

CHAPTER 8

URBAN LABOUR AND MIGRATION

8.1 INTRODUCTION

The purpose of this chapter is to discuss the urban labour market where it is assumed that the households and firms can move freely between cities. In the long run, each household will settle in a city that maximises its utility and each firm will locate where it can maximise its economic profit. In this chapter, economic growth is defined as an increase in total employment. This would result in either an increase in demand for labour or an increase in the supply of labour.

The demand for and supply of labour will first be discussed. This will obviously be linked to the migration of labour, and employment as well as unemployment will form part of the discussion. Lastly, the role of crime on the urban economy due to the lack of employment opportunities, as well as migration of labour will be analysed.

8.2 DEMAND FOR LABOUR

The demand for labour in an urban environment is derived from two types of activities. The local sector sells its products to local consumers within the city, eg. bakeries and bookstores. By contrast, the export sector sells its products to consumers outside the city, eg. computer manufacturers. The city's total labour demand curve is thus negatively sloped for two reasons. If wages in the city increase, both exporters and local producers substitute capital for the relatively expensive labour. This is the substitution effect where wage increases cause a decrease in the quantity of labour demanded. A substitution of non-labour inputs (capital, land) for labour takes place. Secondly, as wages increase, production costs increase and hence prices that firms charge will increase. As the price of export products increases, the quantity of exports demanded decreases with resultant lower demand for labour. As the prices of local goods increase, local residents substitute imports for the relatively expensive local



goods, with the same decline in labour demand. This is the output effect where wage increases in the city lead to price increases and output decreases, resulting in a lower quantity of labour demanded (O'Sullivan, 1996: 129).

These two effects determine how rapidly labour demand falls as a result of wage increases. The larger the substitution effect and the larger the output effect, the greater the responsiveness of labour demand to changes in wages. The substitution effect will be influenced if firms can easily substitute non-labour inputs for labour. The substitution effect will then be relatively large. The output effect can be great and will be affected in two ways. The output price will be sensitive to changes in wages if labour costs form a large share of total costs. A small increase in wages will cause a relatively large increase in output prices and hence a substantial decrease in total production. Secondly, if the price elasticity of demand for the output is relatively large, an increase in the output price will cause a relatively large decrease in the total production (O'Sullivan, 1996: 129).

The following factors will cause the demand for labour to change, i.e. either to increase or decrease (O'Sullivan, 1996: 129).

- i) Demand for exports. A higher demand for the city's exports increases the export production and more labour will be demanded in the labour intensive areas.
- ii) Labour productivity. If labour productivity increases, production costs will decrease, allowing export firms to increase output. If the increase in output is relatively large, the demand for export workers may increase. An increase in labour productivity also allows local producers to undercut the prices of imports, which will increase the demand for local workers.
- iii) Business taxes. An increase in business taxes without a corresponding increase in public services will increase production costs. This will lead to a decrease in output and a decline in labour demand. Evidence exists that an increase in business taxes decreases business activity and therefore less labour is needed.



- iv) Industrial public services. An increase in the quality of industrial public services without a corresponding increase in taxes, decreases production costs. This will increase output with a resultant increase in the demand for labour. Improvements in local infrastructure increase business activity and therefore more labour is needed.
- v) Land-use policies. A city can accommodate existing firms that wish to expand their activities and new firms that want to locate by co-ordinating its land-use and infrastructure policies. In this way a city can ensure an adequate supply of industrial land.

8.3 SUPPLY OF LABOUR

An increase in a city's wages increases the relative attractiveness of that city, inviting the migration of workers from other areas. This affects the supply of labour and is called the migration effect. It is important to stress two assumptions here. The first is that the hourly wage rate per labourer is fixed and thus changes in the wage do not affect the number of work hours per labourer. The second assumption is that the labour force participation rate is not affected by a change in wages. The city's population in the work force will thus not increase if wages increase. An increase in wages will therefore lead to an increased supply of labour because more people move to that city and not because existing workers supply more working hours or additional members join the workforce (O'Sullivan, 1996: 131). An increase in the total employment and the total population, increases the total demand for the majority of goods that lead to higher prices for land, housing and other goods.

