

The Process of Rural-Urban Migration in Developing Countries

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1.0 Introduction

Rural-urban migration occurs at varying rates in every country. This paper focuses on the process of rural-urban migration and its influence on urbanization in developing countries. It presents arguments in support of the proposition that rural-urban migration is an inevitable component of the development process, and does not necessarily have to result in adverse impacts. With the right mix of policies, this process can occur at a socially acceptable level. However, given the distortion of opportunities in favor of cities in most developing countries, the costs associated with rural-urban migration often outweigh the benefits, leading to excessive urbanization.

Special emphasis is placed on the causes and consequences of rural-urban migration, and their relationship with urbanization and economic growth. Given that rural-urban migration is an integral part of the development process, it is very important that the causes and consequences are understood, if effective policies to foster economic growth are to be developed.

This paper is theoretical and policy oriented in nature. By analyzing models of rural-urban migration, a clear rationale for migration will be developed. The paper begins with a brief background of the progress of urbanization in developing countries over time, and how rapid rural-urban migration has led to excessive urbanization in many developing countries.

Secondly, the causes of rural-urban migration are presented, together with a discussion of the issues faced in rural areas, and the factors encouraging people to leave these areas to find new opportunities in the cities. The problem of poverty and lack of opportunities in rural areas are also presented and identified as push factors, while urban job opportunities is the pull factor. This is followed by a presentation of the issues surrounding urban bias, with emphasis placed on government policies which contribute to imbalances in opportunities available in rural and urban areas.

The benefits and costs of urbanization are presented in section 3. Urbanization leads to economic growth and economies of scale, but because of a divergence of social costs and private costs, excess urbanization arises which leads to inefficiency.

The three models analyzed in section 4 provide a theoretical basis for an understanding of rural-urban migration. These models are: (i) Lewis Dual Sector Model, which states that migration occurs between an industrial sector and an agricultural sector; (ii) Family/household Migration Model, which presents rural-urban migration as a family based decision, where the head of the household decides to migrate to the city based on whether or not the overall family income will be higher; and (iii) the Todaro Model which provides a theoretical argument, that migration is an economical decision where the individual or household decides to move if there is a higher expected income in the urban areas. Criticisms and implications attached to these models are discussed and used as the basis for selecting the most appropriate model to explain the process in developing countries.

Many government policies have direct or indirect relationship with rural-urban migration. Due to the negative consequences of excessive rural-urban migration that can

occur, it is very important that policymakers realize the incentives or disincentives associated with each policy during the planning stages, i.e., before implementation. Section 5 looks at the policy implications of rural urban migration. Several policies are presented in section 5, showing their impact on the rural-urban migration process, and the importance of having an appropriate balance between rural and urban areas in policy making.

The case study approach is used in sections 6 and 7 to apply the concepts discussed in the preceding sections. The countries studied are Bolivia and Peru. The policies that are in place in these countries are presented, and the causes and consequences of rural urban migration analyzed.

The final section looks at the lessons learnt and recommends several approaches that should guide governments' policy making strategies if the adverse consequences of unacceptable levels of rural urban migration are to be avoided.

1.1 Background

Many developing countries have a recent colonial past, which has tremendously altered their structure and governance. Their cities, many of which were port cities, were originally created for resource extraction, and most of the urban jobs that were created were established in these original cities. The populations of countries all around the world are becoming increasingly urbanized. The pace of urbanization in less developed countries before 1950 was very slow. However, after this period the rate increased substantially. Table 1 shows that the urban population compared to the rural population increased by 100% in the period of 1950-1985¹, because of improvements in farming practices and way of life in the countryside; more advanced life saving medical practices leading to higher rates of fertility and life preservation; and rapid rural-urban migration. Most developing countries have noticed a transformation in their societies from rural to urban over the last two to three decades. The larger cities in developing countries have been growing very rapidly, often doubling in size every fifteen years.

Table 1:

Percentage of total population in urban areas by region, 1950–1985

Major region and subregion	1950	1970	1985
AFRICA	13.2	22.5	29.7
Eastern Africa	5.3	10.3	18.1
Middle Africa	8.1	24.8	35.6
Northern Africa	23.2	36.5	42.1
Southern Africa	36.5	44.1	52.5
Western Africa	9.5	17.6	24.9
LATIN AMERICA	40.9	57.4	69.0
Caribbean	33.0	45.8	56.5
Mexico and Central America	39.5	53.9	63.3
Temperate South America	62.8	77.9	84.3
Tropical South America	36.5	56.1	70.4
UNITED STATES AND CANADA	63.6	73.8	74.1
ASIA	15.9	23.9	28.1
China	11.1	20.1	20.6
Japan	50.3	71.2	76.5
Other East Asia	23.2	47.4	66.8
Southeastern Asia	13.4	20.2	26.3
South Asia	15.6	19.5	25.2
Western Asia	23.3	43.2	55.0
EUROPE	54.8	66.7	71.6
Eastern Europe	42.2	53.5	61.5
Northern Europe	70.8	82.4	86.1
Southern Europe	44.9	56.2	62.5
Western Europe	63.2	76.4	79.6
OCEANIA	64.5	70.8	71.1
Australia and New Zealand	78.7	84.4	85.2
Melanesia	2.0	15.1	20.2
Micronesia and Polynesia	20.6	32.3	41.6
USSR	39.4	56.7	65.6
More-developed regions ^a	53.4	66.6	71.5
Less-developed regions ^b	15.6	25.4	31.2

¹ Gilbert and Gugler, 2nd ed. *Cities, Poverty and Development* (Oxford Univ. Press 1992) pg. 7

Table 1 shows that in 1950 urbanization had barely existed, because the populations of almost all the developing countries lived in rural areas. In 1950, only Japan, temperate South America, and Southern Africa had a higher proportion of urban inhabitants. Although many developing countries had begun to realize increased urban growth at this time, many were still rural societies.

Since 1950 urbanization has had a tremendous effect on developing countries all over the world, at varying rates of change, some more rapid than others. While most regions have been experiencing an increase in rural-urban migration, some have experienced excessive rates, with the attendant problems. According to Gilbert and Gugler, in some countries where rural-urban migration had earlier been intense, migration no longer was the main driving force of growth in urban populations. For example, after a decade or two of rapid urban growth, the population growth in many Latin American cities is now dominated by natural increases; migrants that had moved to the cities were now giving birth, therefore increasing the population.

2.0 Causes of Rural-Urban Migration

2.1 Issues Faced in Rural Areas

Rural populations wittingly or unwittingly, have become a part of an economic system, which sees goods being farmed for the primary goal of supplying the urban

markets.² In many countries, rural areas supply the manual labor needed in many industries. Rural laborers generally have little education and are relegated to low paying jobs on plantations or in mines. This has provided the incentive for many who have migrated to the cities in search of opportunities for advancement. Rural populations experience the highs and lows of a global economy, for if the price of their crop drops, then their sustainability is affected. During recessions in the economy they are often among the first to lose their livelihoods. The cultural values and norms of the rural poor undergo severe changes when they come into contact with missionaries and foreign entities. Changes in the educational system results in what is taught in schools being different from traditional customs. In addition, they are exposed to radio programs, films, and more recently, television series produced in distant cities, some of which are half way across the globe.

Some rural areas when exposed to urbanization experienced a decline in their living conditions due to a high level of exploitation. In other areas certain groups couldn't cope with the change and were gradually impoverished, being unable to sustain themselves. However, for most rural inhabitants, living conditions changed for the better. With medical care becoming available to a larger number of persons, improvements in health and longevity were dramatic, a contributory factor to higher rates of population growth. The increased population caused a strain on the available land, made worse if it is communal land and there aren't adequate property rights in place.

Another important issue faced by rural areas is the influence of the outside developed world on their culture and way of life. As time goes by and with the influence of media and the outside world, they become to recognize their state of poverty. People's

² Gilbert and Gugler, 2nd ed. Cities, Poverty and Development (Oxford Univ. Press 1992) pg. 62

wants change over time, and when they are being told they need certain things they begin to think that way, and many of these things may not be tangible for large portions of the populations.

People from rural areas may rise to positions of affluence that were previously thought to belong to other levels of the society. Rural inhabitants' perception of a better life changes when observing the new success of the people from their communities, rural dwellers can then analyze how these people have achieved such positions, and hope to emulate their success. Rural inhabitants know what it takes to achieve the lives of wealth they have been exposed to. They know that a high school education or a University degree can lead to a much higher expected income, thereby increasing their future income. With more money they can increase their consumption.

Many people have firsthand accounts of the success that can be had in urban areas. Some manage to improve their living conditions by staying in the areas where they are born, others move to other rural areas as farmers, traders or manual laborers. In general the prospects of employment in rural areas aren't positive, while the urban areas seem more rewarding.

2.2 Migration Forces

Rural-urban migration can be ignited by voluntary forces or involuntary forces. Involuntary forces or forced migration is migration that takes place when the migrant has no choice whether or not to move. Examples include political strife, family disagreements, fighting with neighbors and wars. Voluntary movement covers all

migration done by choice.³ There are many factors that cause voluntary rural-urban migration, such as urban job opportunities; housing conditions; rural land tenure and inheritance patterns; rural social structure and cultural values; among other factors. Rural inhabitants see and hear success stories about people that leave their community and move to cities, which also act as incentives for out-migration. Incentives for out-migration may be distorted, thereby creating excessive urbanization. Therefore, rather than targeting the migration itself, it is preferable to focus on the causative factors.

Rural inhabitants, when presented with options of earning a living other than from farming, and which may not be as demanding or are financially more rewarding than farming, are very likely to accept the change. Depending on the country, farming offers only seasonal employment, not providing sufficient income to sustain the family households for an entire year. In many developing countries, farming is not looked upon with as much respect as, for example, a low level white collar job in the city. For many, farming is seen as strenuous, back breaking work. Consequently, policies that do not provide rural inhabitants with viable economic alternatives will likely lead to migration, creating problems of over urbanization in the cities. As long as there is an income differential, people will always move to where there is a greater income.

