

# GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: B

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## Economics and Commerce

Creativity and Innovation

Intuition to Process Management

Highlights

The Ethiopian Economy

Foreign Exchange Gap

Discovering Thoughts, Inventing Future

VOLUME 15

ISSUE 4

VERSION 1.0



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B  
ECONOMICS AND COMMERCE

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VOLUME 15 ISSUE 4 (VER. 1.0)

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# Creativity & Innovation a Road Map to Business Success and Growth in Sierra Leone: from Intuition to Process Management

By Professor Tang Xiao Hua, Allieu Badara Kabia & Dorzhiev Arkady

*Liaoning University, China*

**Abstract-** Research scholars and business Professionals have proven that macro of business entities in developing economies like in the case of Sierra Leone fail fundamentally as a result of the incapacity and inability of the owners (Entrepreneurs/shareholders) and business Agents to be creative, innovative and the transformation of their intuitive ways of operational business activities to process management and business process orientation. Some Entrepreneurs/shareholders and Management show some amount of “I don’t care”, negligence and carelessness at the initial stage of not adopting the corrective measures of the business tradition, strategies, risk and change management of winning business success to attain depending on the type of investment portfolio, procedures, policies and approach for business planning, priority, pacing, people, processes and controls to attain operational excellence, high employee engagement and increase customer/client centricity. That is where the problem of this paper lies. Therefore, the objective of this research study is to clearly bring out a theoretical exposition of the issues involved in creativity & innovation and to determine whether these indicators stimulate and influence business success to attain growth, process management and business process orientation as in the case of relevant literature reviewed in Kline-Linked model, Abrams and Hippel’s research findings. Literature findings indicate that innovation and creativity has the capacity to influence success in business performance and growth especially in a developing economy like Sierra Leone.

**Keywords:** *business growth, innovation, intuition, process management, sierra leone.*

**GJMBR - B Classification :** *JEL Code: L21*



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# Creativity & Innovation a Road Map to Business Success and Growth in Sierra Leone: from Intuition to Process Management

Professor Tang Xiao Hua <sup>α</sup>, Allieu Badara Kabia <sup>σ</sup> & Dorzhiev Arkady <sup>ρ</sup>

**Abstract-** Research scholars and business Professionals have proven that macro of business entities in developing economies like in the case of Sierra Leone fail fundamentally as a result of the incapacity and inability of the owners (Entrepreneurs/shareholders) and business Agents to be creative, innovative and the transformation of their intuitive ways of operational business activities to process management and business process orientation. Some Entrepreneurs/shareholders and Management show some amount of “I don’t care”, negligence and carelessness at the initial stage of not adopting the corrective measures of the business tradition, strategies, risk and change management of winning business success to attain depending on the type of investment portfolio, procedures, policies and approach for business planning, priority, pacing, people, processes and controls to attain operational excellence, high employee engagement and increase customer/client centricity. That is where the problem of this paper lies. Therefore, the objective of this research study is to clearly bring out a theoretical exposition of the issues involved in creativity & innovation and to determine whether these indicators stimulate and influence business success to attain growth, process management and business process orientation as in the case of relevant literature reviewed in Kline-Linked model, Abrams and Hippel's research findings. Literature findings indicate that innovation and creativity has the capacity to influence success in business performance and growth especially in a developing economy like Sierra Leone. The paper recommends improved quality of human intellectual capital building and training at all levels, training and building quality innovation and creativity structures with related indicators, adequate funding on research, science and development programs, benchmarking countries that ranked high on Global Innovation Index and business growth risk assessment tools. The research study is a proxy of business practitioners to enrich their skills, techniques and strategies for better and excellent operational performance to attain steady growth and sustainable businesses success.

**Keywords:** *business growth, innovation, intuition, process management, sierra leone.*

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## I. INTRODUCTION

Business is like Mother Nature can be good or bad. The life span and success of any business depends on the business growth rate assessment tools in adopting *the corrective measures of business tradition, strategies, risk and change management of winning business success (profitability, effectiveness, efficiency and sustainability) depending on the type of investment portfolio, procedures, policies and approach for business planning, priority, pacing, people, processes and controls to attain operational excellence, high employee engagement and increase customer/client centricity.* Business success to attain Growth should not be assumed rather is a decision made of weighing the merits and de-merits and the risk of growing or not growing. The basis of all businesses is meeting needs and wants of customers demand. A business entity may come up with a brand of new product and design, or create a fantastic new service for delivery to customers/client, but if it does not meet the demand utility of some real and important needs or desire of its market target segmentation, consumers/clients demand becomes defective and subsequently and inevitably, the business will fail. In most cases, business ideas were carried out base on trial and error, incomplete guidelines or rules of thumbs with the hope that they may lead to business performance, success and growth with time if it pleases the ancestors and gods of the land. There is no clear path, since the business entities (enterprise management, partnership and corporations etc.) must create one. Finding a reliable, sound, safe and an appropriate success path) is easier if the business manager approaches creativity and innovation as a logical process, and then utilizes some of the available innovative problem-solving techniques, tools and strategies within the process of its business activities, according to Keratko, Morris and Collins (2011).

Recent research studies by Abrams (2012) indicate that the most exciting and often most risky, entrepreneurial companies are innovative and creativity in nature. They bring something new and unique to the market that significantly alters and improves on the existing commodities (goods & services). This may

require given added value by building or improving on an existing commodity or finding a new use for it. Business professionals and Research scholars have also reveals that of all the necessary indicators needed for a successful business and growth, the individual (People) initiative as one of the 5ps of successful business growth seems the most critical which constitutes entrepreneurs/shareholders, management and employees. Without the visionary leadership and persistence performance of individual leadership, little or no positive business result would be accomplished. As a result of the deficiency existing within the business framework in Sierra Leone, we thought it fit and necessary to come up with a concept, vision or dream and the dream must be translated into products and processes within a business context. This concept must be adapted to reflect the realities encountered within the internal and external business environment and must persevere in mitigating, eradicating and overcoming both the normal and the arbitrary hurdles risk hazard effect that are thrown into their paths.

The success stories of global companies and successful entrepreneurs can be traced to their investment in innovation Google's Larry Page and Sergey Brin came up with more effective search engines that researchers found more reliable. Today, Google and Baidu has become a household name in social network. The Ultra external storage drive, memory sticks and iPod have made it possible to walk around with diversify files say academic and research materials, thousands of songs & movies and documents available at all times. The iPod for example represents a substantially improved, enjoyable, creative and instinctive way to meet a long standing need for music-on-demand. However, in Sierra Leone, among the factors that contribute to business failures is the inability of Sierra Leonean business entities stakeholders (entrepreneurs, shareholders & management) to be innovative, creative and to adapt process management to accomplish desired output goals- profitability, effectiveness, efficiency and sustainability (PEES). All forms of business organizations need innovative and creative ideas to attain a sustainable and successful business growth.

## II. NEEDS ASSESSMENT OF STUDY

Based on the preceding, the purpose of this research is to determine and assess creativity and innovation as a prime factor responsible for successful business growth and process management in a competitive business environment and a growing economy like Sierra Leone. The lack of understanding of the issue involved in innovation, creativity, business success & growth, process management and business process orientation may hinder many businesses from being successful to justify their investments and accomplish the desired output business goals.

The truth about Growing a Successful Business is as follows;

- Stress quality controls
- Stress financial controls
- Dilute one's customer value proposition
- Dilute one's culture
- Put one in a different competitive space
- Business Growth is CHANGE. Growth requires the entrepreneur, employees, processes, etc. to change as the business grows.
- Business Growth is *EVOLUTIONARY*- it evolves and everything in the business is continuously evolving, including people.
- Business Growth requires more processes and more/better management.
- Business Growth eventually requires you to build a management team.

As a business grows, it needs better processes & control, finance, Human Resource and technology tools adopting innovation and creativity for better operational performance and employee centricity in meeting the business desired output.

a) *Growing a successful business means*

- More customers?
- Selling more products/services to existing customers?
- More revenue?
- More profit (revenue-costs)?
- More assets?
- More employees?

## III. LITERATURE REVIEW

Drucker (1985) stated that innovation is the specific tool of businessman/entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. It is capable of being learned and capable of being practiced. Branson (1998) considers innovative business as one which lives breathes 'outside the box'. According to him, innovation is not just good ideas. It is a combination of good ideas, motivated staff and an instinctive understanding of what customers of the business want and need. Davila et al (2000) assert that innovation is the application of better solutions that meet new requirements, inarticulate needs, or existing market needs. It can also be defined as something original and as consequence, new that 'breaks into' the market or into society. While something novel is often described as an innovation, in management and other social science-related disciplines, it is generally considered as a process that brings together various novel ideas in a way that they have an impact on society. This is accomplished

through more effective products, processes, services, technologies or ideas that are readily available to markets, governments and society. Innovation differs from invention in that; it refers to the use of better, and as a result, novel idea or method, whereas invention refers more directly to the creation of the idea or method itself. Companies cannot grow through cost reduction and reengineering alone. Innovation is the key in providing aggressive top line growth, and for increasing bottom line results. Therefore, Innovation is more than simply coming up with good ideas. It is the process of growing them into practical use. (Hargadon, 2003).

Innovation as a process requires turning ideas into reality and capturing value from them. Successful process innovation is in four stages. According to Tidd & Bessant (2013), these stages are:

*Search:* This involves finding opportunities for innovation- bringing new ideas to the system. These ideas may come from research and development, copying, market signals, regulations, competitor's behaviour and so on. The main issue here is how to organize an effective search process to ensure a steady flow of genetic variety which gives a better chance of surviving and thriving in business in the face of environmental constraints.

*Select:* Generating variety of ideas is not enough. Managers need to select from a set of opinions the variants most likely to help grow and develop. This requires some form of strategic choice out of all the things the businessman could do, what is going to do and why? This stage takes into account some form of competitive differentiation, that is, which choice may give the best chance of standing out from the crowd and previous capabilities that can be built on.

*Implementation:* Generating ideas and selecting still leaves the problem of actually making it happen. That is, committing scarce resources and energies to doing something different. Implementation involves channelling or converting ideas into reality. It is essentially a task of managing a growing commitment of resources, time, energy, money, materials and mobilizing knowledge of different kinds against the background of uncertainty. Here businesses do take calculated risk rather than random throws of the dice or through intuitive approach with the hope that it will deliver the calculated value which exceeds or at least equals what we put into it.

*Capture:* This stage involves determining how to get the benefits from innovation. The business needs to consider the challenge of capturing value from its innovative efforts- justifying efforts in commercial terms or in terms of creating social value. It also involves the determination of how to protect the gain from appropriation by others, how to learn from the experience and capture useful learning about how to improve the innovation process in the future.

How to make this simple process work has been the concern of entrepreneurs and business practitioners, the world over. And this is particularly disturbing in Nigerian business environment where majority of businesses are managed on trial and error, intuitive methods or rule of thumb approach. Today however, the academic community especially is working on trying to understand in a systematic way about the core process and the conditions under which the innovation process is likely to succeed and thus promote business performance.

A striking point about innovation is its source- what gives it the desired strength. Hippel (1988) through various researches found a number of useful sources of innovation to include users (customers), suppliers and manufacturers. According to him, this involves categorizing companies and individuals in terms of functional relationship through which they derive benefits from a given product, process or service innovation. Drucker (1985) identified the following seven (7) sources of innovation: the unexpected, incongruities (conflicts between opposing functions, requirements or values), process needs (necessity), industry and market structure, local and global demographics, changes in customer perception and new knowledge. The first four sources lie within the company while the last three lie outside the company and are capable of creating new products and new markets. These factors clearly provide direction for some key changes and awareness that may lead to innovation. For this study, the aspects of innovation explored by Tidd & Bessant (2013) are useful. These are: incremental innovation, platform innovation, discontinuous innovation and component/architecture innovation.

*Incremental Innovation:* This involves 'doing what we do but better' and requires increasing the degree of novelty involved in different places across the innovation space. Consider an innovation in a car. It may require updating the styling on the car and not coming up with a completely new one or increasing the speed and accuracy of a lathe instead of replacing it with a computer-controlled laser forming process. There are degrees of novelty in the above examples running from minor incremental improvement through to radical changes which may transform the way we think about and use them. Sometimes these changes are common to a particular sector or activity, but sometimes they are so radical and far-reaching that they change the basis of society. It is a fact that innovation may involve a discontinuous shift, most of the time it takes place in incremental fashion. Essentially this is a product/process improvement along the lines of 'doing what we do, but better'. Hollander (1965) stated that the cumulative gains in efficiency are often greater over time than those which come from occasional radical changes. After all, 'disruptive or new to the world innovations'

constitute only 6 percent to 10 percent of all projects labelled innovation. (Ettlie, 1999). It is on record that the Japanese improvement in quality and productivity over the years is as a result of sustained incremental change or innovation. (Imai, 1987).

a) *Platform Innovation*

One way in which the incremental innovation approach can be harnessed to good effect is through the concept of platforms (families). Platform innovation is one of the fundamental innovations. Such innovations normally are touching pads for a new industry. Platform innovations include personal computers, cell phones, digital printers, data bases, drug delivery services and so on. Platform innovations launch industries and change ways of life. Platforms and families are powerful ways for companies to recoup their high initial investments in research and development by deploying the technology across a number of markets fields. Hamel (2006) feels that the concept of total quality management is essentially a paradigm innovation which represents concepts which can be shaped and stretched to fit a variety of different contexts that are in line with platform innovations.

b) *Discontinuous Innovation*

The findings of Hippel's research also indicated that most of the time, innovation takes place within a set of rules which are clearly understood, and involves players trying to innovate by doing what they have been doing but better. The rules of the game are accepted and do not change. However, something happens which dislocates this framework and changes the rules of the game. These are not every day events, but have the capacity to redefine the space and boundary conditions thereby opening up new opportunities and challenging existing players to reframe what they are doing in the light of new conditions.

