

Public Flagship Projects: Basic Understanding and Perspective from Kenya as a Developing Economy

Silas Muyela Nganyi*

Abstract—Flagship projects are strategic in nature aimed at both horizontal and vertical integration of the value chain. They are supposed to strategic interventions aimed at bolstering sectoral and regional outputs so as generate long-term model solutions to significant challenges facing society, economy and nation. They are premeditated interpositions meant to seize opportunities that will generate favourable economic and financial outputs. Because of their specific and high-level importance, they need participatory approach. Public expenditures utilised to spur and speed economic growth. The basic principles underpinning public expenditure management include accomplishing macro-fiscal discipline, strategic prioritisation, allocative efficiency, equitable distribution of resources and technical efficiency. Various scholars have developed theories, approaches and conceptualisation that shows why it is imperative for government to spend on certain activities, projects, interventions and programmes. In addition, these expenditure are also driven by various factors. The thrust of this position is that government expenditure is important so at meet the cost of public administration, maintain law and order, meet social welfare needs of citizens and advance technical efficiency within the economy. In its effort to transform the country into a modern, globally competitive, middle-income country, offering a high quality of life for all citizens by the year 2030, the Government of Kenya developed the Vision 2030 (Republic of Kenya, 2008). In the Kenya Vision 2030, government flagship projects are identified as centrally critical vehicles to achieving the vision and in promoting development in the country. The objective of this paper is review and highlight the various theories anchoring government expenditure on public flagship projects. The empirical literature is on various determinants influencing government expenditure on public flagship projects. The determinant in the paper are planning process, project appraisal criteria, source of funds and management responsibility. The paper has derived a conceptual framework to explain the key concepts, constructs, indicator and variables and the relationship between and among that are under study and or analysis. The paper has returned a recommendation that variables influencing public expenditure on flagship projects cannot be reviewed only in a direct effect relationship but moderating and intervening effects should be part of the conceptualisation.

Index Terms—Flagship Projects, Management Responsibility, Planning Process, Project Appraisal Criteria, Source of Funds.

1. Introduction

A. Importance of Government Expenditure

According to staff studies of Central Bank of Sri Lanka (2019) the growth effect of public expenditure has elicited extensive argument in finance, economics and politics. It is argued that reforming public expenditure is paramount in stimulating economic growth.

Government functions and activities are imperative for the reason that they deliver public goods and minimise market imperfections, distortion and failures. The functions are implemented by applying government spending instruments. Public expenditure is well-thought-out to be significant tool for implementing fiscal policy. These expenditures are utilised to spur and speed economic growth. The basic principles underpinning public expenditure management include accomplishing macro-fiscal discipline, strategic prioritisation, allocative efficiency, equitable distribution of resources and technical efficiency.

Various scholars have developed theories, approaches and conceptualisation that shows why it is imperative for government to spend on certain activities, projects, interventions and programmes. In addition, these expenditure are also driven by various factors. According to Wagner's Law (1890) public expenditure increases as national income increases. Wagner argued that increase in government expenditure is attributed to three main reasons: Increase in public administration, law and order; cultural and welfare expenditure; and scale of desired technological efficiency. The thrust of this position is that government expenditure is important so as to meet the cost of public administration, maintain law and order, meet social welfare needs of citizens and advance technical efficiency within the economy.

Keynesian Theory (1930s) argued that public expenditure is an exogenous factor which can be used as a policy instrument to promote economic growth. This thought points out that government expenditure contributes positively to economic growth. Thus increase in public expenditure is likely effective demand, increase in employment, high firm profitability and increase in private investment through multiplier effect of aggregate demand.

*Corresponding author: silmuyela@yahoo.com

Schumpeter (1942) fundamentally emphasised the role of the entrepreneur in economic development. It is the entrepreneurs who determines whether or not capital will grow rapidly or slowly and whether this growth will involve innovation and change. The development of new products and new productive techniques. Transformations in growth rates between countries and between different periods in any one country is largely dependent on the quality of entrepreneurship. Schumpeter describes this as the creative destruction. Creative destruction is a deliberate dismantling of established processes in order to make way for improved methods of production. Therefore, public policy should be focused on creating an enabling environment for the entrepreneurs to engage in creative destruction. Government can do this by spending on policy that promote industrial transformation, business incubation and product standardisation and trade development.

The creative destruction is based on financial analysis to establish business opportunities. The schematic illustration of creative destruction is as depicted in figure 1 below.

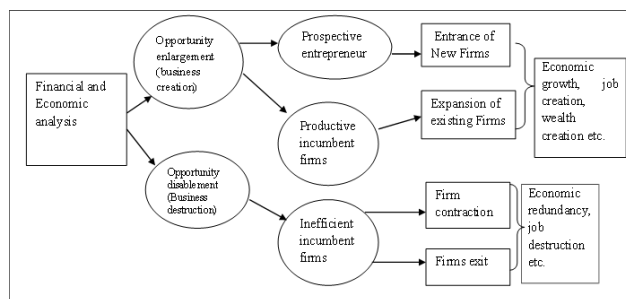


Fig. 1. Illustration of creative destruction

Musgrave (1959) pointed out that, government expenditure is an important tool in achieving desired economic growth. The three functions of public expenditure allocation efficiency of public goods, income redistribution and economy stabilisation.