2.3 Poverty and Lack of Opportunities in Rural Areas

Poverty is still one of the most serious problems in the world. Many existing development policies take poverty alleviation into consideration, which has led to much economic advancement. It is estimated that over 1 billion people in the world still live in

³Nelson, Access to Power, Politics and the Urban poor in developing countries (Princeton Univ. Press 1979) pg. 49

poverty. In the developing world, urban poverty is persistent, with the majority of the poor living in rural areas, hence it is in these areas that poverty alleviation policies should be concentrated.⁴

The most valid assumptions when generalizing about the poor in rural areas, is that they are dispersed all over the poor regions. Among minority groups and indigenous peoples, women, (whether or not they are housewives), and children account for the larger percentage.⁵ Data collected from a number of surveys support these generalizations. According to (Todaro p.229), about two thirds of the poor in rural areas get by and sustain their lives with subsistence farming either as small farmers or working on land owned by other people. The other third are engaged in small scale activities. Poverty profiles for developing countries characterize the poor as being agricultural households with little arable land. In an agricultural based economy, where poor residents lack access to resources and there is a high level of inequality and an inequitable distribution of assets, non-farm labor becomes an important source of income for the poor. Especially in the cases of small farmers and non land owners who account for the majority of agricultural laborers, there is a heavy dependence on the rural labor markets for a huge portion of their incomes. How the rural labor market functions and the wages being offered, have an important impact on the state of poverty in all countries of the developing world.

2.4 Urban Job Opportunities

According to the Todaro model, rural migrants may not find employment

⁴Poverty and Rural Labor Markets in Developing Countries (International Labour Organization Monograph, January 1995) <<http://www.ups.edu/faculty/mwarning/abstracts/povlab.html>>

immediately upon arrival in the city, and when they do, there is a high likelihood that their wages will be lower than they expected, resulting in lower than expected income. Educated and skilled immigrants may not have to wait as long as unskilled migrants to find jobs, since often their skills are in demand in the urban sector. However, migration of skilled personnel is a further reflection of inadequate policies as this further weakens the potential of rural areas to develop.

Many factors influence people's decisions to relocate to urban areas. As empirical research has shown, a disproportional number of these migrants are young adults, all of whom move to the cities for various, albeit mostly economic reasons. Empirical studies have documented that the majority of migrants to cities are young and have higher levels of education. They migrate because they have longer prospects of earnings and their probability of getting hired in the urban areas is higher.

Employment in urban areas can fall under two broad categories, firstly the formal sector and secondly the informal sector. The formal sector characterizes all activities that are recognized by the government as being legal in nature and providing tax revenue. Traditional occupations such as banking, office clerks, and plumbing would fall under this category. These jobs tend to pay more than jobs in the informal sector, and they garner a greater deal of respect. Many migrants who move to cities would like to obtain a job in the formal sector, but find it difficult to do so. They need to have a certain level of education to be able to compete with the urban residents for these jobs. Worker productivity and income tend to be higher in the formal sector than the informal sector. Workers in the formal sector enjoy job security, proper working conditions and retirement pensions. The second category, the urban informal sector will be discussed in

⁵ Todaro, 8th ed. Economic Development (Addison-Wesley 2003) pg.229

more detail below.

2.5 Urban Informal Sector

The urban informal sector, unlike its formal counterpart, includes all activities that are unregulated and small scale in nature. Not much attention was given to this unregulated, unorganized and mostly illegal sector till the 1970s. Observations were made in several developing countries that certain labor market activities failed to show up in statistics relevant in the formal modern sector. The majority of the new workers in the urban labor force seemed to create their own employment and start their own businesses, or work for small-scale family run enterprises. The self-employed were engaged in a variety of activities such as hustling, street vending, knife sharpening, prostitution, selling drugs and selling fireworks. Other migrants found jobs as barbers, carpenters, mechanics, maids, personal servants and artisans. Others managed to become successful entrepreneurs with several employees making high incomes.⁶ After some time, some graduated to the formal sector where they are subject to government labor regulations by becoming legally registered and licensed. According to Todaro, studies reveal that the share of the urban labor force engaged in informal sector activities is growing and now ranges from 30% to 70%, the average being around 50%.

The majority of the workers entering the informal sector are recent rural migrants who are unable to find jobs in the formal sector. Their main reason for taking part in the informal sector is to use what little skills they have to earn enough income to sustain their daily lives. As mentioned before, urban informal sector activities can be labor intensive, the labor coming from every member of the household that is able to work. They work

very long hours, sometimes making it difficult for the children to attend school regularly.

The informal sector is connected to the formal sector, since it provides opportunities for people who are unable to find employment in the formal sector. While it serves as a conduit for excess labor to escape poverty and unemployment, depending on the developing country in question, wages in the informal sector are not much better than rural wages. Although living conditions and working conditions may not be better than in the rural areas, the informal sector wages have remained higher than the wages in the poorest rural areas. Migrants interested in getting employment in the formal sector, find the informal sector as a safety net to fall back on if things do not work out for them. The informal sector is therefore seen as a cause of rural-urban migration, because it lowers the risk of the individual being unemployed once they move to the cities.

2.6 Government Policies Creating Urban Bias

Another cause of rural-urban migration is urban bias. Government policies supporting disproportionate increases in wage rates and employment opportunities in the urban areas contribute to imbalances in the rural urban landscape. This topic will be analyzed in greater detail later in the paper.

3.0 Benefits and Costs of Urbanization

3.1 Benefits

⁶ Todaro, 8th ed. Economic Development (Addison-Wesley 2003) pg.324

Economies of scale arise as a result of economic growth. When suppliers and consumers are in closer proximity to each other, this allows for savings in communications and transportation costs. Large cities also offer a variety of employment opportunities with higher wages, all of which may help accelerate the pace of technological innovation. Urban growth also allows governments to provide services such as sanitation, water supply, electricity, and transportation more efficiently.

3.2 Costs

Against these benefits, a major consequence of rural-urban migration is excessive urbanization. There is a very strong link between excessive urbanization and rural-urban migration. Migration has increased urban populations significantly over the years. A common view held by policymakers and economists in developing countries is that urban growth rates are excessive. This view is brought about by the large numbers of unemployed or underemployed young people in many Asian, African, and Latin American cities.

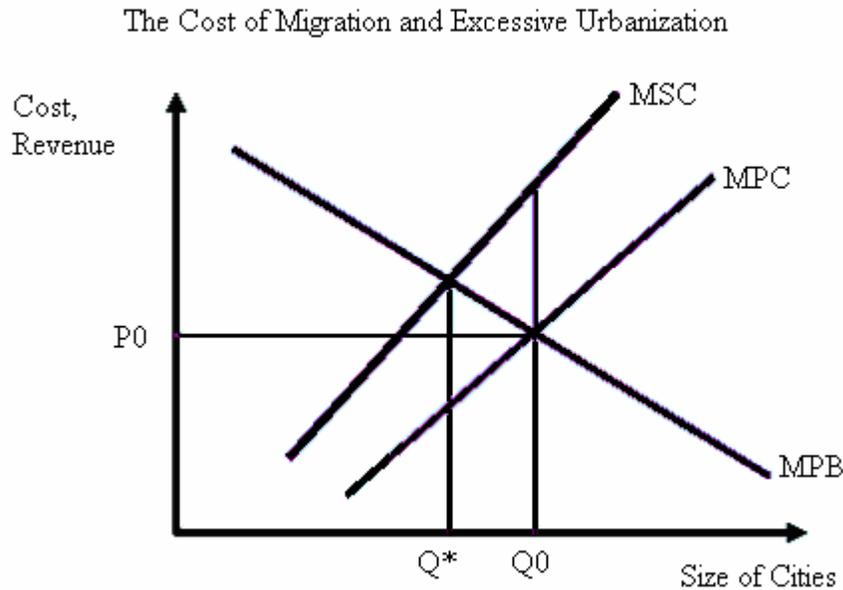
Most economists however, believe that urbanization is an inevitable consequence of rural stagnation and successful economic development, not an undesirable force that must be suppressed. Migration instead should be recognized as an equilibrating response to disequilibrium elsewhere in the economy.

Excessive urbanization leads to high rates of city congestion, crime and poor infrastructure such as proper sewage systems, clean drinking water and other amenities. There is also the problem of chronic unemployment which is also a key cause of crime,

as people need to find ways of putting food on their tables. Excessive urbanization has brought with it the creation of large slums and shanty towns, as new migrants find it difficult to get proper housing. In developing countries, slum settlements represent over one-third of the urban population; in many cases they account for more than 60% of the urban total.

The cost of travel associated with large cities begins to rise as urbanization becomes excessive, because congestion takes place which wastes resources such as time and fuel. The expansion of cities causes the cost of providing basic services to increase, as a result the quality and availability of existing services deteriorate rapidly. Excessive urbanization and the problems associated with it are all examples of negative externalities. Negative externalities lead to market inefficiency, which would cause market failure to occur. In the case of urbanization, market failure can come in the form of excessive urbanization, or city sizes that are above the socially desirable level. As the Economic Review states, this occurs because there is a divergence between social costs and private costs. This is shown in the figure below.

Figure 1:



Source: Economic Review 14(2), November 1996

In the figure, marginal social cost (MSC) is above marginal private cost (MPC), because the true social cost is equal to the private cost plus the cost migration in excess has on a city by causing overcrowding to occur. Since marginal social cost is greater than the marginal private cost, this demonstrates that there is excessive migration. Potential migrants are faced with the choice of whether or not they should leave the rural areas for the cities. They will migrate as long as their benefits from migration exceed their costs. In other words they will migrate up to the point where marginal private cost (MPC) is equal to marginal private benefit (MPB). This point is not efficient because it takes place at Q_0 , while the efficient city size is Q^* . The distance $Q_0 - Q^*$ represents the excessive urbanization that takes place or the degree to which cities are too big.

