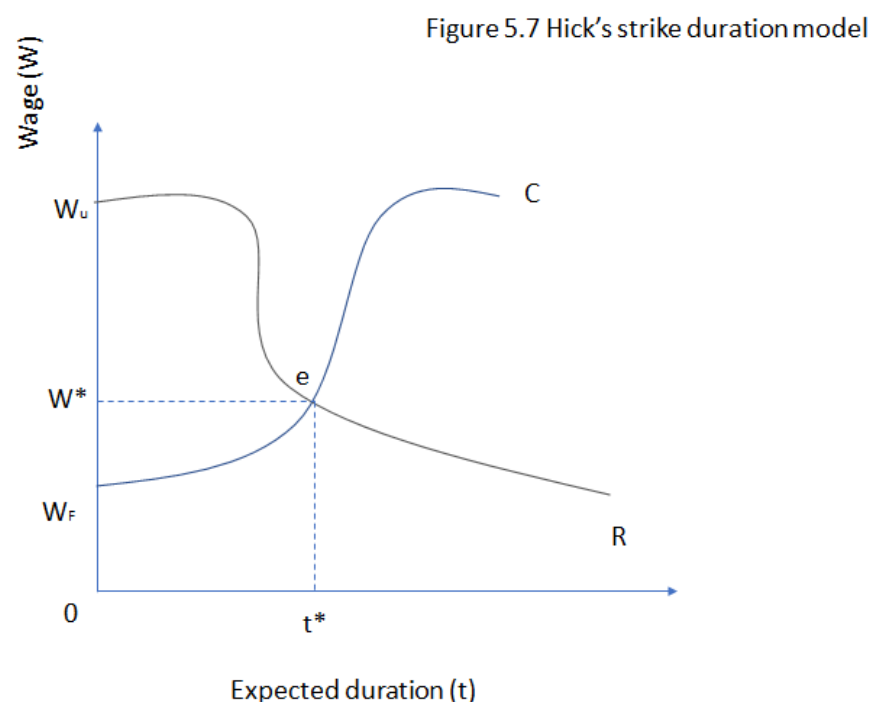


Figure 5.7.

- The curve C is the employer's *concession curve*, representing the firm's highest wage offer at each point during the strike.
- At the start of the dispute (or $t=0$), the firm is willing to pay a low wage of W_F , due to the fact that the firm may still have plenty of unsold inventories that can be used to satisfy the customers.

- However, as the strike takes place and its duration increases, these inventories are exhausted, and the firm starts to worry about issues like customer dissatisfaction, lower labour productivity and lower profits.
- Hence, the firm would increase its offered wage as strike duration increases.
- In other words, the employer's concession curve is upward sloping.
- Curve R is the union's *resistance curve*, which represents the lowest wage that is acceptable to the union at each point during the strike.
- Initially at $t = 0$, the union only accepts at least W_u .
- However, as the strike continues, the union may fear that the firm might hire replacement workers or even retrench workers due to economic losses.
- Hence the union would eventually decrease its asking wage as the strike duration increases.
- In other words, the union's resistance curve is downward sloping.
- At the end a settlement is reached at point e where the two curves intersect, indicating that the strike comes to an end after t^* days, with a wage settlement of W^*

The influence of industrial action in South Africa

- See page 149- 150 of the text book and page 76 of the study guide.

Bargaining Councils

Background to bargaining councils

- Bargaining councils are permanent collective bargaining institutions established on a voluntary basis between one or more employers' organisation(s) and one or more trade union(s) for a specific sector or area, in order to facilitate collective bargaining to negotiate wages and other conditions of employment and to resolve disputes.
- The union(s) and employer organisation(s) that form the council have to be sufficiently representative to form a council.
- What constitutes sufficiently representative is not specified in the LRA, but in respect of the unions it is usually the percentage of employees in the sector that are union members, and in respect of employers the percentage of employees in the sector employed by them.
- Bargaining council agreements can also be made applicable by the Minister of Labour to parties that were not party to the agreement, but that fall within the council's jurisdiction.

➤ Coverage of bargaining councils

- There are 45 councils in South Africa and about one million workers are covered by bargaining council agreements.
- However, this covers only the private sector, and the bargaining councils in the public sector should be included.

The importance of bargaining councils (BCs)

- Minimum conditions of employment are set by the parties themselves without government intervention. BCs are probably the only reasonably effective mechanism to ensure that atypical employees, in particular, are also covered by collectively agreed wages and conditions of employment.
- Conditions of employment are standardised for the industry and competition on the basis of labour costs is eliminated. This compels employers to compete on other bases, for example higher productivity and better quality. There is thus not the “race to the bottom” in respect of labour standards, where every employer attempts to reduce costs by reducing wages and other conditions of employment.
- Closely related to the previous point is that BCs remove wage conflict from the shop floor, which means that employer and employee relations at this level are not damaged by the bitterness that often characterises wage bargaining. BCs may also promote labour peace as there is much more pressure on employers and unions to reach agreement.
- BCs play a very important role in the provision of pension and provident benefit as well as medical benefits.
- BCs assist with the settlement of disputes.

Economic analysis of the impact of bargaining councils

- BCs may be regarded as a form of bilateral monopoly.
- In the case of employers, there is a monopsony because of solidarity among them to fix wages at a certain level.
- At the same time, however, labour has a monopoly in the sense that the union bargains a certain wage level for all employees.
- In this case, wages are determined by the relative strength of each party.
- Because neither party has all the power, some compromise in respect of wages must be reached.

- The final wage outcome in such a market will therefore be indeterminate – the negotiated wage may be either above, below or equal to the competitive wage rate.
- Some economists maintain that there is *tacit collusion* between employers and the union to control both the labour and product markets, i.e. to suppress competition.
- In such circumstances, product prices and wages will be higher than determined by the market.

Making provision for special circumstances of employers

- BCs introduce an element of inflexibility. They do not take into account that circumstances can vary radically from one enterprise to the next, and from one region to another.

The link between wages and productivity

- A further disadvantage of BCs is that the link between wages and productivity becomes tenuous.
- Wages and productivity cannot be effectively linked at industry level, and productivity bargaining can really only take place at enterprise or shop-floor level, but then without any direct link to wages.

Minimum wages

BCs are one mechanism used in South Africa to ensure that a minimum wage applies in the sector covered by the bargaining council.

Arguments in favour of minimum wages

- Every worker should be paid at a level that enables a certain minimum standard of living to be maintained.
- The employer will use labour more efficiently and therefore improve productivity because of the increased wage costs.
- Higher wages can, under certain circumstances, lead to improvements in the workers' morale and nutrition, and reduce absenteeism, illness and labour turnover, all of which can bring about productivity improvements.

- The market mechanism does not operate effectively. In such circumstances minimum wages are required to counterbalance some of the distorting factors.

Arguments against minimum wages

- They do not accommodate the specific circumstances of an individual enterprise.
- Minimum wages also do not take account of the productivity of individuals, and workers should be remunerated in accordance with their marginal productivity.
- Entrepreneurs will usually be able to pass the increased costs resulting from minimum wages on to consumers in the form of price increases. This can create an *inflationary effect*. Consumer demand pressures can compound this effect.
- Minimum wages will interfere with the proper and flexible operation of the market, reducing efficiencies and eventually leading to a lower economic growth rate and higher unemployment than would otherwise have been the case.
- It distorts the price of labour compared to capital and results in workers being replaced by capital equipment.
- For the economy as a whole, wage dispersion and inequality increase.
- For minimum wages to have these harmful effects on the economy they would have to comply with the following conditions:
 - To exceed the wages to have levels the market generates, or to increase all or most wage levels in the formal sector
 - To apply to a large proportion of the workforce
 - To increase unemployment

Minimum wage-setting mechanisms in South Africa

Minimum wages in SA are determined by a dual system

- Bargaining councils
- Sectoral determinations
- See section 5.7.3 on page 162 of the prescribed textbook for details.

Minimum subsistence levels

- This is the minimum financial requirements of a family to enable members to maintain their health and have acceptable standards of hygiene and sufficient clothing.

- There is, however, no such thing as a general or universal minimum living standard to satisfy certain basic needs.
- The concept of basic needs can be defined in a variety of ways, depending on the standard or quality of the clothing, food or whatever is required for subsistence.
- A further problem regarding the satisfaction of basic needs is whether the individual or the family should be taken as the basis.
- Other factors that should be taken into account when considering general living standards in a country are the extent to which employees can rely on various fringe benefits provided by the employer, the availability of state services, and transfers between households.
- This relates to the concept of the *social wage*, which is the total sum of all social benefits received free or partially free, such as state transfers, subsidies and services and kinship and community transfers.

PRODUCTIVITY AND LABOUR MARKET FLEXIBILITY

INTRODUCTION

Unit labour costs- measure the joint impact of wages and productivity.

A company can usually increase productivity if it is able to increase flexibility.

Labour market flexibility is often regarded as an important policy instrument for improving the functioning and outcome of labour market processes.

THE IMPORTANCE AND MEASUREMENT OF PRODUCTIVITY

The importance of productivity

- Productivity largely depends on the flexibility that an employer enjoys or has engineered. e.g. through a skilled workforce.
- The importance of increasing productivity- read page 168 of the prescribed textbook

Definitions and measurement of productivity

- Productivity- traditionally defined as the relationship between real output and the quantity of input used to produce that output. It is a measure of input efficiency, which is expressed in terms of a ratio:
- Productivity = quantity of output

quantity of input

e.g. units of production

units of capital or labour or both

- Various forms of productivity include the following:
 1. *Labour productivity*- defined as the number of units of output obtained from a unit of labour input.
 2. *Capital productivity*- number of units of output per unit of capital input.
 3. *Multifactor productivity or total factor productivity*- takes account of both labour and capital inputs and is the number of units of output obtained from the combined inputs of labour and capital.
- Shortcomings of traditional definition of productivity:
 1. It takes no account of the quality of the product produced or service provided.
 2. Productivity cannot be defined without reference to the consumer. Productivity should thus compare *sold* outputs with inputs.
- Due to these shortcomings, the modern approach is increasingly to see productivity at the workplace as a holistic concept, where it takes into account quality, quantities of inputs and outputs, consumer satisfaction, etc.
- A useful approach is to concentrate on *value added*. i.e. the value that labour and capital add to the total output of the enterprise for the satisfaction of consumers.
- This is measured by subtracting the total cost of inputs from the total value of sold outputs.