Discontinuous innovation is a central theme in Schumpeter's original theory of innovation which he defined in terms of 'creative destruction'. (Schumpeter, 1950 and Foster & Kaplan, 2002). This type of change can come through the emergence of a new technology or it can come through the emergence of completely new market with new characteristics and expectations. This aspect of innovation can also come about by reforming the way we think about an industry-changing the dominant business model (the rules of the game). The new way of framing the business has the power of opening up new trajectories along which all sorts of innovations begin to occur. Triggers or sources of discontinuous innovation include: the emergence of new markets, technology, political order, deregulation, unthinkable events, business model, architectural designs, shift in techno-economic paradigms and so on.

c) *Component and Architecture Innovation*

Innovation can be viewed from the opportunities that are opened up through the components within the

larger systems. In this case, innovations are thought of as changing things at the level of components or those which involve change in a whole system. It should be noted that innovation after all, is about knowledge-creating new possibilities through combining different knowledge sets. Such knowledge may already exist in our experience, result from a process of search or be in explicit form and codified in such a way that others can assess it, discuss it, transfer it, etc or it can be in tacit form. (Polanyi, 1967). It must however be noted that the process of knitting these different knowledge sets together in a successful innovation is one which takes place under highly uncertain business conditions. Innovation and creativity flourish when they are backed up by the actions and attitudes of the leaders and managers of the business. The actions provide the foundations that enable creative and innovative efforts of employees. Some of these actions according to Fry, Stoner & Hattwick (1998) are:

- Encouraging risk and experimentation
- Tolerating and learning from mistakes
- Embracing diversity and differences
- Promoting boundary less behaviour
- Maintaining close contact with customers
- Investing in training.

*THEORETICAL NEXUS* Finding an innovative process that would enhance business success requires an effective model or framework. The paper considers the Kline-Linked model (Kline Model) of innovation which places emphasis on potential market needs as drivers of the innovation process and described the complex and often interactive feedback loops between marketing, designs, manufacturing and so on. In this model, Kline (1985) describes the complexities in the innovation process. He acknowledges the fact that new knowledge is not necessarily the driver for innovation. Instead, the process begins with the identification of an unfilled market need. This drives research and design, then redesign and production and finally marketing with complex feedback between all this stages. There are also feedback loops with the organisation's and the world's stored base of knowledge, with basic research conducted or commissioned as necessary to fill in gaps. Caraca, Bengt-Ake & Sandro (2009) corroborate by linking this model to linear theory of innovation when they state that basic research leads to applied development, then engineering, then manufacturing and finally marketing and distribution process.

IV. CONCEPTUAL PERSPECTIVES

A number of concepts need some clarifications. It includes: Business inception traditions, the four (4) ways of growing businesses (Improvement, Innovation, and Scaling & Strategic acquisition), Business success, Intuition, Process management and Business process orientation.

a) *The Basic Pre-Requisite Tradition of Starting Businesses- (e.g-SMEs)*

Before an Entrepreneur businesses start to grow there must be an existence of a specific business/business Idea. That is to say a plant can only grow by sewing the seed first. Private business is like a Seed. Rational Entrepreneurs should at the initial point before the start of any business to be able to answer three (3) questions for a good start:

- Do I/We Have A Business Proposal?
- Do I/We Have A Business Plan?
- Do I/We Have *Edsoda* So That I Can *Polcca*?



BUSINESS MINDSET INTUITION MODEL	
E-Experience	P-Planning
D-Direction (What, Where, When & How)	O-Organizing
S-Situation Now (Prevailing environment)	L-Leading
O-Output Desired (Vision, Mission & Objectives)	C-Controlling
D-Deadline (Time Management)	C-Coaching
A-Action Plan	A-Achievement

Figure 1 : Business Mindset Model

The 5Ws & H of Planning

Planners of Businesses would always examine the answers to six (6) key foundation questions to trigger their minds into an effective and efficient planning. As a rule of thumb, it's always profitable to answer the questions below as the aim of all businesses is to maximize profit and minimize cost, keeping risk at a lower ebb.

**WHAT?** What kind of Business? Identify your subject matter.

**WHY?** Investigate all possible reasons around the subject matter base on the business intended

**WHERE?** Identify the place or geographical location, as everything on Earth is subject to a place of event, action or activity.

**WHEN?** Similarly, everything is tied up to time and space. Determine the year(s), months(s) and week(s), etc, or time of day or night of the event to start your business.

**WHO/WHOM?** Nothing happens without human or animal agents. Identify who acts or takes responsibility for the happenings being planned and the market (Market target segmentation).

**HOW?** Is the action plan, determine the process or method that is involved in carrying out the activities or events in question.

The above models are essential indicators that determine the survival and sustainability of business in economies in the world. To be specific most businesses in developing countries economies failed because of the neglect of the monitoring, review, evaluation and assessment of policies, procedures, processes and controls by not applying the appropriate models. This is applicable not only to Large scale businesses but also Small and Medium Enterprises. Any failure of business in either the formal or informal sector of any economy has a negative impact in the country's resource base and aggregate demand/GDP. So, my advise if businesses want to remain sustainable and profitable in the world in general and developing economies to be specific need to be watchful of the aforementioned business models and assessment indicators.

Entrepreneurs and shareholder's/management should have the mindset even though they want to grow their businesses must be aware of the "IISS model" of growth for successful businesses refer to as the "Big 4(four)" of business growth

b) *The Four (4) Ways To Grow A Successful Business (Iiss Model)*

- i. *Improvements*: Being better, faster, cheaper
- ii. *Innovations*: Doing something really new or different for you that drives revenue and/or profit growth
- iii. *Scaling*: Doing lots more of what you are currently doing.
- iv. *Strategic acquisitions*: Buying someone else's customers or new products/services to sell, or buying new capabilities to develop new products/services

i. *Improvements*

- Constant improvement is the "heart" of a great successful business.

*What can you improve?*

- You can improve your product-meeting customer needs better.
- You can make your product more quickly.
- You can improve customer service.
- You can improve your sales cycle
- You can collect cash faster.

- You can make doing business with you easier and “smoother.”
- You can operate more efficiently, reducing your costs and increasing your profits.
- You can drive productivity from process improvements-doing more in same amount of time.
- You can improve every process that impacts quality, money, and customers-EVERY process.
- You can improve EVERYTHING you do: every step, of every process of your business.

*How does one improve?*

- You try new things in small experiments and LEARN from experience; Learning to enhance business performance is equivalent to making more money.

*Why are improvements necessary?*

- To stay ahead of the competition: “Bear in the woods” story.

ii. *Innovations & Creativity*

Meaning doing something that’s really new or different.

The Latin word ‘innovare’ meaning ‘to make something new’ is what is translated to mean innovation. There are many definitions put forward from different school of thought to explain what innovation means. For example, Drucker (1985) stated that innovation is the specific tool of businessman/entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. Definitions of innovation may differ in wordings, but they all stress the need to complete the development and exploitation aspects of new knowledge, not just its invention- the first step in widespread and effective use. Further research indicates that innovative programmes are most frequently driven by:

- Improved quality
- Creation of new markets
- Improved production process
- Reduced labour costs
- Extension of product range
- Reduced environmental damage
- Replacement of products or services
- Reduced energy consumption
- Conformance to regulations

*How does innovation usually occur?*

- Combining existing things in a new way.
- Learning something from a different type of business and transferring it to your business.
- Challenging the “usual way” assumptions. Asking why it’s done this way in this type of business.
- Learning from competitors.

- Innovating with customers-customer co-creation
- From “Learning Launches”-small, cheap, fast experiments that test new ideas and ways of doing

iii. *Scaling*

*This is the turbo charger of business success and high growth meaning*

- Doing lots more at the same time of what you are doing now- doing more
- Scaling requires successfully doing the 5 Ps (Planning, Priority, People, Pacing Process & control).
- Why would you outsource?
  - Scale faster?
  - Cheaper?
  - Allows you to focus on critical processes and parts of your business
- What should you rarely outsource?
  - Quality controls. Why?
  - Financial controls. Why?
  - Control of your customer. Why?

*Scaling boosters*

- Businesses basically grow by adding more customers and/or by selling more product/services to existing customers.
- Scaling boosters checklist:
  - What complementary products/services can I sell to existing customers?
  - What new products/services do I have the ability to make that my customers need?
  - Can I reduce the features of my current offering and offer a cheaper version to a different customer segment?
  - What can I do to increase the frequency of purchases? Loyalty program?
  - Can I add a new distribution channel to reach new customers? Internet?
  - Can I bundle services to products or bundle more services together?
  - Can I add pricing, financing and/or guarantees that will produce more buyers?

iv. *Strategic Acquisitions*

- Acquisitions require fundamentally different expertise than scaling an existing business: due diligence, valuation and acquisition integration skills.
- Acquisitions are of high-risk generally.
- What could one buy? Geography expansion, customers, new products or services, new capabilities?



- People confront this question generally when they have experienced high growth and exhausted reasonable scaling alternatives as they currently exist and still want to grow more.

c) *The Five (5) Ps of Growing A Successful Business*

i. *Planning*

How do you plan for the unknown?

“Visualize” what your structure & infrastructure would look like at bigger stages.

- What is *structure*?
  - Your organization chart-by function/job
  - Size inflection Points: 7-9 employees; 20-25 employees; 45-50 employees or 100 employees.

➤ What is *infrastructure*?

- Space needs
- Furniture, equipment
- Phones
- Technology

Do you *outsource*?

- Payroll processing, accounting, taxes
- HR benefits processing
- Manufacturing (QC issues)
- Sales (*Defender Direct*)
- Delivery

ii. *Prioritization*

There are two (2) different kinds of prioritization:

Strategic-The 3 Ws: (What, Whom and Why?)

- **What** Am I Going to Sell?
- To **Whom**?
- **Why** are they going to buy from me? (Marketing Mix & Market Target Segmentation)

Daily—What “fire” do you put out first?

- Critical decision—why?
- Assess the situation and go where you have the most impact—fight the biggest fire.
- How do you know? Life, property, brand, reputation, customers, quality, cash?
- Where is the “bottleneck”?
- “You don’t eat if you don’t sell. You don’t sell if you don’t have a customer. You don’t have a customer unless you offer a good service (product).”
- “Set up 3 or 4 priorities that take precedence over everything else: Manage cash flow; focus on customers and quality service; accelerate revenue growth; and all the rest-unless something is on fire-can wait.”

- Huddles: What is a “huddle”? (Ritz Carlton Hotels)
- Performance Metrics Transparency- posting daily key performance metrics to all employees

iii. *Processes*

- Checklists: Airline pilots
- Instructions: Recipes- step by step how to do something

*Why are processes necessary?* To ensure: 99% defect-free, on-time delivery to the customer.

iv. *Pacing*

- One of the most important findings of my research
- One entrepreneur who grew his business too fast, losing millions of dollars, reported the following lessons he learned:
  - Have the right people and the right processes in place.
  - Walk before you run.
  - Have clear lines of reporting and authority.
- How could too much growth overwhelm Entrepreneurial Business?
- Many entrepreneurs reported that HR processes, were critical growth processes that they’d overlooked or done badly, which created huge problems:
  - Hiring processes
  - Interviewing processes
  - On boarding processes
  - Review and firing processes

v. *People*

- While strategic focus (**P**lanning and **P**rioritization) and operational excellence (**P**ace and **P**rocesses) are necessary for growth, they are not sufficient.
- Growth also requires the *right kind of people*, culture and leadership. The Entrepreneur Must Grow Too!
- Growth requires the hiring, training and retaining of high performance employees and the building of a high performance management team.

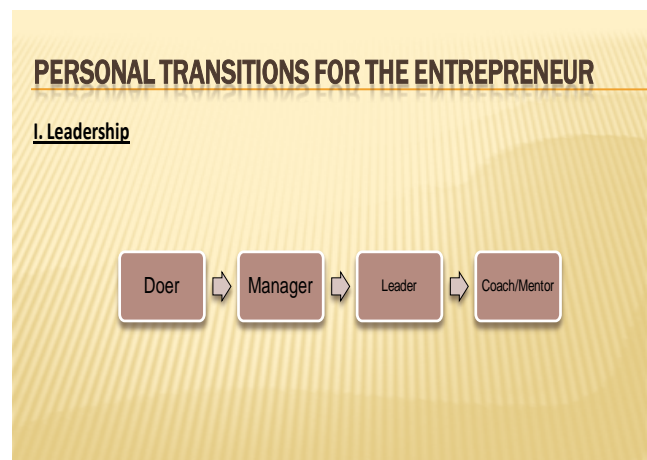


Figure 2 : Personal Leadership Transitions of Entrepreneur

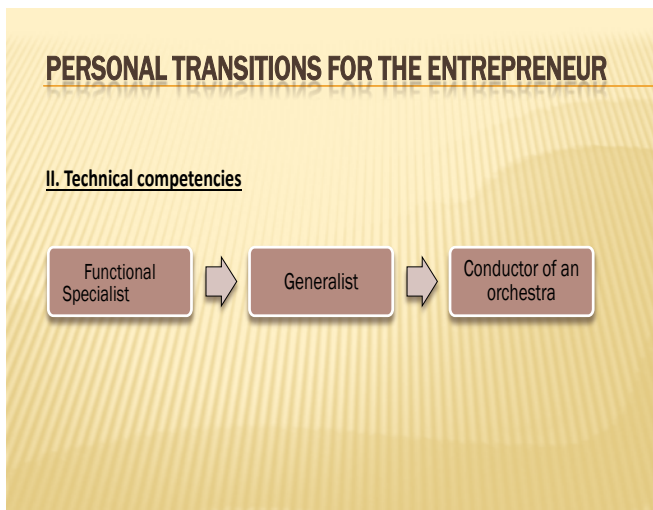


Figure 3 : Personal Technical competencies Transition of Entrepreneur

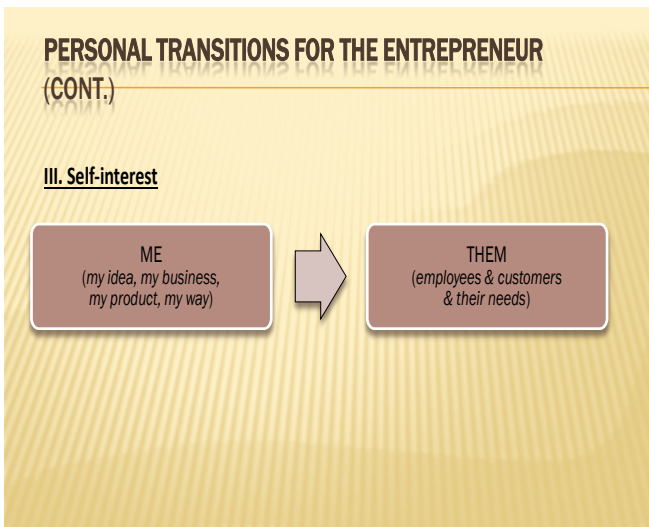


Figure 4 : Personal Self- Interest Transition of Entrepreneur

Each personal growth transition challenges an entrepreneur and raises the following questions:

- Are you still the best person to lead this business?
  - Should you hire someone more qualified to do this?
- ✚ **1st big transition- From doer to manager**
- Growth changes what an entrepreneur does and how he/she does it.
  - Starting out, an entrepreneur's focus is doing; success brings change.
  - In the beginning, most entrepreneurs are "my way or the highway."
  - Most entrepreneurs have to "back off" from that. Why?
  - When do you become a manager?