The factors that may influence the supply of labour are (O'Sullivan, 1996: 131):

i) Environmental quality. An increase in the quality of the environment (cleaner air, higher water quality) increases the relative attractiveness of the urban area, causing migration to the area.



- ii) Residential taxes. An increase in residential taxes without a corresponding change in public services, decreases the relative attractiveness of the area, causing emigration of people.
- iii) Residential public services. An increase in the quality of residential public services without a corresponding increase in taxes increases the relative attractiveness of the city, causing immigration of people.

It is important to realise that urban economics looks at urban labour not merely as a factor input but also as a resident who consumes, causes pollution and congestion and sometimes gets into trouble with the law (Hirsch, 1973: 7).

8.3.1 Composition of changes in employment

This section examines the composition of changes in total employment. If new firms open up and existing firms expand, a city may experience an increase in employment. This should, however, be compared against the loss of jobs when firms close down or contraction of activities take place. The net effect of these two events will determine whether an increase or decrease in employment has arisen. The question is whether cities, experiencing employment growth, have relatively large gains in terms of employment when new firms open up or existing firms expand, or small losses when firms close down or shrink activities. On the other hand, do cities that grow slowly or shrink have relatively small gains from new firms or expansions or relatively large losses from closures and contractions?

8.4 FACTORS AFFECTING URBAN POPULATION GROWTH

Births, deaths or migration can affect population growth and a brief reference to the most important factors affecting each will now be discussed. The most significant factors affecting birth rates and fertility rates are (Miller, 1994: 206):



- Average levels of education and wealth are usually negatively related to birth and fertility rates.
- ii) The contribution and importance of children as part of the family labour force.
- iii) Urbanisation tends to decrease the family size due to superior access to family planning services and less dependence on children for survival tasks.
- iv) The costs of raising and educating children in urban areas are higher because the duration of education is lengthy.
- v) Educational and employment opportunities for women keep them from having more children.
- vi) The infant mortality rate in urban areas is lower because of access to medical services and therefore fewer children are born to replace those who have died.
- vii) A higher average marriage age causes women to have fewer children.
- viii) The availability of pension funds reduces the need for more children to support parents during their old age.
- ix) Access to and availability of reliable birth control measures decreases birth rates.
- x) Religion, tradition and culture may influence the number of children families have.

The rapid population growth rate worldwide is not so much due to an increase in the total birth rate but rather a decline in death rates. The most important factors for this general decrease in death rates are (Miller, 1994: 207):

- i) Better nutrition leading to a declining death rate.
- ii) A lower infant mortality rate and a longer average life expectancy because improved personal hygiene, sanitation and cleaner water supplies have reduced the frequency of infectious diseases.
- iii) Improvement in the provision of medical and public health services.

The movement of people also affects the rate of change of a population. Labour migration can be seen as a source of economic growth and development in urban areas.



The change in the population of an urban area can be expressed as:

Change in population = births - deaths + immigration - emigration

It is important to understand the distinction between gross and net migration. The births minus the deaths are called natural increase in the population, while immigration minus emigration is net migration. Gross migration refers to both the amounts of immigration and emigration. Net migration is a relatively small portion of the gross migration. Although the natural population growth rate varies from place to place, migration flows are the main source of rapid population growth in an urban area (McDonald, 1997: 384). Negative net migration can involve large or small gross migration flows as long as the emigration exceeds the immigration.

The decision to migrate can vary from person to person because costs and benefits normally differ. A person who decides to migrate to another city incurs monetary (including forgone earnings) and psychological (trauma) costs in order to gain a stream of monetary rewards and/or non-monetary gains in the new location. The people who are moving primarily for labour-market reasons should follow the basic monetary human capital model. In this case migration is motivated by gains in earnings and reduced by higher costs of migrating. Since the costs involved in moving are generally associated with distance, migration is more likely over shorter distances. The benefits and costs of moving are influenced by the familiarity that the migrant has with the final destination. Moving to a place where relatives or acquaintances stay will be easier for the migrant. Young people are more likely to move because they have more to gain in the process, as do people with higher qualifications and who have a stronger future orientation towards the future (McDonald, 1997: 385). Table 8.2 gives a brief and simple explanation of four different gross and net migration patterns (Blair, 1995:197).