Shortcomings of productivity data

1. Most productivity studies tend to focus on labour productivity, but on closer inspection "labour productivity" appears to be a misnomer.
- Firstly, it creates the impression that labour is fully responsible for labour productivity. This is partially true as most factors that govern productivity are a responsibility of *management* as they are of workers.
 - Sectoral and national level decisions can also have an impact on labour productivity.

- In instances where workers have very limited influence over decision making at the plant or other levels, it is difficult for them to have more than a partial effect on productivity.
- 2. Labour productivity can increase without workers having any role in it. Labour productivity, for instance, increase if *more capital equipment* is utilised.
- 3. Labour productivity can also decrease as a result of *factors not under the control of workers*.
- 4. Productivity is also a *very elastic concept*- it changes with the business cycle. During upswings, output may increase faster than employment and this is reflected in improved labour productivity.
- 5. The *quality* of output is not always taken into account when productivity is measured.
- 6. Any measurement of productivity should reflect the *combined influence of a number of factors*, including changes in technology, capital investment, utilisation of production capacity, management skills, the quality of labour, economies of scale and the structure of the economy.
- See pages 169-170

Productivity and Employment

- A general misconception regarding productivity is that it necessarily leads to a *reduction in employment*, as such arguments ignore society's desire for additional output and the fact that rising productivity increases incomes and aggregate demand.
- Increases in productivity enable society to achieve higher levels of output and, as a result, increases levels of employment and of living standards.
- According to the Labour Market Commission, there is no causal link between increased productivity and job losses- as long as output increases more rapidly than productivity, employment levels will be maintained or increased.
- However, these arguments apply to the economy as a whole. In some instances, it has been found that improvements in labour productivity have led to labour redundancies at the level of the individual enterprise.
- If these suspicions and misconceptions regarding productivity improvements are to be dispelled, employers and the government will need to give much greater consideration to the following two aspects:
 - The benefits of productivity improvements should be shared more equitably with workers.

- Workers who are negatively affected by productivity improvements should, as far as possible, be accommodated elsewhere, for instance by being retained and assigned to other jobs.
- According to Meth (1997) there is evidence showing that job losses associated with productivity improvements often occur during phases of economic “distress”.
- McConnell *et al.* (2006) found no systematic relationship between productivity and employment growth in industries in the USA.

Some factors influencing productivity

- Productivity can be improved in various ways and the labour market consequences are not always the same.
- Greater workplace and workforce flexibility might also increase productivity but might also result in less favourable working or employment conditions and might not always be sustainable without the support of the union.
- Productivity improvements can thus have different outcomes depending on how they are achieved.
- Various factors that influence productivity include:
 1. Quality of the labour force
 2. Labour market flexibility
 3. Management responsibilities
 4. Socio-political circumstances
 5. Productivity incentive schemes
 6. Management-union cooperation
 7. Productivity SA
- See page 172-173 of the prescribed textbook for a discussion on the above factors.
- Read boxed section on page 171.

PRODUCTIVITY IN SOUTH AFRICA

- After increasing only marginally in the 1980s, labour productivity increased rapidly from the beginning of the 1990s and has generally increased more rapidly than capital productivity.
- Fedderke (2002) found that the 1970s and 80s saw growth that was mostly determined by the growth in capital inputs and to a lesser extent labour inputs, with very little contribution by higher productivity.

- In the 1990s the growth in labour inputs contributed negatively (with formal sector employment declining) and the contribution of capital inputs also declined.
- Instead, the greatest contributor to GDP growth during this period was the contribution by productivity.
- Efficiency gains thus became the main driving force of the economy during the 1990s and 200s, whereas increases in factor inputs were the main drivers in earlier years.
- Productivity cannot be considered in isolation from wage increase.
- This relationship is addressed by using a concept known as *unit labour cost*.

CONSIDERING PRODUCTIVITY AND WAGES TOGETHER: UNIT LABOUR COST

The concept of unit labour cost

- Three reasons why productivity and wages should be considered together:
 1. Productivity is the basic source of improvements in real wages. For the economy as a whole and in the long term, real income per worker can increase only at the same rate as real output per worker. Productivity is therefore the real link between output and reward in production.
 2. Productivity improvements, rather than low wage levels, should provide countries with an international competitive advantage.
 3. Productivity growth is an anti-inflationary force in that it tends to offset or absorb increases in money wages.
- This therefore means changes in labour costs must be considered in relation to the changes in productivity that may have taken place at the same time.
- The extent to which changes in productivity and wages have moved together is determined by *unit labour cost*.
- Unit labour cost takes into account changes in remuneration costs as well as labour productivity.
- Unit labour cost is the cost of labour to produce one unit of output.
- It is also referred to as *remuneration cost per unit produced*.
- The change in unit labour cost is approximately equal to the growth rate of earnings per worker minus the growth rate of output per worker.
- NB- See equations on page 177.

- If the wage increase is greater than the productivity increase, the unit labour cost will increase; similarly, if the wage increase is smaller than the productivity increase, the unit labour cost will decrease.
- The latter point suggests that rapid increases in nominal wages are not harmful, provided they are accompanied by proportional - and hopefully greater – increases in labour productivity.
- In the same way, low labour productivity growth need not be a problem from an inflation or competitiveness perspective, as long as nominal wages are kept in check.

Unit labour costs in various sectors

- All sectors continued to experience an increase in unit labour cost in various sectors for the period 2003-2013.
- All sectors experienced an increase in unit labour cost, with the construction and utilities sectors being the highest.
- This was a result of labour productivity not keeping up with relatively high wage increases.
- According to the Labour Market Commission (1996), depressing the wages of unskilled workers may have a relatively small impact on average unit labour costs.
- At the same time, the Commission also argued that, because of the high burden of adjustment international competition places on South African enterprises with a high unskilled labour component, the wages of unskilled workers in certain segments of the South African economy may well be comparatively high relative to productivity.

Impact of wage increases on productivity: efficiency wages

- Under certain circumstances a wage increase can lead to an equivalent productivity increase. This is called the *efficiency wage* hypothesis.
- The **efficiency wage hypothesis** is the theory that higher wages can, under certain circumstances, result in at least an equivalent increase in productivity.
- Most discussions on wages and productivity explicitly or implicitly assume that wage increases should be linked to productivity increases.
- However, higher wage rates can conceivably also lead to higher productivity.
- Productivity increases are not always the origin of improvements in remuneration levels- high wage increases could result in job-replacing mechanisation, which often means higher productivity.

- So, productivity, wage increases and job losses are intertwined in different ways:
 - Higher wages might enable the employer to recruit employees more carefully, which means *better job matching*, and the employer might also be induced to employ better quality workers.
 - A higher wage might make employers more willing to invest more in their workers, for example through *training and development*, in order to increase their productivity and make the wage increases affordable.
 - Worker's *morale* might improve due to their higher wages, and their rate of *absenteeism* might be lower because their opportunity cost of not working is higher.
 - Workers' *nutritional and health levels* might improve, positively affecting their physical vigour and mental alertness, and therefore increasing their productivity.
 - Workers might, at least in the short term, be motivated by the higher wages to improve their productive effort. *Labour turnover*, i.e. the rate at which workers quit their, might also reduce, which would be to the advantage of the employer.
 - In a less positive vein, labour productivity might increase as a result of wage increases if the employer attempts to reduce the wage bill by becoming *more capital intensive*, i.e. replacing workers with machinery.
- There is a possibility that labour productivity will increase as a result of a wage increase. However, what is important is not whether productivity increases, but whether it increases by more than the wage increase.
- That is, whether the productivity improvement fully compensates for the labour cost increase.
- If this does happen, it might be more efficient for the employer to pay higher wages, as this might reduce the unit labour cost.

THE IMPORTANCE AND TYPES OF LABOUR MARKET FLEXIBILITY

- Low productivity and unemployment could be caused by labour markets not adjusting as quickly as they should to changing circumstances.
- If markets could adjust to be more in line with demand and supply conditions, unemployment might be reduced.

- Labour market flexibility refers to *the extent to which an enterprise can alter various aspects of its work and workforce to meet the demands of the business, for example the size of the workforce, the content of jobs, working time, etc.*
- It is argued that labour market rigidities prevent firms from being as productive as they might have been because firms are unable to adjust to technological transformation, changing economic circumstances, external shocks, and more intense international competition. The labour market therefore does not operate as efficiently as it should and productivity outcomes are poor.
- It is said that employers do not want to employ labour on a permanent basis because of the high cost. They then switch to capital-intensive technology or lose market share.
- The end result is reduced employment.
- Flexibility and labour rights are closely interrelated.
- The debate about labour flexibility should not take place as a binary policy alternative, i.e. choice between flexibility and regulation. The issue is more complex.
- Four types of flexibility identified by the ILO:
 1. *Contracts of employment flexibility*- the ability of employers to terminate contracts of employment, and whether or not the employer is restricted in terms of his or her hiring decisions. It also refers to the ability of the employer to have recourse to the so-called “atypical employment contracts”.
 2. *Wage flexibility*- relates to the ability of the firm to vary workers’ wages in response to the supply and demand conditions. A variety of regulations and institutions may limit wage variation, including the imposition of a minimum wage, trade union activity, the extent to which wages can be linked to performance and bargaining structures.
 3. *Work time flexibility*- This represents the power of the firm to set and change working hours and patterns, and relates to normal or overtime working time, or working weekends or at night.
 4. *Work organisation flexibility*- this is determined by the extent to which new forms of work organisation are introduced, for instance through the multi-skilling and multi-tasking of workers, and the extent to which teamwork is encouraged.

