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STRATEGIES FOR REDUCING YOUTH UNEMPLOYMENT IN SOUTH AFRICA

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Abstract: Youth unemployment is one of the major challenges that the majority of countries worldwide are faced with currently. In South Africa, youth unemployment has been escalating, despite the introduction of initiatives by the government to reduce unemployment. This study aims to identify the root causes of youth unemployment in South Africa and suggesting solutions to reduce youth unemployment. The researcher utilized secondary data obtained from the Quarterly Labour Force Survey by Statistics South Africa, time series data from the South African Reserve Bank and the Department of Higher Education and Training websites for conducting data analysis. The type of research methodology utilized by the research is a Quantitive research method. The findings of the study indicate that the root causes of youth unemployment include the poor education system resulting in skills mismatch in the economy. An econometric regression model was conducted by the researcher in Eviews 8 statistical data analysis software using time series data from the South African Reserve Bank, with youth unemployment being the dependent variable. The results of the econometric regression model indicated that the variables inflation rate, Gross value added a proxy for Gross Domestic Product and the Total loan debt of the nation were statistically significant at a 5% level of significance. This means that youth unemployment is influenced by the inflation rate, Gross Domestic Product and the Total loan debt of the nation or government debt. Lastly, the study discusses the recommendations to policymakers on how to reduce youth unemployment in South Africa. The results of the econometric regression indicate that youth unemployment is influenced by macroeconomic factor namely the rise in the inflation rate, decline in Gross domestic product, an increase in the government debt which deprives youth in terms government investing in youth empowerment programmes. The researcher concludes by giving policy recommendations on possible programmes that can be implemented to reduce youth unemployment.

Keywords: Youth unemployment, skills-mismatch, causes, solutions

Acronyms

Stats SA	Statistics South Africa
QLFS	Quarterly labour force survey
DHET	Department of Higher Education and Training
NDP	National Development Plan

Introduction and background to the problem

Unemployment occurs when the labour resources are idle in an economy which causes a decline in the national production (Gross Domestic Product). South Africa has a high unemployment rate, affecting mainly the youth (18-35 years old). One of the reasons why youth are the most impacted by unemployment is because employers require skills that most youth lack. This results in a structural skills mismatch between the skills needed by employers and the skills supplied by the job seekers. The South African government has put in place initiatives and policies dedicated to reducing the level of unemployment, namely the National Development Plan, Employee Tax Incentive and Youth Enterprise Development Strategy (National Planning Commission 2013). Despite the development of initiatives and policies by the South African government, youth unemployment still persists to rise. The lack of employment among the youth is detrimental to their well-being and the society. Youth unemployment often results in some youth joining gangs, prostitution, drug abuse, and becoming

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involved in criminal activities for survival purposes. It is therefore imperative that youth be equipped for their future while they are still at school, through initiatives such as youth entrepreneurship, learnerships, internships and career guidance. This research will focus on the root causes of youth unemployment and the measures that can be taken to reduce youth unemployment in South Africa. Secondary data obtained from the Quarterly Labour Force Survey and the Department of Higher Education and Training will be utilized for data analysis (Stats QLFS 2018 and DHET 2016). The findings of the research will then be discussed and then recommendations and conclusions will be given by the researcher. This study will assist policymakers with possible solutions to help reduce youth unemployment in South Africa.

Literature Review

According to Reddy (2016), "the causes of unemployment include the following:

1. Structural unemployment

Structural unemployment occurs when there is a mismatch of skills in the labour market. The categories of structural unemployment include the following:

1.1. Structural change in the economy

This is when primary sectors like mining weaken and reduce the number of workers employed. The miners remain unemployed and cannot find employment in new industries with advanaced technology. The researcher agrees with Reddy (2016), because the economies nowadays have shifted from being driven by primary sectors which are labour intensive towards tertiary sectors which are skills intensive.

1.2. Geographical immobility

This is unemployment that occurs during difficult times when people migrate to other regions searching for employment opportunities. A typical example is the Gauteng province where there has been an influx of people from other provinces in search for employment and better life (Thoka and Geyer 2019).