4.0 Models

To provide a theoretical argument for rural-urban migration, three models of rural-urban migration will be presented. These are:

- 1) Migration and the Dual sector model of economic development
- 2) The family/household migration model and
- 3) The Todaro model of migration.

There are many other models that try to explain migration, but these three were chosen because of the amount of attention they have been given in the economic literature over time.

These models give alternative insights for the reasons why migration takes place. The Lewis Dual Sector model basically states that there are two sectors: agricultural and industrial. There is the existence of excess labor in the rural agricultural sector, therefore people migrate to the industrial sector to obtain employment. Secondly, the family/household migration model states that migration is rarely an individual decision, immediate and extended family play an important role when making the decision to migrate. Finally the Todaro model of migration states that migration is mostly an economic decision, which an individual finds rational even with the existence of urban unemployment.

The main ideas of these models will be presented, followed by the criticisms or implications that are associated with them.

4.1 Migration and the Dual Sector Model of Economic Development

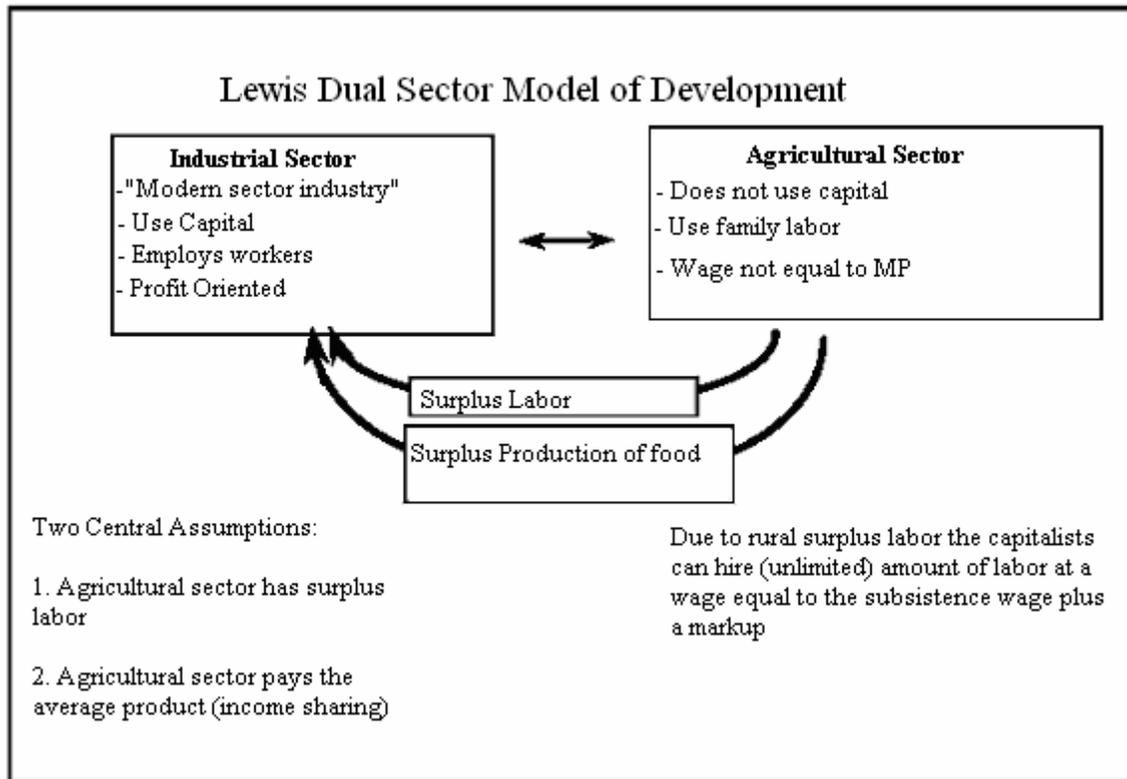
The Lewis Dual Sector model has two main sectors: An agricultural/rural sector characterized by zero marginal productivity of labor, and an urban/industrial sector which has a high demand for labor and offers wages that are higher than the rural areas. Lewis assumed the agricultural sector to be purely subsistence characterized by surplus labor, low productivity, low incomes, and considerable underemployment. Some portions of the rural labor force were assumed to be redundant or surplus in nature, contributing nothing to output. The industrial sector was assumed to be technologically advanced with high levels of investment operating in an urban environment.⁷

By offering a slightly higher wage in the urban/industrial sector, many workers from the rural sector are attracted. Wage here only has to be slightly higher than the average agricultural product in order to attract surplus labor to the cities. At this wage in the industrial sector, the supply of labor is said to be elastic, since as long as there is surplus labor in the rural sector there is no upward pressure on the wages in the industrial sector. Lewis states that because the firms in the industrial sector are offering these relatively low wages, they are able to earn and reinvest profits very quickly.

In this model, the level of productivity in the rural sector is so low, that if there is a large outflow of workers from this sector to the industrial sector, this would have no impact on the aggregate output. Lewis states that increased savings and investment leads to economic development. When workers move to the industrial sector, their savings are increased because of an increase in income. Lewis thought this was the only way that economic development could occur.

Rural-urban migration is a central part of the dual sector model theory, as it allows the flow of labor from the agricultural sector to the industrial sector. This flow of labor is shown in the figure below which illustrates the Lewis dual sector model of development.

Figure 2:



Source: http://www.econ.ku.dk/heltberg/core_course/lecturenotes_spring2002/lect09.pdf

Criticisms

There are many criticisms of the Lewis Dual Sector model. The Lewis model is very simple and probably does a good job in explaining the historical experience of developed countries in the west, but some of the main features of the model do not

⁷Biz/ed Virtual Developing Country, Lewis's Dual Sector Model of Development: The theory of trickle

explain the actual realities of less developed countries. The main criticisms of the model are as follows:

- 1) The model assumes that the rate of transfer of labor from rural to urban areas and creation of employment is directly proportional to capital accumulation. This is not very realistic, it would make more sense to say that the profits are reinvested in labor saving technologies which increase productivity.
- 2) The model's assumption of a capitalist marginal propensity to save of almost 1 is unrealistic, because there may be potential leakages from the economy. An increase in profits usually leads to an increase in consumption.
- 3) The model places more weight on development in the industrial sector, and ignores the balance between agriculture and industry. It also ignores the fact that investing in agriculture is very important.
- 4) There is also the assumption that the real wage in the industrial sector remains constant up to the point where the surplus labor in the agriculture sector no longer exists.

Historical evidence from many developing countries associate rural-urban migration with an increase in wages and a fall in profits earned.⁸

4.2 The Family/Household Migration Model⁹

Household migration can be divided into two categories: Split migration and family migration. Split migration occurs when the head of the household moves from a

down <<http://www.bized.ac.uk/virtual/dc/copper/theory/th8.htm>>

⁸ <http://www.brunel.ac.uk/depts/ecf/lectures/2054/2054L3.pdf>

⁹ Richard U. Agesa and Sunwoong Kim, "Rural to urban migration as a household decision: Evidence from Kenya," *Review of Development Economics* 5(1) (2001): 60-75

rural to an urban area, then the rest of his/her family follows at a later date. Family migration occurs when the entire family moves together at the same time to urban areas.

Consider a developing country with a rural/agricultural sector and an urban sector. The family in the rural sector is comprised of a husband (assumed to be the head of the household), wife, children, and extended family. The rural household is assumed to maximize a utility function, with the following components: goods that have to be purchased (G), the consumption of goods produced by the family (F), subsistence costs (C) and emotional costs (E). The families are able to purchase goods with wage earned (W). R is used to represent the real wage where $R = W/P$, $P =$ price level. The urban wage (W_u) is assumed to be higher than the rural wage (W_r) in this model. This model also assumes that the wages are the only source of income, and that the urban wage and rural wage are fixed. The wages are also adjusted to account for the difference in cost of living between both sectors.

The subsistence cost (C) component in the model is divided into the following categories:

- 1) The subsistence cost when the family decides to stay in the rural areas $\alpha > 0$. There is an additional subsistence cost when the family head decides to move to an urban area which is $\delta > 0$. Because the family now has to maintain two households, the total subsistence cost is $\alpha + \delta$.
- 3) Finally when the entire household decides to move to the city all at the same time, the total subsistence cost is $\beta > 0$.

Emotional costs, (E), describes the emotional toll on the migrant and his/her family when split migration occurs. In the absence of split migration, $E = 0$.

Therefore the utility function is as follows: $U (G+F - C) - E$. If migration is chosen, the household moves to settle permanently in the urban area. According to Agesa and Kim (2001, p.4) there are four strategies migrants can choose when moving to the urban area.

These four strategies are A, B, B', and C. Each strategy can take place over three periods: the first, the second, and the third periods. When strategy A is chosen, the entire household decides to remain in the rural area, in which case strategy A takes place in the first period. The length of the first period is essentially the amount of time the family resides in the rural sector. When this occurs, subsistence costs are equal to α , and the emotional cost of split migration does not take place, therefore $E = 0$.

When migrants choose strategy B, the entire household migrates at the beginning of the second period. This illustrates family migration and when this occurs, the subsistence cost of the entire migrant household in the urban area is β . The length of the second period is essentially the amount of time the family resides in the city. With this strategy also, the emotional cost of split migration does not take place making $E = 0$.

In strategy B', the entire household migrates to the urban area in the third period. There is no split migration in this strategy, and it can be perceived as delayed migration. The family decides to wait until their chances for success in the urban sector are optimal. The subsistence cost of the entire migrant household in the urban area is β . Also $E = 0$, since split migration doesn't take place.