*a. Delegation*

Becoming a manager/teacher

- Why is delegation necessary? If you want to grow, you HAVE to learn to delegate.

- What do you delegate?
- How do you delegate?
- The power of processes: Processes are how entrepreneurs are able to be in multiple places at the same time.

Delegation is a learned skill; "Delegation is a process and not a natural act."

Why is delegation so hard for many entrepreneurs?

- "Delegation is the most difficult management skill to learn."
- "Delegation is baptism by fire. You start looking at the fact that if you don't let go, you will lose."
- You only have so much time. You can only do so much.

*Take note:* "I don't think delegation is a linear process. You have to delegate. Then you do delegate, and you find some things fall apart. Then you gather them up, pull them back in towards you, fix them and then start the process all over again."

*b. Delegation*

The necessity and power of processes

- The power of processes: the recipes or checklists of how to do something.
- Processes reduce delegation risks and mistakes.
- Processes *must* be written down.
- After each mistake is corrected, write a process. Leave a fire extinguisher behind.

*c. Delegation*

Best practices

- Learning to live with the humanity of employees- mistakes will happen!
- Expect mistakes. Look for them! Find them! Teach and correct!
- As you grow, you need clues, evidence and hints that mistakes are happening.
- You need daily and weekly measurements.
- What do you measure? Start measuring what's most important to you.
- Trust but verify.
- Measure: quality; on-time delivery; customer satisfaction; efficiency; daily costs.
- Engage employees in writing processes.
- Not one single point of failure.
- Engage employees in measuring key indicators.
- Encourage and reward self-reporting of mistakes.
- NEVER delegate writing checks or using credit cards until you get really big, and even then, only with limits and checks and balances.
- First delegate non-critical tasks.
- Delegation is teaching NOT punishing.
- Mistakes WILL happen.
- Don't expect them to do it YOUR way.

✚ **2nd big transition- Becoming a leader (managing managers)**

- When do you need managers? Typically around 7-10 employees.
- Managing managers is a teaching/coaching process.
- Every manager is a different person and you have to learn how that individual learns and responds to feedback, etc.
- You cannot lead unless you have willing followers. Engaging followers takes time and emotional intelligence—a skill that many people lack.
- Learning to have respectful, difficult performance conversations is hard for most people.
- Critique performance, not the person.
- Correct managers in private—not in front of employees.
- A leader can manage, generally, up to 7 managers.
- As a business grows, the structure (organizational chart) has to change. It becomes more complex.

*The paradox of growth*

- As a business grows, the entrepreneur must learn and grow as an individual.
- Here is the paradox:
- Some entrepreneurs become entrepreneurs because they've grown tired of big company structure, rules and bureaucracy.
- They yearn for simply “doing” their jobs, so they become entrepreneurs.
- And if they are successful...*Guess what!* They have to create structure and rules and go back to managing others (and quit “doing” themselves). Growth changes your job!

✚ *3rd big transition-Becoming a mentor/coach*

- As your business grows to 100+ employees, you will have begun to build a *Senior Management Team*. Now the entrepreneur’s role changes again.
- Now you have to personally mentor/coach each of the people in that team—who, in turn, are managing multiple managers—as they learn to be leaders.
- The challenge is to build a trusting, open relationship while holding people accountable for high performance.
- This role requires even more emotional engagement and time to deal with personal issues and style.

*Take note:* “As you push decisions down you have to spend more time on alignment and prioritization, making sure people are focused on the right things, that they are communicating well and getting along and that they have the requisite skill sets to do what needs to be done.”

✚ *4th big transition-From specialist to generalist*

- Many entrepreneurs had a business specialty when they worked for someone else—a functional focus (e.g., manufacturing, sales, finance, marketing, etc.).

- Entrepreneurs have to become generalists when they start a business and grow it—they are responsible for everything.
- An entrepreneur becomes a general manager by doing and being responsible for every functional area: Sales, marketing, production, purchasing, finances, accounting, logistics, customer service, HR, etc.
- As a business grows and a good management team is built, many entrepreneurs start to refocus on a functional area they love and excel at (eg., sales or operations or finance).

✚ *5th big transition-From generalist to “conductor”*

As a business grows, the entrepreneur spends more and more time “out of the details” and not “fighting fires,” and more time on:

- Strategy, finance, people and cultural issues; and
- “Conducting the symphony orchestra” so that beautiful music comes together from all the disparate parts of the business.

✚ *6th big transition-From me to them*

- Another way to describe how entrepreneurs change along the growth path is that they have to change from a “me” focus (relying on myself for everything important) to a “them” focus.
- One learns quickly that one’s business success in most cases is dependent on others (employees) and making and keeping others (customers) happy.
- Most businesses are people businesses.
- Learn to teach, listen to, engage with, relate to and inspire people.

• *Intuition: Trial and error approach to business*

Business success is not an intuitive activity—using or basing on what one feels to be true even without conscious reasoning. It is the ability to acquire knowledge without reference and/or the use of reason. It is the rule of thumb or intuitive approach to (business) issues or decisions. Intuition is conceived as a kind of inner perception, sometime regarded as real lucidity or understanding. The process of intuition remains largely unknown psychologically, but they are however opposed to the views of rationality. Intuition provides views, understanding, judgments, or beliefs that we cannot in every case empirically verify or rationality justify. Jung (1971) refers to intuition as ‘irrational function’ that is, the perception via the unconscious. Therefore, business strategies must be fashioned out rationally based on innovation and managed by a process to accomplish positive results and business success.

• *Sierra Leone Business space and Growth*

Sierra Leone has an area of 73,326 square kilometers with a current population of about six(6) million of which 51% are women and over 75% of the people residing in the rural areas highly dependent on subsistence agriculture and micro-

enterprises/household enterprises. This indicates that majority of the rural people are micro entrepreneurs, or small holder farmers or both. The financial system is small comprising the Bank of Sierra Leone (Central Bank), twelve (12) Commercial Banks, six (6) Community Banks, two (2) Discount Houses, fifty-two(52) Foreign Exchange Bureaux, a National Social Security and Insurance Trust (NASSIT), seven(7) Insurance Companies, 6(six) Insurance Brokers and a few other Non-banking Financial institutions(NBFIs)- with macro of microfinance institutions(MFIs) and Small & Medium Enterprises (SMEs). The Sierra Leone socio-economic space is characterised by a large agrarian sector, which accounts for about 80-85% of the rural employment and at least 75% of the total population. Most of the people in this sector are self-employed and unpaid family workers. Mining and other non-farm activities are also important rural activities. Cash crop production (mainly cocoa and coffee) is primarily carried out by men, while women dominate food crop production. (Bank of Sierra Leone Newsletter July-August, 2012). There is also a large informal sector whose transactions hardly go through the banking system and getting data on their activities is difficult. (Sierra Leone Government National Micro-finance Policy, 2003). The second largest sector is the urban informal sector, which emerged largely as a result of accelerated rural-urban migration, and the labour surplus generated in the cities. This sector represents over 70% of the urban labour force and at least one-fifth of the total labour force (Sierra Leone Government National Micro-finance Policy,2003). Women accounts for about 65% of the Informal Sector's workforce. The key features of the informal sector are dominance of self-employed individuals (such as small traders, street vendors, carpenters, tailors and taxi drivers). The sector largely relies on labour services provided by owners and families, but occasionally also on paid labour without formal employment contracts. Labour productivity is low, underemployment is high, job security is pervasive, wages are highly flexible and workers do not receive much from employers. Legal minimum wage laws do not apply and unions play very limited role in wage fixing. Perhaps more important is the limited access to credit opportunities for enterprise start-up and expansion. (Sierra Leone Government National Micro-finance Policy, 2003).

The third (3<sup>rd</sup>) segment of the market is the formal urban sector comprising the public sector (civil service, parastatals, and semi-autonomous institutions) and medium-scale and large-scale enterprises producing both tradable and non-tradable goods and using both skilled and unskilled labour. (Sierra Leone Government National Micro-finance Policy, 2003).

To be a successful business, all the participants in the business- owners (Entrepreneurs, shareholders) managers and other stakeholders must have their various needs or claims satisfied. Fry, Stoner & Hattwick

(1998) state a number of indicators of success to include financial performance, customer needs and values, quality of products and services, innovation and creativity, and employee commitment. Business success is multidimensional in nature and may take into account several factors.

d) *Determinants of Business Growth*

A healthy business, according to Fry, Stoner & Hattwick is the ability of a business to excel over a long period of time. If a business makes a lot of money in the short run but fails far short of its objective later in the course of operation, it is not a successful business. Further a business that makes a lot financial returns but at the expenses of low morale, uncommitted employees, shoddy products, bad services, or unethical behaviour should not be considered a successful business (Dugguh, 2005). Recently Abrams provided the following business success factors for business owners to consider in their business decisions:

- i. *Underserved or new market:* many businesses succeed by bringing a proven product or service to a market for which there is greater demand than competitors can currently satisfy. This is done by establishing a location that has been overlooked by competitors or identifying a market that has not yet been served or dominated by competitors. These can be new markets, insufficient competitors in a new geographical location or when companies abandon or neglect smaller portion of their current customer base. In some cases, an innovative company may lead the way and others follow once the innovator has built or created customer demand. This is often called 'me-too' business that can achieve remarkable success.
- ii. *Lower price:* customers are often tempted by lower prices (lower cost options), and being a low-cost leader is a time-honoured strategy for business success. However, this can only be made possible if the business has some strategic advantages like unique production or distribution method, secret supply sources, or arrangements with particular partners that make costs consistently lower. Lower price strategy can only be attained in the short-run. This is because if the only key differentiation is the provision of cheap product or services, another company can also lower prices thereby 'beating you at your own game'.
- iii. *Higher Quality:* innovation often comes in the form of higher quality. A business may recognize an opportunity because of lack of high quality offerings in a robust market, or may notice customers expressing dissatisfaction with current options. Under such situation, a business that offers high quality product or service is more likely to succeed than one that offers low quality product or service to customers.

- iv. *Service*: a number of highly successful companies seized business opportunities that are made possible by the opportunity in the environment to provide better service than competitors. Better service means giving customers more personal attention: taking care of customers faster, quick response to customer complaints, return policy, dedicated sales staff etc.
- v. *Convenience*: making a product or service in a more convenient way for customers can create a viable business success. Convenience has the potentials to attract and retain more customers. Convenience products are generally small, rather quickly consumed and bought frequently. They are branded, staple in nature, standardized and generally be substituted. Customers expect and demand that convenience products should be nearby and immediate availability heavily influence which brand and businessman and location are chosen. The price per unit of a convenience product is generally low. Examples of convenience products include bread, milk, toothpaste and brush, battery, light bulb, under wears and so on.
- vi. *New delivery system or distribution channel*: some successful companies have been founded by creating or using new sales channels. It is on record that Amazon.com pioneered the possibilities of new delivery system and distribution in the internet as a sales channel for books, academic journals etc and today Amazon.com is a successful company in books distribution and is acclaimed the 'world's largest bookstore'.
- vii. *Increased integration*: integration is a situation where a company controls more steps in the design, production, and sale of its product or service rather than relying on outside supplies. This can create a competitive advantage because it gives the company more power to oversee the quality at every stage of the production process. To gain competitive advantage based on quality, vertical integration is often advocated. In addition, businesses are highly successful when they possess the following characteristics: compelling, executable business idea, large market and potential for high or rapid growth, building a business in a growing industry, creating a business and not just a product, building a strong team and having original ideas but not completely new ones. When these factors are linked to innovation, process management and business process orientation, the success of the business is enhanced.

e) *Growth Risks Assessment Tool*

There are certain questions business practitioners (Entrepreneurs, shareholders, Management of businesses) needs to answer for "a successful growing business" as shown below:

- ❖ Why should we grow?
- ❖ How will we grow?
- ❖ How much should we grow?
- ❖ How much growth can we afford?
- ❖ Do we have enough people?
- ❖ Do we have the right people?
- ❖ Do we have hiring and training processes?
- ❖ Do we have adequate financial controls?
- ❖ Do we have adequate quality controls?
- ❖ How will growth create risks for...
  - a. Culture?
  - b. Customer service?
  - c. Customer experience?
  - d. Cash flow?
  - e. Supply chain, raw materials and suppliers?
  - f. Distribution and delivery?
  - g. Financial safety net?
- ❖ How will we mitigate those risks?
- ❖ Do we have adequate daily information to monitor these risks?
- ❖ Who will help us monitor, manage, and correct such risks or results?
- ❖ Do we need to pace growth?