The endogenous economic growth theory asserts that economic growth is driven by factors that are internal to the economy. The theory emphasis that growth is determined by technological advancement, rate of private investment, the size of the capital stock, and the value of human capital. The endogenous growth theory is argues that there are increasing returns to scale to all factors taken together and constant returns to a single factor, at least for one. Also technological advancement comes from things people do. This means that technological advance is based on the creation of new ideas. In addition many individuals and firms have market power and earn profits from their discoveries. This assumption arises from increasing returns to scale in production that leads to imperfect competition. Romer (1987) emphasize that technological ideas are more significant in generating wealth that mere reliance on natural resources. By way of illustration Japan is cited as a country with very few natural resources but was open to new technologies and ideas. Therefore, government should focus on development need to investment in research & development (R&D), intellectual property laws and help foster endogenous (homegrown) innovations.

Government expenditure is also important in generating the

desired human capital for the economy. Human Capital Theory (Becker, 1992) asserts that an economy derives economic growth by investing in people in a systematic manner. The theory focuses on the argument that quality education and training is the prime human investment for empirical analysis. The relationship between human capital investment and economic growth is staple of financial thought. Experts have argued that, human capital can be calibrated based on investment in developing employee skills and knowledge. Therefore, finance experts can determine return on investment (ROI) by dividing total profits to overall investments in human capital. at national level one is able to establish the national return on investment by getting total expenditure o human capital activities to grass domestic product.

The schematic illustration of creative destruction is as depicted in figure 2 below.

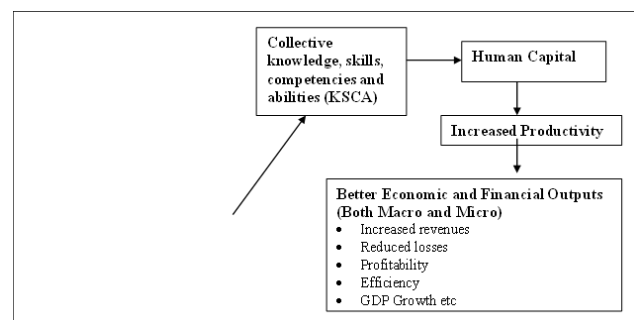


Fig. 2. Illustration of human capital model

Public expenditure is an area of focus that cannot be ignored. Agénor (2006) proposed infrastructure-led growth theory. It is argued that infrastructure development is one of the main engines of long-run economic growth and development. The degree of infrastructure efficiency has a relationship with stock of public capital. This is in turn causes multiplicity of equilibrium growth paths.

The diagrammatic summary of various areas of public expenditure that have an impact on economic growth is as represented in figure 3 below.

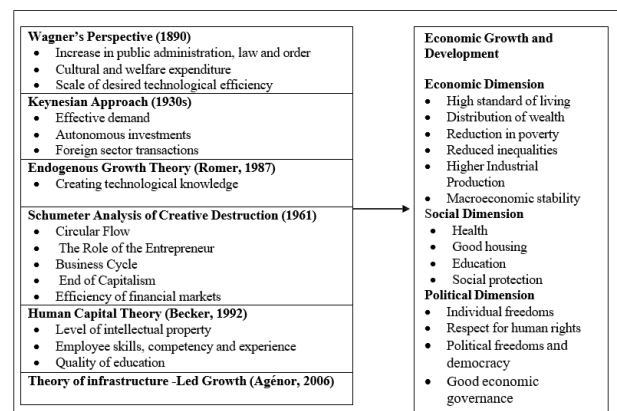


Fig. 3. Illustration of public expenditure and economic growth

The above scheme points to the areas that government can design projects to increase economic growth and development. In identifying these priority areas of expenditure the decision

maker do so on behalf of citizens and tax payers.

The agency theory explains the relationships between public bureaucrats as agents and citizens as the stakeholders whose welfare should be maximised as a result of financial decisions taken by government (Bowie & Norman, 2008). By application of agency theory, the desired performance outputs of project expenditure decision are assured when that performance meets the needs of the citizens. According to Ferejohn (2009) moral hazard model in public finance that taps is one of the key concerns about development project as instruments of power control and sometimes for political opportunism.

Abdulla and Maamor (2010) states that, government expenditure on public projects is an important component of public policy since it is used to realize a number of budgetary objectives including debt management, resource allocation and averting fiscal crises. Public project are a long term investment vehicles loaded with economic development agenda to carry the economy towards growth. it must therefore be enhanced. Thus, long-term planning has a positive significant influence on government development expenditure. Therefore, according to International Monetary Fund (2010), the determinants of public projects expenditures should be enhanced to ensure that allocation of resources achieves the desired outputs and for positive well-being of citizens.