In strategy C, split migration takes place. The husband or the head of the household migrates to the city without his family to find a higher paying job. This takes place at the beginning of the second period. His family then joins him at the beginning of

the third period. The reason for split migration may be that the family would want to take on less risk and also less costs. If the husband goes to the urban sector by himself, initially he doesn't have to worry about his family's survival while he is in search of employment. The family can stay in the rural sector and continue doing their miscellaneous tasks to provide subsistence for themselves, until the husband finds employment and is able to pay for his family to join him in the city.

In this strategy, emotional costs are incurred therefore $E > 0$. Also, with the initial situation where the husband resides in the urban area while the family remains in the rural sector, there is the additional cost of maintaining a separate residence, which is δ . Therefore the total subsistence cost for the entire family is $\alpha + \delta$.

At the beginning of the third period when the remaining household joins the husband we assume that $\beta > \alpha$. Also if the size of the household is relatively large we assume that $\beta > \alpha + \delta$.

It is proposed by the author that the typical migrant upon arrival in the urban area has the probability p_1 of finding a job in that period. In the following period, the probability of finding employment is p_2 . The underlying assumption here is that $p_2 > p_1$. A similar assumption is put forth by the Harris-Todaro model. This model states that migrants make their decisions on whether or not to migrate based on the probability of finding employment and the probability of higher expected incomes in the urban sector.

4.3 Choosing the Best Strategy

As established before, in the first period of each strategy, the family is assumed to still live in the rural areas. We will begin by looking at strategy A. It is fair to assume that

if the probability of obtaining urban employment is low, and there is a small difference between urban and rural wages, then the household would remain in the rural area. Especially if the family knows that the cost of maintaining a separate residence in the city for the head of the household (δ) is high, they would definitely think twice about migrating.

We then take a look at strategies B, B', and C. These strategies will be considered as long as wage differentials exist between the rural and urban sectors, and urban job opportunities outweigh those of the rural sector. In other words, as long as the expected income derived from living in urban areas is higher than that derived from rural areas, migrants stand to benefit more from moving to the cities as soon as possible, because the longer they stay in the cities the higher is the probability that they will find employment. By applying our previous argument, the migrants therefore will choose to move to the city at the beginning of the first period, instead of remaining in the rural area; if it is indeed the case that migrating to the urban area is better than remaining in the rural area.

Hypothetically speaking, with the existence of a higher urban wage, if the husband specializes in labor market activities, the household would gain if he moves to the urban area first. If the wife is skilled in household production, and doesn't possess other skills, the household would lose if she migrated to the urban area first. It would be better if the husband migrated to the city to earn a higher wage, then sent remittances back to his family in the rural area. This is assuming that he is able to secure a job. If he is unemployed his income is assumed to be zero.

The model has the following implications: If the emotional cost of separation increases, the household will most likely choose family migration as the best strategy,

this would include strategies B and B'. Secondly, if the household is relatively large, they would gain more if the household head migrated first and the rest of the family remained in the rural area and joined him at a later time. By doing this the household would incur fewer costs, this illustrates split migration, which is strategy C. The third implication is that if the household production is higher in the rural area than in the urban area, strategy C would be chosen as the best strategy also. Agesa and Kim state that “the last implication of the model is that if household production by his wife (net of the subsistence cost of living) is higher in the rural area, then a higher probability of the husband finding a job is likely to be associated with a higher likelihood of family migration.”

If the probability of the husband finding urban employment increases to the extent that his urban wage outweighs the wife's loss in household production, the household that has a large net rural production by the wife will choose to migrate.

4.4 Todaro Model of Migration

The main idea of the Todaro model is that migration is mostly an economic decision, which an individual finds rational even with the existence of urban unemployment. The Todaro model states that urban-rural differences in expected incomes rather than actual earnings lead to migration. Individuals look at the employment opportunities that are available to them in the rural and urban sector, and choose the one that gives them the most gains from migration.¹⁰

According to Todaro, “the theory assumes that members of the labor force, both actual and potential, compare their expected incomes for a given time period in the urban

sector (the difference between returns and costs of migration) with prevailing average rural incomes and migrate if the former exceeds the latter.” But the reality of the situation is that in many developing countries, there is a chronic unemployment problem, so migrants can not expect to find high paying urban employment as soon as they enter the city. What would probably end up happening is that many unskilled and uneducated migrants upon arrival in the city would either be unemployed or find employment in the urban informal sector. On the other hand, migrants with marketable skills and secondary or tertiary education will have a better chance of securing a high paying urban job, and depending on the country in question, many will find jobs in the formal sector quickly. However, this category of migrants constitutes the minority in the migration stream.

Faced with the high rates of unemployment in urban areas and the probabilities of underemployment and being unemployed for an extended period, the migrant must consider the risks and weigh them against the positive urban-rural real income differential.

Todaro goes on to say that just because a typical migrant who obtains a job in the urban formal sector can expect to earn twice the amount he would than if he stayed in the rural sector, doesn't mean much if the actual probability of his getting a high paying job is one chance in five in a one year time period. Therefore, he has a 20% probability of getting a high paying urban job, and considering this in terms of monetary units, his expected urban income for a one year period would be 20 units instead of the 100 units that the migrant originally anticipated to be what he would earn as an urban worker in a full-employment environment. Thus, looking at these results, within a one year time

¹⁰ Todaro, 8th ed. Economic Development (Addison-Wesley 2003) pg.337

period and with a 20% success of securing a job, it would be irrational for the individual to migrate, even though the urban earnings are twice that of the rural earnings.

However if the probability of success in finding a job were 60%, it would be rational for the migrant with a one-period time horizon to take the risk and migrate to the urban area, even if there are high rates of unemployment.

A more realistic situation would be if we assumed that there was a longer time horizon. The Todaro model states that the majority of migrants are young people between the ages of 15 and 24. Thus the decision to migrate should be made on a more long term basis, with long-term earnings taken into consideration. Todaro says that “if the migrant anticipates a relatively low probability of finding regular wage employment in the initial period but expects this probability to increase over time as he is able to broaden his urban contacts, it would still be rational for him to migrate, even though expected urban income during the initial period or periods might be lower than expected rural income.” Therefore as long as the present value of the net expected urban income is higher than that which the migrant would obtain in the rural area over an extended time period, it would make sense to migrate.

In the Todaro model, rural-urban migration can be seen as “an equilibrating force that equates rural and urban expected incomes.” Because expected incomes take into consideration urban and rural wages and the probabilities of securing employment, this demonstrates why people continue to migrate even when there are high rates of unemployment in the urban sector.

Criticisms:

- 1) An important point of the Todaro model is that for each urban job created, more than one immigrant is induced to leave the rural area, and this labor surplus will result in an increase in urban unemployment. But empirical evidence has criticized this point by saying that this does not affect urban unemployment to any significant extent, as, it is claimed, the model does not take into account persons working in the urban informal market.
- 2) Another criticism of the model is that the decision to migrate is hardly ever made by only one individual. The family or the household almost always plays an important role in the decision to migrate, and migration can be seen as being a family utility maximizing decision.¹¹

5.0 Policy Implications of Rural-Urban Migration

5.1 Policies and Politics

Lack of meaningful employment in rural areas is often a consequence of poor government policies. This is an area of major concern when discussing urbanization. With issues of rural-urban migration and urbanization receiving more and more attention, policy makers in developing countries are considering the impact of their policies on migration. According to Gugler (91), in countries with rapid urban growth, governments aim to slow this growth and redirect it into smaller cities. In general, governments usually feel obligated to provide more services to urban inhabitants; this is merely a question of

efficiency. Urban areas are more densely populated with people living in close proximity to each other, allowing easier provision of basic services. By contrast, people in rural areas are assumed to live further from each other, making it harder to provide such services. Also there are political reasons, in that major cities are often used by governments to signal economic prosperity to a larger proportion of the voting population. Governments see a larger political payoff from having prosperous cities and hidden rural poverty, rather than unattractive capitals and rural investments.

5.2 Appropriate Policies

Policy makers must realize that rural-urban migration is an inevitable consequence of both asymmetric policies and economic development favoring urban areas. Migration should be seen as an equilibrating response to disequilibrium existing in the economy, and it is the responsibility of governments to reduce this disequilibrium. As long as there are gaps in rural-urban employment opportunities caused by urban bias, there will be migration. A widely held view is that urban populations are too concentrated in a few large cities, and that by implementing policies aimed at restricting urban growth, there may be reductions in social welfare. An alternate argument however, suggests that it is better to go the root of the problem to determine why people are migrating, and then implement policies to effectively deal with these problems.

In countries where there are issues of urbanization, there are a variety of policies that may be considered, depending on the issues of greatest concern. These policies generally are aimed at restricting or redirecting rural-urban migration and reducing

¹¹ Richard U. Agesa and Sunwoong Kim, "Rural to urban migration as a household decision: Evidence from Kenya," Review of Development Economics 5(1) (2001): pg. 60

population growth. A few of these policies and their effectiveness will be discussed.

5.3 Policies to Reduce Urban Bias - Promoting Rural Development

As discussed earlier in the paper, rural migration is a major contributor to the problem of high unemployment in urban areas. Since wage differentials caused by urban bias encourage people to migrate to urban areas, it would be in the best interest of countries facing issues of rural-urban migration to reduce urban bias. Rural development policies aimed at creating more employment and income in rural areas should therefore receive greater emphasis. Of course, the situation varies depending on the country in question. Agricultural development can be a positive factor in a country that is heavily dependent on inputs from rural areas. However, one has to be careful because some crops are more capital intensive than others, and utilization of high technology methods of production may encourage migration all over again.