In the process of answering the various questions in the above business growth assessment tools in a knot shell examine and evaluate how effective and efficient is the business marketing strategy, risk and change management, the Entrepreneur profitability and growth mindset and the agency concept towards maximizing shareholders wealth. There is also need for a continuous assessment and evaluation of policies, procedures of business investment activities looking at models such as; PESTEL, CAMEL, SWOT, and SPAMSAPO analyses in trying to identify the strength, opportunities, deficiencies and finding appropriate measures to catalyze the achievement of Entrepreneurial and Institutional/Organizational goals that is attaining the 'PEES'-that is Profitability, Efficiency, Effectiveness and Sustainable Business Investment.

RISK ASSESSMENT BUSINESS SUCCESS MODELS			
PESTEL	CAMEL	SPAMSAPO	SWOT
P- Political stability st	C- Capital	S- Stewardship	S- Strength
E- Economic status	A- Asset	P- Policy & procedures	W- Weaknesses
S- Social Amenities	M- Management	A- Auditing, Accounting Principle & Standards	O- Opportunities
T- Technology	E- Earnings	M-Management	T- Threat
E- Environment	L- Liquidity	S- Supervision & Monitoring	
L- Legal Issues		A-Accountability & Transparency	
		P-Processes & Controls	
		O- Outsourcing effect	

Figure 5 : Risk Assessment Models

f) *Process Management*

Simply put, process management is the application of knowledge, skills, tools, techniques and systems to define, visualize, measure, control, report and improve processes with the goal to meet customer requirements profitably. The objective of process management is to clearly identify and document all steps and action taken to complete a process or work flow. It involves documenting the current process, evaluating time and level of effort as well as analysis of efficiency, bottlenecks, and overall process costs as opposed to the trial and error approach which does not for example, document any process. The benefits of process management cannot be underestimated. For instance, the ISO 9001 (clause 0.2 of ISO 9001:2000) emphasized that:

Process management promotes the adoption of a process approach when developing, implementing and improving the effectiveness of a quality management system, to enhance customer satisfaction by meeting customer requirements.

Closely related to process management is business process orientation. Basing his study on the previous work of researchers like Walton (1986), Drucker (1985), Davenport (1993) on business process orientation, Koblbacher (2009) suggests that companies could enhance their overall performance by adopting a 'process view' of the organisation. Empirical study by McCormark (2000) to explore the relationship between business process orientation and enhanced business performance indicated that business process orientation is critical in reducing conflict and encouraging greater connectedness within an organisation while improving business performance. Another study by Kohlbacher (2009) reveals that business process orientation is positively associated with customer satisfaction, product quality, delivery speed and time-to-market speed. Building on this concept requires a new approach and a

new way of thinking about the organisation which will result in dramatic business performance improvements. Companies that have built or centered on business process orientation like Texas Instruments have reported receiving improved business performance within the organisation. (Hammer, 1999 & 2001).

V. GLOBAL INNOVATION INDEX

At this juncture, it important to acknowledge the top 10 countries that make up the list of the most innovative countries of the world with the hope that other nations would benchmarked and benefit from their strategic ideas regarding innovation and creativity. These countries, in a descending order, are: Switzerland, Sweden, U.K, Netherlands, USA, Finland, Hong Kong, Singapore, Denmark and Ireland. The factors used for the ranking include input and output of countries for the ranking.

VI. CONCLUSION

Innovation and creativity are key inputs in attaining business success and growth in any society and economy that is in readiness to grow and progress to economic prosperity as they serve as the bedrock platform with a positive geometric effect on socio-economic growth and development that output sound and quality Intellectual capital service delivery, quality of life sustainability, effectiveness efficiency and productive growth of business entities. Considering the key factors responsible for business success and growth like the underserved markets, low price, high quality, service, increased integration etc. It is therefore necessary for business entities to shift from trial and error (the rule of thumb approach) to a more scientific process in business operations especially for Entrepreneurs who have been in such habit. The research study clearly brings out cogent facts about innovation & creativity, business mindset intuitive business success model, the

“IISS” model, 5ps of growing a successful business, drivers of innovation, innovation process, business success factors and indicators, intuitive behaviour and shows how process management, business process performance and risk assessment business success model may contribute to business innovation and creativity in Sierra Leone.

**Key Points To Note For A Successful Business And Growth:**

- Employee needs Good body language related to your direct boss.
- Employee needs Good intentions are NOT enough-it's how you behave as a leader.
- Employee wants to be listened to.
- Employee wants to have input into how they do their jobs.
- Employee wants you to care about them as people.
- Employees want you to help them grow and advance.
- Employees want frequent and fair feedback.
- Employees want to be treated with respect.
- Employees are emotionally engaged and personally invested in doing great work.
- Employees view their work as more than a paycheck.
- Employees are proud of where they work.
- Employees find meaning and emotional satisfaction in being part of your business.
- Employees find meaning and emotional satisfaction in the purpose of their work
- As a business grows, the entrepreneur's success becomes more and more dependent on others.
- It's critical to hire the right people.
- It's critical for the entrepreneur to be a "people person," with good people skills.
- Success depends on teaching, motivating and relating, and on a daily basis, engaging employees and managers in the pursuit of excellence and high performance.
- The secrete of high Performance is High Employee Engagement

## VII. RECOMMENDATION FOR POLICY IMPLICATION

Intellectual Capital resource is the first and foremost significant resources among all other resources of any Nation and a very good example is Singapore which has been transformed from being a third to first world country as result of efficient and effective innovation and creativity that has lead there business activities in both the public and private sector to a success and ultimately growing their GDP. The reason been a Country can be richly endowed with all

natural resources on Earth but if there is no efficient and quality intellectual capital no creativity and innovation. So For Sierra Leone businesses to be successful there should be improved quality of education and training at all levels. This will foster education, attract talents and also create talents for innovation and creativity to attain business success and growth which will ultimately has a positive functional relationship of growing the economy. Also, other developing countries like China, India, Republic of Moldova, Rwanda, Uganda, Jordan, Malaysia, Senegal, Hungary, Ghana, Costa Rica etc, have invested in education and today, the quality of education and by extension, innovation has significantly improved for better. With improved education, talents could also be created. According to records, there were only few countries in Africa that are among the list of 142 countries on Global Innovation Index, 2013- Mauritius (#53), South Africa (#58) and Tunisia (#70). In addition, creativity and innovation training skills should be given by innovation experts in dynamic workshop settings, laboratories and so on. Currently, Sierra Leone has three (3) Universities, three (3) Polytechnics and 5 Colleges of education and many secondary as well as primary schools. However, it's imperative for the Government to boost and increase on the budget of the Education Ministry to stimulate, revamp and increase quality, efficient services of intellectual product in the Country and to ensure a ready and timely market place by putting square pegs in square holes and round pegs in round holes which is the platform and incubator of intellects innovative and creative skills to be able to perform well in their various job specifications which will positively impact economic activities and grow the Country's GDP, National Income, safe and sound eco-financial system and better standard of living of citizens in the Country. The current educational budget before the ebola epidemic is grossly inadequate to attract innovative talents and its devastation of the socio-economic space with special reference to the Health sector, business and agriculture which have been seriously affected with increasing impediments than before. Therefore, Government, the Organised private sector and individuals should provide adequate capital for Research and Development (R&D). Research studies and other evidence have proven that developed countries invest more in R&D and are more innovative and creative in meeting the task of Global Competitiveness. Countries like Brazil, Russia, India and China and South Africa (BRICS) are funding R&D projects with positive results. A climate of investment around innovation and creativity should be nurtured. A culture of venture and risk capital to help local investors should be encouraged. In addition, a culture of 'mindset' or awareness creation on innovation, business success and process management should also be encouraged as well as tackling security challenges like social chaos, strikes, frequent unending political to give vote of

confidence to economic players with support and without fear which will stimulate business performance and success. Government should build a strong and dynamic institutional structure of innovation and creativity that should not be neglected and discarded but given all the support needs for winning economic success in the Country. Policies that foster and promote innovation should be reviewed and made new policies and identify priority accorded areas that will yield sustainable growth and development that would address the socio-economic, Climate change and environment as well as community and societal issues that confront Sierra Leone as a nation. There are socio-economic sectors such as; Industrialisation, Health, Transport, Agriculture, Food & Security, Environment, Energy & Power and Management Information technology & System etc, that warrant innovative and creative skills for both the public and the private sector if and only if Sierra Leone as a nation is prepare and ready to grow the economy for prosperity for the betterment of all citizens in the Country.

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# “Planning as an Instrument for National Development in Nigeria”

By Edame, Greg. Ekpung

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**Abstract-** Education as an engine for economic, social and political transformation deserve more than casual planning. A carefully planned system of education ultimately proves to be more cost-effective, efficient and easier to operate than a haphazardly planned system. Effective planning of education becomes imperative especially in developing nation with limited natural and human resources that cannot be wasted on costly mistakes arising from planlessness.

Educational planning is prompted by factors such as population growth in relation to educational opportunities and the demand for education, manpower needs, environmental or ecological considerations, cultural, social and economic changes, as well as communication needs among other factors. This means that educational planning in Nigeria, must take cognizance of the physical, social, economic and developmental priorities of the nation.

The success of any system of education is hinged on proper planning and therefore calls for a judicious financial and administrative planning, taking into account other needs of the society.

**Keywords:** *administrative, educational, effective planning, environmental, manpower, social.*

**GJMBR - B Classification :** *JEL Code: O10*



PLANNING AS AN INSTRUMENT FOR NATIONAL DEVELOPMENT IN NIGERIA

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**Abstract-** Education as an engine for economic, social and political transformation deserve more than casual planning. A carefully planned system of education ultimately proves to be more cost-effective, efficient and easier to operate than a haphazardly planned system. Effective planning of education becomes imperative especially in developing nation with limited natural and human resources that cannot be wasted on costly mistakes arising from planlessness.

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The success of any system of education is hinged on proper planning and therefore calls for a judicious financial and administrative planning, taking into account other needs of the society.

The paper is divided into four sections. Section one looks at the introduction and meaning of educational planning in Nigeria. Section two deals with types of educational planning in Nigeria. Three treats the educational planning constraints in Nigeria, while part four look at the recommendations, summary and conclusion.

**Keywords:** administrative, educational, effective planning, environmental, manpower, social.

## I. INTRODUCTION

Education as an engine for economic, social and political transformation deserves more than casual planning. A carefully planned system of education ultimately proves to be more cost-effective, efficient and easier to operate than a haphazardly planned system. Effective planning of education becomes imperative especially in developing nations with limited natural and human resources that cannot be wasted on costly mistakes arising from planlessness. Educational planning must reflect the stage of development of a nation including its needs and readiness to execute the planned objectives. Educational planning is prompted by factors such as population growth in relation to educational opportunities and the demand for education, manpower needs, environmental or ecological considerations, cultural, social and economic changes, and communication needs among other

factors. This means that educational planning must take cognizance of the physical, social, economic and developmental priorities of the nation. Educational planning therefore, calls for a judicious financial and administrative planning.

### a) Definition of Educational Planning

Denga (1989:56) has defined educational planning as the formulation of educational policies and objectives, the coordination of various educational proposals, the projection of enrolments, compilation of school statistics, education costing and budgeting, establishment of new schools, and the expansion of the existing ones. It also involves a systematic forecasting of educational growth rates, staffing, financing, directing, and experimentation.

Planning in the other hand means a conscious and deliberate use of the resources of the community for achieving pre-determined objectives. Prof. H. D. Dickson, in Stephen and Osagie (1985:408) stressed that, planning is the making of major economic decisions what and how much is to be produced and to whom it is to be produced and to who it is to be allocated by the conscious decision of determinant authority, on the basis of a comprehensive survey of the economic system as a whole.

Educational planning as instrument of development takes cognizance of the close links which must be established between the objectives on the one hand and the means and resources to achieve these objectives on the other. It involves the governments' priorities and options and also indicated the possible financial, social and economic consequences of the plan. A sound should take into account the existing flows in the previous system and should show how the proposed plan will be better than the previous one.

Educational planning requires team effort. It is not the sole responsibility of the planning experts. Denga (1986:57) has indicated that other members of the team whose cooperation is needed include demographers, economists, sociologists, and psychologists. These people according to Denga, together can work out the estimates of how many children will be educated at any particular educational level for a given period of time, the number of teachers required, arrangements for the training of these teachers and their postings, the equipment needed, the most effective ways of financing the plan and combating wastage.

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Educational planning in Nigeria covers all levels of education primary, secondary and tertiary – and each level requires different modalities of planning. Long range and short range objectives are planned for skillful execution. An important aspect of educational planning involves directing the quest for fundamental restructuring of learning arrangements.

There are specific units in the federal and state Ministries of Education:

- ✚ Such as Educational planning section
- ✚ Federal Inspectorate
- ✚ Vocational and non-formal education; and
- ✚ International education section, all at the federal Ministry of Education. While at the state ministries of education the following functions are performed:
  - Planning, research and development of education at state level;
  - Policy and control and administration of education at primary and secondary levels at state level;
  - Education services;
  - Inspectorate services to improve and maintain standards;
  - Co-ordination of the activities of school boards and/or local education authorities.
  - Examinations particularly certification of primary school teachers, testing and evaluation;
  - Establishment of state registries and teachers;

Ministry of Education both at state and Federal levels will be responsible for preparing their educational development plan, taking into account economic, social and other needs of the society (National Policy on Education, 1981:45). It must however, be stated that planning activities of the experts are constrained by political decisions of the government in power. Besides, the interference by the political authorities, educational planning is constrained by the shortage of experts in educational research and planning, inaccurate information on involvements and the number of teacher's and the upsurge of educational programmes that characterize developing nations in a great hurry to provide education for their citizens. This constraints to educational planning would be discussed later in details.

*b) The Objectives and Basis of Educational Planning in Nigeria*

Educational planners must have a basis and direction for their actions. They should know where they are trying to go. Educational planning must also reflect the national philosophy and development objectives. For example, educational planning in Nigeria must reflect the five main national objectives as stated in the second National Development Plan (1970) which was endorsed by the government as the necessary

foundation for the National Policy on Education (1981:7). These five main objectives include the building of:

- A free and democratic society;
- A just and egalitarian society;
- A united, strong and self-reliant nation;
- A great and dynamic economy;
- A land of bright and full opportunities for all citizens.