Aruwa (2010) reiterated that, the effectiveness of public project expenditures determines the level of economic growth which can be evidenced by rise in job creation and an increase of citizens' income. However, notably, in most developing economies, misallocation, wrong prioritization, corruption and mismanagement of project funds pose a tremendous challenge. From the foregoing, it implies that, one of the surest way in which the government can accelerate economic development and achieve the aspirations of national economic blue print (such as Vision 2030, agenda 2063 among others) is by undertaking public project expenditure that meet pre-planned policy objectives. Development project expenditure must be given due attention since it is a driver to economic growth of a country.

According to Labonte (2010), public projects have multiple roles: as instruments of fiscal policy, to improve the net worth of government, particularly in the area of economic infrastructure and as vehicles for economic development. HM Treasury (2011) reiterated that in the public sector there is a vast number and diverse range of potential uses of resources and the efficient use of public resources has a significant impact on the welfare of citizens. As resources are finite, a decision to implement one project may preclude implementing others. There are always alternatives that need comparison even if the choice is between 'doing something' and 'doing nothing'. This is based on the principle of financial trade-off and balancing expenditure priorities on scale of funding sources. Therefore, in considering a spending proposal, decision makers need to be assured that the overall welfare of society will be raised as a result of the proposed project.

Source of funds have influence on government expenditure decision on flagship projects. According to Jin and Zou (2005), revenue and expenditure assignment theory is fundamental in

determining the kind of expenditure to be undertaken by any level of government. The theory suggests that a close match between revenue and project expenditure assignments improves allocative efficiency, and hence economic growth. That is, a convergence of revenue and expenditure is positively associated with a high economic growth rate. This intends that for flagship projects' expenditure, the decision makers should be alert to the sources of revenues such that if the sources were interrupted then it is easier to make financial adjustment in implementation of development projects. Jin and Zou (2005) argue that revenue and expenditure assignment theory can be amplified by fiscal decentralization procedures. Using this approach, the centre is in a better position to allocate budgetary resources for horizontal balance, macroeconomic stability, and investment in projects of national significance. These projects of national importance are generally referred to as flagship projects.

B. Importance of Public Flagship Projects

Flagship projects are development interventions that are strategically and scientifically defined. They are usually of substantial size with regard to financial volume, implementation scope, number of project partners and completion running time. Flagship projects are strategic in nature aimed at horizontal and/or vertical integration of the value chain. Thus, they provide technological feasible systems solutions with a long-term potential for economic growth. Flagship projects are strategic interventions aimed at bolstering sectoral and regional outputs so as generate model solutions to significant challenges facing society, economy and nation. They are premeditated interpositions meant to seize opportunities that will generate favourable economic and financial outputs. Because of their specific and high-level importance, they need participatory approach in creating awareness of the problem among the general public. The key components of flagship projects are as shown in figure 4 below.

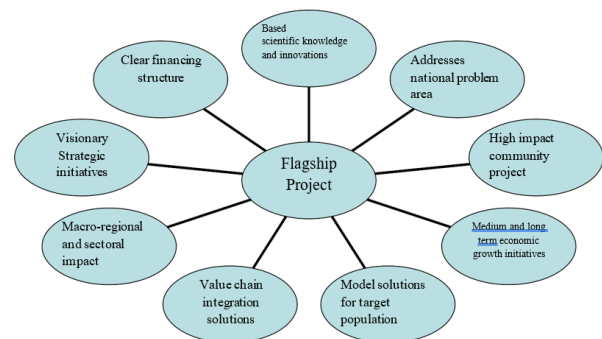


Fig. 4. Illustration of major characteristics of flagship projects

South Africa University (2013) indicates that, flagship projects are interventions with highest impact. They are prestigious projects with "big ideas, big science and for big impact". They are inter-disciplinary in scope, addresses important problem area, led by accomplished experts, and capable to generate high value impacts to society and the economy. They are usually focused, long term initiatives

though with short- and medium-term objectives and deliverables. Flagship projects have a high macro-regional impact and contribute to the implementation of one or more actions. The project should have a well-defined implementation plan, clear financing structure and should result in real actions.

Austrian Research Promotion Agency (2013) points out that, flagship projects aim at the horizontal and/or vertical integration solutions with a long-term potential for growth. They are projects to strengthen a sector or sub-sector, region, targeted population or to generate model solutions to important challenges faced by an economy or society.

According to European Union (2014) flagships projects are long-term, multi-disciplinary initiatives at the frontiers of scientific knowledge, have clear mission and a unifying goal, achieve transformational impacts resulting in key competitive advantage for the economy or industry, and capable of delivering substantial benefits to society. The flagship projects should bring new knowledge, competencies, ideas and resources and leverage on scientific directions, innovation and exploitation potential.

C. Flagship Projects from the Kenyan Perspective

In its effort to transform the country into a modern, globally competitive, middle-income country, offering a high quality of life for all citizens by the year 2030, the Government of Kenya developed the Vision 2030 (Republic of Kenya, 2008). In the Kenya Vision 2030, government flagship projects are identified as centrally critical vehicles to achieving the vision and in promoting development in the country. The Institute of Economic Affairs (2013) remarked that, the Kenya vision 2030 blue print is seeking to catapult Kenya into middle-income status within a generation, the roadmap proceeds on flagship projects categorized on three fronts: economic growth – the ambition is to achieve 10% growth annually from 2012; social transformation – through the efficient delivery of and equitable access to social services; and political – deepening democratic reforms and strengthening governance systems. After launch of the Kenya Vision 2030, some are Chinese-financed projects are responsible for Kenya's infrastructure take-off. The projects are classified in four thematic areas of economic pillar; social, political and foundational.