2. Real wage or Classical unemployment

Real wage unemployment occurs when wages rise above the labour market equilibrium wage, for example when supply of labour is higher the demand for labour. This type of unemployment occurs when trade unions and labour organizations bargain for wage increases, which causes a decline in the demand for labour.

3. Cyclical or Demand deficient unemployment

Demand deficient unemployment occurs when there is a decline in Gross Domestic Product due to a recession or economic downturn".

According to Reddy (2016), "the ways to solve the unemployment problem include the following:

3.1. Government to ensure political stability.
3.2. Enhancing the quality of education for example skills training in the school curriculum.
3.3. Encouraging self-employment and entrepreneurship among the youth.

According to Graham and De Lannoy (2016), "the causes of youth unemployment include the following:

1. The evolving nature of the labour market and mismatches within the education system.
2. The structural changes in the South African economy.
3. The high demand for skilled workers.
4. The inequality in terms of access to study material in the public schooling system
5. Limited social capital and access to information to apply for job opportunities.
6. High transport costs to interview centres.

According to Graham and De Lannoy (2016), "Solutions to youth unemployment include the following:

1. Shift employers'appointment criteria

> There is a need to restructure the labour market to become more youth friendly. This can be done through hiring youth for internships, apprenticeships and learnerships in companies that will receive a subsidy from government.
>
> An example of such an initiative is the Harambee Youth Accelerator programme that recruits youth trains them computer skills and places them in companies (Galombik 2016).

2. Address spatial barriers to job seeking

A transport subsidy for job seekers can be a solution for people who are geographically displaced from job opportunities.

3. Assist with information and social networks

Majority of youth from poor households lack access to information on job opportunities which are available in the internet, because the youth cannot afford to purchase internet data.

4. Work with and support the youth

High quality local based interventions that make an effort to understand the challenges of the youth and finding ways to assist the youth are vital.

According to Graham and Mlatsheni (2015), "the causes of youth unemployment include the following:

1. When youth remain unemployed for long period after completing school, which makes employers to have little confidence on the youth's capabilities.
2. Inadequate access to social and financial assets and the lack of relevant skills.
3. Lack of internet, transport money, work experience and information regarding employment opportunities make it difficult for the poor youth to enter the labour market.

According to Graham and Mlatsheni (2015), "the solutions to youth unemployment include:

1. Enhancing public employment programmes, for example the Expanded Public Works Programme.
2. Supporting youth entrepreneurship and community development.
3. Preparing the youth with skills required in the workplace while the youth are still in school.
4. Employability interventions, for example learnerships, internships and entrepreneurship programmes".

Research Methodology

The researcher utilized secondary data obtained from Stats SA quarterly labour force survey, Gross Domestic Product and the Department of Higher Education and Training. The data for employment and GDP was for the period 2012-2018, while the data for the number of graduates was for the period 2012-2016 and time series data collected from the South African Reserve Bank database was quarterly from 2008Q1 to 2018Q4. An analysis of employment by provinces in South Africa was conducted by the researcher using data from Statistics South Africa, quarterly labour force survey. The researcher utilized a Quantitative research methodology in the form of an econometric regression model for the data analysis process. The research study is quantitative in nature where the research conducted experimental data analysis matching literature findings with Statistics South Africa employment and economic growth trends with econometric regression model findings using South African Reserve Bank data.

Research objective

The objective of the research study was to investigate the causes of youth unemployment in South Africa and give policy recommendations on how to reduce youth unemployment.

Significance of the research study

The research study is very significant because youth unemployment is a global problem which government and the private sector need to tackle to reduce poverty and income inequality in society. The research study aims to add to the body of knowledge on ways that can be utilized to reduce youth unemployment.