If the above national objectives are used as base for planning educational objectives, then the quality of instruction at all levels will be oriented towards inculcating values such as freedom for the individuals to make national educational decisions, equal educational opportunities for all citizens at the primary, secondary and tertiary levels of educational, respect for the worth and dignity of individual citizens, respect for the dignity of labour, a healthy moral and spiritual development of individuals and a sense of responsibility to work together for the common good of the society.

School supervisors, teachers, counselors and administrators will then ensue that children are educated according to their individual capacities, so that they become moral and cultured citizens, with good mental and physical health, and with the necessary guidance and counseling to choose educational programmes and subsequently occupation and trades that will benefit them and the society.

Educational planning assumes that the values of the individual and those of the society are catered for in the final implementation of the plan. For example, in order to include some of the salient values of the society, the planned kit should comprise;

- Moral Education- ethics and refinement, moral responsibility, and the spirit of service.
- Physical ducation- The improvement of good healthy, both mental and physical and a sporting spirit.
- Intellectual education- The improvement of thinking, acquisition of knowledge techniques and principles conducive to a useful and happy life.
- Practical education- Promotion of industrious habits, perseverance and training in manual skills that are basic to good living and occupation. Several other examples could be given Denga, 1986:58.

The above values as well as objectives are general and all inclusive. A careful study of these values

and objectives are the basis of educational planning. It is the task of educational planners and administrators to clarify these planned objectives and to implement them. Education planners must take cognizance of the resources of the national or community in which they operate.

Furthermore, the success of any system of education hinged on proper planning, efficient administration and adequate financing. The school systems, and consequently their management and day-to-day administration should grow out of the life and social, ideas or belief of the community which they serve. Consequently the administrative machinery for the national education system based on three cardinal principles:-

- i. Effective lines of communication between the local community and the state and national machinery for policy formulation and implementation;
- ii. intimate and direct participation and involvement at the local levels in the administration and management of the local school management boards;
- iii. devolution of functions where by:-
  - Planning, financing, coordination and direction of the total educational effort within the state is placed in the hands of the state Ministry, Department or Directorate for education;
  - The management of schools is placed in the hands of district school boards of management and
  - The integration of educational development and policy with national objectives and programmes which is made the responsibility of a federal Ministry, Department or of a Federal Ministry, Department or Directorate of Education (NPE, 1981:44).

To accomplish these objectives of educational planning in Nigeria, government has already established a Federal Inspectorate Service and an education planning section in the Federal Ministry of Education.

These sections take charge of the following functions:

- i. To ensure adequate and effective planning for all educational services;
- ii. To provide efficient and administrative and management control for maintenance and movement of the system;
- iii. To provide adequate and balanced financial support for all educational services; and
- iv. To ensure quality control through regular inspection and continuous supervision of instructional and other educational services.,

Finally, the government of Nigeria has established planning, research and development of education at state levels; responsible for preparing their

educational development plan, taking into account economic, social and other needs of the society.

## II. TYPES OF EDUCATIONAL PLANNING IN NIGERIA

Educational planning in Nigeria dates back to the missionary activities through the colonial period when Lord Lugard actually formulated educational plans. The plans by Lord Lugard helped to shape development plans including educational planning which came into full swing in the early 1950s. Educational planning in Nigeria therefore however started from the 1950a.

The first example of educational planning in Nigeria, is that by the former Western Region of Nigeria in 1952 the regional government proposed the introduction of free education to come into effect in January, 1955. To make this proposal succeed, the government proposed a large-scale training of teachers, expanded the existing teacher training Colleges and purchased adequate equipment for the proposed schemes. Several planning committees were set-up to work out details for effective implementation of the plan. The scheme was implemented as scheduled.

The scheme however, ran into unforeseen difficulties. One of these was the inadequacy of teachers led to poor quality of teaching and falling standards of education generally. There was an upsurge in the number of pupils since education was free and compulsory. Equipment were inadequate. Schools were not properly supervised because there were fewer supervisors compared to the number of pupils. The budget for education rose from N4.4m million in 1954 to N5.4 (10.8) million in 1955. Over 87% of the budget for education was spent on primary education alone. Since there was a drop in the price of cocoa in the world market, the government's source of revenue from cocoa dwindled considerably.

After six years of operation, the plan was reviewed with a view to detecting errors in planning and making necessary corrections. It was indeed clear that the planning was faulty.

Another example is that introduced in the former Eastern Region which has been described by Ozigi and Canham (1979) as "hastily prepared". The poor planning at the initial stage led to shortage of teachers, equipment, buildings and other essentials. Like the government of Western Region, the government of Eastern Region set up the Dike committee, which later found out that the government was spending over 30% of its national resources on education, and that most of the budget on education was exhausted on primary education alone.

The committees therefore recommend qualitative rather than quantitative education. A compromise was then reached whereby a three year non-fee paying system and a three year fee paying

system based on the estimated local distributions was adopted by the government.

The third example of educational planning in Nigeria is the case of Northern Nigeria where educational planning between 1962 and 1968 was guided by Ashby Commission's Report Recommendation that:-

- a) 10% of all children completing primary education should proceed to secondary education.
- b) 30% of those completing WASC (West African School Certificate) should be admitted into Institutions of higher learning including university.
- c) 25% of all children should complete primary education.

The above stages preceded the introduction of Universal Primary Education (UPE). Here again, planning problems adversely affected the scheme, and by 1967, 11% overall enrolment was attained.

The demand for enrolment into secondary school however, exceeded Ashby Commission's estimate by 1967 when 11.4% was recorded instead of the 10% estimated by the commission.

From this time to 1976, the six universities then in existence (Ibadan, Lagos, Ife, Benin, Ahmadu Bello and Nsukka) could not even cope with the number of candidates aspiring to enter university. By 1977/78 academic session several universities were established in addition to the six other universities that had existed.

For planning increasingly evidence where the older universities began to complain of funds, teachers and other resources. The National University Commission not only resorted to overseas training of staff for Nigerian universities but also started legislating against further establishment of new universities. Today, the numerous universities in Nigeria hardly have funds for expansion or even for the maintenance of the existing structure; resulting to crisis in the university system in Nigeria.

The fourth examples of poor planning are the universal primary education schemes launched in September 1976 by the Federal Government. According to the announcement by the Federal Government, the UPE became compulsory in 1979. apparently, the Federal Government had assumed full financial responsibility for this scheme.

Barely one year after the scheme had become operative, it became clear that the planning was faulty. Some of the major difficulties included the shortage of teachers, classroom space, equipment, funds to purchase the essential materials. While some of the schools were overenrolled, others were under-enrolled. The whole nation was dotted with primary schools that were poorly maintained, some abandoned. The Federal Government started shifting some of the financial burden onto the state and local governments, and even to the communities in which these schools were

situated. It was again clear that the planning was faulty and short-sighted.

It was not based on adequate statistics and demographic data, and was not backed up with enough teachers, enough teaching materials, buildings and funds to pay staff salaries.

The fifth example of educational planning and policy in Nigeria is the introduction of the 6-3-3-4 system of education in 1982. This coded numeric observation means that children will spend six years at the primary education level. Six years at the secondary, but the secondary years will be divided into three years of junior secondary and three years of senior secondary. The last four years are expected to be spent in the university (a tertiary level of education).

The 6-3-3-4 system of education in theory, places a central emphasis on pre-vocational education and academic in order to provide the needed technical manpower. It also aims at providing avenue for those not academically inclined to branch off into a vocational school where they are more likely to implement their talent (see NPE, 1981; 17-18).

A remark that could be made interms of the system is that the planners were not fully aware of the demands of this system in terms of equipment, classroom space, technical expertise, technical advice and infrastructural facilities among others essentials. Most of the teaching staff at the initial stage had to be recruited from overseas at a high cost. Little preparation was made regarding the provision of the 6-3-3-4 system into the most appropriate educational programmes and consequently the most appropriate occupations ultimately. Howe teachers for the primary schools will be trained was not specified in the 6-3-3-4 system if the teacher grade two institutions would be phased out or not. It is likely that the drop-out rate will exceed the educational provision made to cater for them.

In all the above examples of educational planning in Nigeria, it become evident that sound planning is necessary. Less developed nations lack accurate statistics and demographic data, trained manpower in educational research and planning, and the necessary facilities to implement plans when they are made. (Denga, 1986; 60-62). It must be emphasized that there is still room for growth and improvement in education planning in Nigeria.

### III. EDUCATIONAL PLANNING CONSTRAINTS IN NIGERIA

The job of planning or educational planning in general is to select form among the repertoire of possible arrangements and experimental evidence those educational programmes that seems to be true offer reasonable prospects of helping to transform education in the desirable direction. In the LDCs, nations with scarce resources or with resources that

await full exploitation, it is essential to plan effectively and use the resources most parsimoniously.

Educational planning in developing countries (Nigeria in particular) is compounded by a number of constraints. These are financial, statistical, and political and planning manpower constraints countries (Nigeria in particular) is compounded by a number of constraints. These are financial, statistical, political and planning manpower constraints.

Financial constraints are tied to economic fluctuations of a country. The fiscal resources to buy services and materials needed to execute the plans are essential. Foreign loans are not dependable in financing educational plans or economic projects (A lack of financial resources causes the abortion of planned projects). A good example in Nigeria is the suspension of the National Open University in 1984 under the guise that it was not financially affordable at the time it was being operated.

The second constraint is the issue of inadequate or reliable and valid statistical data to serve as a basic for planning constitutes a serious constraint to educational planning. The statistical ability of many planners is inadequate for accurate projections. Adesina (1981) reports that 1944 Ten years educational plan were both based on faulty and incomplete data of the 1931 census.

Political constraints include a forceful or abrupt termination of governments. The effect of this on educational planning is that many plans cannot be fully executed as the change of government usually introduces a new package on educational planning and disrupts the previous plan as a whole.

Finally, another constraint to educational planning in Nigeria and the LDCs in general, involves a lack of inadequate planning experts to plan and execute educational projects. The current emphasis on training experts in educational planning and administration is lop sided in the sense that more administrators are trained compared to educational planners. It becomes thus difficult to produce enough experts in educational planning to carry out planning duties. The production of planning experts is further slowed down by a lack of competent trainers to produce planning experts.

#### IV. RECOMMENDATIONS

Having seen some of the constraints to educational planning in Nigeria and in view of the importance attached to educational planning, it is therefore recommended that educational planners should;-

- a) Place more emphasis on science education and plan for the introduction of inquiry and problem solving methods.
- b) Plan to relate the world of work to education.

- c) Identify educational resources that are not now employed for effective utilization in education
- d) Diversify and create more educational and vocational opportunities for students with varying potentials.
- e) Revise admission arrangement sot encourage multiple entry into various courses according to the qualification of the entrants.
- f) Re-define education at all levels and restructure it bearing in mind the needs of the society, the learner, the subject matter, the stage of development, the socio-economic challenge and political influences that impact on educational programmes.
- g) Educational plans should be revamped from time to time to keep abreast current change according to new demands and needs of the society.
- h) Strive for accurate demographic and factual data which will make planning realistic and lasting value of education.
- i) Examine possibilities of harnessing new techniques into learning to make education more pragmatic and functional to the individual and society in general.
- j) Introduce sufficient democracy into the educational system by planning for participation in educational governance by students, school administrators and teachers in general, where such does not exist.

#### V. SUMMARY AND CONCLUSION

Education as an engine for economic, social and political transformation deserves more than casual planning. Our educational system must be effectively given more attention.

Educational planning must be in relation to educational opportunities and the demand for education, manpower needs, environmental or ecological considerations as well as cultural, social, economic changes and communication needs of the society.

Educational planning in Nigeria, must therefore take cognizance of the physical, social, economic and developmental priorities of the nation in general. Finally, since the success of any system of education is hinged on proper planning, it therefore calls for judicious financial and administrative planning; taking into account other needs of the society.

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GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B  
ECONOMICS AND COMMERCE

Volume 15 Issue 4 Version 1.0 Year 2015

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Foreign Aid *vis-a-vis* Foreign Exchange Gap under the Ethiopian Economy

By Fentaye Setargie Ejigu

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**Abstract-** The study has examined the effect of foreign aid on economic growth in Ethiopia through financing foreign exchange gap (import requirement) over the period 1974 to 2013 using multivariate cointegration analysis. The empirical result from the growth model shows that aid has a significant positive impact on growth in the long run. The aid-policy interaction term also has a significant positive effect on growth implying that the effectiveness of aid would have been higher if it was supported by a sound macroeconomic policy environment. The empirical result of import model also indicated that the positive and significant contribution of aid on import requirements in the long run. In other words the theoretical view of the gap models which is Aid can enhance growth by financing foreign exchange gap is proven in this study.

**Keywords:** *foreign aid, policy, economic growth, cointegration, VECM, ethiopia.*

**GJMBR - B Classification :** *JEL Code: O19*



*Strictly as per the compliance and regulations of:*





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Fentaye Setargie Ejigu

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## I. INTRODUCTION

The beginning of foreign aid traces back to the 1940s marshal plan in which its purpose was to reconstruct the war- torn economy of Western Europe (Todaro, 1994).

Ethiopia has experienced strong economic growth in recent years. With real GDP growth at or near double digit levels since 2003/04, the country has consistently outperformed most other countries in Africa and expanded much faster than the continent-wide average. At the same time, the country still faces some structural weaknesses that present significant challenges in the medium term. Its economy is highly vulnerable to exogenous shocks by virtue of its dependence on primary commodities and rain fed agriculture. It has experienced major exogenous shocks during the past five to seven years. These are notably droughts and adverse terms of trade (e.g., prices of coffee and fuel). (Peter and Lamin, 2010). Similarly, the external trade performance of Ethiopia remained weak. The export sector, dominated by few agricultural commodities, suffered from weather fluctuation and price instabilities in the international market. On the other hand, the dependency on imported goods continued to be substantial. Thus the external trade sector recorded an increase in the trade gap; it is increased from 10.1 percent in1992-2000 to 19.7 percent of the country's GDP in 2005- 2009. Between 2009/10 and 2010/11, both trade balance and current

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account balance as a percentage of GDP is declined. (MoFED, 2010).