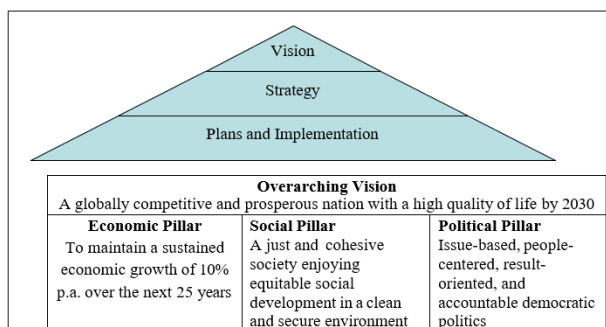


Fig. 5. Illustration of Kenya vision 2030

World Bank (2013) observed that, government expenditure on public flagship project should attempt to have new way to analyze a problem, try to understand where the roadblocks exist

to improving outcomes, and formulate strategies for system strengthening. The components of the flagship should include where funding for the project come from, pooling of funds, and how are they allocated and spent (financing); the place of various actors in the system; political support needed to bring about positive change; and how national systems reflect the country's and community's values.

1) Foundations for Socio-Economic Transformation

The Kenya Vision 2030 is being implemented within a foundational framework for macroeconomic stability, enhanced equity, land reforms, infrastructure-led development, human capital, improved energy efficiency, better national security and efficient public service. These foundational reforms and developments are summarized in figure 6 below

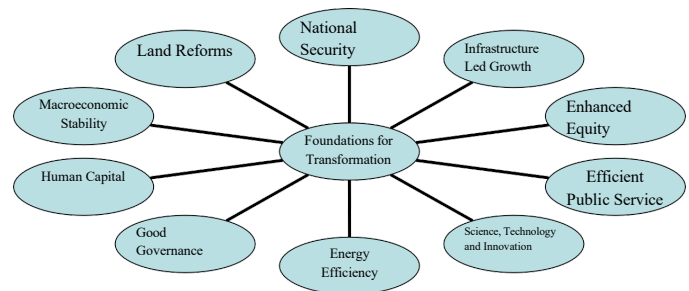


Fig. 6. Illustration of foundation of Kenya vision 2030

The macroeconomic stability is focused on ensuring the economy operates on low levels of inflation, restricted budget deficits, stable foreign exchange rate and low interest rates. A stable economic environment favours the poor who stand to lose the most in periods of high inflation. The governance agenda is expected to continually deepen and accelerate conducive business environment and enjoyment of individual rights. The Government will continue to intensify the anti-corruption programme through: better investigation and prosecution. In addition focus is being put on eliminating discretionary decision-making in a public service that is prone to bribery. Judicial and legal reforms are also.

The Government also recognizes open society, public participation and democratization of public decision. The role of people themselves, Parliament and civil society and vigilant press are the ultimate defense against abuse of office. These institutions will continue to receive full support from the Government and from the people of Kenya. Enhancement of equity and wealth creation opportunities is paramount. No society and economy can gain cohesion when majority of the people live in abject poverty. Special attention is being investment in arid and semi-arid lands, and marginalised areas and vulnerable groups (children, women and persons living with disability).

On the infrastructure front the flagship projects include roads, railway modernisation and expansion, pipelines, ports and resort cities along the planned northern infrastructure corridor. The government has to generate more energy and increase efficiency in energy consumption. This requires continued institutional reforms in the energy sector, including a strong regulatory framework, encouraging private generators of

power, and separating generation from distribution. New sources of energy will be found through exploitation of geothermal power, coal, renewable energy sources, and connecting Kenya to energy-surplus countries in the region.

Science, technology and innovation is key in raising productivity and efficiency across all sector of the economy. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

Land is a critical resource for the socio-economic and political developments. The expected transformation is hinged on national land use policy. The policy is to facilitate the process of land administration, computerisation of land registries, establishment of a National Spatial Data and enhanced legal framework for faster resolution of land disputes. The country intends to create a globally competitive human resource base to meet the requirements of an industrialising economy. This will be done through life-long training and education to raise labour productivity. Other steps include revamping technical training institutions, as well as the enhanced collaboration between industry and training institutions.

Improved national security is important so as attract investment, lower the cost of doing business and to provide Kenyans with a more secure living and working environment. Specific strategies involve: improving the practice of community policing; reducing the police to population ratio to recommended UN standards; adopting information and communication technology (ICT) in crime detection and prevention. These measures are supported by accelerated reforms in the judiciary. The Government will intensify efforts to bring about an attitudinal change in public service that values transparency and accountability to the citizens of Kenya. Results-based management and performance contracting will be pegged to the implementation of the Vision's goals, making it easier to reward public servants on merit and performance. Reforms in the public service will further enhance strategic planning in government, continuous improvement, and stakeholder engagement.

