



**POLICY**

# Two approaches to the dynamics of Employment and Economic growth in India

## I. Introduction

One of the most salient features of India's labour market in the last two decades has been its relatively weak performance in terms of employment generation. The labour market experience of low and declining employment rates despite rapid GDP growth performance has been termed as the phenomenon of jobless growth. It is widely believed that jobless growth has been responsible for the disappointing results in achieving inclusive growth. However, there is an emerging economic thinking that the emphasis should be placed not on increasing employment levels per se but on increasing high- quality, productive employment that lies at the core of sustainable economic and social development. Keeping this in view, Wadhvani Foundation Policy Research Centre has conducted two studies: one, on the quantitative aspect of job creation; and another on qualitative aspects of employment. The objective is to draw some important policy implications.

Quantitatively, we examine the dynamic relationship between employment and growth for India using a time series analysis for the period from 1983 to 2011-12, and project the level of employment under alternative scenarios of economic growth. We have also attempted to map these projections on the government targets of job creation. For the qualitative analysis, we use the Shapley's Decomposition Analysis to examine the contribution of growth in employment and change in its quality to GDP per capita across different phases of growth over 1972-73 to 2011-12. Two indicators of the change in employment quality are: one, structural change in employment, and two, TFP growth. We highlight the need of a comprehensive "Employment Policy" in the country.

## II. Dynamic relationship between employment and growth: A time series based approach

### *Employment and Economic Growth (1983-2009)*

With the onset of economic reforms in the early 1990s in India, economic growth accelerated from its "Hindu rate" origins of around 3.5 percent per year in the 1970s to annual rates of 5.6 percent in the 1990s, and further to above 8 percent in the 2000s. Table 1 shows that the economic growth rate which was as low as 4.8 per cent during 1983-87 jumped to 5.4 percent in 1987-93, to 6.7 per cent in 1994-00 and further to 8.65 percent during 2005-10. It also shows that the service and industry sectors have been the driver of growth in India (Table 1). This pattern of economic growth has a major implication for employment growth as employment generation capacity is higher in industry and services.

**Table 1: Average Annual Economic Growth in India (%)**

Sectors	1983-87	1987-93	1994-00	2000-05	2005-10	1983-1993	1994-2010
<b>Agriculture</b>	2.0	3.90	3.40	1.88	2.73	3.5	2.86
<b>Industry</b>	5.52	5.72	7.00	5.56	8.54	5.59	7.13
Manufacturing	5.7	5.28	7.39	5.93	9.35	5.5	7.75
Construction	4.5	5.39	6.40	9.26	10.44	5.0	7.79
<b>Services</b>	6.69	6.45	8.65	7.77	9.97	6.56	8.7

Transport and communication	6.3	5.51	9.62	9.24	10.35	5.9	11.2
Trade and Hotel	5.6	5.71	9.76	9.54	9.4	5.6	8.9
Finance, insurance, real estate and business services	9.0	9.02	7.75	7.13	11.44	9.2	8.8
GDP Growth rate	4.8	5.37	6.71	6.07	8.65	5.3	6.95

Source: Based on Central Statistical Organisation

While GDP growth accelerated, the rate of employment growth has slowed down after the 1991 sweeping policy reforms. The overall employment growth scenario during 1983-2010 is presented in Table 2. It shows that the average annual employment growth rate was higher (2.0%) during 1983-93 compared to the post liberalization (1.35 %) period (1993-2010). Clearly, acceleration in economic growth rate in the post reform period has not been accompanied by commensurate growth in employment. Sectorally, almost all sectors saw deceleration in employment growth. But the service sector which expanded most rapidly in terms of GDP witnessed the largest decline in employment growth from 4.12% during 1983-93 to 2.76% during 1993-2010. Within this sector, the subgroup of “finance, insurance, real estate and business services” showed some dynamism in terms of employment during the early 2000s but it subsided after 2005. Industry did show marginal improvement in employment growth but it was primarily due to expansion in the construction sector employment; employment growth in manufacturing decelerated. As expected, employment in agriculture contracted, *albeit* marginally. Clearly the strongest rate of employment creation is seen in the construction sector and it is this sector that has been absorbing labour released from agriculture. Does that mean no role of economic growth in job creation?