Flexibility in contracts of employment: job security and hiring decisions

- *External or numerical flexibility*- the ability of an enterprise to adjust the size of its workforce to changes in the demand for the product and to use different types of employment contracts, such as short-term contracts and subcontracting.

➤ Job security

- There has been an increase in job security in SA since the beginning of democracy, through the measures in the LRA, preventing unfair dismissals and discouraging retrenchments.
- Not only do legal and other processes incur high costs, but job security regulations are blamed for the reluctance in employers to engage new workers on indefinite-period contracts.
- In addition, employers may substitute labour with capital or utilise subcontractors, casual and temporary workers, or they may employ workers on fixed-term contracts only.
- In the end, employment may simply be increased.
- Job security for those workers already employed may therefore be to the detriment of labour intensity and therefore disadvantage workers trying to enter the labour market for the first time.
- Other than anecdotal evidence, there is little clear-cut information to prove either the negative or the positive effect of high job security.
- An ILO (1995) study found that stricter employment protection was not found to be significantly related to the employment intensity of growth.
- Read page 180-182 of the prescribed textbook for a discussion regarding labour market flexibility in other countries and SA.

➤ Restrictions on hiring

- If an employer's ability to recruit and appoint the best person for the job is inhibited, it will have a negative impact on flexibility and search for excellence.
- There are several examples of restrictions on hiring in the South African legislation:
 - Provision for *closed-shop agreements*, in terms of which employees must join a union or face dismissal.
 - The duty on employers to implement *employment equity* (EE) measures to give preference in hiring and promotion to so-called "disadvantaged groups" in terms of the Employment Equity Act.

- The introduction of indirect “racial quotas” by the BBBEE Codes.
- The provisions for *probationary employment* in the LRA might reduce some of the disadvantages of substantial job security and thereby increase flexibility, provided this is clear and not undermined by rash decisions by CCMA commissioners.

Flexibility in contracts of employment: atypical employment

- As employers are becoming less inclined to employ workers on a full-time, permanent basis, there appears to be two categories of workers:
 1. The *core workers* - regular, full-time employees who are part of the corporate family and receive fringe benefits. They have a long-term relationship with their employer.
 2. *Atypical, non-standard or contingent employment* - is a more flexible type of employment, where workers are not part of the corporate family and do not have a long-term relationship with an employer. This can include casual or part-time workers, or some type of contracting arrangement.
 3. See boxed section on page 183-184 on what is atypical employment.
- The development of atypical employment is normally through one or more of the following processes:
 1. Casualisation
 2. Externalisation
 3. Informalisation
- See page 184 of the prescribed textbook for description of the above processes.

➤ Reasons of the use of atypical employment:

- Young inexperienced people make use of atypical employment to get into the labour market for the first time.
- It *reduces labour costs*, in particular because fringe benefits are usually not provided, smaller enterprises providing the services may pay lower wages, and because contingents are paid only on actual work required by the enterprise.
- In the past, employers often resorted to labour broking services to *sidestep burden-some labour regulations*, but changes to the LRA and the BCEA have made this more difficult.
- Atypical employment allows the employer *more flexibility* in the utilisation of labour, especially if there are fluctuating levels in demand for labour, and avoid the hassle of dealing with employing workers, especially those who are highly unionised.

- It can also mean more freedom and flexibility for workers.
- Read boxed section on page 185
- Disadvantages of atypical employment
- Research in SA seems to indicate that the increasing use of non-standard employment is eroding labour standards in the following manner:
 - Wages
 - Conditions of employment
 - Health and safety
 - Training
 - Social security
 - Employment security
 - Trade union rights and collective bargaining
- See page 186 of the prescribed textbook for a detailed discussion on the above.
- Atypical employment can also be dysfunctional for the employer.
- Heavily flexible workplaces lose their ability to attract, bind and retain skilled workers.
- Read boxed section on page 186-187.

Wage flexibility

- Wage flexibility relates to the extent to which wages are linked to the productive effort of the individual worker or a group of workers, and to the productivity and profitability record of the sector or enterprise: This is referred to as *performance-related pay*.
- Wage flexibility is important for job security because it has been found that where flexible wages constitute a large proportion of labour costs, employees are less likely to be laid off.
- The *levels of collective bargaining*, and the extent to which provision is made at such levels for flexibility arrangements, directly influence wage flexibility.
- *Minimum wages* seem to be one of the major causes of unemployment among those groups they set out to protect, for example young people.
- If firms can get more educated or experienced workers at the minimum wage they are required to pay, they are unlikely to try out inexperienced worker. This is especially if they find it difficult and costly to undo the employment relationship with such inexperienced workers.

Working time flexibility

- This concerns the adjustment of total working time within a given period and the possibility of rearranging working time within a given period.
- Time flexibility can take various forms including the following:
 - Overtime
 - Flexitime (flexible starting and finishing times)
 - The averaging of hours over a certain period
 - Shift work
 - A shortened work week

See page 189 of the prescribed textbook regarding the BCEA

Work organisation flexibility

- The extent to which workers or conditions of employment within an enterprise can adjust to changing circumstances is also called *internal* or *functional* flexibility.

A skilled workforce

- New patterns of work often require flexible and highly skilled workers.
- Workers are required, for example, to function without direct supervision and to be able to correct small interruptions in the production process on their own initiative.

General considerations regarding flexibility

- Read page 190-194 in conjunction with the study guide page 90-91.

Unemployment in South Africa

Definition, types and measurement of unemployment

Definition of unemployment

- An unemployed person is a person without work, currently available for work and seeking work or wanting to work.
- There are two definitions usually used to derive unemployment statistics: the official, narrow (strict) and the broad (expanded) definition.
- According to the narrow (strict) definition used in the OHS, LFS and QLFS, unemployed persons represented those in the labour force who:
 - did not work in the 7 days prior the interview,
 - Wanted to work and were available to start work within the reference period (one week in the OHS and QLFS; two weeks in the LFS)
 - Had taken active steps to look for work or to try to start a business in the 4 weeks prior to the interview.
- In the OHS and LFS, broad (expanded) definition of unemployment excluded the third criterion above.
- That is, that the expanded definition only required a desire to find employment.
- The difference between the number of unemployed derived from the expanded definition and the number of unemployed derived from the strict definition is then equal to the number of discouraged work-seekers.
- However, the discouraged work-seekers are derived very differently in the QLFS
- Since the discouraged work-seekers are defined more strictly in the QLFS by considering why the person did not find work or start a business in the past four weeks, the number of discouraged work-seekers (and then the number of expanded unemployed) is lower in the QLFS compared to the OHS and LFS.

- The unemployment rate is expressed as the number of unemployed persons as a proportion of the total labour force (LF) or the economically active population (EAP), which includes both the employed and the unemployed.
- Unemployment rate = $\frac{\text{Number of unemployed persons}}{\text{Total labour force}} \times 100$
- See Table 7.1 which gives a summary of the derivation of the labour force participation rate (LFPR) and the unemployment rate (according to the strict and expanded definitions respectively) as well as the employment rate.
- Natural rate of unemployment
 - It is the constant ratio of unemployment.
 - There is no such thing as full employment even under favourable economic conditions.
 - Workers can be unemployed while moving between jobs or moving from outside the labour market to the inside (e.g. students).
 - Occurs where there is neither excess demand nor excess supply in the overall labour market.
 - This concept is theoretical where SA is concerned and will remain so for the next foreseeable future because of the inadequate demand for labour.

Types of unemployment

- Frictional unemployment
 - result of normal labour turnover.
 - occurs in any dynamic economy.
 - it takes time for those seeking work to find and fill the positions as people move between jobs and new entrants enter the labour market- at this time there are unemployed persons and vacancies.
 - is of a relatively short duration.
 - it can be reduced by improving labour market information and placement services so that employers and jobseekers can find each other sooner and more effectively.
 - it is one of the factors that determine the natural rate of unemployment.
- Seasonal unemployment
 - it is due to normal and expected changes in economic activity during a single year.
 - is found in many sectors. e.g. agriculture and retail.

- the seasonally unemployed work during peak periods and are unemployed in off-peak periods.
 - occurs regularly and is predictable.
- Cyclical unemployment
- also known as *demand deficient unemployment*.
 - arises during recessionary periods, when aggregate demand and therefore also the demand for labour is low.
 - during a recession, few/ no jobs are created.
 - existing workers might lose their jobs through retrenchments.
 - when the economy improves, the cyclically unemployed find jobs
 - in SA, cyclical unemployment is difficult to address successfully; this is because it is superimposed on large-scale structural unemployment.
- Structural unemployment
- it is the overall inability of the economy, due to structural imbalances, to provide employment for the total labour force, even at the peak of the business cycle.
 - even when the economy is experiencing periods of high growth, job opportunities do not increase fast enough to absorb the unemployed and the new labour market entrants.
 - reasons for this include: rapid growth of the labour force, use of capital/ skills –intensive technology and inflexible labour market.
 - also refers to a skills mismatch or geographic mismatch.
 - in SA, the major form of unemployment is structural unemployment.