Over the period 2008-2012, a new transport corridor linking Lamu, Ethiopia, Southern Sudan and Somalia to a second planned port at Lamu was to be developed and implemented through Build, Own, Operate and Transfer (BOOT) arrangements at a cost of USD 15-20 billion while a free port at Dungu Kundu in Mombasa was to be developed. The other major transport infrastructure projects was the development of a rapid bus and light rail system in the Nairobi Metropolitan area, which is expected to serve as a prototype for other main urban areas in the country. In the same vein, an energy access scale-up programme was planned for implementation. To implement the projects for the period 2008-2012 an estimated Kshs. 500 billion was to be invested with an amount of Kshs. 250 billion expected from the national exchequer while the remaining half expected to be financed by both local and foreign private investors, and mainly through PPP arrangements.

The total financing for the projects from PPP was estimated at Kshs. 250 (Republic of Kenya, 2011). The operationalisation of the PPP policy was to facilitate private sector participation in complementing public sector interventions. The five-year PPP target was to have 64,500 km of well-maintained and motorable roads with a total of Kshs. 186 billion spent on road construction and upgrading during the 2008-2012 period. Some of the projects have faced financial management problems (for transparency and accountability), poor public expenditure decisions, underutilization of development funds and inadequate budgetary provisions (World Bank, 2013). According to Kenya Institute for Public Policy Research and Analysis (2013), the flagship projects have not yielded desired results such that, the overall poverty levels increased from 48.8 in 2007 per cent to 49.8 per cent in 2012, and the number of poor people in the country estimated

at 18.2 million in 2007 soared to 20.1 million in 2010. Though, the flagship projects in the industrial sector were planned to stimulate growth rate of 12.4 percent, the actual growth rate stood at 3.3 percent in 2011. In the same vein, only 2.2 percent of a new terminal container covering an area of 100 hectares at the port of Mombasa was completed, 5000 acres of land acquired for establishment of Konza Technology City has low progress and free port at Dongo Kundu did not take off as planned (Republic of Kenya (2013).

2) Economic Pillar

The analysis of Kenya's global competitiveness, identified six key sectors whose main goal is to deliver the 10 per cent economic growth rate per annum. These sectors are: tourism; agriculture; manufacturing; wholesale and retail trade; business process outsourcing (BPO); and financial services. The summary is shown in figure 7 below.

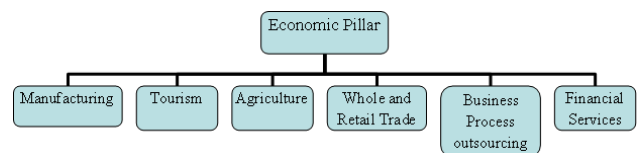


Fig. 7. Six key sectors in economic pillar

Kenya aims to have a robust, diversified, and competitive manufacturing sector. This will be achieved (i) restructuring key local industries that use local raw materials (ii) exploiting opportunities in value addition to local agricultural produce; (iii) adding value to intermediate imports. Under tourism sector, Kenya aims at becoming one of the top tourist destinations in the world, offering a high-end, diverse, and distinctive visitor experience. The strategies include: (i) establishing resort cities in two key locations in the coastal region; (ii) increasing the quality of service in premium safari parks; (iii) creating new high value niche products; (iv) attracting high-end international hotel chains; and (v) investing in conference facilities to boost business tourism.

The agriculture sector aim to promote innovative, commercially-oriented, and modern agricultural sector. This will be accomplished through: (i) transforming institutions in agriculture and livestock to promote agricultural growth; (ii)

increasing productivity of crops and livestock; (iii) introducing land use policies for better utilisation of high and medium potential lands; (iv) developing more irrigable areas in arid and semi-arid lands for both crops and livestock; and (v) improving market access for smallholders (vi) adding value to farm and livestock products before they reach local and international markets.

The wholesale and retail trade is expected to raise earnings by giving large informal sector opportunities to transform into formal enterprises. This is to be realised through: (i) improving access to credit (ii) improving efficiency by reducing the number of players between the producer and the consumer; (iii) creating formal market outlets for small-scale operators (iv) encouraging more investment in retail trade; (v) developing an outreach programme to expand retail trade; and (vi) developing training programmes to improve business skills.

The economy aims to become top off-shoring destination in Africa. BPO will, therefore, become the sector of choice for employment for youth and young professionals. The country will move quickly to establish the necessary capacity in the sector through: (i) attracting at least five major leading information technology (IT) suppliers, and at least ten large multinational companies and global BPO players to the country; and (ii) strengthening at least five local players to become local champions through stand-alone operations or joint ventures.

The 2030 Vision for financial services is to create a vibrant and globally competitive financial sector. Kenya also intends to become a regional financial services centre. This is to be achieved through: (i) legal and institutional reforms to make Kenya more competitive as a financial centre (ii) reforms in the banking sector that will be undertaken to facilitate consolidation of small banks in Kenya to large and strong ones; (iii) introduction of credit referencing in the country; (iv) streamlining informal finance and Savings and Credit Co-operative Organisations, as well as micro-finance institutions; (v) deepening financial markets by raising institutional capital through pension funds, expanding bond and equity markets as well as tapping international sources of capital.