Research Findings

Youth unemployment in South Africa is structural (skills mismatch) and demand deficient (recessionary) in nature. "According to the Department of Government Communications newsletter issue 13 the cause of youth unemployment includes the following:

1. The legacy of apartheid and inequalities in the education system

The deliberate exclusion of black people from high-quality education, skilled occupation under apartheid contributed to high rates of unemployment today. Inadequate education and lack of productivity are costing jobs. Unemployment increases progressively with decreased educational levels and the education system is not producing the right skills for the labour market.

2. Labour demand and supply mismatch

Labour supply has been influenced by the increase in the number of work seekers over the years. The South African population is a young population i.e. more people enter the working age as contrasted to the number of jobs that become available in the labour market.

3. The effects of the 2008/9 global recession

During the financial crisis many workers lost their jobs, the largest number in manufacturing. Most companies could no longer employ more people and had to reduce the workforce, contributing to the high unemployment rate.

4. Role of trade union federations in government

Higher wage demands lead to a decrease in new employment, for example youth employment.

5. General lack of interest for entrepreneurship

Despite various government initiatives to enhance entrepreneurship, entrepreneurial activity in South Africa is still low. For example, the percentage of young people who are entrepreneurs remains low at 6% of the total youth (18-34 years) population (DoC Tracker, 2014).

6. Slow economic growth (decline in the Gross Domestic Product)

The South African economy has been growing slowly with relatively small employment growth over the years (Department of labour, 2013). Economic growth has been too slow to create job opportunities (DTI, 2012)".

"Youth unemployment is a result of geographical migration across provinces in South Africa, as many youths leave their hometowns in search for better opportunities in large cities like Johannesburg, Cape Town and Pretoria. It is essential that local economic development programmes be developed in remote areas of all provinces to stimulate economic growth that will result in a reduction of provincial migration. South Africa youth are unemployed, because of the structural shifts in the economy from a labour-intensive orientation towards a skills-intensive orientation. Most of the youth are low-skilled which makes them become unable to meet employers' recruitment criteria, resulting in unemployment".

Findings

Labour market trends

Employment by sector analysis

Table 2: Employment by sector in South Africa, 2012-2018

Employment by sector in South Africa (both Male & Female)	2012	2013	2014	2015	2016	2017	2018	**Total**
	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand
Agriculture	2785	2960	2806	3518	3496	3370	3382	22317
Mining	1502	1644	1711	1818	1777	1738	1676	11866
Manufacturing	7266	7239	7039	7047	6767	7129	7078	49565
Utilities	407	513	470	529	471	596	593	3579
Construction	4363	4582	4995	5621	5724	5656	5889	36830
Trade	12580	12528	12808	12645	12714	12998	13120	89393
Transport	3439	3656	3727	3619	3640	3908	3936	25925
Finance	7607	7980	8120	8792	9098	9609	9914	61120
Community and social services	12809	13405	13973	14204	14285	14436	14777	97889
Private households	4927	4943	4920	5154	5133	5213	5169	35459
Other	14	12	16	16	17	22	40	137
Total	57699	59462	60585	62963	63122	64675	65574	434080

Source: Stats SA, QLFS Trends 2008–2018 Q4. Numbers do not add up as result of rounding.

Economic sectors that experienced an increase in employment during the period 2012 to 2018 as shown in table 2 above include the following:

1. Construction ((5889/4363) ^1/7) =1%

2. Trade ((13120/12580) ^1/7) =1%

3. Finance ((9914/7607) ^1/7) =1%

4. Transport ((3936/3439) ^1/7) =1%

5. Community and social services ((14777/12809) ^1/7) =1%

6. Private households ((5169/4927) ^1/7) =1%.

The primary sectors, Agriculture and mining experienced a decline in employment. The Utilities sector also experienced a decline in employment. The above trends in employment indicate that the South African labour market has shifted structurally from primary sectors orientation towards secondary and tertiary orientation. This structural shift in the labour market has resulted in most youth being unemployed because the growing sectors are skills intensive. The results of the research findings match with the findings of Reddy (2016), Graham and De Lannoy (2016) and Graham and Mlatsheni (2015) that there has been a structural shift in the South African economy from being driven by primary sectors which are labour intensive towards being driven Tertiary sectors which are skills intensive.