5.4 Pricing Policies

Another consideration is the pricing of rural products. Interestingly enough, low agricultural prices can diminish production, resulting in lower levels of urban manufacturing, which can act to slow city growth in the long run. The most important element when discussing agricultural pricing is whether or not urban export sectors are strong. If they are, then low agricultural pricing would not have an adverse effect on urban development, because export earnings would come from urban production, and agricultural products may be imported. However, low agricultural pricing would lead to low rural incomes thus increasing rural-urban migration. Therefore, in very

underdeveloped countries, agricultural development is closely linked to the growth of cities.

It is a given that poverty alleviation is one of the main goals of development policies. Fewer policies benefit the poor more than those that directly or indirectly increase the incomes of rural areas. In most cases, rural development means increasing agricultural productivity which translates into income gains, inducing rural farmers to remain on farms. If the country in question has a liberal foreign trade policy, increased agricultural productivity does not necessarily bring about lower prices. If the rural sectors are only producing for domestic consumption, an increase in supply would imply falling rural prices which in turn would reduce revenues. Falling food and industrial prices lower the costs of urban production, leading to employment creation, further contributing to rural-urban migration. Governments therefore have to be mindful that there be harmonization of policies to minimize conflicts between those aimed at increased rural production, and those aimed at lowering prices to stimulate urban production.

5.5 Promotion of Secondary Cities

In developing countries it is very important to promote secondary cities and market towns. Many countries have huge primary cities because of urban bias. It is important to promote secondary cities in order to encourage agricultural and other rural development and slow the growth of the main city. Rural areas close to secondary cities have easy access to storage facilities thus reducing the distance to the market, and the levels of post-harvest losses. Also if the nearest market is a considerable distance away, farmers will receive low prices for their crop, because middlemen would have to be

compensated for higher transportation costs. From the point of view of urbanization, secondary cities have the potential to provide attractive alternative destinations for city-bound rural migrants. They not only serve as market intermediaries, but also create employment. This would create less strain on the primary cities, and help to alleviate urban poverty.

5.6 Decentralization

Another policy is that of government decentralization. Decentralization of government responsibilities gives decision-making power to the local residents, who have greater understanding of their issues and so are expected to make more appropriate decisions. However, to be truly effective, both taxing and spending authority should be given to local governments.

While the right policy will greatly assist in reducing rural-urban migration, it is recognized that the process cannot be stopped altogether. Every policy has its advantages and disadvantages, and governments have to be realistic when making rural development policies. A specific case of a country successfully implementing rural development policies is Thailand. With the help of the UNDP, the government of Thailand has implemented several policies aimed at alleviating poverty in rural areas, with particular focus on strengthening the capacity of government, communities and other entities to provide economically and environmentally sustainable livelihoods and employment opportunities for the rural poor. Under a program set out by the UNDP, the specific objectives are to:

- 1) mobilize and strengthen local farmer organizations to undertake sustainable

- agricultural activities;
- 2) ensure employment and income opportunities through the creation and support of rural community industry; and
 - 3) expand sustainable livelihood opportunities in poor rural communities of the five southern border provinces.

The Royal Thai government places great emphasis on the need for "job opportunities and equitable income distribution among all groups of people in all regions of the country" and that "the quality of life in the provinces and rural areas should not be inferior to the capital city."¹² A major part of the plan was a move toward decentralization, relying on collaborative efforts and participation among all stakeholders. The program was successful in building capacity at national and local levels needed for effective implementation of policies and programs that support sustainable poverty alleviation. Through its inter-related and mutually reinforcing elements, the program progressively made significant changes in policy development, management development, enhanced economic opportunities, environment and natural resources, and human resources development.

Case Studies

The purpose of these case studies is to provide a brief analysis of rural-urban migration in Bolivia and Peru, and to observe the advantages and disadvantages

¹² The UNDP Thailand Website, (29 Oct. 2003)
<<http://www.undp.or.th/focusarea/poverty/povertyprog.html>>

associated with it. These two countries were chosen because they are similar in size and are both sparsely populated. The process of rural-urban migration differs in every country, and because of Bolivia's diverse landscape, this country provides an interesting case in which to study the process. Peru also is an interesting case because of the cultural diversity of the migrants there, and the importance of their social networks in providing an incentive for rural-urban migration.

Differing views of rural-urban migration arise in Bolivia because of its population density. This case will illustrate the importance of implementing the correct policies to achieve the best results. Bolivia is a good example of policies being put in place without considering the effects on rural-urban migration or people's incentives to migrate. The same people that argued that urbanization is the best means to provide better basic services are surprised by the rapid rise in the urban population over the recent years, as is common in most developing countries.

Bolivia and Peru will provide good cases for the application of some of the policies discussed earlier in the paper. Some policies that are currently underway in Peru will be analyzed as well as the problems associated with them.

First, some brief country statistics will be provided in both cases to give the reader an idea of the composition of the countries. Then rural-urban migration will be analyzed in more depth. After which, the policies which should be implemented will be considered.

6.0 Case Study: Bolivia

6.1 Country Statistics

In the year 2002, Bolivia had a population of 8.7 million compared with the combined populations of Latin America and the Caribbean of 527 million. The country has a surface area of 1.1 million square kilometers, which is sparsely populated. Their average annual population growth was 2.3 %. The majority of their population is located in the urban areas. In 2002 the urban population as a percentage of total population was 63%. Poverty in the country as a percentage of population below national poverty line was 63%. Rural poverty rates are relatively high. According to Andersen et al (2001), rural poverty levels are high because of the inadequate provision of basic services, which brings about low levels of productivity. These basic services include education, health services, electricity, piped water, and road access. The provision of these basic services is made difficult by the population density of the country. The rural population is spread over expansive areas of mountainous or forested land. Bolivia's population density of 8 people per square kilometer is among the lowest in the world, which makes it difficult for the government to meet the needs of each citizen. Before 1992, the argument could have been made that the best way to meet the needs of each Bolivian, was to have them move to locations where it is cheaper and more efficient to deliver basic services. In other words it would be more feasible for them to move into urban areas, where it is easier to set up proper infrastructure to deliver basic needs. Table 2 provides statistics illustrating the inadequate provision of basic services in the poorer municipalities.

Table 2: Basic Services indicators (1992), by municipality group

Municipality group	% of pop with unsatisfied basic needs	% of pop with piped water	% of pop with electricity	% of pop with sanitation
10 major cities	53.7	83.8	95.2	51.4
Richest 150 municipalities	84.9	52.4	52.5	14.9
Poorest 151 municipalities	98.1	31.3	17.5	3.3
Average (over municips)	90.3	43.2	36.9	10.5

Source: Andersen & Nina (2001). The richest and poorest municipalities do not include the 10 municipalities containing the 10 major cities.

Bolivia's seven largest cities are La Paz-El Alto, Cochabamba, Oruro, Potosi, Santa Cruz, Sucre, and Tarija. La Paz being the largest city, while Santa Cruz is the second largest. The average annual growth rate in each city varies. The country can be divided into three main areas: the Altiplano (high plateau) of the Andes between 3700 to 4500 meters above sea level; the steep sided valleys of the south (1500-3000 ms); and the subtropical lowlands (400-500ms)¹³. Each of the three regions has an urban center. The cities of El Alto and La Paz in the highlands mainly attract migrants from the rural highlands. The third largest city, Cochabamba, which is located in the valley region, serves as an urban center that is steadily growing in size and can provide the same services as the country's capital. Tarija is also a rapidly growing valley city due to the natural gas boom in that region. Finally Santa Cruz in the lowlands has been the fastest growing Bolivian city with an average annual growth rate of 6.7% in the period 1950-2001¹⁴. See Table 3:

¹³ Bolivia country information

<http://www.international-service.org.uk/latin_america/pages/bolivia_home.htm>

¹⁴ Lykke E. Andersen, Rural-Urban Migration in Bolivia: Advantages and Disadvantages, Institute for Socio-Economic Research, Universidad Catolica Boliviana, La Paz Bolivia (20 February 2002)

Table 3: Bolivia's seven largest cities and population by census year (thousands)

City	1950	1976	1992	2001	Average annual growth rate 1950-2001 (%)
La Paz – El Alto	267.0	635.3	1118.9	1487.2	3.4
Cochabamba	86.5	229.7	515.7	778.4	4.4
Oruro	58.6	124.2	183.4	202.0	2.5
Potosí	43.3	77.4	112.1	133.3	2.2
Santa Cruz	41.5	254.7	697.3	1114.1	6.7
Sucre	38.4	63.6	131.8	194.9	3.2
Tarija	16.4	38.9	90.1	135.7	4.2
The 7 biggest cities	551.7	1423.8	2849.3	4045.6	4.0

Source: Urquiola *et al* (2000) for 1950, 1976, and 1992 data and http://www.ine.gov.bo/Censo_2001/Preliminar_01.htm for 2001 data.

6.2 Rural-Urban Migration in Bolivia

Bolivia always had a large rural population outnumbering that of the urban areas. However, in recent years this trend has been reversed by the high migration to urban areas. This rapid rise in urban population has meant that marginal towns are developing particularly in the main cities (La Paz-El Alto, Santa Cruz and Cochabamba). Like the majority of rural areas, these marginal city areas lack basic services such as water, sewerage, health posts and adequate schools. Today the migration to the main cities and to the lowlands has meant a spread of the different ethnic groups. This migration is smaller in number and many have been heavily influenced by migrants from the highlands and valleys of Bolivia, and from abroad.¹⁵

As mentioned before, Bolivia traditionally had a higher percentage of its

¹⁵ Bolivia country information
http://www.international-service.org.uk/latin_america/pages/bolivia_home.htm

population living in rural areas. In this country rural-urban migration was seen by many as being a positive contributing factor to economic development. The main problem was to tackle poverty alleviation and meet the needs of the people. People left the rural areas because of lack of opportunities there, and the attraction of a better life style being offered in the cities. In 1992, the population of Bolivia was 7,156,590 with an urban population of 3,000,000 people. At that time the basic services were unsatisfactory.