3) Social Pillar

Social Pillar is focused on investing in People of Kenya and building a just and cohesive society that enjoys equitable social development in a clean and secure environment. The key social sectors are: Education and Training; Health; Water and Sanitation; the Environment; Housing and Urbanisation; as well as in Gender, Youth, Sports and Culture. It also makes special provisions for Kenyans with various disabilities and previously marginalised communities. The illustration of these key areas are as reflected in figure 8.

The education and training, is to provide a globally competitive human resource. This will be achieved through: (i) integrating early childhood education into primary education; (ii) reforming secondary school curricula; (iii) modernising teacher training; (iv) developing key programmes for learners with special needs, (v) rejuvenating ongoing adult training programmes; (vi) revising the curriculum for university and technical institutes to include more science and technology;

and (vii) partnership with the private sector in supporting education and training.

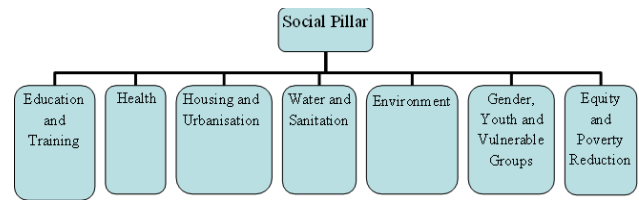


Fig. 8. Illustration of social pillar

On the health front the government aims to provide an efficient integrated and high quality affordable health care system. Priority will be given to preventive care at community and household level, through a decentralized national health-care system. Kenya also intends to become the regional provider of choice for highly-specialised health care through: (i) provision of a robust health infrastructure network countrywide; (ii) improving quality of health service delivery to the highest standards (iii) promotion of partnerships with the private sector; (iv) providing access to those excluded from health care for financial or other reasons.

Under water and Sanitation, the country aims to conserve water sources and enhance ways of harvesting and using rain and underground water. This will be realised through specific strategies, such as: (i) raising the standards of the country's overall water, resource management, storage and harvesting capability; (ii) rehabilitating the hydro-meteorological data gathering network; (iii) constructing multipurpose dams (e.g., on Nzoia and Nyando); and (iv) constructing water and sanitation facilities to support a growing urban and industrial population.

The Environment subsector aims to be nation that has a clean, secure and sustainable environment by 2030. This will be achieved through: i) promoting environmental conservation; (ii) improving pollution and waste management; (iii) commissioning of public-private partnerships (PPPs) for improved efficiency in water and sanitation delivery; (iv) enhancing disaster preparedness in all disaster-prone areas and improving the capacity for adaptation to global climatic change.

Given the current demographic trends, Kenya will be a predominantly urban country by 2030. The country must, therefore, plan for high quality urban livelihoods for most of her people by that date. The 2030 vision for housing and urbanisation is "an adequately and decently-housed nation in a sustainable environment." This will be attained through: (i) better development of and access to affordable and adequate housing; (ii) enhanced access to adequate finance for developers and buyers; (iii) pursuit of targeted key reforms to unlock the potential of the housing sector; (iv) initiation of a nationwide urban planning and development campaign, starting with Kenya's major cities and towns.

The Vision 203 for gender, youth and vulnerable groups is gender equity in power and resource distribution, improved livelihoods for all vulnerable groups, and responsible, globally competitive and prosperous youth. In addition, Kenya aims to capitalise on her international reputation as an "athletic

superpower” by opening up the country for top global sports events, encouraged by corporate sponsorship.

The Government will provide stricter enforcement of copyright laws in music and the performance arts, and provide facilities for the most talented musicians and actors. The country aims to be a competitive destination for global film producers. These aims will be realised through the implementation of specific strategies such as: (i) increasing the participation of women in all economic, social and political decision-making processes (e.g. though higher representation in Parliament); (ii) improving access of all disadvantaged groups (e.g., business opportunities, health and education services, housing and justice); and

(iii) minimising vulnerabilities through prohibition of retrogressive practices (e.g. female genital mutilation and child labour) and by upscaling training for people with disabilities and special needs.

4) Political Pillar

The transformation of the country’s political governance system under Vision 2030 will take place across key strategic areas: rule of law; electoral and political processes; democracy and public service delivery; transparency and accountability; and security, peace building and conflict management. The illustration of these key areas are as reflected in figure 9 below.

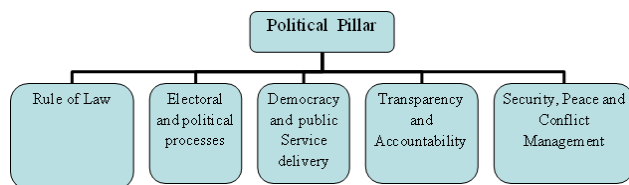


Fig. 9. Illustration of political pillar

Under rule of law, the 2030 Vision seeks to foster adherence to the rule of law as applicable to a modern, market-based economy in a human rights-respecting state. The strategies involve: (i) aligning the national policy and legal framework with the needs of a market-based economy, national human rights, and gender equity commitments; (ii) increasing access and quality of services available to the public and reducing barriers to justice; (iii) streamlining functional capability of legal and judicial institutions to enhance inter-agency cooperation; and (iv) inculcating a culture of compliance with laws, cultivating civility and decent human behaviour between Kenyans, and between Kenyans and outsiders.