Measurement of unemployment

Unemployment can be measured in three broad approaches:

- Sample survey method
- Census method
- Registration method
- See page 202 of the prescribed textbook for discussion on these measurements

Unemployment in South Africa

Total unemployment

- According to the official narrow definition, total unemployed has nearly tripled from two million in 1995 to 5.9 million in 2016

Unemployment by demographic and education characteristics

- Unemployment is far higher among Africans than in other groups.
- The youth also accounts for a high share of unemployed people
- There is an increasing phenomenon of unemployment among the educated.
- See bottom of page 203-205 of the textbook.
- Also read boxed section on page 206.

Other characteristics of unemployment

Urban areas – In 2016, the official unemployment rate in urban areas was slightly lower than that in rural areas.

Province – Unemployment rate increased across all nine provinces between 1995 and 2016. The Western Cape had the lowest unemployment rate in 2016. The Free State, North West and Mpumalanga have the highest rates of unemployment.

Long-term unemployment – the largest proportion of the unemployed (66.2%) have been searching for work for longer than a year, and more than half of these have been looking for work for three years or more.

Previous employment – about 60% of the unemployed had never held a job and would therefore not have contributed to an unemployment insurance fund (UIF) and would therefore not qualify to receive such benefits.

Reasons for high unemployment

- There was a *rapid increase of the labour force* in the late 1990s.
- Regarding the demand for labour, technology advancements and capital deepening lead to a structural change of the economy, resulting in a *growing demand for skilled labour* but a decreasing demand for unskilled labour.
- Constraints on the employer (e.g. direct costs, procedures during CCMA hearings, dismissal procedural costs) may result in unnecessary *employment rigidity*, discouraging employers from hiring labour.
- *Minimum wages* have an impact on employment

- There is an inherent *asymmetry between the desires of the currently employed (i.e. insiders) and the unemployed (i.e. outsiders)*. Even though outsiders may be willing to accept lower wages and insiders prefer higher wages, the views of the outsiders are not represented well by trade unions. Outsiders remain unemployed.
- Even though the informal sector absorbed labour in other countries, this sector has stagnated in SA. There is no indication that the informal sector is rapidly absorbing surplus labour from the formal sector. There are numerous *barriers to entry to the informal sector*.
- Affirmative action might not be a success to rapidly reduce *employment discrimination* by race and gender, even after controlling for differences in demographic and education characteristics between groups.

A strategy to create jobs

Numerous official documents addressing the problem of unemployment in SA are discussed on pages 210-211 of the textbook.

Economic growth and exports

- One of the reasons for SA's high unemployment is the relatively slow growth of the economy when compared to other upper-middle-income countries.
- However, higher growth does not invariably and automatically lead to increased employment.
- The degree to which employment is created also depends on the pattern of growth and the labour intensity of the economic growth.
- Economic growth should form a major determinant of growing employment opportunities.
- See page 211 of the textbook

Allowing higher inflation in order to create jobs: the Phillips curve

- The Phillips curve indicates that there is a negative correlation between the rate of inflation and the rate of unemployment
- In the 1960s, the experience of the US economy seems to confirm that there is a *trade-off between inflation and unemployment*.
- The USA experience in the 1970s has shown fault with this approach. The assumed relationship between inflation and unemployment disappeared and both unemployment and inflation seemed to be moving to constantly higher points. Therefore, there is no trade-off between inflation and unemployment.

- There is no long-run trade-off between inflation and unemployment. The long-run Phillips curve is vertical
- See figures 7.6 (a) and (b)
- Read pages 211-213 of the textbook.

Improving the labour absorption capacity of the economy

- SA needs to create more employment opportunities for every percentage point increase in economic growth.
- Increase in labour absorption and labour intensity of growth requires attention to employment enhancing policy shifts regarding labour policies and cost of labour.

➤ Inward industrialisation

- Refers to the process whereby the effective demand for locally produced basic goods and products increases because of various factors operating together.
- These factors or various factors include rising real income among lower-income categories, falling birth rates, higher urbanisation rate, more government spending on less privileged communities.
- The combination of these factors can unleash meaningful demand for basic consumer goods and other facilities.
- Most of these goods can be produced in a labour-intensive manner, have low import content and require a less skilled labour to produce.

➤ Preconditions

- There are important preconditions for the success of inward industrialisation.
- Real wages increases should not exceed productivity so that there will be an increase both in real incomes associated with production.
- Small enterprises and informal sectors must be stimulated so that the benefits of the inward industrialisation process can be spread widely among the population.

Cost of Labour

- Research shows that increase in cost of labour without being accompanied by increase in productivity, has a negative impact on employment.
- Cost of labour includes money wage and indirect costs such as fringe benefits and costs to cover risk.
- ILO Review (1996) states that a reduction in labour costs will boost employment.

- It is important to point out that there are other ways to reduce labour costs besides focusing on the wage rate.
- Wage moderation is important for economic success.
- *The government's employment strategy*: labour organisations are challenged to bargain wages that are appropriate to productivity gains and inflation rate and this should not lead to job losses.
- This strategy proposes a youth learnership wage to encourage the creation of more jobs for young people.
- International evidence suggests that highly centralised or highly decentralised bargaining structures deliver the best economic outcomes and SA's system of sectorial bargaining is the worst.
- The cost of labour to the employer in SA appears to be relatively high and thus has a negative impact on employment.
- Read boxed section about the reservation wages on page 215

Labour market flexibility and productivity

- Labour market flexibility enhances labour absorption directly.
- The reason for this is that employers are willing to take on additional labour in good times if they know they can adjust their labour force relatively easily in bad times.
- Flexibility with regard to the utilisation of labour, among others, encourages labour-intensive production techniques. On the other hand, inflexibility encourages higher capital-intensity.
- Labour flexibility is important for increased productivity which in turn could neutralise the negative impact of high labour costs on employment.
- A high-wage-high-employment economy can be achieved in an environment when total productivity performance of the country is positive.
- In SA, the total productivity performance is unsatisfactory.
- Unit labour cost is increasing at a relatively high rate. This is said to damage SA's international competitiveness.
- In an attempt to increase productivity, employers/firms have reduced their workforce. This simply leads to increases in unemployment in SA.

Active labour market policies

- These are the policies that aim to improve the operation and results of labour markets so as to maximise quality employment and minimise unemployment and underemployment.

- The policies aim to prevent unemployment/remedying it by returning displaced workers to productive jobs.
- Excessive emphasis on income protection for the unemployed creates undue disincentives to active job search and contribute to the loss of motivation and skills.

A Strong Skills base

Availability of a strong skills base is an essential element of any strategy to relieve unemployment.

Formal and informal small enterprise sector

In many parts of the world it has been found that small enterprises and the informal sector represent a significant part of total employment or have been responsible for a major portion of the total increase in employment opportunities in the recent years.

Special employment and income maintenance programmes

Public works and special employment programmes

- Method of giving unemployed persons the opportunity to participate in the economic life of the country.
- Have been introduced with varying levels of success in SA.
- Read pages 219-222 of the textbook for details

➤ Arguments against:

- The programmes play only a temporary (i.e. cyclical) role and SA's structural unemployment problem cannot be addressed through such programmes.
- Such programmes usually involve denying resources to some other programme. i.e. either government expenditure increases, or important programmes are neglected.
- If workers do not find a job in a relatively short time after training, this can result in a higher level of frustration for the job-seeker and greater social problems.
- If taxes are increased to fund such a programme- this may result in reduced private sector investing and less consumption. If domestic borrowing is increased, interest rates will rise, resulting in a decrease in investment and consumption. Domestic and foreign borrowing will impose future cost of repayment on the economy.
- Such programmes might conflict with the required fiscal and monetary policy from the point of view of stabilisation.

➤ Arguments in favour:

- Unemployment can be reduced.
- Long-term unemployed persons can be targeted.
- The programme can give workers, marketable skills, life skills or exposure to world of work and thus increasing their employability.
- If the programme is linked to specific development initiatives it might fit in well with the government's role of uplifting communities. e.g. infrastructure programmes.
- Dependence associated with anti-poverty welfare programme is avoided.
- Programme has negligible effect on balance of payments.
- Can increase the capacity of communities to manage their own affairs.
- Page 221 of the textbook- read about the *Two-pronged approach*.

Programmes focused on young people

- The unemployment rate among young persons is particularly high
- A series of measures were suggested to encourage the employment of young people:
 - Tax breaks
 - Special economic zones where businesses are exempt from legislative measures increasing their costs
 - Larger and more effective vocational education stream in high schools
 - Large and simple temporary employment schemes for young people in the poorest province

Wage subsidies

- Have been used to encourage employers to create jobs, even though these may only be temporary jobs that last as long as the subsidies are available.
- Reduce the price of labour relative to the price of capital or that of non-targeted workers and encourages enterprises to substitute targeted workers for unsubsidised capital or non-targeted workers.
- It also reduces the enterprises costs, encouraging it to expand its output and demand for labour.
- Leads to an upward shift of the firms' labour demand curve in a labour demand model.
- Reduce cost of labour for employer, increasing labour demand.
- However, the extent to which a wage subsidy increases the employment of targeted groups depends on the elasticity of demand for such workers.

- If the reduction in wage does not result in a significant increase in demand for workers, then demand for labour is relatively *inelastic*- in this case the employment effect of subsidies is negligible.
- General disadvantage of subsidies:
 - There may be no long-term positive impact on employment creation or it may lead to labour being utilised in an efficient way. This is because employers do not carry the full cost employing the person.
- See page 224 of the prescribed textbook for various types of wage subsidies
- Read page 226 on the Employment Tax Bill (ETIB)

The social plan

Policies designed to deal with the negative social implications associated with economic restructuring and, more specifically, large-scale job losses.

➤ The social plan guidelines

- The Presidential Jobs Summit in 1998 gave rise to a social plan that applies when an organisation or industry is in trouble or in the event of threatening large-scale retrenchments.
- See the three phases discussed on page 227.