Table 8.2: Gross and net migration flows

male process.	Emigration High		Emigration Low	
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Immigration	High	Low net migration (i.e., footloose population, university, college, military)	High net migration (i.e., area of expanding opportunities)	
Immigration	Low	Negative net migration (i.e., area of declining opportunities)	Low net migration (i.e., stable job base, few new opportunities)	

Another aspect of urban migration is the idea that the urban labour markets are generally in equilibrium. It seems that if the net advantages of migration which open up tend to be closed fairly quickly by shifts in the flow of people. Equilibrium wage rates for identical work may vary from region to region because of amenities and disamenities that people value. According to McDonald (1997: 385) higher wages are normally associated with the size of an urban area, the crime rate, warm sunny days, extremely cold days and the number of cloudy days. Wages are also usually higher in urban areas that have grown more rapidly in the previous decade. The ability to attract the labour force is most important and conventional economic incentives such as income growth, employment growth, reductions in the unemployment rate, high income levels and low unemployment levels still matter a lot.

Capital and labour normally move from urban area to urban area in response to factor price differentials. The rate of growth in labour is thus the natural increase in the labour force plus a fraction that is a function of the difference between the wage in the urban area in question and the average for all other urban areas. Likewise, the growth of capital is the natural increase in capital which is a function of savings and investment within the urban area, plus inter-urban capital movement due to the difference between the rental price of capital in that urban area and the average rental price for all other urban areas (McDonald, 1997: 304). Labour and capital would, however, not respond instantly to such price differentials so that the difference is necessarily eliminated in one year, although it could be eliminated in the long term.



Urban areas with high ratios of labour to capital presumably have low wages and high rental prices for capital. Labour will tend to move away from such areas and capital will migrate to such areas. Depending on the response rate of the two inputs, low wage areas will grow faster than high wage areas due to the movement of capital to these low wage areas. This should lead to the convergence of all wages to the national average except where wage differentials can be ascribed to amenities associated with certain areas.

One factor enhancing migration to urban areas is mainly due to the movement of people from rural to urban areas. This migration pattern is linked to the prospects of opportunities in the urban areas. The search for jobs and a better quality of life are pulling people to the cities. There are also certain push factors into the urban areas due to modern mechanisation in the agricultural sector with resultant decreasing employment. Urban growth is also fuelled by policies that distribute most income and social services to urban areas at the expense of rural areas (Miller, 1994: 231). The perceived economic oasis of economic opportunity for urban migrants is reversed to a poverty trap. This gives rise to crowded slums in central cities or illegal squatter settlements on the outskirts of cities (Hirsch, 1973: 1). Many cities are unable to provide these settlements with adequate drinking water, sanitation, electricity, housing, etc. This is sometimes due to a lack of funds, but also the fear among officials that improved public services will attract even more people from the poor rural areas.

Squatter settlements also provide a sense of community as well as a vital survival safety net for the poor and unemployed. The establishment of these slums in cities causes jobs, businesses and middle- and upper-class people to move away to the suburbs. As a result, violence, drug trafficking and abuse, crime and decay will increase in certain parts of the city. In these areas the poor, the elderly, the unemployed, the homeless, the handicapped and others who cannot afford to leave are trapped in a downward spiral of poverty. In the same city where possible opportunities may improve the lives of some, the quality of living is perceived as deteriorating (Hirsch, 1973: 2).



Table 8.3: Factors influencing labour migration

	Supply push factors (Factors leading to city unemployment)	Demand pull factors (Factors leading to city employment)	Structural constraints
Influence What influence the: Supply push Demand pull Structural forces	Technological development Increase in capital intensity Downswing in business cycle Labour legislation Other (eg. tax) legislation Globalisation	Knowledge dissemination Trade protection Upswing in business cycle Outsourcing	Unfavourable socio- economic environment Constraining demographic issues Lack of proper infrastructure Inadequate education and training Geographic distance (rural/urban divide) Cultural distance (disillusionment with economic system)

Source: Adapted from: BEPA. 1999.