The electoral and political processes pursues to cultivate genuinely competitive and issue-based politics. Specific strategies will involve: (i) introducing laws and regulations covering political parties; (ii) enhancing the legal and regulatory framework on the electoral process; and (iii) conducting civic education programmes to widen knowledge and participation among citizens, leading to an informed and active citizenry.

For democracy and public service delivery the aim is to create a people-centred and politically-engaged open society. Specific strategies will involve: (i) pursuing constitutional and

legal reforms necessary to devolve to move resources and responsibility to local governance institutions; (ii) encouraging formal and informal civic education and action programmes; and (iii) promoting open engagement between government and civil society, as well as the free flow of information.

To entrench transparency and accountability the 2030 Vision is to ethical and results-oriented government institutions. The specific strategies are (i) strengthening the legal framework for anti-corruption, ethics and integrity; (ii) promoting results-based management within the public service; (iii) encouraging public access to information and data; (iv) introducing civilian oversight around the key legal, justice and security institutions; and (v) strengthening Parliament’s legislative oversight capacity.

The Vision 2030 aims at security of all persons and property throughout the Republic”. Specific strategies will involve: (i) promoting public-private cooperation and civilian/community involvement for improved safety and security; (ii) deepening policy, legal and institutional reform for improved enforcement of law and order; (iii) promoting national and inter-community dialogue in order to build harmony among ethnic, racial and other interest groups; (iv) promoting peace building and reconciliation to improve conflict management and ensure sustained peace within the country; and (v) inculcating a culture of respect for the sanctity of human life that does not resort to the use of violence as an instrument of resolving personal and community disputes.

D. Public Project Budgeting

Jackson Kilimba (ESAMI, 2022) defines a budget for a project is simply the combined costs of the individual activities, or work packages that the project must accomplish. The budget is represented by the approved cost baseline. In developing the project budget, it's important to understand why it is significant. It helps in setting expenditure expectations, getting project approval, ensuring funds are ready at the right time and measuring performance.

The project budget that has been approved is what drives project funding. It will tell stakeholders how much money is needed and when it is needed. The ability to get people, equipment, and materials when they are needed are dependent on the funding provided as a result of the approval budget. In addition, analyzing project financial performance is facilitated by the project financial budget. The second reason budgeting is important for your project is because it provides the basis for project cost control. By measuring the project's actual cost against the approved (baseline) budget, one is able to determine if the project is progressing according to the plan or if corrective action is needed.

In project budget the six key information set sources are as highlighted if figure 10 below.

Activity cost estimates are the individual cost estimates for each activity or work package that your project will complete. For each activity, the cost estimate generally includes direct labor, materials, equipment, services, facilities, and information technology. The basis of estimates documents supporting details about the activity cost estimates. For example, how the

estimates were made, assumptions and constraints, and the confidence level of each estimate.



Fig. 10. Key project information sets

The scope baseline will let you know if there are any funding constraints that may be mandated by your organization, contracts, or other groups such as government agencies. The project schedule will be used to determine the cost budget over time. For a specified calendar period, you can combine the activity costs that are planned for that period to determine the time-phased budget. Resource calendars will let you know which resources are assigned to the project and when they are assigned. Using each rates for each resource and combining with the project schedule you can then determine resource costs over time. Contracts for products or services will be used to determine their costs and can then be included to the project budget. Once you have the above information, then it is simply a matter of summing up the costs to determine the budget for your project.

Project budgets, are a reflection of project work and the timing of that work. A comprehensive budget provides management with an understanding of how funds will be utilized and expended over time for projects work. In general, a project expends resources slowly, then ramps up rather quickly as more resources are utilized, and subsequently tapering off as the project comes to completion.

E. Problem Facing Implementation of Flagship Projects

Funding has been a bottleneck to seamless implementation on Vision projects as planned. For instance, total financing for the projects from PPP was estimated at Kshs. 250 billion. This did not occur in the MTPI (Republic of Kenya, 2011). The operationalisation of the PPP policy was to facilitate private sector participation in complementing public sector interventions. The five-year PPP target was to have 64,500 km of well-maintained and motorable roads estimated Kshs.186 billion was to be spent on road construction and upgrading during the 2008-2012 period. Some of the projects have also faced financial management problems (for transparency and

accountability), poor public expenditure decisions, underutilization of development funds and inadequate budgetary provisions (World Bank, 2013).

According to Kenya Institute for Public Policy Research and Analysis (2013), the flagship projects have not yielded desired results such that, the overall poverty levels increased from 48.8 in 2007 per cent to 49.8 per cent in 2012, and the number of poor people in the country estimated at 18.2 million in 2007 soared to 20.1 million in 2010. Though, the flagship projects in the industrial sector were planned to stimulate growth rate of 12.4 percent, the actual growth rate stood at 3.3 percent in 2011. In the same vein, only 2.2 percent of a new terminal container covering an area of 100 hectares at the port of Mombasa was completed, 5000 acres of land acquired for establishment of Konza Technology City has low progress and free port at Dongo Kundu did not take off as planned (Republic of Kenya (2013).