**Table 2: Employment Growth (CAGR) in India (%)**

Sectors	1983-87	1987-93	1993-99	2000-05	2005-10	1983-1993	1993-2010
Agriculture	0.02	1.83	0.11	1.20	-1.39	1.10	-0.02
Industry	5.07	1.76	2.14	6.20	3.12	3.07	3.70
Manufacturing	2.34	1.74	1.41	5.03	-0.98	1.98	1.76
Construction	15.24	1.03	5.85	9.01	9.93	6.56	8.10
Services	3.48	4.55	2.54	4.25	1.56	4.12	2.76
Transport and communication	3.14	4.88	4.90	5.02	2.53	4.18	4.20
Trade and Hotel	4.43	4.22	5.77	4.65	0.75	4.31	3.83
Finance, insurance, real estate and business services	1.47	5.0	5.12	9.93	5.77	3.57	6.81
Total Employment	1.43	2.35	0.99	2.84	0.32	1.98	1.35

Source: NSSO

### *Testing the relationship between employment and growth: The Methodology*

*Theoretically*, output is expected to have a positive long-run effect on labor demand as suggested by the Okun’s law. This law postulates an inverse relationship between unemployment rate and

gross output. According to the law a 3% increase in output corresponds to a 1% decline in rate of unemployment. While testing this relationship in India, we use the Keynesian model of employment. In this model, employment is a function of GDP, wage level, and the cost of capital. The model thus takes into consideration the substitution effect arising from the substitutability between capital and labor<sup>1</sup>. We estimate the following Keynesian equation to establish the relationship between employment and growth:

$$\ln L_t = \alpha + \beta_1 \ln Q_t + \beta_2 \ln W_t + \beta_3 \ln COC_t + u \quad (1)$$

Where Q, K, L and COC denote GDP, capital, labor and user cost of capital respectively. In this equation, GDP is expected to be positively related with employment. The real wage level is expected to have a negative impact on labor demand. Inclusion of the real user cost of capital (COC) is important for theoretical reasons. A positive value for COC means that the substitution effect (i.e. substitution of labor for capital by producers) is stronger than the income effect.

Our analysis is based on the quinquennial surveys of NSSO beginning with the one conducted in 1983. We consider six NSSO surveys relating to the years : 1983, 1987-88, 1993-94, 1999-2000, 2004-05 and 2009-10 (labeled as 38, 43, 50, 55, 61 and 66 rounds respectively). From the 45th round onwards, the NSSO has been providing annual employment data which it collects by incorporating employment related questions in its consumption expenditure surveys. But these annual surveys are based on thin samples, which are normally one fifth the size of the quinquennial surveys. While the concept of activity status and the reference periods used in these surveys allow easy comparison of employment rates on an annual basis, they have not been found comparable to form a time series. Therefore, we focused on only the quinquennial surveys and generated Time series data between two rounds using interpolation method based on compound annual growth rate formula. The real and sectoral GDP (base 2004-05) data are collected from the Central Statistical Organisation (CSO). Wage data obtained are normalized using the consumer price index series (base 1986-87). Finally, the real user cost of capital (COC) is calculated using the following formula:

$$COC = PI (\pi - \sigma + r) \quad (2)$$

Where r is the nominal interest rate on bank loans,  $\sigma$  is the depreciation rate (set at 15 percent), PI is the price deflator for fixed capital formation and  $\pi$  the inflation rate of the price of capital goods (calculated as the changes in the price deflator for fixed capital formation).

### *Major findings*

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<sup>1</sup> The neoclassical model which assumes that the labour market is similar to any other market and the forces of supply, and that demand jointly determine price (the wage rate) and quantity (number of people employed) is rejected in favour of the Keynesian model. The former does not provide for the substitutability between capital and labour. Further, it assumes perfectly flexible wage rate and no involuntary unemployment.