Labour migration can be caused by two main factors. These factors are discussed in Table 8.3. There is great upward pressure from the unemployed who are seeking employment in the city but are excluded from it. These supply push factors refer to forces that push people out of jobs in the urban areas. The reason for this resides in certain structural deficiencies that relegate them to unemployment. However, cities also have a strong demand for certain workers. These are the demand pull factors that refer to the forces pulling people into urban areas. This dynamic process consists of certain push, pull and structural factors. The structural constraints refer to the factors that act as a barrier preventing people from becoming employed. These factors refer to the structural imbalances in the socio-economic environment and an obstructive and ineffective institutional dispensation.



Unfortunately, these socio-economic problems created by structural deficiencies, lead to higher levels of unemployment that result in higher levels of crime in cities. In the next section, an economic approach to crime and crime prevention is presented.

8.5 ECONOMICS OF CRIME

The economic approach to crime assumes that both criminals and victims are rational in the sense that they base their choices on the expected benefits and costs of alternatives. A criminal will commit a crime if the expected benefit of the crime exceeds the expected cost. Similarly, potential victims use their resources to prevent crime if the expected benefit of prevention exceeds the expected costs. The analysis of crime is important to urban economics for three reasons (Mills & Hamilton, 1994: 360).

- i) Crime is the highest in central cities and metropolitan areas.
- Households are sensitive to crime and their location decisions will be affected by high crime rates.
- iii) The relatively high crime rates in central cities have contributed towards the suburbanisation of people. Many households have, because of high crime rates in central cities, moved to suburbs to escape central-city crime.

Crime is divided into personal crime and property crime. Personal crime is a situation where the victim is placed in physical danger. The criminal's objective may be to injure the victim (rape, murder, assault) or to steal property, or a show of force is used by the criminal to coerce the victim (robbery). Property crimes are a situation where the criminal is cunning but does not use force. Burglary, purse snatching, pickpocketing, bicycle theft and auto theft are examples of property crime. The victims of crime can vary according to income, place of residence, gender, age and race.

Criminal activity imposes a direct as well as an indirect cost on society as a whole. The physical victims of crime incur the direct costs, be it by way of injuries or property loss. Three types of direct cost from crime can be identified *viz.*, personal losses, property



losses and losses from business crime. The indirect costs of crime are the costs due to the prevention of crime, undertaken by potential victims. This may take the form of expenditure on locks, dogs as well as taxes to support crime prevention by the police, court system, etc. Two types of indirect costs can be identified. The prevention cost is the upgrading of personal security for crime prevention and the second is the cost of the criminal justice system. This will include spending on police, courts and correctional facilities. The opportunity cost of crime prevention is the value of the alternative use of resources, currently wasted on crime prevention (O'Sullivan, 1996: 656).

It is assumed that a rational criminal commits a crime if the expected benefit of the crime exceeds the expected cost of the crime. This is, however, only relevant for economically-motivated crimes like property crimes but not for crimes of violence. The decision to engage in crime, depends on the personal circumstances of each individual as well as the risks such individual is willing to take. The following factors may influence the behaviour of the criminal and the levels of crime in an area (O'Sullivan, 1996: 658).

The expected loot: The expected value of the crime is the probability of success
 (P_s) times the monetary value of the loot.

$$EL = P_s.loot$$

- ii) Expected cost: On this side, the possibility exists that a person may be sent to prison for the crime committed. The expected value of the penalty for the crime is the probability of being imprisoned (P_i) times the opportunity cost of time spent in prison.
 - a) Probability of imprisonment is determined by the police and court system.

 The probability of imprisonment (P_i) is the probability of being arrested (P_a) times the probability of being sentenced to prison once arrested (P_p).

$$P_i = P_a P_p$$



- b) The opportunity cost of prison time equals the annual opportunity cost times the length of the prison sentence. Another cost in terms of opportunity cost is the loss of freedom.
- Expected cost is the probability of being imprisoned times the opportunity cost of imprisonment.
- iii) Expected benefit: The expected benefit from the crime is the expected loot less the expected cost.
- iv) Net return from crime: The alternative to crime is to spend time doing a day's legal work. The net return from crime is the expected benefit of the crime less the money to be earned in a legal job.