With rapid rural-urban migration the population changed dramatically. In Bolivia, 79% of the total population in 2000 had access to improved drinking water sources - 55% in rural areas and 93% in urban areas; 66% of the total population in 2000 had access to improved sanitation facilities - 82% of Bolivia's urban population and 38% of its rural population. The prospect of these urban advantages has ensured a steady stream of rural migrants to the urban areas.

6.3 Reasons for Rural-urban Migration

With reference to the MECOVI survey covering both rural and urban households in Bolivia, important implications for the reasons for migration were obtained. There were 13,031 participants in the survey, and weights were provided to make estimates for the whole Bolivian population. This section will use the survey to illustrate the various reasons for migrating.

According to the survey, 243,301 people migrated to the cities from 1994-1999. Table 4 shows the reasons they stated for leaving the rural areas to go to their new urban homes. We will focus on the top three reasons: job search, education, and family reasons.

Table 4: Reasons for Rural-Urban Migration

<u>Reason stated in survey</u>	<u>%</u>
1. Job search	18.2
2. Job moved	3.9
3. Education	25.6
4. Health	2.2
5. Family reasons	50.1
Total	100.0

Source: Andersen's calculations based on MECOVI survey

Job Search

Almost one fifth of migrants said they moved to the cities to find a job. The decision appeared to be well founded, because 95.2% of them were able to find employment up to one week before the survey. Their average monthly labor income was Bs. 1080, which is excellent, considering that they have significantly less education than urban workers. Average urban workers earn Bs 1092, and 14.1% of urban workers have a university degree, while none of the migrants did.

Based on the empirical evidence, migrants who were seeking jobs were overall successful in doing so. Although most of these jobs were in the informal sector, they were well paid in comparison to urban workers in Bolivia, and they earned more than four times the amount that a rural worker would make.

Education

Education accounts for more than a quarter of migration to urban areas. Table 5 shows that more than three quarters of this group of migrants attended school in 1999. Forty percent of the school attendees went to primary school, while 60 percent of the migrants obtained more advanced education such as secondary school, adult education, and tertiary level.

Table 5: Level of education received by education seeking rural-urban migrants

Level of education enrolled at	Number	%
1. Pre-school	905	1.9
2. Primary	18,284	38.9
3. Secondary	13,057	27.8
4. Higher education	11,188	23.7
5. Adult education and other courses	3,570	7.5
Total	47,004	100.0

Source: Andersen’s calculations based on MECOVI survey

Family Reasons

Fifty percent of the migrants moved for family reasons, which makes this category the most important one. When the head of a family decides to move, the rest of the household usually follows, some willingly and others against their will. The ones that are forced to move can potentially present a problem. Children generally do not present a problem because they adjust easily to the new cities and adapt to the new ways and customs. The older migrants have a harder time especially if they need to learn a second language.

6.4 Problems Associated with Rural Urban Migration

In 2002 Bolivia's total population was 8.7 million, with an urban population of 5,481,000. As one can see, this is a tremendous growth from the 1992 urban population of 3 million.¹⁶ Rural poverty has contributed to urban growth through rural-urban migration. In many Bolivian cities, the poorest settlements are very often occupied by rural peasants and new migrants. They are located at the edges of the city with none or very few basic services such as paved roads, decent housing, potable water and sanitation installations. They live in conditions of squalor, which might not be much better than their previous living conditions in the rural areas. The geographic location of the urban poor is a disadvantage both socially and economically due to distance from markets and access to basic services and public facilities.

Problems of urban management take on different characteristics according to the nature of the city. But in all major cities in Bolivia, urban sprawl has increased, escalating the cost of services, taxing the environment, and making it more difficult to maintain city, metropolitan, and regional representation on issues of common concern. In addition, problems of coordination between different authorities of the same city have resulted in administrative overlapping and jurisdictional uncertainty. This seriously restricts the productivity and efficiency of municipal authorities. All metropolitan areas suffer from poor air quality, as the roads are choked with cars and buses moving in and out of the city centers. Inadequate solid waste management, water supply and sanitation infrastructure underlie chronic health problems. One-sixth of Bolivia's population is spilling out of La Paz, located in a huge hole in the Andes at an altitude of 3,600 meters. Drainage and

erosion problems are critical on La Paz's steep slopes, where the more impoverished households are located at the higher elevations. Critical water shortages in the high valley city of Cochabamba mean that the rich, in well serviced neighborhoods with private connections, pay a fraction of what the poor pay for water from private vendors. The tropical lowland city of Santa Cruz, which is fast overtaking La-Paz as Bolivia's economic hub, is growing at a tremendous pace. The provision of basic services simply cannot keep pace with the influx of people.

6.5 Policies Considered

Macroeconomic policies are generally considered more important than micro-economic policies in most developing countries. Such policies include import substitution, currency devaluations, poverty reduction, tax reforms and trade facilitation.

Macroeconomic changes can seriously impact rural-urban migration. In Bolivia, many changes to economic policies after the year 1985 led to macroeconomic stability.¹⁷ This was all part of the structural adjustment program agreed to with the World Bank and IMF. Under the structural adjustment program (SAP), the objective was to introduce import substitution industrialization policy in Bolivia.

In general, the government and financial authorities liberalized the markets for goods and factors of production; took steps to open the economy to foreign trade; and sought to liberalize the financial system. Bolivia underwent a drastic devaluation to equalize the balance of trade and to be able to pay back debt owed to foreign entities.¹⁸

¹⁶ <www.urbaninternational.utoronto.ca>

¹⁷ Michael Krakowski, "Poverty Reduction Strategy Papers in Latin America: The Case of Bolivia," HWWA Report (Hamburg Institute of International Economics 2003): 28

¹⁸ Josef Gugler, *Cities in the Developing World: issues, theory, and policy*(Oxford Univ. Press 1997) pg. 98

Part of the fiscal measures was to reduce expenditure and increase tax revenues which would lead to a reduction in government budget deficits. By reducing the deficits, this would indirectly lead to a reduction in rural-urban migration. If the SAP was followed religiously, there would have been a reduction in education and other social spending. If government spending on education was reduced, especially on post-primary education, then fewer potential migrants would possess the skills to compete in the urban labor market. This would provide a disincentive for them to leave the rural areas. In other words, if there were fewer educational opportunities in the urban areas, then there would be a reduction in the number of migrants going to cities seeking employment.

As can be seen from actual experience, the government of Bolivia did not stick to the strict measures of the SAP in terms of social spending and education. After a couple years of implementing policies to achieve and maintain structural stability, Bolivia realized that they had low human capital levels, which slowed down economic growth considerably. It was decided that social and poverty reduction policies should be focused on to better the people of the country. In the mid 1990s the Bolivian government put social spending as a high priority, which placed a severe load on the overall expenditure. These increases in spending were not being accounted for by overall economic growth.

Education reform led to increased quality and coverage of education in both urban and rural areas, especially at the primary level. The proportion of the rural population that lacked access to educational services declined by 21.31% in the period 1992-2001, which is the highest improvement in this sector. While in the urban areas access to education increased by 32.28%.¹⁹ This reality is captured in the MECOVI survey, which shows the

¹⁹ Michael Krakowski, "Poverty Reduction Strategy Papers in Latin America: The Case of Bolivia," HWWA Report (Hamburg Institute of International Economics 2003): 29

number one reason for people migrating to urban areas was for education. Education accounted for more than a quarter of the rural-urban migration.

In order to increase the tax revenue, the government implemented a tax reform, under which they reduced the number of taxes and simplified the tax collection methods. They also included more individuals in the tax net and established taxation which favored small-scale rural land owners and low income earners.

Import tariffs and tariff barriers were reduced. Also to open the economy, Bolivia's government implemented a system of low uniform customs rates. By doing this they reduced production costs of tradable goods, and increased exports, which were also supported by the creation of mixed institutions. They introduced a measure which was called the drawback certificate which helped to improve the competitiveness of producers. If reduction of import tariffs reduced output and employment in the import-substituting industries in the urban areas and raised them in industries that use imports, then this would deter potential migrants. Migrants would be discouraged by lower wages and lower probability of finding employment.

6.6 Anti-Poverty Policies

Policies that target poverty alleviation influence rural-urban migration. According to the HWWA Report, the Bolivian government took significant measures in order to improve education, access to basic services and sanitation, and access to health services for the poor. The author says "these efforts were not sufficient to balance the negative effects of the growth pattern on distribution." That is, the efforts were not enough to lead to an increase in the per capita growth for the poor beyond the country's national average,

therefore the objective of increasing economic growth through targeting the poor was not achieved.

The Poverty reduction strategy in Bolivia has four components²⁰, namely:

- 1) expand employment and income earning opportunities
- 2) develop productive capacity
- 3) increase security and protection
- 4) promote participation and social integration

1) *Expand employment and income earning opportunities:*

The majority of the poor in Bolivia are found in the rural areas. Policies promoting rural development, establishing micro-enterprises, developing microfinance, and improving road infrastructure, are expected to decrease rural-urban migration by improving the standard of living of people living in the rural areas.

2) *Developing productive capacity:*

Developing productive capacity is synonymous to developing people's capacity by addressing health, education, sanitation and housing.

3) *Increase security and participation:*

Protection of the elderly and vulnerability of young people are considered. Property rights and land tenure are also considered. Securing property rights, especially in rural areas, would reduce rural-urban migration. In Bolivia many rural people still do not have titles to their land. People would feel secure if they knew that their land legally belonged to them. They would be more productive which would lead to creation of rural

²⁰ Michael Krakowski, "Poverty Reduction Strategy Papers in Latin America: The Case of Bolivia," HWWA Report (Hamburg Institute of International Economics 2003): 37

employment opportunities. The more opportunities that are available in the rural areas, the less migration there would be to the cities.