Unemployment Insurance Fund (UIF)

- Provides short-term relief to the contributor when they become unemployed or are unable to work because of illness, maternity, or adoption of small children, and provides relief to dependents of deceased contributors.
- It is an insurance scheme and not social assistance.
- *Positive influence of unemployment insurance:*
 - It benefits the person experiencing hardship due to unemployment.
 - Benefits society in that the costs of unemployment, whether direct/ indirect are reduced.
 - Labour market mobility and flexibility are increased, because unemployment benefits reduce the pressure of employers to retain redundant workers and less pressure on unions to protect jobs.
 - Allows flexibility to affect required production adjustments.
- Negative influence of unemployment insurance:

- Reduced labour market flexibility, because they can increase wage demands of unemployed workers. The so-called “reservation wage” is the wage at which the unemployed worker will accept employment.
- Increase the minimum wage at which unemployed workers will accept employment, because he/she can “afford” to look for a job that suits him/her better. i.e. one that pays a higher wage.

Basic Income Grant (BIG)

- Recommended by the Committee of Inquiry into a Comprehensive System of Social Security (the Taylor Committee, 2002) to alleviate absolute levels of poverty.
 - Seen as a method to provide all the households with a minimum level of income to enable the nation’s poorest households to meet their basic needs more adequately.
 - The grant is to be paid to all individuals irrespective of employment status and not be subject to a means test.
 - The absence of a means test will diminish the administrative burden, the disincentive to work and opportunities for corruption that are often associated with means-tested grants.
- Possible benefits of a basic income grant:
- *Poverty alleviation*-R100 will double the amount available for consumption by people in the poorest 29% of the population and will promote improved nutrition.
 - *Response to HIV/AIDS pandemic*- BIG fills the gap that cannot be filled by the current social assistance system. This will give HIV affected households’ additional resources to help them cope.
 - *Stimulus to increased consumer spending, job creation, investment and economic growth*. Cash transfers into households increase and stabilise demand, consumption and savings.
- Possible disadvantages of a basic income grant:
- *Corruption* – the nature of a benefit paid to all persons is such that there are many more possibilities for corruption than with most other social security schemes. e.g. people may try to claim twice, claim on behalf of people who have died or are non-existent.
 - *Regional mobility of labour* – even though grants will be restricted to SA, the introduction of this scheme is likely to increase illegal flow of poverty-stricken people from neighbouring countries. These people are often able to obtain residence documents from corrupt officials, thereby increasing cost of the scheme.
 - *Funding the scheme* – taking into account the probability of high administrative costs and influx of labour from neighbouring countries, the proponents of the scheme seem to have underestimated the cost. Increased tax rates and increased deficits to fund the BIG will have

negative effects on the competitiveness and creditworthiness of SA in a globalised world. This may also lead to an increase in the outflow of skilled people from the country- SA will gain unskilled poverty-stricken people while losing skilled people.

Human Capital and the Demand for Skilled Workers

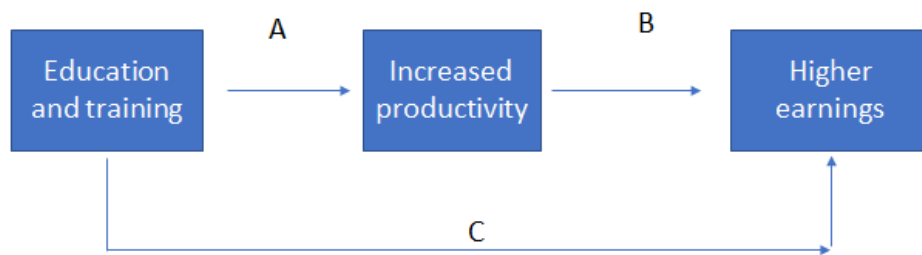
Introduction

- SA is similar to other developing countries in that there is an oversupply of unskilled labour (unemployment) and a shortage of skilled workers.
- This is likely to be the factor most likely to inhibit long-term economic growth.
- SAs poor utilisation and development of its human capital (HC) is damaging to the country's competitiveness.
- Future availability of skills is also affected by HIV/AIDS. This will impact availability of educators. Personal and economic returns from investment in education will be cut short.

The human capital theory (HCT)

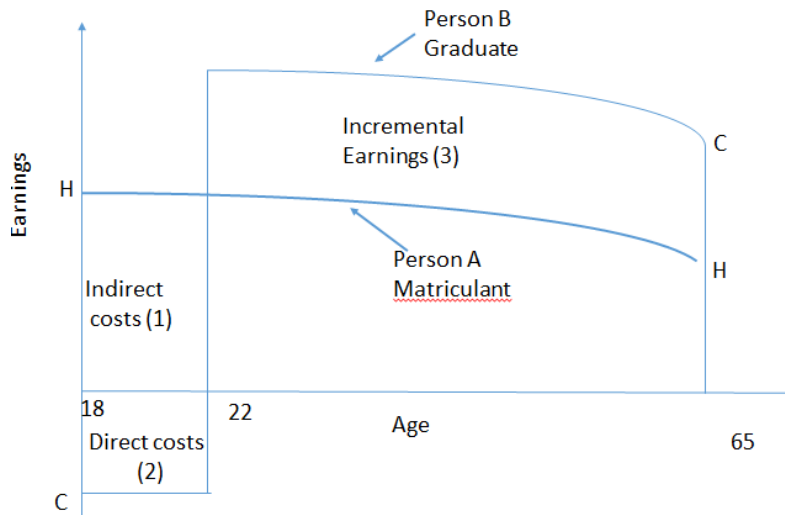
- People with higher educational qualifications consistently earn higher salaries.
- The hourly wage of workers without matric is only about 25% of their higher-educated counterparts.
- The reason individuals with a higher education earn a higher income is that skills development enhances their stock of human capital and therefore increases the individuals' potential to be productive.
- The educated individuals are more valuable to employers and therefore earn higher earnings.
- The progression goes from, education and training to higher productivity, to higher earnings.
- See illustration on page 234, figure 8.1 of the textbook.

Figure 8.1 Human capital theory



- - Education and training also provide immediate benefits (e.g. subjective satisfaction and status) in addition to long-term monetary rewards.
 - Why would a person *not* educate themselves to the highest possible level?
 - *Answer-* improving one's education is costly.
 - Cost includes the following elements:
 - *Direct cost or out-of-pocket cost* - tuition, books and related expenses.
 - *Indirect cost or foregone earnings* - earnings forgone when a person decides to study instead of working to earn an income.
 - *Psychic losses* – learning is often tedious and difficult. However, since it is not easy to measure this cost in monetary terms, psychic losses will not be taken into consideration for the human capital theory from this point onwards.
 - Decision to invest in education depends on the monetary return on education and training.
 - According to the HCT, this is the net return, which is arrived at by taking into account both the costs and the benefits of education and training - i.e. the cost benefit analysis of education.
 - The sums may not be calculated directly but similar factors are considered when an individual decides what to do after school.
- Calculating rates of return
- To determine “profitability” OR rate of return (ROR) of an investment in education or training, the **total direct and indirect cost** of education should be compared with the **increased earnings** of the individual over the working life of that individual.

Figure 8.2 Potential earnings stream of a matriculant compared with a graduate (Private and social rates of return)



on page 235 of the text book.

- Referring to figure 8.2

1. Individual A starts working at age 18, immediately earning a salary, and has a salary profile of HH.
2. Individual B goes to university (with direct and indirect costs). B enters the labour market 3 or 4 years later (age 22 in the graph) and immediately enjoys higher earnings than A (B's higher earnings are shown by line CC).
3. The gap between CC and HH becomes greater as time goes by because individual B is associated with a greater likelihood of promotion and being involved in skilled work with higher pay due to his higher education.
4. If area 3 (incremental earnings of person B) is greater than sum of areas 1 and 2 (total cost = Indirect and direct cost), then the investment in education will have been worthwhile from the economic point of view.
5. Costs and benefits should be translated to a common point in time. This is due to the fact that future money has less value than present money (e.g. present money can be invested and will be worth more in the future).
6. The *net present value* of future costs and earnings is calculated by *discounting* the future values to the present resulting in the *rate of return* of education.

➤ Private and social rates of return

- Private rate of ROR- only the benefits and costs to the individual are considered.

- Public / social ROR – is important from a policy stand point. Costs and benefits of training and education are considered from a societal point of view. It takes into account the broader cost of education (i.e. all educational subsidies and broader societal returns and benefits mentioned below).
- Cost to calculate societal ROR would be all public subsidies to education. These costs are excluded by the individual as they do not carry these costs.
- For the individual the after tax incremental earnings would be calculated.
- For society as a whole it would be before tax earnings.
- Benefits to society as a whole include economic growth, reduction of unemployment, poverty elimination, reduction of inequality, potentially lower crime rates, lower law enforcement costs, educated children of educated parents.
- The distinction between private and social ROR is important as society may decide that the benefits from education are more important than deemed important by the individual. Society may decide that more resources need to be allocated to education than an individual would, based on individual ROR.
- ROR differs over time depending on the educational level and the demand and supply conditions of the labour market.

➤ Predictions of theory

Four general predictions can be made regarding the demand for university education:

- Forward –looking people are more likely to go to university, as they weigh future events heavily compared with present-oriented people.
- Most university students are young, as they prefer to have a longer remaining work life ahead.
- University attendance increases if the direct and indirect costs decrease.
- University attendance increases if the gap between the earnings of university graduates and high school graduates widens.

➤ Research evidence

- College graduate in the USA earn a private ROR of about 13% to 14% (Becker, 1975).