Economic growth trends

Table 3: Gross Domestic Product by sector, 2012-2018

GDP by sector South Africa	2012	2013	2014	2015	2016	2017	2018	**Total**
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Agriculture	68 093	71 143	75 982	71 515	64 305	77 857	74 157	503 054
Mining	221 990	230 772	226 791	234 247	225 035	234 522	230 514	1 603 871
Manufacturing	377 330	381 173	382 498	380 781	383 903	383 189	386 884	2 675 759
Electricity	68 733	68 289	67 622	66 364	64 956	65 329	65 932	467 226
Construction	98 329	102 818	106 403	108 361	109 640	109 008	107 665	742 225
Wholesale, trade and retail	400 938	408 968	414 826	423 365	430 406	429 224	431 669	2 939 395
Transport	243 188	250 129	258 906	262 458	265 363	268 993	273 193	1 822 229
Finance	562 042	576 707	592 352	604 767	616 301	628 972	640 368	4 221 509
General government	436 466	450 348	464 664	468 396	471 158	472 497	478 693	3 242 222
Personal services	155 472	159 530	162 367	163 791	166 659	168 834	170 530	1 147 184
Total	2 632 583	2 699 878	2 752 410	2 784 045	2 797 727	2 838 425	2 859 605	19 364 674

Source: Stats SA. GDP 2008-2018 Q4. Researcher's own calculations, converting from quarterly data to annual data.

Table 3 above depicts trends in Gross Domestic Product (GDP) by sector in South Africa from 2012 to 2018. The sectors that experienced growth in GDP include the following:

1. Finance ((640 368/562 042) ^1/7=1%).

2. General government ((478 693/436 466) ^1/7=1%).

3. Wholesale, trade and retail ((431 669/400 938) ^1/7=1%)

4. Manufacturing ((386 884/377 330) ^1/7=1%).

5. Transport ((273 193/243 188) ^1/7=1%)

6. Personal services ((170 530/155 472) ^1/7=1%)

The trends in GDP by sector in South Africa indicate that the economy is currently being driven by secondary (Manufacturing) and tertiary sectors (Wholesale, trade and retail, Transport, Finance, General government and Personal services). This depicts the shift of the South African economy from GDP being driven by primary sectors towards Tertiary sectors. Majority of the tertiary sectors jobs require years of experience, which majority of the youth lack, inhibiting them from being absorbed into the labour market.

Number of graduates in South Africa 2012-2016

The number of graduates who have obtained their qualifications at higher institutions in South Africa has been declining during the period 2012-2016. This indicates that the majority of youth who enrolled for post-matric studies drop out of college before obtaining their qualifications. The decline in the number of graduates who obtained their qualifications filters to the increase in youth unemployment, because those youth with incomplete studies become unemployable. Table 4 below depicts the trends in the number of graduates who obtained their qualifications during the period 2012-2016 per field of study.