1. **There is a long run stable relationship between employment and GDP growth: While estimating (1),** the ADF unit root test was applied to all the data series in order to avoid spurious relationships. The ADF test rejects the null hypothesis of non-stationarity in the first difference at 5 per cent level, indicating that all variables are I (1) except user cost of capital. Given that all relevant variables are integrated of order one except COC, Johanson-Juselius (JJ) test of cointegration is used to test the null hypothesis of no cointegration. The null hypothesis is rejected at 5 per cent level indicating that there exists a long-run stable relationship between employment and growth.
2. **Real GDP has a positive significant impact on employment across all non-farm sectors in the long run and the impact is highest for manufacturing and services sectors:** After establishing the existence of cointegration between employment and its determinants, the long-run coefficients of employment are estimated in the framework of error correction models (ECM). The coefficients indicate that the real GDP is positively related with employment. The relationship turns out to be particularly strong for manufacturing and services sectors. This indicates that GDP growth remains the main driver of employment growth in India. The results also indicate that employment elasticity is around 0.40 for the period 1983-2009. This is quite comparable with other developing countries (Kapsos, 2005). Further, the real wage rate is found to have a significant negative impact on employment growth. Clearly, as the real wage rate increases, employment generation declines in India. The coefficient of real cost of capital is positive and significant for all sectors. It means that an increase in the cost of capital might lead to more employment of labour and vice versa. The coefficient is more than one in the case of manufacturing indicating strong substitution effect for manufacturing industry (see Table 3).

**Table 3: Long-run Coefficients derived from ECM**

Variables	Aggregate employment	Manufacturing	Industry	Services
Constant	-5.29	4.29	-3.96	-0.38
LGDP	0.40** (7.20)			
LMGDP		1.68**(19.21)		
LIGDP			0.85**(6.57)	
LSGDP				1.63** (31.6)
LWAGE	-0.32**(-3.00)			
LMWAGE		-2.67**(-13.71)		
LIWAGE			-0.52 (-1.68)	
LSWAGE				-1.68** (-18.95)
LCOC	0.37* (2.17)	4.96**(14.19)	0.16 (0.34)	0.56**(4.15)
Adj.R <sup>2</sup>	0.52	0.82	0.37	0.55

Figures in the parentheses are t-ratio. \* and \*\* denotes significant at 5 and 1 per cent level. Lag length are selected on the basis of AIC criteria.

3. **There is a positive short run relationship between GDP growth and employment:** Our analysis for short term relationship between employment and GDP growth indicates that

economic growth has a positive and significant impact on employment growth but after one lag.

4. **Adjustment between labour market and economic growth is not spontaneous and takes time:** We examined the dynamic relationship among the variables within the vector auto regression (VAR) framework by conducting forecast error variance decompositions (FEVD) tests at different time horizons. The results of the FEVD tests for upto 10 years' horizon indicate that the variance of employment growth is largely explained by its own shock and GDP shock (95 percent for time horizon of 2 years). Even after 10 years, the variance of the employment growth is explained by its own shocks (60 per cent) and GDP growth Shock (28 per cent). Therefore, it can be said that employment growth is mainly explained by own shock and GDP growth shock. The wage rate growth and growth of capital explain around 12 per cent of variance in employment growth after 10 years. Similar pattern are found for manufacturing and services employment. These results indicate that adjustment between labour market and economic growth is not spontaneous and takes time. After lag one, GDP growth has an immediate and large effect on employment which lasts for about ten periods.

### *Employment Projections*

**Total employment:** Using long-run coefficients (with the estimated employment elasticity<sup>2</sup> of 0.22), we have projected employment levels for the period 2012-2025. Three alternative employment scenarios are created assuming different GDP growth rates. In scenario 1, growth rates are assumed to grow from 5 to 7.5 per cent as forecasted by RBI and IMF for India (average 6.7 percent growth rate over 2012-2025). In Scenario 2, the average annual GDP growth rate is expected to be 7.7 per cent. In Scenario 3, we assume the average annual growth rate to be 8.7 per cent.

- In scenario 1 employment is expected to increase from 490 million in 2012-13 to 514 million in 2016-17 and further to 595 million by 2025-26.
- In scenario 2, employment level is expected to increase from 492 million in 2012-13 to 526 million in 2016-17 and further to 628 million by 2025-26. In this scenario, approximately 35-40 million job will be created in the non-farm sectors.
- In the case of scenario 3, total employment is expected to increase from 494 million in 2012-13 to 536 million in 2016-17 and further to 664 million by 2025-26. In this growth scenario, approximately 45-50 million job will be created in the non-farm sectors.

Based on 8 per cent GDP growth rate, the 12th Five Year Plan (2012-2016) has set a target of 50 million (10 million jobs a year) new jobs in the non-farm sector. But our projections indicate that this target will be achieved only if the economy grows at an annual rate of 8.7% (assuming the employment elasticity to be 0.22).