- Others estimate a private ROR of 8.5% and 11% with a slightly lower social ROR (McConnell *et al.* 2006).
- Marginal ROR in SA is found to be “extremely high” for tertiary level of education and small (approaching zero) for lower levels of education (Keswell and Poswell, 2004).
- Another way in which HCT has been applied is to estimate the extent to which economic growth can be attributed to improvement in HC.
- Estimated that 38% increase in output in the USA economy between 1929 and 1957 was due to improvements in labour quality.
- Even though HC is important in explaining economic growth in SA, only specific types of investment is HC contribute positively to growth (Fedderke, 2005).
- Production of quality HC is important NOT just production of HC.
- However, both quality and quantity of HC raises political instability. Instability lowers output. Therefore, increase in HC may increase AND lower output.
- Results from studies of the impact of HC in economies have been inconclusive.
- Most controversial aspect of HCT is that it has been used to motivate and justify massive investment in education.
- HCT conclude that income inequality could be reduced by ensuring a more equal distribution of HC- i.e. by concentrating training and education efforts on the poor and disadvantaged sections of society.

Criticisms of the HCT

Measurement

- To calculate the effect education and training have on productivity, the education, training and productivity of the educated individual have to be determined.
- The *problem*- how is the “amount” of education and training measured?
- Years of education and training are not an indication of the quality of education and training.
- Even though there are measures that could potentially be used to measure productivity (such as teacher qualification, teacher pupil ratios), these are not necessarily related to quality of education.
- In many cases, it is practically impossible to measure the productivity on an individual worker.

- In many studies, the progression from education and training TO productivity TO earning as depicted in figure 8.1 (paths A to B) was ignored due to measurement problems. Only the link between education and earnings (path C) was proved.
- This link could also be just an indication of employers' bias towards university graduates.
- These measurement and calculation problems are one of the reasons there are doubts concerning the value of the HCT approach for SA (Hosking, 1992).

Ability or educational level?

- Different educational qualifications may be an indication of pre-existing differences in ability.
- Workers with the necessary abilities attain higher educational qualifications and it is therefore ability, not educational qualifications, which is rewarded with higher earnings.
- If this is the case, then sharp increases in educational spending will not necessarily lead to increases in productivity and consequently earnings.

The screening hypothesis

- Employers use educational attainment as an inexpensive screening device to determine "ability" of workers and thus their job placement.
- Workers with higher education are regarded, rightly or wrongly, as having more ability.
- They are therefore promoted to better jobs relatively soon, which leads to higher earnings.
- However, higher education levels might not be related to higher ability. This means again the link between education and productivity is short circuited via path C (see figure 8.1)
- Even though it might make sense for an individual to obtain an educational qualification (because it leads to higher earnings), the social ROR of education may be overstated.

Family background

- Family background and financial status may lead to higher educational qualifications and earning without there being a direct relationship between education and earnings.
- Family background and financial status can facilitate entry to better educational institutions and certain occupations (e.g. the business) which might otherwise have been more difficult to access.
- Family background and financial status can make attainment of educational qualification possible and more probable.

Dual labour market theory

- A serious challenge to human capital theory, and one that is based on theoretical premises, is the dual or segmented labour market theory.
- According to this theory, workers in the internal labour market enjoy good jobs, high earnings, high upward mobility and job security.
- Jobs “on the outside” are characterised by low wages, little job security and limited upward mobility.
- Internal promotions and similar restrictive mechanisms deter access to the internal labour market.
- This theory criticises the HCT approach in that wages are not necessarily dependent on education, training or productivity. But on the operation of the internal labour market.
- Wages of workers on the outside (in the secondary market) remain low regardless of education attainment. This is because access to the internal labour market and high wages is severely restricted, and there is little incentive for employer to utilise better workers.
- Earning inequalities cannot be adequately reduced by investment in education and training.
- Attention should focus on integrating the secondary labour market into the primary market.

The radical approach

- In this approach, neither educational and training programmes nor the integration programmes of dualists significantly alter relative income structures in the labour market.
- According to this approach, inequalities can be changed only if the power relations in society are changed. i.e. elimination of the capitalist class.
- This approach can be criticised. Class structures and inequality are not only unique to capitalism but are found in all economic structure.
- Another criticism is that industrialisation in various economic systems has also resulted income and hierarchical structures. Production methods demand that work follows routines and jobs are ordered in a hierarchy.
- Because of these criticisms economists have objected to large spending on education and training that is simply directed at areas with the highest ROR.
- Despite criticisms there is a belief that the neglect of education and training in SA in the past has resulted in severe income inequalities.

Human Capital in South Africa

Educational level of the labour force

- read page 239 of the textbook.

The occupational structure of the labour force

➤ Classification of occupation

- according to type of work done. In certain cases, attention is paid to the industrial sector in which the occupation is exercised as well as the training required for the occupation.
- Qualification is not always a good indicator of skills level. Classification should be done based on work done.

➤ Occupational structures of workers in employment

- the largest component of the labour force consists of the elementary occupations. Highly skilled workers account for about a fifth of all workers in SA and there has been a sharp increase in the number of these workers.

Skills levels of workers in formal employment

Focusing on permanently employed formal sector employees, approximately 30% of them are involved in skilled occupations, with one third of them working as managers in 2016.

Education in South Africa

Educational shortcomings in South Africa

There are 3 levels of formal education:

1. General Education and Training (GET) - includes a reception year and learners up to Grade 9 AND equivalent adult basic education and training (ABET) qualification.
2. Further Education Training (FET) - Grades 10-12 in school education, out of school youth and adult learners.
3. Higher Education (HE) – national diplomas and certificates up to and including doctoral degrees.

➤ Low progression of learners

- Many learners do not make it to grade 12. This suggests gatekeeping (not allowing learners unlikely to pass grade 12 to progress) or “culling” of learners (removing over-age learners or discouraging them from registering for the senior certificate registration).

➤ Shortage of teachers

- There has been an improvement in the number of the learners per teacher, and there has also been a more equal distribution of learner to teacher ratios between provinces.
 - There has been a drop in the number of underqualified teachers although there are significant differences between provinces.
 - The supply of qualified teachers seemed to be excessive at some point but when a number of teaching colleges closed down in the 1990s, no account was taken to the increasing mortality of teachers due to AIDS.
 - An estimated number of 20 000 teachers leave the profession each year through death, disease or resignation.
 - An additional number of teachers are also required due to increasing number of learners and the need to reduce teacher to learner ratios.
 - There is a further reduction in the number of African students training to be teachers, especially in the foundation phase. The reasons are:
 - Reduced number of training institutions
 - Restructuring of the profession and retrenchments
 - HIV/AIDS impact
 - Racism, violence and other manifestations of antisocial behaviours that discourage teachers from entering the profession
 - Lack of bursaries / loans
- Backlogs in infrastructure
- There has been a decline in overcrowding and the number of schools without electricity, water or telephones.
 - However, there are still a number of schools with no water and electricity, a shortage of classrooms and lack of libraries.
 - Wage disparities and high poverty levels negatively affect family life, dietary deficiencies which affect learning ability and opportunities.
- Poor quality despite increased educational expenditure
- SAs expenditure on education as a percentage of GDP is very high compared to other countries.
 - After 1994 the government reallocated resources in order to address earlier discrimination.
 - Disparities between provinces were also addressed as part of this initiative.

- The shift in resources has mainly taken the form of more teachers and higher salaries for teachers in historically black schools and cutbacks in teacher numbers in other schools.
- Changes in teacher to pupil ratios were not substantial. Educational outcomes also did not improve much.
- SA needs to focus more on the *quality* of education as opposed to only access (Fedderke, 2005).
- If this is not done, the quality of education is most likely to be an inhibiting factor in innovation and economic growth.

➤ Poor quality Mathematics and Science education

- Many tertiary qualifications require mathematics and science. However, there has been a decline in the number of students with quality math and science education.
- There is even a smaller proportion of African learners obtaining a pass in math and science.
- Few matriculants are enrolling for teacher qualification in math and science.
- Some of the reasons given for SAs poor performance are:
 - SAs school years are shorter than other countries
 - SA has a higher absentee rate for both teachers and learners
 - The time devoted to math and science is the least
 - More time is spent on repetition and homework
 - The government has been overambitious with policy changes but there is discontinuity in policy.

➤ Problems with tertiary education

- There has been a decline in qualifications awarded in some humanities such as social sciences and languages. There has been an increase in qualifications in business, commerce and management sciences computer sciences and communication and media.

➤ The impact of HIV/AIDS on the education system

- HIV/AIDS are likely to severely affect education.
- Household and government expenditure is most likely to be directed from education and training to medicine and health. In some cases, the breadwinner of the family dies from AIDS, weakening the family and damaging the acquisition of human capital by children.

- Children are likely to be absent from school. Orphans are unlikely to receive material and emotional support.
 - The expensive investment in education is also likely to be lost as a number of secondary school learners is likely to die before they can apply their knowledge.
 - Economic and personal returns from years of investment in education will be cut off before any returns are realised.
 - Teachers are likely to die of AIDS.
 - There has been a drop in the growth of school enrolments since 1995. This is partly due to lower fertility rates and increased mortality owing to HIV/AIDS.
- Starting to address the educational shortcomings
- The centre for development and enterprise found that even though schooling reform is difficult, measurable improvement can be achieved in as little as six years.
 - The quality of teaching and teachers is a central determinant of student performance.
 - The key to improving education in Africa is to strengthen accountability.

Skills Development in South Africa

Skill development systems and structures

- The National Skills Authority (NSA)
- It was established in 1999 to advise the Minister of Labour on policies and strategies related to skills development.
 - The NSA also suggests a number “success indicators” to ensure that objectives related to skills development are realised.
- South African Qualifications Authority (SAQA)
- This is a framework for education and training in SA.
 - SAQA is appointed by the minister of education in consultation with the Labour Minister.
 - SAQA is responsible for:
 - Establishing a single unified system of education and training qualifications in SA by overseeing and implementing NQF
 - Generating unit standards and qualifications for NQF registration
 - Creating and accrediting institutions ensuring that the qualifications are of high quality as well as monitoring trainers.
- National Qualifications Framework (NQF)

- It is based on the principles of access. Everyone in SA should have access to learning quality and portable skills that are transferable across different sectors in the economy.
- The NQF is a national register of education and training unit standards and qualifications. It consists of 10 levels.
- See page 248 of the prescribed textbook.