Table 4: Number of graduates per field of study, 2012-2016

Fields of study (Top 3)	Number of graduates 2012	Number of graduates	Number of graduates	Number of graduates	Number of graduates 2016	**Total**
Mathematics & statistics						**6 731**
Mathematics	207	719	749	782	271	2 729
Statistics	525	602	548	454	235	2 364
Applied mathematics	762	229	261	243	144	1 638
Architecture & Built environment						**5 808**
Building/Construction site management	86	755	776	689	438	2 743
Environmental design/Architecture	679	42	35	30	12	797
Architectural history & criticism	2 182	25	21	32	8	2 267
Languages						**6 642**
English language & literature	302	858	803	948	152	3 062
Linguistic, comparative & related language studies	437	508	616	536	192	2 289
Isizulu language & literature	897	149	86	118	40	1 290
Agric sciencies						**7 630**
Agricultural business & management	311	1 258	1 151	806	389	3 914
Agricultural production & operations	340	433	387	243	228	1 630
Food science & technology	1 114	297	326	277	73	2 086
Visual & performining arts						**7 253**
Design & applied arts	511	798	820	570	198	2 896
Drama/ Theatre arts	647	400	409	335	104	1 895
Fine & studio art	854	573	591	320	123	2 462
Physical sciences						**12 313**
Geography & cartography	550	1 076	1 260	1 329	570	4 785
Chemistry	958	996	1 119	1 063	512	4 648
Geology & earth sciences	1 150	474	528	498	231	2 880
Communication, Journalism & related						**11 698**
Communication & media studies	455	1 088	774	1 052	256	3 625
Journalism	1 039	463	441	307	105	2 356
Public relations & advertising	1 120	1 152	1 696	1 404	345	5 717
Psychology						**13 138**
Psychology	400	1 763	2 161	1 966	433	6 723
Industrial & organisational psychology	793	1 018	950	1 084	298	4 143
Research methodology for psychology	1 650	278	172	152	20	2 272
Life sciences						**8 058**
Physiology, pathology & related sciencies	325	905	925	950	350	3 455
Biochemistry, Biophysics & molecular Biochemistry	576	547	631	590	194	2 538
Microbilogical sciences & immunology	931	297	340	402	95	2 065
Law						**11 082**
Private law	504	1 682	1 975	512	204	4 877
Perspectives on law	726	443	538	302	296	2 306
Mercantile law	1 525	930	1 050	283	112	3 899
Computer & information sciences						**13 164**
Computer & information sciences	360	1 792	1 932	1 290	875	6 249
Computer programming	898	959	877	708	514	3 955
Computer science	1 438	357	400	417	348	2 960
Social sciences						**16 822**
Social work	807	2 351	2 555	301	54	6 069
Sociology	1 263	1 236	1 062	1 189	289	5 039
Political science & government	1 935	867	1 247	1 165	500	5 714
Health professions & related clinical sciences						**11 400**
Medical & clinical sciences	275	1 603	1 669	559	149	4 256
Nursing	1 321	1 436	1 596	453	59	4 865
Dentistry	1 591	261	311	100	17	2 279
Engineering						**24 680**
Electrical, electronics & communications engineering	1 153	2 628	2 949	1 602	1 286	9 618
Civil engineering	2 162	2 456	2 425	1 348	863	9 254
Chemical engineering	2 306	1 251	1 374	604	273	5 808
Education						**52 530**
Eduaction, general	3 888	9 048	8 580	1 980	236	23 732
Teaching education & professional development	3 909	4 893	6 599	0	0	15 401
Teacher education & professional development	7 606	3 057	2 733	0	0	13 397
Business, Economics & management sciences						**102 853**
Accounting & related studies	2 497	11 409	11 440	10 941	4 573	40 860
Business administration, management & operations	8 766	10 117	9 953	9 860	4 226	42 922
Marketing	11 130	2 673	2 496	2 020	753	19 072
Total	**75 861**	**79 151**	**82 336**	**52 810**	**21 643**	
					Total 2012-2016	**311 800**

Source: Department of Higher Education and Training website and author's own calculations

Employment by province

The provinces that experienced the highest increase in employment during the period 2012-2018 include Gauteng, KwaZulu Natal, Western Cape, Eastern Cape, Limpopo, Mpumalanga and North West (Table 5).

Table 5: Employment by province, 2012-2018

Employment by province South Africa	2012	2013	2014	2015	2016	2017	2018	**Total**
	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand
South Africa	136 701	139 160	141 641	144 139	146 676	149 177	151 629	1 009 121
Western Cape	16 025	16 385	16 752	17 126	17 507	17 884	18 250	119 929
Eastern Cape	16 028	16 175	16 308	16 442	16 594	16 787	16 986	115 319
Northern Cape	2 951	2 991	3 031	3 069	3 106	3 144	3 180	21 471
Free State	7 321	7 373	7 427	7 481	7 530	7 557	7 594	52 283
KwaZulu Natal	25 681	26 057	26 431	26 811	27 209	27 630	28 060	187 879
North West	9 189	9 360	9 535	9 712	9 893	10 070	10 245	68 004
Gauteng	35 615	36 456	37 326	38 210	39 095	39 930	40 738	267 371
Mpumalanga	10 383	10 596	10 812	11 025	11 235	11 437	11 627	77 113
Limpopo	13 509	13 768	14 019	14 264	14 506	14 737	14 948	99 752
Total	273 401	278 320	283 281	288 278	293 352	298 354	303 257	2 018 243