4) *Promote participation and social integration:*

This policy is intended to increase the participation of the majority of people in decision making, with a special focus on ethnic minorities.

6.7 Secondary Cities and Market Towns

Bolivia has quite a few secondary cities, all with populations over 100,000. As stated earlier the seven largest cities in terms of population in descending order are: La Paz-El Alto, Cochabamba, Oruro, Potosi, Santa Cruz, Sucre, and Tarija. The rapidly declining primacy of La Paz-El Alto produces good consequences for urbanization.

The concentration of population and economic activity is now spread over all these cities, which produces less strain on La Paz. Policies which promote secondary cities benefit the population as a whole. Although it takes a consolidation of policies to properly manage rural-urban migration, secondary cities help to give people options. These cities provide farmers with ease of access to markets and storage facilities for their goods, and increase efficiency, which leads to economic growth.

The existence of these cities has provided an incentive for rural-urban migration, because now persons do not have to travel as far to seek employment in the cities. This goes back to the point that there has to be a proper balance in policy making, because one policy can negate another.

Conclusion:

Bolivia proves that policies put in place that provide an incentive for rural-urban migration to take place can lead to bad results as a consequence of over-urbanization. Although the new secondary cities and major cities in Bolivia provide better basic services than the rural areas, they are plagued with the same problems that many cities in other developing countries are plagued with. They don't have the infrastructure or resources to cope with the large influx of migrants.

The case of Bolivia illustrates what many developing countries had to go through with the structural adjustment programs. The IMF tried to get the government to decrease their budget deficit by decreasing their social spending; which makes sense if they wanted to pay back their loan in a timely manner. But another way to increase available revenue or decrease the deficit is by increasing production. This cannot occur unless there is an increase in human capital. Education, health care and other social spending is very important for this to take place.

Bolivia's government was faced with the problem of having a healthy financial system, but having the social welfare of their people decrease. For economic development to take place, the people of the country have to be made better off, and poverty alleviation has to be the main goal, all as equally important as economic growth.

By deciding to increase spending on education, without also increasing spending on housing and job creation, Bolivia ran into the problems associated with excessive urbanization. There should have been a better balance of policies.

7.0 Case Study: Peru

7.1 Country Statistics:

Peru can be divided into three major regions: the central Andean highlands; the long, low coastal strip, and the remote eastern vastness of the Amazon basin. The four largest cities in Peru in descending order are Lima, Arequipa, Trujilla, and Chiclaya. The populations in these cities in 2002 were 7,603,500, 733,900, 600,900, and 490,400 respectively. In the year 2002, Peru had a population of 26.7 million compared with the combined population of Latin America and the Caribbean of 527 million. The country has a surface area of 1.3 million square kilometers, which is sparsely populated with a population density of 20.5 persons per sq. kilometer. Their average annual population growth was 1.6 %. The majority of their population is located in the urban areas. In 2002 the urban population as a percentage of total population was 73% which is approximately 18,674,000 (making cities work).²¹ The estimated urban population by the year 2015 is 78%, with projected annual growth rates (2000-2015) for urban and rural areas of 1.9% and 0.1% respectively.

Approximately 49% of the population falls below the national poverty line. Sixty three percent (63%) of the country's poor live in urban areas. Forty percent (40%) of the urban population is poor, which represents approximately 7,544,300 urban dwellers.

There are deficiencies in the availability of infrastructure and basic services in both urban and rural areas in Peru. For example, in 2000, approximately 2,427,620 urban

²¹ Making Cities work USAID website < <http://www.makingcitieswork.org/files/pdf/south-america/Peru.pdf>>

dwellers (13% of the urban population) and 3,424,000 rural dwellers or 49% of the rural population lacked water supply.

Thirty one percent of people without sanitation coverage live in rural areas, while in all, 1,867,400 urban dwellers were without sanitation coverage in 2000, which is 10% of the relative population. While 4,193,000 rural dwellers lacked sanitation coverage in 2000 which is 60% of the relative population.²²

7.2 Rural-Urban Migration in Peru

Rural-urban migration in Peru started to gain momentum over the last 50 years. Increased migration to the cities fostered economic growth in the major urban areas, particularly the largest city, Lima. In Peru, rural-urban migration usually took place from the rural areas to small towns, then to the large cities. Rural-urban migration led to rapid rates of population growth in the large cities. The population of small towns grew at modest rates, while the rural populations steadily declined over time.²³

According to the USAID website, there are a set of features that give rural-urban migration immigration in this country a distinct Peruvian character. These include: concentration of a large percentage of the country's population in the largest city Lima and other coastal cities; regional differences among migrants; the tendency of migrants to take part in household and family migration over an extended time period; and the importance of migrant organizations in the urban areas and remittances sent back to the origins.

²²All estimates from Making Cities work USAID website <
<http://www.makingcitieswork.org/files/pdf/south-america/Peru.pdf>>

²³ "Restoring Fiscal Discipline for Poverty Reduction in Peru, A Public Expenditure Review" A World Bank Country Study (2003)

Unlike Bolivia, rural migrants in Peru tend to be more educated than urban dwellers and have better family backgrounds. Migrant families were at 16 percent lower risk of being poor in 1994 than urban families, with this figure increasing to 18 percent in 1997.²⁴

Lima and Callao became gigantic cities as a result of migrants from the surrounding provinces. They moved there in search of better living conditions and in search of employment opportunities. In 1990, 30 percent of all Peruvians lived in Greater Lima. In this year Lima was 14 percent larger than the next 24 cities combined, with 58 percent of all urban dwellers residing in Greater Lima. Because of the massive growth in population, Lima has become one of the world's leading cities in terms of primacy. Cities on the north coast, such as Chiclayo, Piura, and Trujillo have drawn migrants from their own regions in large numbers; while in the southern highland cities of Arequipa, Cusco, Iquitos and Juliaco, significant growth has taken place. Even though these cities experienced about a 330 % population growth between 1961 and 1990 this figure can not compare to the number of people that migrated to greater Lima.

7.3 Reasons for Migration

Most rural-urban migrants, migrate for better income and employment opportunities in urban areas; even though on average they tend to have better education than urban dwellers. There are microeconomic as well as macroeconomic reasons for migrations. An example of a microeconomic reason can be the opportunity to utilize higher levels of education to gain better employment in the urban areas. Macroeconomic

²⁴ “Restoring Fiscal Discipline for Poverty Reduction in Peru, A Public Expenditure Review” [A World](#)

reasons include better housing and infrastructure in the urban areas; re-uniting with family members who migrated before; labor market conditions; provision of public goods and services such as transportation and health services; all of which act as incentives for people to migrate to or from different areas. Macroeconomic issues are therefore very important determinants in the migration decision making process.

In the period 1994-1997 Peru experienced an increase in economic growth. This growth benefited the more educated Peruvians relative to the less educated ones, and led to an increase in income inequality. Poverty increased as a result of this income disparity. An increase in regional income inequality can have a tremendous impact on migration decisions, influencing migrants to move to the areas with higher incomes. There are also 'force' factors or push factors that cause people to migrate to urban areas. The push factors can include being forced from farmlands by natural disasters such as earthquake, landslides and flooding. Also over time there have been issues with terrorist activities and military reactions, which has displaced over 30,000 persons from towns and areas in the Ayacucho and Huancavelica highlands, most of them migrating to Ica or Lima.²⁵

A major reason for migration was to relocate to urban areas where family and friends have relocated. Migrants find this appealing because there are already social contacts created, providing a support network of friends and family in the new city to help them through the transition phase. According to the USAID site, few Peruvians migrated to new cities alone. Thus in the urban areas, the development of social organizations was very important to help facilitate the support networks discussed previously. Also it helped migrants to retain their cultural values, languages, and identity.

Bank Country Study (2003)

²⁵ Demography of Growth, Migration, and Work <<http://countrystudies.us/peru/35.htm>>

7.4 Problems of Rural-Urban Migration in Peru

Housing

Like many other developing countries, employment opportunities and available housing are less than the inflow of migrants. A new migrant lacks both financial capital and a steady income, so therefore is unlikely to be able to afford housing built according to government regulations.²⁶

7.5 Policy Implications

7.5.1 Education

Peru like many other developing countries allocates most of its budget for social spending on health and education. The World bank (1999) reports that in 1996, education accounted for 22% of total government spending. The public education in Peru is provided free of charge to any Peruvian that wishes to attend, from pre-primary straight through to post-secondary education. In general, families bear some costs, such as purchasing school uniforms, books, and food but these costs are usually very low.²⁷

On average, the rural residents in Peru are more educated than urban residents. This raises the question, “Why spend so much money on education in rural areas if there aren’t enough jobs available?” By having access to free post secondary education, many rural residents become highly skilled and would like to obtain high paying jobs. The

²⁶ Peter Lloyd, The “young towns” of Lima: aspects of urbanization in Peru (New York: Cambridge University Press, 1980) 36.

²⁷ Christian Morrisson, Education and health expenditure, and development: The cases of Indonesia and Peru, (OECD 2002)

policy of allocating large amounts of social spending on education thus perpetuates the incidence of rural-urban migration. I agree with the proposition that providing education to the population as a whole would help economic growth in the long run. But it is very important to focus on job creation, entrepreneurship and rural development in order to not put a severe strain on the cities.