This model of a rational criminal provides three reasons why certain people engage in committing crimes. Firstly, some people are relatively skillful in committing crimes and escaping punishment. In this case, the expected loot is relatively larger than the expected cost of crime. Secondly, some people have a relatively low opportunity cost of time spent committing crime and time spent in prison and thus the expected cost of crime is relatively low. An unemployed person would have a lower opportunity cost for example. Lastly, some people have less respect for society and are less averse to committing a crime. These people need a relatively small net return to make it worthwhile to engage in crime (McDonald, 1997: 497).

According to Curie (1993) there are four necessary characteristics for a neighbourhood or open area to attract criminal elements.

- Criminals do not like clean, well-lit areas or neighbourhoods because cleanliness is perceived as a characteristic of a zero-tolerance area.
- Criminals need a legitimate cover for presence on the streets eg. a convenience store, bar, etc.



- iii) Drug dealers are attracted to areas or neighbourhoods with many poorly supervised children because these children are easy to recruit as salesmen and lookouts.
- Markets require a steady stream of customers and provide an easy means of escape.

Crime can be prevented in urban areas using a number of options, although this may not be isolated to urban areas alone (O'Sullivan, 1996: 661).

- i) The target can be hardened. Victims can decrease the expected loot by decreasing the probability of a successful crime by installing locks etc.
- ii) The police can increase the expected cost of crime by increasing the probability of arrest by employing more police members.
- iii) The criminal justice system can increase the expected cost of crime by increasing the probability of imprisonment through more convictions. A more efficient criminal justice system and effective handling of evidence will help.
- iv) The criminal justice system can increase the expected cost of crime by increasing the severity of punishment through lengthening the prison sentences.
- Increasing the value of legal opportunities in an area by increasing the job skills of potential criminals can increase the opportunity cost of crime.

It is important for cities to address the issue of crime because it may force business out of the city as well as prevent potential investors to the city. Residents in urban areas may also opt for safer areas in other regions because of a high level of criminal activity. These combined factors may have a major destabilising effect on an urban area.

8.6 SUMMARY

The demand for labour in an urban environment can be influenced by the relative price of capital. If labour wages increase relative to the price of capital, the demand for labour will be negatively influenced. The demand for products as well as the



productivity of labour will also affect the demand for labour. If an increased volume of sales in both local and export goods can be achieved, the demand for labour will increase through the employment multiplier.

Births, deaths and migration may affect the population growth. The supply of labour to an urban area is positively linked to a high wage rate, relative to other cities. This is the migration effect and may also be caused by environmental quality and public services to mention but a few factors. Unemployed people will also flock to cities due to the prospect of greater opportunities. The possibility of finding a job in a city is perceived higher than in rural areas thus contributing to an increase in the supply of labour. Births and deaths also determine the population growth of urban areas. Various factors like education, birth control, etc. affect birth rates, while better nutrition, improved medical and health services affect death rates. Certain supply push factors and demand pull factors affecting the labour situation in a urban area, were identified.

Lastly, the fact that the urban population is on the increase leads to a higher rate of unemployment and obviously to higher levels of criminal activities. Criminal activity imposes a direct and indirect cost on society and influences business negatively. Cities have to address the issue of urban crime using a variety of options because of crime's critical destabilising effect on economic activity.

It is important to attract skilled labour to an urban area because of the potential stimulating effect on the urban economy. It is therefore necessary to enhance the urban environment so that businesses employing skilled labour will locate. Knowledge spillovers may occur and result in further job creation for the semi-skilled and unskilled to address the unemployment problem. This could reduce the possibilities of criminal activities and contribute to higher levels of economic growth and development.

In an effort to attract businesses and skilled labour, housing needs to be supplied to these people. Housing is an important and valuable asset for any household. In the



next chapter, urban housing is discussed. Decisions of households to locate in specific urban areas could affect the urban environment and surroundings.