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<sup>2</sup> Estimated based on the long run coefficients obtained

**Table 4: Employment Projections till 2025 (in million)**

Years	Scenario 1: Growth rate increases from 5 to 7.5% gradually)	Scenario 2 Growth rate	Scenario 3	Projection by Planning Commission*
Projected Elasticity=0.22				
2012-13	490	492	494	498
2016-17	514.1	526	536	553
2025-26	595	629	664	
Projected Elasticity=0.30				
2012-13	494	-	-	-
2016-17	535	-	-	-
2025-26	640	-	-	-
Actual Current Elasticity=0.055				
2012-13	470	471	473	470
2016-17	477.2	479.2	481	477.2
2025-26	497	503	506.6	497

\*based on 8 per cent GDP growth rate

Alternatively, if employment elasticity increases to 0.30 from the projected elasticity of 0.22, then the level of employment at GDP growth rate of 6.7% is expected to increase from 494 million in 2012-13 to above 640 million by 2005-26. This means a net addition of 146 million employment over the period 2012-25. This can meet the target of creating 10 million jobs a year.

It is however instructed to note that the current employment elasticity is as small as 0.055 which falls far short of even the long term elasticity of 0.22. If the employment elasticity remains at this level then the projected employment will be much lower in all the scenarios. For example, in scenario 1, employment will increase from 470 million in 2012-2013 to 497 million by the end of 2025-26, a net addition of 27 million only. In alternative scenarios 2 and 3, net addition of employment will be around 32 million and 34 million respectively.

**Manufacturing sector:** Independently of the Planning Commission projections, the National Manufacturing Policy has set the target of creating 100 million jobs in manufacturing alone by 2025. However our projections indicate that in scenario I (manufacturing GDP growth rate of 5 to 7.5 per cent and employment elasticity equal to 0.41), manufacturing employment is expected to increase from 65 million in 2012-13 to 95 million by 2025-26 which means a mere addition of 30 million job in the manufacturing sector. We find that additional 100 million jobs can be created in manufacturing only if the average annual growth in manufacturing remains 12% over an extended period till 2025-26 (see Table 5). However, at the current elasticity of 0.10, even 12% annual growth rate cannot push the levels of employment beyond 71 million. This will mean an addition of just 10 million jobs in manufacturing in the next 13 years.

**Table 5: Employment Projections for Manufacturing and services sector (in million)**

Years	Scenario 1 : Average Manufacturing GDP growth rate of 7.1 per cent	Alternative Scenario 2: Average Manufacturing GDP growth rate of 12 per cent
Employment elasticity=0.41 ( Based on long run estimation)		
2012-13	65	67
2016-17	74	90
2025-26	95	166
Employment elasticity=0.10 ( Actual elasticity during 2005-12)		
2012-13	60.1	61
2016-17	62.8	63.5
2025-26	69	71.3

\*assumed manufacturing GDP growth rate

The upshot is that accelerating growth along with reversing the current trend of falling employment elasticity are critical for achieving higher employment growth.

### III. GDP Growth and Employment: Shapley's Decomposition based on cross section data

#### *Research questions*

Shapley decompositions are based on the premise that economic growth is determined by the combined rates of growth in employment and labor productivity. As long as growth in real gross domestic product (GDP) exceeds growth in labor productivity, employment will rise. If employment growth is more rapid than labor force growth, the unemployment rate will fall. Thus, our research questions are :

- Is growth correlated with increases in the quantity of jobs (job creation) or in the quality of jobs (increased productivity of existing jobs)?
- Are changes in the quality of jobs due to productivity growth within sectors, or due to shifts of workers from low productivity to higher productivity sectors, i.e. changing employment structure in India?
- What are the sources of any increases in output per worker within sectors in India? Are they related to increases in Total Factor Productivity (TFP) due to better use of existing resources? Or are they due to increases in the ratio of capital to labour in firms (adding more resources)?

We apply Shapley decompositions on the quinquennial NSS data on 'Employment and Unemployment' corresponding to the years: 1972-73, 1983, 1993-94, 2004-05; and 2011-12<sup>3</sup>.

#### *Methodology*

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<sup>3</sup> For the full study, please visit

We begin by decomposing GDP per capita growth into two components: (1) growth associated with changes in productivity, and (2) growth associated with employment changes. Thus,

$$\frac{Y}{N} = \frac{Y}{E} * \frac{E}{N} \dots\dots\dots (1)$$

where Y is total Value Added, E is total employment, and N is total population. Thus, Y/N is GDP per capita, Y/E is total output per worker, E/N is the share of workforce in population (workforce participation rate). While the former represents the productivity effect, the latter is the employment effect.