Source: Stats SA QLFS 2008 – 2018Q4

The trends in table 5 indicate that employment opportunities are not evenly distributed among all the 9 provinces in South Africa, which exerts pressure on some provinces, therefore resulting in high unemployment in provinces like Gauteng, Western Cape, and so forth. The growth among the provinces with an increase in the employment level are as follows:

Gauteng ((40738/35615) ^1/7) =1%

KwaZulu Natal ((28060/25681) ^1/7 =1%

Western Cape ((18250/16025) ^1/7 =1%

Eastern Cape ((16986/16028) ^1/7 =1%

Limpopo ((14948/13509) ^1/7 =1%

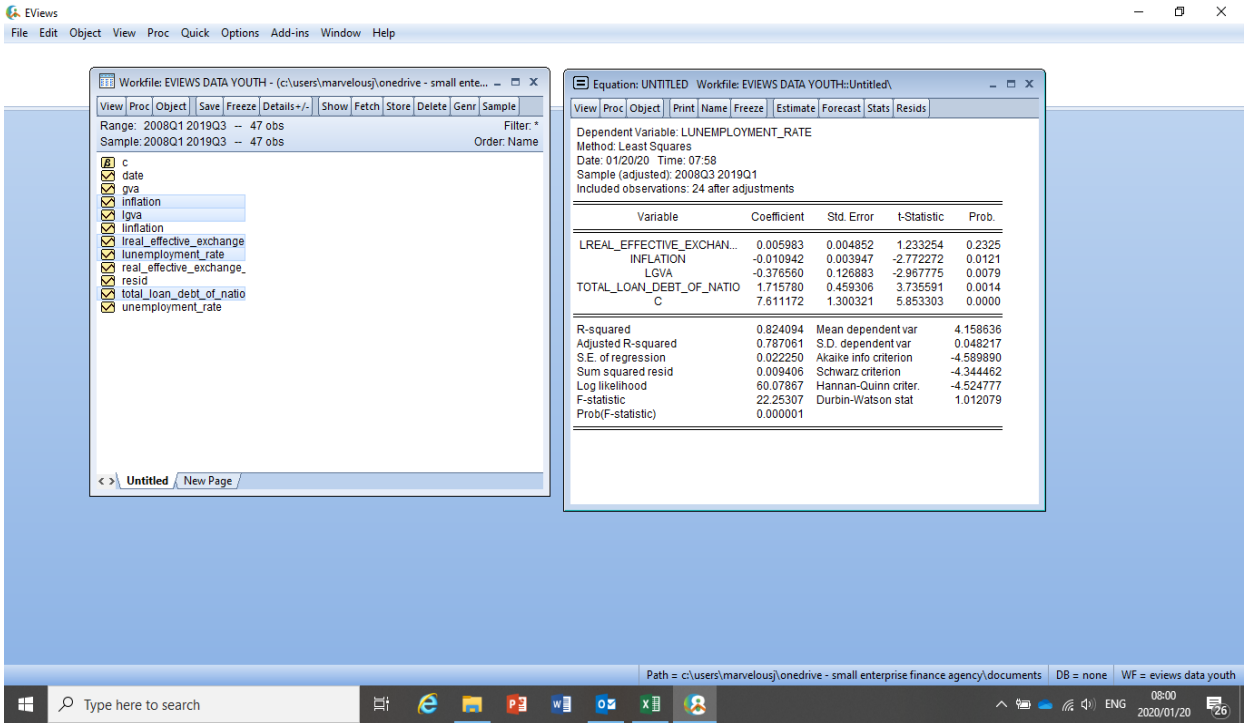
Mpumalanga ((11627/10383) ^1/7=1%

North West ((10245/9189) ^1/7 =1%.