➤ Framework for quality assurance

- SAQA accredited bodies monitor the quality of training given by providers, according to the standards and qualifications of NQF.
- These bodies are called Education and Training Quality Assurers (ETQAs).
- ETQAs accredit education and training providers. They also award certificates to students who achieve these qualifications.

➤ Learnerships

- These are training agreements between a learner and an employer, and possibly a training provider to train the learner to an agreed standard in a specific field.
- This is a mechanism through which qualifications that are registered on the NQF can be achieved.
- Learnerships combine practical work experience and structured learning.
- Read page 249 of the textbook for differences between learnerships and apprenticeships.

➤ Sector Education and Training Authorities (SETA)

- They have been created in 25 sectors of the economy by representatives from employers and employees in that sector as well as government departments.
- They are concerned with education and training. Their job is to help implement the national skills development strategy and to increase the skills of people in their sector.
- SETAs have the following duties:
 - See page 249 (right column) of the textbook for the list of duties.
- A sector skills plan describes the trends in each sector, supply and demand for skills and identifies skills priorities. It provides the framework and background for SETA's activities.
- Sector skills plans are presented to the National Skills Authority (NSA) and approved by the Minister of Labour.

➤ Funding of skill development

- It is done through a compulsory skills development levy, in terms of the Skills Development Levies Act.
- Every employer with an annual payroll in excess of R250 000 pays a skills levy of 1% of total payroll to SARS.
- 20% of the collected funds go to National skills fund (NSF). Each SETA may get the remaining 80% of the money paid by employers in its sector.

➤ National Skills Fund (NSF)

- Receives 20% of all levies paid by employers.
- This fund is used to train unemployed and other vulnerable people in areas where there is a strong potential for growth and employment.
- The funds can be used for youth development, development of SMMEs and learnerships of national priority.

Joint initiative on Priority Skills Acquisition (JIPSA)

- It was launched as a 3-year project in March 2006 to identify priority skills in all sectors of society.
- It seeks to develop skills, from boosting primary education to improving higher education learning.
- It plans to recruit retired experts and expert mentors in certain fields.
- It aims to recruit those South Africans who have gone abroad, to import scarce skills, establish a skills database and make sure that underutilised training facilities are used.
- See the list of challenges in with JIPSA on page 250.
-

The extent of in-service training activities in South Africa

- See pages 250-251
- Structured learning programmes
- Skills development levy
- Learnerships
- Overall state of training
- Skills development targets in terms of the BBBEE codes

Skilled labour shortages

- Labour shortages in certain skilled occupations are experienced during most phases of the economic cycle in SA, except for deep recessionary periods.
- Skills shortages are not easy to measure, although vacancy data are usually used as a proxy for skills shortages.
- The vacancy rate measures vacancies as a percentage of the total number of post:
- Vacancy rate =
$$\frac{\text{Vacancies}}{\text{Employment} + \text{vacancies}} \times 100$$
- Shortcomings of Vacancy data:
 - It does not measure quality deficiencies. It does not reflect workers being appointed to skilled occupations without proper training or ability to do the job.
 - Employers might indicate in the statistical returns that they have vacancies, but they do not actively try to fill these positions or do not offer realistic remuneration. In these instances, even though there are vacancies, there is no real shortage of labour.
 - Employers may not formally record vacancies, even though they might wish to employ additional skilled workers in certain occupations. This means that labour shortage exists even if it is not recorded as a vacancy.
 - Frictional vacancies may also exist. These are vacancies resulting from normal labour turnover.

See page 254-256 for the projection of future demand for supply of labour by skills category.

Definitions and types of discrimination:

- The definition of Labour Market Discrimination is *the inferior treatment of groups of workers with respect to employment policy or practice, through factors not related to the labour market, such as being female or black*
- See page 260 of the prescribed textbook for more definitions
- Four types of possible labour market discrimination (McConnell *et al.* 2006)
 1. Human capital discrimination- discrimination in respect of education and training,
 2. Employment discrimination- some groups bear a disproportionate share of the burden of unemployment,
 3. Wage discrimination- workers belonging to certain groups are paid less than workers belonging to other groups for doing the same work,
 4. Occupational discrimination- specific groups are underrepresented in skilled occupations, although they are as capable as other groups and also have the necessary qualifications.

Discrimination: Categories :

- **Before-the-market discrimination:** it occurs before the individual seeks employment or, in the case of on-the-job training, before he or she is fully productive in the labour market. (Human Capital discrimination)
- **Within-the-market discrimination:** it is encountered after the individual has entered the labour market. (even if they are still employed)

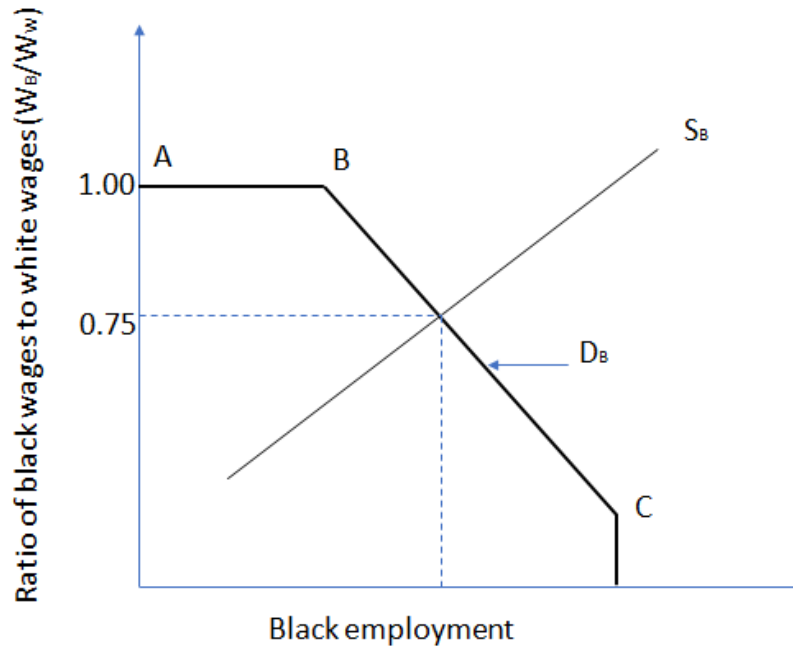
Theories of discrimination:

- Taste-for-discrimination model
 - Originally presented by Gary Becker in 1957
 - Some employers prefer certain groups of workers, (e.g. whites or males) even if this preference or prejudice means that they have to pay for their prejudice in terms of higher wage.
 - These employers are in fact saying that hiring a black worker imposes an indirect cost on them. This cost is the wage of the black worker plus the psychic “disutility” of employing black workers.
 - The strength of the psychic cost of employing a black worker by the discriminating employer is called the **discrimination coefficient (d)**. This coefficient varies from one employer to the next.

Theories of discrimination: Taste-for-discrimination model:

- Such workers are only willing to employ black workers only if their wage rate is below that of white workers, and then only if black wages are lower than white wages by the amount of the discrimination coefficient.
- If the wage of white workers is W_w and that of black workers is W_b , then the discriminating employer will regard the cost of employing a black worker as $W_b + d$, even though the actual monetary cost of employing this black worker is W_b .
- If d equals zero that is, the employer does not have any preference or prejudice over any group of workers) and assuming white and black workers are equally productive and perfect substitutes, it is expected that W_w equals W_b .
- However, if d is positive and the employer discriminates against black workers, the employer's hiring decision would be as follows:
 - Hire only white workers if $W_w < W_b + d$, as it is relatively cheaper to hire white workers, *after* taking the psychic disutility of hiring black workers into consideration.
 - Hire only black workers if $W_w > W_b + d$; although the employer discriminates against black workers (indicated by the positive d), even *after* taking the psychic disutility of hiring black workers into account, it is still relatively cheaper to hire black workers.
 - Be indifferent with regard to black and white workers if $W_w = W_b + d$, *after* considering the psychic disutility of hiring black workers.
- The mathematical examples are in page 261
- See Figure 9.1 on page 261 of the textbook for an illustration

Figure 9.1 Wage discrimination in the labour market



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- The vertical axis measures the ratio of black wages to white wages, W_b/W_w (the higher along the axis, the higher the black wage relative to the white wage).
- At level 1.00, white and black wages are equal.
- The horizontal axis measures the number of black workers employed in a specific occupation by all employers.
- Non-discriminating employers will pay white and black workers the same (d , the discriminating coefficient = zero)
- The employment of black workers by non-discriminating employers is reflected by the "AB" portion on the black labour demand D_b in figure 9.1
- After "B" black employment will increase only if discriminating employers employ black workers, and they will do so only if black workers' wages are lower relative to the wage of white workers, i.e. W_b/W_w ratio is less than 1).
- As one moves along the curve from "B" to "C" this indicates discriminating employers with a discrimination coefficient (d) becoming increasingly higher.
- At "C", employers are pure racists and will not employ black workers at any cost.
- The supply of black workers is the curve " S_b ".
- S_b is upward-sloping because the quantity of black labour supply increases if W_b/W_w increases (i.e. the black wage is closer and closer to the white wage).
- The intersection where the Demand curve for black workers " D_b " and the Supply curve for black workers " S_b " establishes the ratio of black wages relative to white wages.
- This ratio is 0.75. This means that black workers will earn 75% of that of white workers due to discrimination.