The employment effect is further decomposed into labour force and employment rate effects. Thus

$$\frac{E}{N} = \frac{E}{L} * \frac{L}{N} \dots\dots\dots (2)$$

In (2) L is the labour force. Thus, E/L represents the employment rate effect while L/N is a proxy for the labour force effect.

This means that GDP per capita can be decomposed into three components: growth associated with GDP per worker, growth associated with changes in employment rates, and growth associated with changes in the size of the labour force. Per capital income  $Y/N=y$  can thus be expressed as:

$$\frac{Y}{N} = \frac{Y}{E} * \frac{E}{L} * \frac{L}{N} \dots\dots\dots (3)$$

The output per worker effect ( $\frac{Y}{E}$ ) is further disaggregated into the productivity growth due to inter-sectoral relocation of labour from low to high productivity sectors; change in capital-labour ratio; and total factor productivity. Similarly, employment effect is also disaggregated at the sectoral level.

*Main Findings*

Our results are summarized in Table 6 below.

**Table 6: Decomposition of growth per capita 1972-2012: Summary results**

Year	Contribution of capital-labour ratio (%)	Contribution of changes in TFP (%)	Contributions of Inter-sectoral Shifts (%)	Total labour productivity effect	Contribution of changes in Employment rate (%)	Contribution of changes in labour force (%)	Total employment effect (%)	Total
1973-1983	95.01	-53.28	51.15	92.9	-1.13	8.25	7.12	100
1983-1994	186.96	-119.33	32.37	100.0	-0.09	0.10	0.01	100
1994-2005	56.61	11.35	32.05	100.0	-0.91	0.90	-0.01	100

2005-2012	57.77	45.39	15.92	119.1	0.13	-19.20	-19.07	100
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Source: Author's estimates based on NSS surveys

- Quality of employment has improved over time:** Growth in output per worker (labour productivity) has been the main driver of growth per capita since 1972-73. However, the factors driving labour productivity growth have changed significantly over time. In the protective regime, it was driven by a rising capital-labour ratio and relocation of labour from low to higher productivity sectors; in the liberalized regime however, total factor productivity growth emerged as an important driver of GDP per capita growth. Apparently, the market driven regime has had a positive impact on the competitiveness of the economy. A rising capital-labour ratio still remains an important determinant of labour productivity. This means that there is substitution of capital for labour which might have had a significant negative effect on employment (as seen above). It is also worrisome that the labour-relocation effects has worsened over time. This indicates that labour released from agriculture is increasingly being absorbed in low productivity sectors. This is a manifestation of retrogression in inter-sectoral movement of labour. It is encouraging that this effect still remains positive contributing positively to labour productivity. Overall, the quality of employment seems to have increased significantly.
- Employment effects have been modest:** The employment effect has not only been modest but has also declined over time. During 2005-12, all other things remaining the same, the negative employment effect would have pulled down the growth rate in GDP per capita by 19%. Interestingly however, the employment effects worsened essentially due to contraction in labour force. The employment rate effect improved over time and during 2005-12, its contribution became positive. Apparently, employment growth had been more rapid than labor force growth during this period of accelerated growth as a result of which the unemployment rate fell. The hypothesis of jobless growth is thus subject to further examination.

There is thus evidence that the quality of employment has improved over the years due to increase in labour productivity. But this has had a dampening effect on employment expansion. Growth in GDP per capita needs to outpace growth in output per worker to have a positive impact on job creation in particular in high productivity sectors. Further, there is a need to increase the employment generation potential of GDP growth by discouraging substitution of capital for labour.

### *Policy Recommendations*

For effective tackling of both growth and employment problems, the policy makers have to work simultaneously on sustaining high Gross State Domestic Product (GSDP) growth rates and increasing employment elasticity of growth without affecting labour interests. It is proposed that the state should implement a comprehensive "Employment Policy" with following pillars:

- Acceleration of growth
- Transformational changes in education
- Promotion of entrepreneurship

- Effective labour market management
- Expansion of employment information systems

### 1. Acceleration of growth:

Employment creation is positively related to growth. It is seen that the employment rate increases with acceleration in growth. Economic acceleration is an essential condition for employment expansion. It needs to have the following policy components:

- **Improving Infrastructure:** The provision of reliable and affordable transport is identified as key to enabling the urban poor to access the best opportunities, while good rural roads and reliable electricity and water supplies are essential for accessing off- farm employment in rural areas.
- **Improving investment climate related issues:** A host of policies and institutions which act as constraints to job creation and productivity need to be addressed to improve the investment climate. These include the legal and regulatory hurdles to business entry, operation, and exit.
- **Promoting the formal economy:** Efforts need to be made to switch from informal to formal economy through stronger incentives (such as progressive taxation, improved access to social security, etc.).
- **Promoting technology- driven, high growth Micro, Small and Medium Enterprises (MSMEs):** Young, high- growth MSMEs have a high potential for employment generation. In OECD countries, 60-70% of the net job creation occurs in MSMEs. The focus should be on promoting these enterprises.

### 2. Strengthening the education system:

- **Improve access to and the quality of education and training:** A well-educated workforce is one of the cornerstones of a dynamic economy. In India however the rates of literacy and enrollment are low and drop-out rates are high. There are also marked differences in educational attainment across gender and social backgrounds. Recent gains in enrolment rates at all levels of education are accompanied by a continuous decline in the quality of education. This needs to be addressed by increasing public expenditures in education.
- **Strengthen vocational education and training:** Various reports have pointed out that there exists large skill gap in India. The growing mismatch between skills/education and jobs/occupations needs to be addressed. Unless this problem is not addressed properly, India may not reap benefit of demographic dividends. The Prime Minister's Council for

Skill Development has set up a manpower target of 500 million skilled workers by 2022. It has planned to set up 1500 new ITIs and 5000 skill development centers, across the country as well as a National Vocational Education Qualifications Framework (NVEQF) for affiliations and accreditation in the vocational, educational and training systems. International experience suggests that policy makers should create strategies for making vocational education and training more relevant. In doing so, it must be ensured that the employers are involved in consultations so as to reduce skill mismatches and shortages and that there are tools to assess the effectiveness of education and training. Following the example of OECD countries, India has also implemented its National Skill Qualification Framework. However it is also important to have in place tools for its monitoring and assessing its performance.

- **Improve the quality of the educational systems:** Education, in its various guises, is often a crucial precondition for adjustment of labour market towards more profitable economic activities. It is necessary for enabling participation in more technologically- advanced sectors. There is a need for stronger links between training institutes and private sector sources of demand, as a means of increasing market relevance of the labour force.
- **Supporting the return to self-employment:**
- India needs to make a transition from wage economy to entrepreneurial economy where the youth is not looking for jobs, but is encouraged to indulge in creativity and self-employment.
- The proposed Employment Policy should have elaborate incentives to promote self-employment.
- We also recommend an “Entrepreneurship Policy”. The guidelines will have special provisions for the training and monetary support required for promoting self-employment. Efforts will need to be made to promote public-private partnership in these areas by involving social entrepreneurs who have been engaged in entrepreneurship development.

#### **4. Labour market management:**

- **Manpower planning:** Manpower planning is indispensable for solving the problem of unemployment. Hence, economic planning should be integrated with manpower planning. There is a mismatch between demand and supply. There is excess supply of skilled labour in certain sectors and shortages in other sectors. There is need to assess the skill requirements and plan skill development programmes to address the supply constraints.

- **Strengthen labour market policies that address labour market rigidities:** There is a need for conceptualising new models of labour management systems without compromising the income security of workers. The country needs to introduce a system that combines flexibility in labour market with income security for workers and providing assistance for their retraining and relocation. The Flexicurity system of Denmark has been recognised as one of the best practices in labour management. It has been adapted by many countries to suit their local conditions. It is a *leitmotiv* of the European employment strategy. It entails a “golden triangle” with three principles:
  - Flexibility in the labour market combined with -
  - Social security;
  - Comprehensive, lifelong learning strategies; and
  - An active labour market policy with rights and obligations for the unemployed.

#### **5. Promotion of informational channels and creation of a better data base:**

Expansion of employment services and search assistance, in particular E-Systems, plays a potential role in overcoming informational barriers in the labour market. The labour market is a system in continual movement. Counts of employment, unemployment, and people outside the labour force give only still pictures at a point in time; this is inadequate. Much of what is going on is not revealed. To shed light on the factors that underlie net changes in stocks, figures are wanted of gross as well as net flows between the count dates or periods.

The draft National Employment Policy is yet to be implemented. Our study shows that there is an urgent need for the implementation of the policy with suitable changes to develop a more specific and focused framework.