7.5.2 Government Decentralization

Peru inherited its centralized administration from colonial powers that were interested in maintaining centralized control. Gugler says that in Peru until very recently, “almost all public investment decisions were made by officials of the central government in Lima.” (p.95) Analysis over the past two decades shows that Peru’s centralized government has been influenced by strong presidential control of the bureaucracy and a weak party system in the legislature.²⁸

Since the 1990s Peru has made progress in the right track by changing the role of the state. They started out by reducing the size and scope of the public sector, and changed the nature of government by shifting from the responsibilities of ownership of factors of production and market intervention, to market regulation and provision of social services. But then as is common in many developing countries, they lost focus towards the end of the 1990s.²⁹

But recently the current government has decided to take decentralization seriously, and if carried out properly it can lead to the better provision of services and

²⁸ J. Tyler Dickovick, Centralism and “Decentralization” in Unitary States: A comparative analysis of Peru and Senegal, Princeton University, Journal of Public and International Affairs, Volume 14 (Spring 2003)

²⁹ Restoring Fiscal Discipline for Poverty Reduction in Peru, A Public Expenditure Review” A World Bank Country Study (2003)

government responsiveness to citizens in all regions of Peru. However decentralization does have serious macroeconomic implications. Firstly, the Central government's deficits can become worse if local governments are unable to decrease spending or increase revenues to service the additional costs that are transferred to these governments. The World Bank report states that "the government may find itself decentralizing both revenues and expenditures, but unable to reduce existing levels of CG spending in those functions that have been decentralized." Secondly, increasing taxes to get revenue to lower rising deficits can outright fail or take a much longer time than anticipated. Thirdly, decentralization undermines the central bank's ability to deal with economic shocks, because it reduces its control over total public sector revenues and expenditures.

In general, decentralization has the potential to be a destabilizing factor for already deteriorated Peruvian public finances and, ultimately, for the country's overall macroeconomic framework. The Latin American experience suggests, moreover, that decentralization should not be carried out without a coherent overall strategy and without prior technical and institutional preparation at the sub-national levels of government. In the case of Peru, the fact that municipal governments are heavily dependent on central transfers justifies caution in the transfer of responsibilities to them. Taking into account that the degree of satisfaction in the provision of public services by local governments appears to be low, gradualness in the transfer of functions and a sizeable effort to strengthen the administrative capacity of sub national governments prior to the transfer of responsibilities seem to be necessary conditions of any reasonable decentralization strategy.

Conclusion:

Rural urban migration has a distinct Peruvian character. Lima has become one of the world's leading cities in terms of its level of primacy, that is, its overwhelming demographic dominance with respect to the next largest urban centers. Lima attracts many migrants yearly from the rural areas in surrounding regions. These migrants have a tendency to take part in family/household migration over an extended time period. Migrant organizations and family ties play an important role in rural-urban migration. The existence of these factors makes it easier for migrants to get established once they are in the new cities.

Unlike Bolivia, rural migrants in Peru tend to be more educated than the urban dwellers and have better family backgrounds. This is as a result of Peru's large expenditure on education. The Peruvian government spends a lot of money on education but not enough on job creation. This leads to a high number of highly skilled rural residents being unemployed. The policy of allocating large amounts of spending on education thus perpetuates the incidence of rural-urban migration.

Peru has been making stringent strides to decentralize their government. Decentralization can have serious macroeconomic implications; it should not be carried out without a coherent overall strategy and without prior technical and institutional preparation at the sub-national levels of government.

Summary and Conclusions:

This paper is policy oriented and essentially theoretical in nature. Findings from the literature are presented which show that rural-urban migration is an inevitable consequence of both asymmetric policies and economic development favoring urban areas. Consequently, migration should be seen as an equilibrating response to disequilibrium existing in the economy. As long as there are gaps in rural-urban employment opportunities caused by urban bias, there will be migration, and it is the responsibility of governments to reduce this disequilibrium. Policymakers must take into consideration that programs initiated in urban areas will also affect rural residents. The various factors presented in this paper that contribute to rural-urban migration may be summarized in two categories:

First, issues faced in rural areas: Incentives for rural-urban migration may be distorted, thereby creating excessive urbanization. Therefore, rather than targeting the migration itself, it is preferable to focus on the causative factors. This paper shows that migration of skilled personnel is a reflection of inadequate policies as this further weakens the potential of rural areas to develop. A large proportion of migrants are young, skilled, and have relatively high levels of education. They migrate to urban areas because of the higher probability of finding employment, and at higher wages than in the rural areas. In order to encourage economic growth, more employment opportunities must be created in rural areas. Policies should aim to develop or retain much of the rural skilled human capital required for development to occur in these areas.

Second, issues of urban bias: A major cause of rural-urban migration is urban bias. Government policies supporting disproportionate increases in wage rates and

employment opportunities in the urban areas contribute to imbalances in the rural-urban landscape. In other words, policies that demonstrate urban bias cause more people to migrate from rural areas, thereby magnifying the overpopulation problems in cities. In general, governments usually feel predisposed to provide more services to urban inhabitants. This is not merely a question of efficiency, but is often linked to political expediency. Governments see a larger political payoff from having prosperous cities (more votes) and hidden rural poverty, rather than unattractive capitals and rural investments.

Since wage differentials caused by urban bias encourage people to migrate to already overcrowded urban areas, it would be in the best interest of countries facing issues of rural-urban migration stresses to implement policies that reduce urban bias.

The benefits and costs of urbanization are analyzed, and it is found that although there are benefits that can arise from rural-urban migration, the costs are pervasive in developing countries. This can be explained by putting excessive urbanization and the problems associated with it (pollution, congestion, and crime) in the context of negative externalities. The marginal social costs far outweigh the marginal private costs, so urbanization is not efficient. The level of urbanization takes place at the point where marginal private costs equal to marginal private benefits. At this level, excess urbanization occurs.

This paper discusses a variety of policies that should be considered in order to ensure desirable levels of rural-urban migration. These include policies to reduce urban bias and promote rural development; establishment of secondary cities and markets; and

decentralization. It can be argued that the most important of these are rural development policies.

Poverty alleviation is one of the main goals of development policies. Fewer policies benefit the poor more than those that directly or indirectly increase the incomes of rural areas. In most cases, rural development means increasing agricultural productivity which translates into income gains, inducing rural farmers to remain on farms. Governments have to be mindful that there is harmonization of policies to minimize conflicts between those aimed at increased rural production, and those aimed at lowering prices to stimulate urban production.

The analysis supports the view that city primacy invariably results in rural-urban wage disequilibrium, leading to migration and excessive urbanization. Policymakers must be cognizant of the consequences of increased urbanization that will likely arise when too much emphasis is placed on the primary city. Policies that encourage agricultural and other rural development and promote secondary cities address the problem of city primacy. In addition, secondary cities have the potential to provide alternative destinations for city-bound rural migrants.

The paper analyzes three models that provide theoretical reasoning for the process of rural-urban migration: the Lewis Dual Sector Model; the Family/Household Migration Model; and the Todaro Model. It was found that the Lewis Dual Sector Model of economic development did not explain the process appropriately enough. There are too many criticisms associated with this model, especially of the explicit assumptions that the model makes. The Lewis Dual Sector Model makes sense when put in the context of the

historical evidence associated with developed western countries, but is not very realistic when applied to developing countries.

The Family/household Migration Model and the Todaro Model explain the rural-urban migration process appropriately, although they look at the issue from alternative views. The Family/household Migration Model states that migration in developing countries is a family decision, while the Todaro Model states that migration is based on rational decisions made by individuals and households. Both the Todaro Model and Family/household Migration Model describe aspects of the rural-urban migration that takes place in Bolivia and Peru. In Peru, where family/household migration is more common place than in Bolivia, the social networks and family ties in the cities are very important. While in Bolivia, both models do a good job of explaining the migration that takes place there.

The cases of Peru and Bolivia were used to apply the issues surrounding rural-urban migration discussed in the paper, and to show the policies that were implemented in these countries, and their influences on migration. These cases are used to demonstrate the various issues that may arise, however, they are not intended to be prescriptive as each developing country is different. As was shown in the cases of Peru and Bolivia, the secondary cities are gaining in significance, more so in Bolivia than in Peru. Peru may wish to follow Bolivia's example and try to reduce the primacy of the capital city Lima, which would create more employment opportunities and hopefully help alleviate the housing problem. The city of Lima in Peru is experiencing all the problems of excessive urbanization and it is advisable that the government focus on policies to redirect rural-urban migration to the secondary cities.

The two case studies show that although there are many similarities among developing countries, there is no one homogenous solution or set of policies that would provide the most efficient level of rural-urban migration. Bearing in mind that governments have limited resources, and that programs implemented ought to be efficient and cost effective, rural development programs would be more effective where the population density is such that there is a large enough rural population. Rural programs that help to develop agriculture and lead to revenue creating activities are much needed. This, coupled with the provision of basic services such as water, sanitation, and transportation would provide a disincentive for rural-urban migration in developing countries.

Peru has been making significant strides to decentralize their government, which would help decrease the primacy of Lima. However, decentralization can have serious macroeconomic implications. Decentralization should not be carried out without a coherent overall strategy and without prior technical and institutional preparation at the sub-national levels of government.

Governments have to be mindful to ensure that there is harmonization of policies to minimize conflicts between those aimed at increased rural production, and those aimed at lowering prices to stimulate urban production. The two case studies presented in the paper show that although there are many similarities among developing countries, there is no single homogenous solution or set of policies that would provide the most efficient level of rural-urban migration.

In conclusion, rural-urban migration is an inevitable consequence of both asymmetric policies and economic development favoring urban areas. This paper shows

that there is no quick fix for the problem of excessive urbanization caused by rural-urban migration, and that an integrated approach must be adopted by policy makers. Since most social policies have an indirect link to rural-urban migration, it is an inevitable process that must be considered when designing and implementing a wide range of social policies. Policies such as government decentralization, establishment of secondary cities and markets, reduction of urban bias and promotion of rural development must be carefully integrated to ensure desirable levels of urbanization. However, it will be difficult to achieve this balance without a sufficiency of resources to fund the required social expenditure. That, unfortunately, is often the weakest link.

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