In general, the high import intensity of the economy, limited capacity to produce capital goods, low levels of domestic savings and limited capacity to generate foreign exchange make the development effort in Ethiopian beyond domestic capacity. All these factors have provided an apparently objective justification for the huge inflow of foreign aid.

The amount of foreign financial assistance that is given to the developing countries in general and for African countries in particular has been increasing from time to time. In Africa, the share of Official Development Assistance (ODA) to GDP has significantly increased over the years. It drastically increased from 1.9 percent in 1960-61 periods to 2.9 percent in 1970-71 and to 5 percent in 1983-84 and reached 9.6 percent in 1990-91 periods (WB 1992). And also, the share of foreign aid to GDP has also increased to 18 percent during 2000-2010 fiscal years.

Despite such increase flow of external finance to the African countries a number of empirical studies argue that the role of aid in promoting the development potential of Africa remained unsuccessful. For instance, between 1970 and 1997, the real per capital GDP of Sub Sahara Africa has been 0.6%, despite huge flow of aid to the region (Gomanee et al, 2002). World Bank (1998), Burnside and Dollar (1997) have raised does aid work? The question raised has been answered. It can work, depending on policies. If they are good, aid will be efficient, if they are not, aid will be useless, at best. Aid has to be allocated to those countries pursuing good policies, to a larger extent, it is argued, than is already the case. Aid effectiveness and aid selectivity issues are thus simultaneously solved.

The literature on the impact of aid on economic growth are mainly in the cross sectional analysis of developing countries. Most of these cross sectional analysis suggest that the growth impacts of foreign assistance vary among countries that pointed out the need for empirical study for individual countries.

Despite a number of empirical works that has been done on the impact of aid on economic growth in Ethiopia little has been done in analyzing its impact through financing foreign exchange gaps (import requirements) in which further study is still required. Thus, this paper will attempt to examine the growth impacts of official development assistance through

financing import requirement by using a multivariate co integration analysis.

In broad spectrum, the objective of this paper is to assess the effectiveness of foreign aid in enhancing economic growth through financing import requirement. Specifically this paper tries to:

- Examine the impact of foreign aid on import requirements
- Determine whether foreign aid effectiveness is policy dependent or not.
- Determine whether there is absorptive capacity constraint of the economy as to the flow of foreign aid or not.

## II. DATA AND METHODOLOGY

### a) Data Type and Source

For the purpose of analyzing the impact of foreign aid on the economic growth through its transmission channels, time series data, from 1974/75 to 2013/14, would be used. For this achievement secondary data is collected from different government ministers and authorities' data base as well as international financial organizations. These include Minister of Finance and Economic Development, publications of National Bank of Ethiopia (NBE), Ethiopian Investment Authority, Central Statistical Authority (CSA), Ethiopian Economic Association (EEA), International Monetary Fund and World Bank data base.

### b) Model Specification

This paper would try to assess the impact of aid on growth by considering transmission channel by using multivariate co integrated VAR approach and it will be examined by specifying the following two equations

Accordingly, the model to be estimated can be specified as follows:

$$\ln \text{RGDP} = \beta_0 + \beta_1 \text{INVo} + \beta_2 \ln \text{AID} + \beta_3 \text{PA} + \beta_4 \text{HC} + \beta_5 \ln \text{LAB} + \beta_6 \text{A2} + \epsilon_i \quad (3)$$

#### a. Dependent Variable

Real GDP: The dependent variable of the model is Real GDP

#### b. Explanatory Variables

Beside foreign aid a number of factors are expected to influence the economic growth. These variables are briefly described with their respective expected relation to the economic growth.

#### c. Non-aid Financed Investment (INVO)

This is the ratio of non-aid financed investment to GDP. The variable INVO would be developed by using the technique of generated regressor of Gomanee, Girma, and Morrissey (2005). Using residuals from an aid-investment bi-variate regression i.e. aid is used as the only explanatory variable; a variable is constructed representing that part of investment which is not financed by foreign aid (INVO). Then INVO is used in place of investment in the growth regression. It is worth noting that this transformation

based on the equations that are derived by Gomanee et al (2002).

#### i. Growth Equation

The growth model, which is used in this study, is based on Harrod –Domar (1946) growth model in which the growth of a given country depends on the amount of investment.

$$g = \kappa/Q.I = \delta I \quad (1)$$

Where  $\delta$  = incremental capital output ratio,

$I$  = investment level,

$Q$  = output level, and

$g$  = growth rate of output.

However, recently different scholars come to include various variables that are believed to affect the growth of a country. Rana and Dowling (1988) extended the Harrod Domar growth work by including variables like labor force and policy variables.

Since the objective of this paper is to assess the impact of aid on growth, attempts are made to include variables to further improve the above model and to be in line with the objective.

Thus, the growth function is given by:

$$\text{RGDP} = f(\text{INVo}, \text{AID}, \text{PA}, \text{HC}, \text{LAB}, \text{A})^2 \quad (2)$$

Where, RGDP = Real Gross domestic product

INVo = investment level that is not financed by aid

AID = aid as a ratio of GDP

PA = aid policy interaction term

HC = human capital proxied by education expenditure

LAB = labor force as a ratio of total population

affects only the estimated coefficient on the aid variables. Empirical aid-growth regressions usually omit investment from their equation. Aid is intended to affect growth via its effect on investment. However, not all aid is intended for investment, and not all investment is financed by aid. If investment is omitted from the growth equation, there will be potential omitted variable bias—any effect of investment on growth is attributed to the other variables (especially aid) as argued by Girma, Gomanee and Morrissey (2005). If both aid and investment are included, there will be a problem of double counting (as part of aid is used for investment), and the coefficients are biased. Therefore, to address such problems Gomanee, Girma, and Morrissey (2005) propose the technique of generated regressors (the mechanism of residual generated regressor). Using the technique, non-aid financed investment (INVO) is generated as:

$$\text{INVO} = I - 0.04\text{AID} \quad (4)$$

Where, INVO = investment which is not financed by aid.

I = Total investment as ratio of GDP

AID = Official Development Assistance as ratio of GDP

*Official Development Assistance (ODA)*: It is the ratio of Official Development Assistance (ODA) to GDP as defined by the DAC (Development Assistant Committee).

ODA is defined as pure grants and concessional flows from bilateral governments and their agencies as well as multilateral financing agencies to the developing countries at low rates of interest with maturity periods of a long-term nature, all of them containing a grant element of at least 25 %.

*A<sup>2</sup>: the square of ODA to GDP*: This takes into account whether there is diminishing return to aid. The diminishing returns to aid hypothesis assume that an inflow of aid, above a certain threshold level, starts to

The result of the policy indicator obtained is:

$$Pt = - 2.9635(BD)t + 0.1498(OPEN)t + 0.1288(INF)t + 2.423(TELE)t \tag{5}$$

Where, BS/BD: overall budget surplus/deficit excluding grants; like Burnside-Dollar (1997) approach this paper will also use inflation as a proxy for monetary policy), OPEN; a standard openness index, (X + M)/GDP (i.e the ratio of total trade to GDP) where X: total value of goods and services exported; M: total value of goods and services imported; TELE: major telephone lines per 1000 people.

*Labor Force (LAB)*: This represents labor force as a ratio of total population. That is age from 15-64 years as a percentage of total population;

*Human Capital (HC)*: A wide range of growth models has treated human capital as a critical factor in determining growth rate of output (Lucas, 1988). It is an important source of long-term growth, either because it is a direct input to research (Romer, 1990) or because of its positive externalities (Lucas, 1988). Policies that enhance public and private investment in human capital, therefore, promote long-run economic growth. The inclusion of human capital variables in growth models are intended to capture quality differences in the labor force, as non-physical capital investment increases the productivity of the existing labor force. They commonly relate to education and are measured by an index of educational attainment, by mean years of schooling, or by school enrolment (Barro and Lee, 1993). However, none of this data are found in the required level so we will use expenditure on education as a proxy to human capital.

$$\ln M = \varphi_0 + \varphi_1 \ln X + \varphi_2 \ln AID + \varphi_3 \ln RER + \varphi_4 \ln TOT + \varepsilon_i \tag{7}$$

c) *The Unit Root Test*

The standard classical methods of estimation which are used in the applied econometric work are

have negative effects. This happens because of the limited absorptive capacity of recipient countries.

*Aid Policy Interaction Term (PA)*: an interaction between policy indicator (P) and aid (A) which capture the conditional effectiveness of aid on policy. The policy indicator will be developed based on Burnside and Dollar (1997), with minor modifications, out of a regression result obtained from a growth equation. The growth model is comprised of budget surplus/deficit, openness to trade, inflation, and telephone lines per 1000 people (covering aspects of fiscal, trade, monetary, and infrastructure policy) as an explanatory variable, and the coefficients of these variables are taken from the growth regression to construct the policy indicator. To account for openness to trade in the construction of the policy indicator (OPEN), a standard openness index, (X + M)/GDP this is the ratio of total trade to GDP which is exports plus imports divided by GDP (Yanika, 2003) will be used.

ii. *Import Equation*

Bacha (1990) and Taylor (1993, 1994) argues, a major benefit of export is that they generate the foreign exchange required to purchase the import required for growth. According to Gomanee et al (2005) also, the most obvious is imported investment goods.

Based on the theoretical explanation of the 1950s two gap models and the recent three gap models will formulate the import equation.

According to Bacha (1990) it is by financing import and increasing investment goods that foreign aid affect a growth of a country. That is, by financing the gap between import and export.

Therefore earnings of export and foreign aid are a main source of foreign exchange required to pay for import. However, the purchasing power of this financing revenue (export and foreign aid) depends on the exchange rate and terms of trade. Therefore we include Terms of trade and real exchange rate to capture their effect.

The import function is given by:

$$M = f (X, AID, TOT, RER,) \tag{6}$$

Where, M = Import as a ratio of GDP

X = Export as a ratio of GDP

AID = Aid as ratio of GDP

TOT = terms of trade

RER = Real exchange rate

Accordingly, the model to be estimated can be specified as:

based on a set of assumption one of these is that all variables are stationary. However, most economic variables are not stationary (Gujarati, 1995). A data

series is said to be stationary if its error term has zero mean, constant variance and the covariance between any two – time periods depends only on the distance or lag between the two periods and not on the actual time which it is computed (Harris, 1995). On the other hand a time series is stationary if its mean, variance and auto covariance (at various lags) remain the same on matter at what point we measure them, i.e they are time invariant (Gujrati, 2004).

The unit root test is one of the mechanisms that enable us to check whether the time series data is stationary or not. There are several ways of testing the presence of unit root. In this paper unit root test will be conducted using Dickey-Fuller (DF) and Augmented Dickey- Fuller (ADF) tests.

#### d) Co-integration Test

Most macroeconomic variables are found to be non stationary and showing trending overtime (Johansen, 1991). However, one can difference or de trend the variables in order to make the variables stationary. If variables become stationary through differencing, they are in the class of difference stationary process. On the other hand, if they are de trended, they are trend stationary.

Cointegration among the non stationary variables reflects the presence of long run relationship in the system, (Gujarati, 1995). There are two approaches used in testing for Cointegration. They are: (i) the Engle-Granger (two step algorism) and: (ii) the Johansen Approach.

The Engle-Granger (E-G) method requires that for co-integration to exist, all the variables must be integrated of the same order. Hence, once the variables are found to have the same order of integration, the next step is testing for level of integration. This needs to generate the residual from the estimated static equation and test its stationarity.

Although, the Engle-Granger (EG) procedure is easily implemented, it is subject to several limitations.

The Johansen (1988) procedure enables estimating and testing for the presence of multiple co integration relationships, in a single step procedure. Moreover, it permits to estimate the model without priory restricting the variables as endogenous and exogenous. Under this procedure, the variables of the model are represented by a vector of potentially endogenous variables. Therefore, this paper will use the Johansen maximum Likelihood Procedure since it addresses the weakness of the E-G method.

#### e) Vector Error Correction Model (VECM)

Economic variables have short run behavior that can be captured through dynamic modeling. If there is long run relationship among the variables, an error correction model can be formulated that portray both the dynamic and long run interaction between the variables. In the previous discussion, it was shown that if

two variables that are non-stationary in levels have a stationary linear combination then the two variables are co integrated. Co integration means the presence of error correcting representation. That is, any deviation from the equilibrium point will revert back to its long run path. Therefore, an ECM depicts both the short run and long run behavior of a system.

#### f) VAR Diagnostic Tests

Once the VAR models are estimated we should make some diagnostic tests which are important in order to make sure that the results obtained from VAR estimation can be used for forecasting or policy purposes. These post-estimation tests are mostly performed on the residual of the VAR and they include: the LM test for residual autocorrelation, Jarque-Bera test for residual multivariate normality, test for VAR stability and White test for the presence of heteroscedasticity in the VAR's residuals.

##### i. Residual Vector Normality Test

The Jarque-Bera normality test is used to determine whether the regression errors are normally distributed. It is a joint asymptotic test whose statistic is calculated from the skewness and kurtosis of the residuals.

##### ii. Error Vector Autocorrelation Test

Testing for autocorrelation helps to identify any relationships that may exist between the current values of the regression residuals and any of its lagged values (Brooks, 2002). The null hypothesis of the LM test for autocorrelation is that the residuals are not serially correlated, while the alternative is that the residuals are serially correlated. If the P-value is less than 0.05 then we reject the null hypothesis (Harris, 1995). The test statistic is given by:

$$LM = (T - q)R^2 \epsilon^2 \quad (8)$$

Where, q is the degree of freedom and  $R^2 \epsilon^2$  is the coefficient of determination obtained from the auxiliary regression; and the LM test statistic is chi-square distributed.

##### iii. Stability Test

The test for stability checks whether the roots of the characteristic polynomial lies inside the unit circle. If all roots lie inside the unit circle then the VAR is considered as stable and can be used for policy analysis. We can also make use of variance decomposition and impulse response functions in our analysis if the VAR is stable.