- Non-discriminatory employers will be at a competitive advantage because they do *not* need to pay a premium to employ white workers.
- Figure 9.2 illustrates that by employing equally productive black workers, employers gain in terms of profits.
- At point “AB”, non-discriminating employers make maximum profits
- Thereafter, as d (discriminating coefficient) increases, employers make less and less profit.
- At some point where racists refuse to employ black workers, their profits plummet due to the excessive premium paid to the only white workers they employ.
- In a perfectly competitive market discriminating employers charge higher prices in order to cover the cost of the wage premium paid to white workers.
- According to theory, in a perfectly competitive market, black workers’ wages and white workers’ wages will equalise and discrimination should be eliminated in the long run.
- Evidence from the USA has shown that discrimination does not decline (McConnell *et al.* 2006; Faundez, 1994).

Theories of discrimination: Statistical discrimination (a brief explanation):

- This theory has been put forward to explain why discrimination persists in competitive labour markets
- According to this theory, employers discriminate not because of a taste for discrimination, but because of their perception that, on average, workers from certain groups are less productive.
- Statistically (according to these discriminating employers), there is a good chance that an individual from a certain group will have certain characteristics that might disadvantage the employer.
- The “statistical generalisation” of individual workers leads to the employer discriminating against the whole group.
- For instance, the characteristic of race or gender is then used as an inexpensive substitute to determine the actual production-oriented attributes of workers.
- Since the proper selection of personnel can be expensive, employers use the “cheaper” method of discrimination which is inaccurate to employ workers.
- The cheapest method of selecting personnel is to focus on educational qualifications.

Theories of discrimination: Market imperfections:

- In cases where perfectly competitive conditions do not exist, an employer may find it profitable to practise wage discrimination. i.e. to pay differential wages to equally productive groups of workers
- Labour supply less elastic
- The employer will find it profitable to pay lower wages to groups of workers whose *labour supply is less elastic*...i.e. less responsive to a wage reduction.
- This is relevant to South Africa, as the supply of African workers might have been less elastic than white workers. This may have changed in the recent past as black workers have increased their mobility and skills in the labour market.
- Dual labour market

- African workers are often found in the secondary labour market. i.e. where wages are relatively low and there is little training or job security.
- They are therefore labelled as unstable and undesirable workers, although this is because they are unable to enter the primary labour market (where there are better employment conditions, proper training and job security, which lead to a stable and dependable workforce).
- Theories of discrimination: The crowding model:
- In the interests of labour peace, the employer will segregate white and African workers into different occupational categories and thereby avoid racial tensions in the workplace.
- White customers may prefer white workers and this results in African workers being crowded into less attractive occupations.

Theories of discrimination: Transaction costs model;

- According to this model, African people have their own languages and culture, and often lower educational qualifications than whites.
- The cost to the employer of restructuring the workplace to accommodate these differences, or to provide additional training or bridging courses, can be perceived to be substantial.

Theories of discrimination: Legislation and government:

- In South Africa, African people were discriminated against through official policy.
- Legislation such as job reservation, which reserved certain jobs for whites only, influx control which limited access to urban areas, the Group Areas Act which limited the availability of housing for African people and also restricted social interaction, and other pieces of legislation, resulted in entrenched discriminatory practices.
- The scraping of discriminatory measures by the previous government during the 1980s reduced statutory discrimination in the labour market.

Inequalities in the South African Labour Market:

- Educational level
- An important indicator of the divergent effects of the discriminatory educational system of the past is the educational levels of white and African people.
- There were wide differences in the per capita education expenditure for white and African learners, with that for Africans comprising about a third of that for whites.
- Teachers of mainly African learners were often unqualified or underqualified.
- The ratio of learners to teacher in mainly African schools was also much higher than in mainly white schools, resulting in a lower quality of education.
- Employment and unemployment inequalities
- The unemployment rate, according to the QLFS, is much higher among the African labour force than among whites.
- Although discrimination is an important reason for the differences in unemployment rates between African and white people, it should be remembered that inequalities in employment is very closely related to other factors such as inequalities in education.
- Occupational inequalities

1. Inequalities by race

- Africans make up about 70% of all workers in the formal sector in 2016. However, they make comprise of a much smaller percentage of skilled workers.

- Only about 39% of senior official and management positions were occupied by blacks.
- See pages 269 in the textbook for more statistics

2. Inequalities by gender

- African women comprised 11% of all skilled workers in 2006 but this share increased to 29% in 2016.
- Women accounted for about 30% of skilled occupations.
- Wage and income inequalities
- The extent of income inequality in South Africa compared to that of other countries can be determined in a number of ways, but the most well-known instrument is the Gini coefficient.
- The coefficient can range from 0, which represents perfect equality, to 1. The higher the number, the greater the level of inequality.
- Another instrument is the Theil index. This decomposes overall inequality into a proportion originating between subgroups and a proportion originating within subgroups.
- The Gini coefficient of the South African economy as a whole increased from 0.57 in 1995 to 0.65 in 2010.
- The level of inequality among Africans in the highest, at 0.62, compared to 0.44 among whites.
- Read pages (270) of the textbook.

Addressing inequalities in South Africa:

1. Higher economic growth and employment opportunities

- Other remedies for reducing inequalities can be effective only under conditions of higher economic growth and increasing employment opportunities.
- To a significant extent, inequality is driven by the gap between those without jobs and those in wage employment.
- Reduced economic growth has a negative effect on reducing inequalities,
- However, inequality also seems to impact negatively on economic growth.

2. Education and training

- South Africa is experiencing serious backlog in the educational system if inequalities are to be reduced.
- South African enterprises also do not provide enough training in various occupations.

3. Entrepreneurship

- Disadvantaged groups are underrepresented among owners of wealth-creating instruments of the economy.
- There needs to be training and development of entrepreneurs and financing to support such individuals
- Management of enterprises also need training
- Large contracts could be broken to smaller ones and allocated to enterprises owned by disadvantaged groups.

4. Government employment and tender practices

- In South Africa, the government prescribes codes of conduct or guidelines for reducing inequalities and implementing black-advancement programmes in respect of companies applying for government contracts (tenders).
- It has been suggested that the government should give higher priority to proper performance than on to the enforcement of non-discriminatory or black-advancement provisions.
- The Employment Equity Act has measures to ensure that enterprises applying for tenders have affirmative action plans in place.

- BBBEE Codes are also a method of ensuring that companies that apply for state contracts comply with certain objectives to eliminate inequalities.

5. Legal remedies

- The South African Constitution prohibits discrimination, while it allows positive measures to promote equality.
- This approach is evident in several laws such as the Employment Equity Act.
- The shortcoming with legal remedies is that, the courts are usually not very accessible.
- Legal procedures are also very slow, expensive and uncertain.
- It is important to note that equal opportunities are not the same as equal treatment. Equal treatment only means that there is no apparent discrimination in respect of employment or promotion of workers.
- Page 276 (read about the Employment Equity Act).

Equal pay for work of equal value:

- This is an approach that is often legislated but not always directly.
- **Arguments in favour** of policies that enforce equal pay for work of equal value :
 - The labour market is neither efficient nor fully competitive. There are many factors that distort remuneration of workers. Job evaluation provides a better indication of the workers worth than existing wages or the job content. Wages are distorted by institutional factors such as past discriminatory practices and the discriminatory practices against certain groups in some occupations, driving down wages in those occupations. The differences in wages in these cases are not a reflection of differences in productivity and this can be rectified by basing all remuneration on job evaluation.
 - It helps enhance overall gender equality in the world of work by addressing gender pay differentials.
- **Arguments against** policies that enforce equal pay for work of equal value :
 - Even though there are factors that distort labour markets, the market is reasonably competitive and wages are paid more or less according to productivity.
 - There will be an efficiency loss for the whole economy. Wages are set according to productivity levels, and job evaluations do not necessarily measure productivity. In addition, the economy will not be able to adjust rapidly to changing circumstances. If employers are forced to remunerate workers at equal levels in different occupations, there is no incentive for workers to want to undergo retraining for the undersupplied occupations because the wage rates cannot be increased.
 - Equal pay for work of equal value will apply to only a minority of skilled black workers. This will not address the problem of before-the-market discrimination.

Affirmative Action:

- Refers to policies and practices aimed at redressing social, economic or educational imbalances or inequalities arising out of unfair discrimination against certain groups.

Arguments in favour of introducing affirmative action programmes:

1. Dismantling of discrimination cannot take place instantly, simply by getting rid of discriminatory legislation.
 - After many years of discriminatory legislation, the people who were discriminated against are far behind in terms of ownership of wealth of the country and filling of skilled occupations.

2. Affirmative action is not a form of reverse discrimination, but a method of providing reparation to benefit members of a group that has been discriminated against because of their race.
3. From an economic point of view, the argument is that, markets do not function properly.
 - Figure 9.7
 - The employer has the option to choose white or black labour as production factors. These are illustrated along the horizontal and vertical axis respectively.
 - The isoquant indicates various combinations of white and black labour to produce a specific level of output.
 - The isocost curve shows the cost combinations of using black and white labour.
 - Profit maximisation takes place where the isoquant and isocost just touch.
 - The discriminating employer will employ more white than black workers, even if this is expensive. This is indicated by point "P" in figure 9.7a.
 - This provides less profit than point "Q" (profit maximising point), because it lies on a higher cost curve.
 - Government policy designed to force employers to employ more black labour will bring about movement from "P" to "Q", the profit maximising position.

Arguments in opposition to affirmative action:

1. Affirmative action programmes reduce economic efficiency because the best person for the job is not necessarily appointed.
2. If standards are reduced over the long term or permanently, there is less likelihood for a positive economic outcome.
3. The victims of discrimination may use affirmative action as a source of entitlement, in the same way whites used the system of apartheid as a source of privilege.
4. There could also be problems if affirmative action is applied in such a way that individuals are deprived of existing rights.