The results in table 5 above correlate with the findings of Reddy (2016) that most people migrate from their hometowns to other provinces like Gauteng in search of employment opportunities and better life. Table 5 shows that Gauteng employed 267 371 000 people in total from 2012 to 2018. Gauteng is the leading province in terms of employment creation contrasted to other provinces (Table 5).

Youth unemployment regression equation

Regression model in Eviews
8



Regression equation: log (youth unemployment) =7.6+0.006*log (Real effective exchange rate)-0.01*Inflation-0.38*log (GVA: Gross value added) +1.7*Total loan debt of nation+ error term (omitted variables).

Regression output results explanation:

A 1% change in the Real effective exchange rate will result in a 0.006% increase in youth unemployment, ceteris paribus (holding other variables constant).

A 1% change in the inflation rate will result in a 0.01% decline in youth unemployment, ceteris paribus.

A 1 unit change in the Gross value added (proxy of Gross Domestic Product) will result in a 0.38 unit decline in youth unemployment, ceteris paribus.

A 1% change in the Total loan debt of the nation (government debt) will result in a 1.7% increase in youth unemployment.

Statistical significance and adjusted R-square of the model:

The probability of the F-statistics is 0.000001 which is less than 0.05, meaning that the model is overall statistically significant (rule of thumb: at 5% level of significance, p-value should be less than 0.05).

The p-value for Real effective exchange rate is 0.23 which is greater than 0.05, meaning that Real effective exchange rate is statistically insignificant in explaining variability in youth unemployment.

The p-value for Inflation rate is 0.0121 which is less than 0.05, meaning that Inflation rate is statistically significant at explaining variability in youth unemployment.

The p-value for Gross value added (GVA) is 0.008 which is less than 0.05, meaning that Gross value added is statistically significant at explaining variability in youth unemployment.

The p-value for Total loan debt of nation (government debt) is 0.0014 which is less than 0.05, meaning that Total loan debt of nation is statistically significant at explaining the variability of youth unemployment.

The adjusted R-square which is a measure of goodness of fit of the model is 0.79 which is close to 1, meaning that 79% of variability in youth unemployment is explained by the inflation rate, Gross value added (proxy for Gross Domestic Product) and the Total loan Debt of Nation (Government debt), while only 21% is explained by other omitted variables. This is a good model to explain the relationship between youth unemployment and the regressors.

Conclusion and policy recommendations

From the findings and results the researcher concludes that youth unemployment is caused by the structural shift of the economy from being driven by labour intensive sectors towards skills intensive sectors, making unskilled youth to become unemployed. Youth unemployment in South Africa is very high, which has resulted in a decline in the national Gross Domestic Product because labour resources are idle. Youth need to be encouraged to enrol and study at Technical and vocational education and training colleges that equip learners with practical skills required in the labour market and to become entrepreneurs. The results of the econometric model proved that youth unemployment is influenced by the rise in inflation rate, decline in the Gross domestic product and an increase in the government debt which deprives the nation of investments in youth empowerment programmes.

The study recommends that programmes be designed to equip the unemployed youth with the skills required by employers in the labour market. There is a need for an entrepreneurship culture to be promoted among the youth in townships and rural areas to help them become economically involved.

There is a need for more Government spending in the form of infrastructure development, to build more technical schools that will equip the youth with skills required in the labour market. Government investment programmes need to be channelled towards developing infrastructure in the rural areas, to help reduce rural-urban migration which increases unemployment in the urban areas.

Government and policy makers can use expansionary monetary and fiscal policies to tackle demand-deficient (recessionary) unemployment. Government can use supply-side policies that include entrepreneurship, internships, learnerships, apprenticeships to tackle structural (skills mismatch) unemployment.

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