##### iv. Heteroscedasticity Test

The test for heteroscedasticity investigates whether the variance of the errors in the model are constant or not. Breusch-Pagan-Godfrey test is used to check whether the residuals are homoskedastic. It tests the null hypothesis that the residuals are both homoskedastic and that there is no problem of

misspecification. The test regression is run by regressing each cross product of the residuals on the cross products of the regressors and testing the joint significance of the regression. If the test statistic is significant, that is, P value is less than 0.05; the null hypothesis of homoscedasticity and no misspecification will be rejected (Brooks, 2002: 445).

### III. RESULTS AND DISCUSSION

#### a) Unit Root Test Results

Since unit root tests are sensitive to the presence of deterministic regressors, three models are estimated. The most general model restrictive models i.e. with a constant is estimated first and with a drift and time trend and without either constant and trend, respectively, are estimated. A unit root test for each variable is performed on both levels and first differences. The result of the unit root test for the variables at level was presented in table below.

Table 3.1 : Unit root test results for variables at level

Variables	With drift only	With drift and trend	Only stochastic	
LnRGDP	-2.724	-0.902	-2.425	
LnAID	-0.607	-1.309	0.956	
PA	1.846	1.338	2.037	
HC	2.254	3.474	1.625	
LnLAB	-0.855	3.382	-0.669	
A <sup>2</sup>	-0.878	-1.347	-0.725	
LnX	-1.267	-1.888	0.088	
LnRER	-1.077	-1.819	-0.346	
TOT	-2.126	-2.526	-1.246	
LnM	-0.719	-1.874	0.783	
lnINV <sub>0</sub>	-2.197	-2.832	-1.201	
Critical values	1%	-3.615588	-4.219126	-2.627238
	5%	-2.941145	-3.533083	-1.949248

Source: Eviews 6 stastical output of ADF test at level.

The ADF test results show that all the variables (at levels) are non stationary with the three different specifications. That is, the test conducted fails to reject the null hypothesis of unit root in the three different specifications.

Therefore, to avoid spurious regression all these variables have to be differenced to transform them to stationarity. In the second stage, the order of integration

of the non-stationary variables were performed proceeding in the same way by means of ADF tests applied to all series in first differenced form.

First difference of the each variable was generated by deducting one period lag from the variable of itself of successive period. After making the first difference of each series the usual unit root test of ADF were applied to determine their order of integration. The result of the test was presented below.

Table 3.2 : Unit root test results for variables (at 1<sup>st</sup> difference)

Variables	With drift only	With drift and trend	Only stochastic	
DlnRGDP	-5.348***	-6.273***	-4.819***	
DlnAID	-6.431***	-6.754***	-6.265***	
DPA	-4.111***	-4.544***	-4.001***	
DHC	-3.860***	-3.832**	-2.505**	
DlnLAB	5.794***	4.243***	4.245***	
DA <sup>2</sup>	-6.788***	-7.185***	-6.715***	
DlnX	-5.365***	-5.373***	-5.437***	
DlnRER	-4.884***	-4.806***	-4.936***	
DTOT	-6.009***	6.110***	-6.033***	
DlnM	-7.303***	-7.243***	-7.163***	
DINV <sub>0</sub>	-10.309***	-10.245***	-10.416***	
Critical values	1%	-3.621023	-4.226815	-2.628961
	5%	-2.943427	-3.536601	-1.950117

Source: Eviews 6 stastical output of ADF test at 1<sup>st</sup> difference.

Note \*\*\*, \*\* denotes significant at 1%, 5% significance level respectively.

The first differences of the variables are investigated for a unit root test and the test result proved that all of them are stationary in the three different specifications. Therefore, it can be conclude that all variables are integrated of order one.

#### b) Multivariate Co integration Test Results and VECM

##### i. Growth Equation

##### a. Long run Equation for Growth Equation

Once the ADF unit root test result revealed that the series is I (1), a co integration test is performed to determine the rank of the co integrating vector. The rank of the co integrating vector is determined using the Johansen's maximum likelihood method.

Table 3.3 : Johansen's Co integration test results

Ho (null hyp.)	Ha(alternative hyp.)	Eigen Value	λ trace Stat	5% critical value	Prob.	λ max.	5% critical value	P.value
r = 0	r =1	0.822051	158.0928	125.6154	0.0001	63.87150	46.23142	0.0003
r ≤ 1	r =2	0.622206	94.22126	95.75366	0.0635	36.01601	40.07757	0.1337
r ≤ 2	r=3	0.576493	58.20525	69.81889	0.2946	31.78986	33.877687	0.0869
r ≤ 3	r=4	0.263501	26.41540	47.85613	0.8754	11.31634	27.58434	0.9567
r ≤ 4	r=5	0.190987	15.09905	29.79707	0.7736	7.841785	21.13162	0.9131
r ≤ 5	r=6	0.141001	7.257268	15.49471	0.5479	5.623531	14.26460	0.6619
r ≤ 6	r=7	0.043194	1.633737	3.841466	0.2012	1.633737	3.841466	0.2012

Source: Eviews 6 stastical output of johansen Co integration test.

The optimal lag length used to test for co integration is determined at lag length of one using Akaike Information Criteria (AIC).

The test result (both  $\lambda$  trace and  $\lambda$  max statistics) rejects the null hypothesis of no co integration both at the 5 % and 1 % significance level. In other words, the null of at most one co integrating vector is not rejected. Hence, there exists single co integrating

vectors which make up the long run relationship among the variables in the system.

The presence of a single co integrating vector points to estimate the long run equation along with its associated coefficients ( $\beta$ ) and adjustment parameters ( $\alpha$ ) which are important for further analysis. The corresponding  $\beta$  and  $\alpha$  coefficient vector are reported below.

**Table 3.4 :** Normalized Long run  $\beta$  Coefficients

Variables	LnRGDP	LnAID	PA	A <sup>2</sup>	INVo	HC	LnLAB
Estimated coefficients	1.00000	-0.027	-2.24e-06	0.00295	-0.014	-1.10e-10	-5.733

Source: Eviews 6 stastical output of johansen Co integration test.

**Table 3.5 :** Adjustment ( $\alpha$ ) coefficients

Variables	LnRGDP	LnAID	PA	A <sup>2</sup>	INVo	HC	LnLAB
Adjustment coefficients	-0.725075	-5.135677	-3.61e+08	-45451257	3.522394	-2.48e+09	-8.19e-05

Source: Eviews 6 stastical output of johansen Co integration test.

Once after conducting co integration tests the next task would be identification of a given equation with specified endogenous and exogenous variables which is the main problem in most econometrics analysis. Therefore to identify variables that are endogenously

determined and conditional up on the other variables in the VAR, the test for weak exogeneity is conducted. This requires imposition of zero restriction on the first column of  $\alpha$  coefficient. The results of weak exogeneity test are given in the following table.

**Table 3.6 :** Result of weak exogeneity test (Zero restriction on  $\alpha$  co-efficients)

Variables	LnRGDP	LnAID	PA	A <sup>2</sup>	INVo	HC	LnLAB
$\alpha$ - coefficients	-0.725075	-5.135677	-3.61e+08	-45451257	3.522394	-2.48e+09	-8.19e-05
$\chi^2$	20.51183	0.418486	0.903671	0.900039	1.031968	0.3766521	0.030889
P-value	0.0006***	0.517693	0.341799	0.341968	0.09697	0.539471	0.860489

Source: Eviews 6 stastical output of imposing Zero restriction on  $\alpha$  co-efficient.

Note \*\*\* denotes rejection of the null hypothesis at 1% significance level.

The likelihood ratio test of exogeneity indicates that except the dependent variable (real GDP) all variables are exogenously determined in the model. The null of weak exogeneity for the dependent variable is rejected at 1% level of significance while for other variables it is not rejected at any conventional level of significance.

Similarly a zero restriction is imposed on long run  $\beta$  coefficients to identify which explanatory variables constituting the growth equation are statistically different from zero.

**Table 3.7 :** Result of Zero restriction test on  $\beta$  coefficients

Variables	LnAID	PA	A <sup>2</sup>	INVo	HC	LnLAB
$\beta$ -coefficients	-0.027	-2.24e-06	0.00295	-0.014	-1.10e-10	-5.733
$\chi^2$	4.088618	13.24954	4.175495	40.011	11.776	5.07356
P-value	0.04636**	0.0002***	0.041013**	0.00000***	0.0006***	0.034728**

Source: Eviews 6 stastical output of imposing Zero restriction on beta co-efficient.

Note \*\*\*, \*\*, represents rejection of the null hypothesis at 1%, 5% level of significance respectively.

The result of the likelihood ratio test (the zero restriction tests) performed on the long run coefficients of the explanatory variables shows the statistically

significant coefficient different from zero, which allows the estimation of the long run growth equation. The estimated long run growth equation is:

$$\text{LRGDP} = 0.027\text{LAID} + 5.733\text{LLAB} - 0.00295\text{A}^2 + 0.014\text{INVo} + 1.10\text{e-}10\text{HC} + 2.24\text{e-}06\text{PA}$$

$$[4.088618] \quad [5.07356] \quad [4.175495] \quad [40.011] \quad [11.776] \quad [13.24954]$$

(0.04636)\*\* (0.034728) \*\* (0.041013) \*\* (0.00000) \*\*\* (0.0006) \*\*\* (0.0002) \*\*\*

Vector Hetero test:  $\chi^2(6) = 11.37399(0.0775)$

Vector AR (1, 2):  $\chi^2(30) = 38.99056(0.1259)$

Vector Normality:  $\chi^2(2) = 0.328147(0.848680)$

The long run result depicts that all explanatory variables are significant in affecting growth at five percent level of significance.

The result of the diagnostic test<sup>1</sup> confirms the adequacy of the model. That is, the null of homoscedasticity is not rejected at any level of significance; therefore the model is free of heteroscedasticity problem. In addition, the null of no serial correlation is not rejected and the test for normality confirmed that the errors are normally distributed and the null is not rejected at any conventional significance level.

Generally, aid has a significant and positive impact on the growth of a country. According to the result a one percent increase in aid will increase RGDP by 0.027 percent. This result is also consistent with the result reached by Tolessa (2001) and Tsegay (2008) in Ethiopia. Also Malik (2008) found that foreign aid has a long run positive impact on growth in Togo. The result also confirms that the impact of aid on growth is significant at 5% level of significance.

Similarly, foreign aid interacted with policy (PA) has a significant positive influence on growth. The positive result is associated with the policy environment (macroeconomic and infrastructure) in the country which makes aid more effective. A comparison of the coefficients of aid and the aid interacted with policy indicator in absolute terms indicate that aid would be more effective had there been a favorable macroeconomic policy environment.

Though the importance of a sound policy environment for growth is unquestionable, but the argument of Burnside and Dollar (1997, 2000) that aid is effective only in a good policy environment is not valid in Ethiopia since aid entered alone has a positive and significant contribution to growth as indicated above. Rather it can be argued that aid is effective in promoting growth in Ethiopia in the period considered; but its effectiveness would have been higher if it was supported by a sound macroeconomic policy environment.

Like the theoretical expectation the Aid squared term, shows that negative and significant impact, suggests that the presence of capacity constraint in absorbing foreign aid beyond some level. In other words, the argument that foreign aid tends to have diminishing returns beyond some threshold level is operate in the Ethiopian situation in the study period considered since countries with low level of human capital and poor institutions are expected to have a capacity constraint in absorbing excessive capital from abroad and The existing situation in Ethiopia is a living example of the scenario. Similar result is obtained by

Wondwossen (2003) for Ethiopia Lensink and White (2000) and Burnside and Dollar (1997, 2000) for Developing countries.

Investment, which is not financed by aid, has a positive impact on growth. A unit change in investment which is not financed by aid to GDP ratio, leads to a 0.014 percent change in the real GDP of a country. The above result also confirms that its impact is significant at one percent level of significance.

Human capital has positive impact on the growth of a country. Referring to the result, a change in educational expenditure (a proxy to human capital) by one unit leads to a 1.1 percent change in the real GDP of a country and this result is significant at one percent level of significance.

The other variable which is entered on the long run growth equation is labor force in line with the theoretical expectation has entered with a positive sign and moreover it is significant. It shows that economically active labor force has played a role in promoting growth in the long run.

#### *b. Vector Error Correction Model for Growth Equation*

Since the variables in the growth equation are found to be co integrated, we proceed to estimate the vector error correction model which represents both the long run and short run adjustments among the variables. The lag changes in the relevant variables represent short run elasticity's (alternatively, short run variation), while the error correction term (ECT) represents the speed of adjustment back to the long run relationship among the variables. A VECM is estimated beginning with the general over parameterized model. Then the VECM is subjected to a systematic reduction and diagnostic testing process until an acceptable parsimonious model is obtained. In the process, all insignificant explanatory regressors with their corresponding lags are dropped until further reduction is rejected (Hendry, 1997).

In the short run dynamic equation, all weakly exogenous variables identified in the long run growth equation are entered in the right hand side of the model in their appropriate lagged difference form. In addition the error correction term with one period lag is also incorporated in the VECM. Using the VECM specification, a short run dynamic equation is estimated for growth function. Dropping insignificant regressors from the specification (i.e. step-by-step elimination of insignificant regressors from the general VECM model) following the general to specific modeling strategy, a parsimonious result for growth is reported below.

**Table 3.8** : results of Short run equation for growth equation

Variables	Coefficient	t-value	p-value
D(INVO)	0.002031	0.544025	0.5912
ECT-1	-0.170086	-2.101302	0.0459**
D(ODA2)	9.82E-07	1.001502	0.3262
D(PA)	-1.22E-07	-0.987705	0.3328
D(LNRGDP (-2))	0.361288	2.342078	0.0274**
D(LNODA (-2))	0.050126	1.249248	0.2231
D(HC(-2))	2.93E-12	0.207300	0.8375
D(ODA2(-1))	3.04E-06	2.184942	0.0385**
D(LNLAB)	23.12110	5.762515	0.0000***
D(PA(-1))	-3.28E-07	-2.307906	0.0296**
C	0.063514	5.638379	0.0000***

Note \*\*\*, \*\* denotes that rejection of the null hypothesis at 1%, 5% level of significance.

$R^2 = 0.76$  DW = 2.03 F (10,36) = 74.83738(0.0000)  
 AR(1-2) = F(2,23) = 0.866839 (0.4336)  
 ARCH = F(1,33) = 0.317814 (0.5768)  
 Hetro = F(10,25) = 0.558932 (0.8350)  
 Normality =  $\chi^2(2) = 1.238561(0.427652)$   
 Ramsey reset = F(1,24) = 1.290507 (0.2672)

Source: Eviews 6 stastical output of vector error correction model.

The Goodness of fit of the model ( $R^2$ ) shows, 76 percent of a variation in the dependent variable (RGDP) is explained by the variation in the explanatory variables included in the model.

#### ii. Import Equation

##### a. A Long run Equation

The diagnostic test of the short run model for growth shows that there is no problem at all. The tests show that the null of the various tests are not rejected except for the joint insignificance of the explanatory variables i.e. the coefficients of the explanatory variables

are jointly significant. The result shows that there is no serial correlation and the errors are normally distributed with constant variance. A test for ARCH is performed but the result failed to reject the null of no autoregressive conditional heteroscedasticity. The Ramsey test for model misspecification confirms that the model is well specified and there is no problem in the specification of the model.

The estimated dynamic equation for growth result indicates that foreign Aid (ODA) has a positive impact on growth as it is expected, however its impact is insignificant in the short run. It point that foreign aid was used to finance investment which has a longer gestation period and its impact may not be reflected in the short run. The aid-policy interaction term has got a negative and significant influence on growth. Moreover, the result indicates that the unfavorable role of poor policies for growth in the short run.

Aid square has appositive and significant impact on growth. The finding reveals that unlike the theoretical expectation there is no capacity constraint in absorbing foreign aid at any level in the short run. In other words, the argument that foreign aid tends to have diminishing returns beyond some threshold level do not operate in the Ethiopian situation in the study period considered only in the short run.

Labor force in line with the theoretical expectation has entered with a positive sign and moreover it is significant. It shows that economically active labor force has played a role in promoting growth both in the short run and long run. Human capital proxed by education expenditure has appositive impact but it is insignificant in the short run.

The error correcting term is statistically significant and between zero and one. The coefficient indicates that RGDP adjusts itself to the equilibrium by 17 percent in one year.

**Table 3.9** : Johansen co integration test results

Ho (nullhyp.)	Ha (alternativehyp.)	Eigen value	$\lambda$ trace Stat	5% critical value	Prob.	$\lambda$ max.	5% critical value	P-value
$r = 0$	$r = 1$	0.630527	72.11157	69.81889	0.0324	36.84011	33.87687	0.0215
$r \leq 1$	$r = 2$	0.316971	35.27146	47.85613	0.4337	14.10507	27.58434	0.8153
$r \leq 2$	$r = 3$	0.2966310	21.16638	29.79707	0.3474	13.00246	21.13162	0.4520
$r \leq 3$	$r = 4$	0.184425	8.163920	15.49471	0.4480	7.542882	14.26460	0.4271
$r \leq 4$	$r = 5$	0.016645	0.621038	3.841466	0.4307	0.621038	3.841466	0.4307

Source: Eviews 6 stastical output of johansen Co integration test.

The optimal lag length used to test for co integration is determined at lag length of one using Akaike Information Criteria (AIC).

Like to that of investment, government consumption expenditure and growth equations the co integration test result reveals that there is one co integrating vector in the import equation. In other words, both the  $\lambda$  trace and  $\lambda$  max test results from the above

table shows that the null of no Co integrating vector is rejected at 5% level of significance in favor of at most one Co integrating vector in the equation.

The existence of one co integrating vector suggests that the first row of  $\beta$  coefficient and the first column of  $\alpha$  coefficient are important for further analysis.



**Table 3.10 :** Normalized Long run  $\beta$  Coefficients

Variables	LnM	LnAID	LnX	LnRER	TOT
Estimated coefficients	1.00000	-0.505193	-1.622157	-1.136896	1.1222

Source: *Eveivs 6 stastical output of johansen Co integration test.*

**Table 3.11 :** Adjustment ( $\alpha$ ) coefficients

Variables	LnM	LnAID	LnX	LnRER	TOT
Adjustment coefficients	-0.0622	0.0504	-0.0721	-0.0144	0.0368

Source: *Eveivs 6 stastical output of johansen Co integration test.*

Weak exogeneity test for the import equation results in the logarithm of import to GDP ratio (dependent variable) as endogenous. For the import variable, the null hypothesis of weak exogeneity is rejected at 1% level of significance. However, for all variables

other than the dependent variable (explanatory variables) the null of weak exogeneity is not rejected at any level of significant that means these variables are exogeneous to the model under consideration.

**Table 3.12 :** Result of weak exogeneity test (Zero restriction on  $\alpha$  coefficients)

Variables	LnM	LnAID	LnX	LnRER	TOT
$\alpha$ - coefficients	0.212723	-0.172327	0.246698	0.49181	-0.125637
$\chi^2$	9.091803	0.072426	0.171355	0.342354	1.938597
P-value	0.0026***	0.7878	0.6789	0.55847	0.163821

Source: *Eveivs 6 stastical output of imposing Zero restriction on  $\alpha$  co-efficient.*

Note \*\*\* represents the rejection of the null hypothesis at 1% significant level.

Once the variables are identified as endogenous and exogenous, check for the significance of the explanatory variables is the next task and this

requires zero restriction tests on the beta coefficients. The results are presented in the following table.

**Table 3.13 :** Result of Zero restriction test on coefficients

Variables	LnAID	LnX	LnRER	TOT
$\beta$ – coefficients	-0.505193	-1.622157	-1.136896	1.1222
$\chi^2$	9.932139	6.024717	9.818287	16.74174
P-value	0.001624***	0.014107**	0.001728***	0.00043***

Source: *Eveivs 6 stastical output of imposing Zero restriction on beta co-efficient.*

Note \*\*\*, \*\* denotes rejection of the null hypothesis at 1%, 5% significant level respectively.

The long run equation and its significance are depicted as follows:

$$LM = 0.505LAI D + 1.622LX + 1.137 LRER - 1.12 TOT$$

$$[9.932139] \quad [6.024717] \quad [9.818287] \quad [16.74174]$$

$$(0.001624)*** \quad (0.014107) ** \quad (0.001728) *** \quad (0.00043) ***$$

Vector Hetero test:  $\chi^2(4) = 8.383013(0.0785)$   
 Vector AR (1-2):  $\chi^2(30) = 37.42392(0.1651)$   
 Vector Normality:  $\chi^2(2) = 1.086559(0.5808)$

The long run estimation of import equation reveals that all the explanatory variables are significant in affecting import in the long run. The diagnostic test for the model also reveals that the model fails to reject the null of no heteroscedacity, no serial correlation and the error terms are normally distribute at 5 percent significance level.

From the equation, export is found to be the main determinant of import in the country and its impact is significant at 5 percent level of significance in the long run. According to the long run result of the model, a one

percent increase in the export to GDP ratio leads to 1.6 percent increase in the import to GDP ratio. This result confirms that export earning is a primary source of finance for the import of a country goods and services.

Foreign aid is also found to have a positive and significant impact on import of a country at 1% level of significance. And a one percent increase in aid to GDP ratio will increase import to GDP ratio by 0.50 percent. From the long run equation one can conclude that in Ethiopia, aid has been used to finance the gap between import and export which is consistent with the theory

posed by the gap models. This is consistent with a result of yohannes (2011) in Ethiopia and Gomanee et al (2005) in Sub-Saharan Africa.

Terms of trade have a negative significant impact on the import of a country at one percent level significance. The result with TOT can be explained in the way that the export of Ethiopia is not price sensitive due to capacity constraint and the lag in agricultural output. From the result a unit changes in terms of trade results a 1.12 percent decrease in import to GDP ratio. Whereas The RER result indicates that the import of our

investment goods is exchange rate sensitive in the long run. And a one percent increment in real exchange rate results a 1.14 percent increment in import to GDP ratio.

#### b. Vector Error Correction Model for Import Equation

Since the variables in the import equation are found to be co integrated, we proceed to estimate the vector error correction model which represents both the long run and short run adjustments among the variables. Based on the residual saved for the long run estimation the following short run model is obtained for import of Ethiopia.

Table 3.14 : Results of short run equation for import

Variables	Coefficients	t-value	p-value
D(LNRER(-2))	0.267822	2.408604	0.0226**
D(LNEXPORT)	0.6826369	6.835582	0.0000***
ECT-1	-0.388931	-3.287626	0.0027***
D(LNODA(-1))	0.021935	1.453323	0.1569
D(TOT(-1))	0.103566	0.837793	0.4090
D(LNIMPORT(-2))	0.015741	0.142599	0.8876
C	0.020009	1.213631	0.2374

Note \*\*\*, \*\* represents rejection of the null hypothesis at 1% and 5% level of significant respectively.

$R^2 = 0.70$  DW = 2.05 F(6,36)=11.53328(0.0001)  
 AR(1,2) = F(2,27) = 0.196014 (0.8232)  
 Hetro = F(6,29) = 0.530795 (0.7805)  
 Normality = Chi<sup>2</sup>(2) = 0.898894(0.637981)  
 ARCH = F(1,33) = 1.199304 (0.2814)  
 Ramsey Reset = F(1,28) = 3.453695 (0.0737)

Source: Eviews 6 statistical output of vector error correction model.

The diagnostic test for the import equation in the short run shows no problem related with serial autocorrelation, heteroscedasticity, autocorrelation conditional heteroscedasticity, functional misspecification and normality.

The goodness measure  $R^2$  says that, 70% of the variation in the import in the short run is explained by the variation in the variables included in the model. The all over test of significant F-test also shows that all variables in the model except the constant are jointly significant in affecting import of the country in the short run.

The short run estimation of import equation reveals that like that of the long run impact, export is a significant determinant of import in the short run. In other words export has positive and significant impact on import in the short run. Aid does not have a significant impact in the short run even if it has positive impact. Real exchange rate has positive significant impact on import in its lag in the short run. Terms of trade has a positive impact on the import of a country in the short run in its lag however it is insignificant.

The error correcting term for import is negative and significant. The co efficient of the error correcting term implies that in one year import adjusts itself to equilibrium by 38.9 percent.

## IV. CONCLUSION

The result from the growth equation revealed that aid contributed positively to economic growth in the long run, but its short run effect appeared insignificant indicating that most of the aid has been used to finance investment which has a long gestation period. Similarly, foreign aid interacted with policy (PA) has a significant positive influence on growth only in the long run. The positive result is associated with the policy environment (macroeconomic and infrastructure) in the country which makes aid more effective. A comparison of the coefficients of aid and the aid interacted with policy indicator in absolute terms indicate that aid would be more effective had there been a favorable macroeconomic policy environment.

Therefore, aid is effective in promoting growth in Ethiopia in the period considered; but its effectiveness would have been higher if it was supported by a sound macroeconomic policy environment. Like the theoretical expectation the Aid squared term, shows that negative and significant impact, suggests that the presence of capacity constraint in absorbing foreign aid beyond some level only in the long run while in the short run the result indicates that no capacity constraint in absorbing foreign aid.

The empirical result on import equation confirms that export is a main determinant of import both in the long run and short run. In addition Aid has a positive contribution on import both in the long run and short run but it is insignificant in the short run, this justifies the importance of aid in financing the gap between export and import.

Therefore, for the period under consideration aid played a positive role in improving economic growth of Ethiopia through financing import requirement (foreign exchange gap).

Based on the empirical investigations, the following policy implications are drawn by the researcher.

Though the view that aid is ineffective but only in a good policy environment is not supported in the period under consideration, the finding points that the importance of a good policy environment to make aid more effective. Thus setting a sound policy environment is crucial to use aid more effectively and make domestic investment efficient.

The Ethiopia economy is characterized by huge trade deficit therefore foreign aid can be used to finance this problem and enhance economic growth.

Diversification along with policies of export promotion in addition to import substitution are crucial to minimize the foreign exchange constraints which makes dependence on aid compulsory. In addition, the poor track of export in the past decades also points the need to reduce dependence on primary commodities as the dominant way of foreign exchange earnings.

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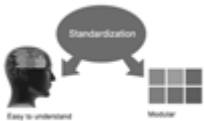


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1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript's Category,
5. Structure and Format of Manuscript,
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- One should avoid outdated words.

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**26. Go for seminars:** Attend seminars if the topic is relevant to your research area. Utilize all your resources.



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**28. Make colleagues:** Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

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**31. Adding unnecessary information:** Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

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**33. Report concluded results:** Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

**34. After conclusion:** Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

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- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

### Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.



Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

### **General style:**

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

- Adhere to recommended page limits

Mistakes to evade

- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

- Use standard writing style including articles ("a", "the," etc.)
- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives
- Shun use of extra pictures - include only those figures essential to presenting results

### **Title Page:**

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.



## Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript-- must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study, with the subsequent elements in any summary. Try to maintain the initial two items to no more than one ruling each.

- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

## Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

## Introduction:

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

## Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.





- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

#### **Procedures (Methods and Materials):**

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

#### **Materials:**

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

#### **Methods:**

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

#### **Approach:**

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

#### **What to keep away from**

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

#### **Results:**

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.



## Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

### What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

### Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

### Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

### Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

### Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



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	A-B	C-D	E-F
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<i>Introduction</i>	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
<i>Result</i>	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
<i>Discussion</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



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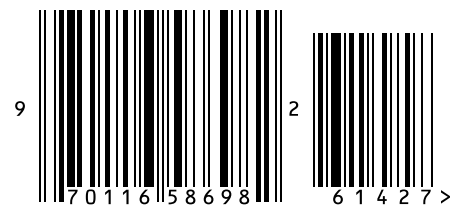
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ISSN 9755853



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