The Kenya Vision 2030 flagship projects are expected to take the lead in generating 10 percent economic growth in the country but they are currently threatened by inadequate source of funding, failure to link policy, planning and expenditure budgeting and poor expenditure outcomes at the macro, strategic and operational levels. The projects are rarely completed within the anticipated time, poorly funded and some projects were agreed upon without reference to their cost to the exchequer, project appraisal systems and therefore attainment of the desired results is becoming difficult. Despite cost-benefit analysis being credited to be an important technique for project appraisal, its application in the public sector continue to be elusive. Therefore, financial valuation of project costs and benefits is not clear and disclosure on the choice of the best project with net social benefits is scanty.

The financial troubles that face public projects is mainly attributable to planning process (Shah & Hagen, 2007) appraisal criteria (Palmer, 2012), source of funds (Republic of Kenya, 2013) and management responsibility (Foss, 2007; Otiende, 2013). Therefore, without a clear financial framework that can be used to determine government expenditure on public projects, poor financial planning and inappropriate utilisation of public resources (Aruwa, 2010), continue to militate against achieving targets set out in the Kenya Vision 2030.

Technology is also known to be changing at quick rates. Some of the anticipated ICT projects in the year 2008 may have no place in the year 2030. It is argued that understanding such problems during project conceptualisation is important for effective, economic and efficiency implementation of planned projects. They should be evaluated as determinants of government expenditure on the public flagship projects. This is necessary so as to give recommendation on how to enhance sustainable development and increased economic growth as envisaged in Kenya

Vision 2030. Additionally, political process is key determinants of government expenditure on flagship projects and excluding political factors and others can be detrimental.

2. Theoretical Framework Underpinning Public Projects

A. Public Finance Theory

Musgrave's Theory (1959) of public finance asserts that, government expenditure is a fiscal policy instrument devoted to achieving full employment of resources. The objective is increase aggregate demand, economic efficiency, and politically acceptable redistribution of income. Oates (2007) postulates that, public finance theory has three basic areas of focus which are to establish an efficient allocation of resources; to attain the desired distribution of income and wealth; and to maintain high and stable levels of employment and output. Against this conceptual scheme it is argued that a rise in public expenditure greatly depends on revenue collection and expected economic development results. Figure 10 below is an illustration of how fiscal policy is transmitted within an economy.

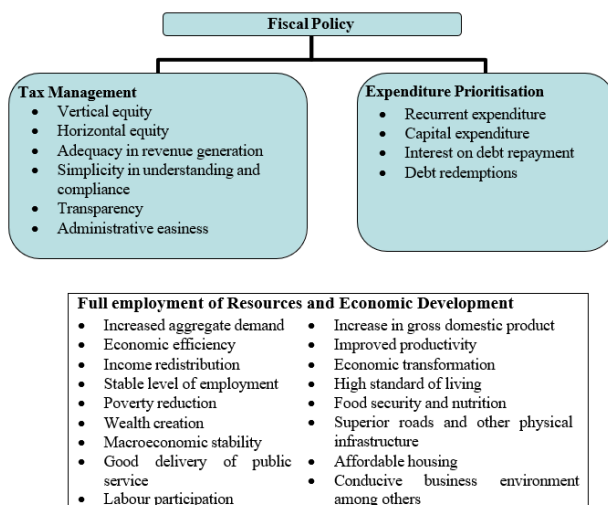


Fig. 10. Illustration of fiscal policy

Fiscal policy is one of the key aspects of public finance. According to Tanzi and Zee (1997) fiscal policy is implemented through taxation management and public expenditure. The goal is to maximise economic well-being of citizens and stimulating long-term economic growth. The public finance theory argues that fiscal policy is the means and ways by which governments use to grow the economy, achieve desired national outcomes and stabilize the economy by manipulating tax measures and public expenditure. The tax management focuses on vertical equity, horizontal equity, adequacy in revenue generation, simplicity of tax system, and administrative easiness of revenue administration. Public expenditure focuses expenses incurred by government-central, state, local, sub-national. They are incurred for salaries, operations, maintenance, capital expenditure and grants to other level of government.

Public finance theory provides the foundations on how to determine the level of expenditures on public goods to ensure public resources are allocated efficiently. This is important in providing the principles underlying public spending and the influence of this expenditure on economic development. In addition, public finance theory basically deals with all aspects of resource mobilization and expenditure management in

government. Thus, government expenditure on projects is critical and essential ingredient of public finance management which includes efficient allocation and effective management of resources

B. Budgeting Theory in the Public Sector

The theory of budgeting in public sector has transformed from incrementalism to medium term expenditure framework in recent years as highlighted below.

1) Incrementalism Theory

Incrementalism theory of budgeting assumes that the economy is operating with an environment of a steady economic expansion and government expenditure should increase so as to absorb increasing tax revenues. In other words, “budgeting for growth” (Schick, 1990). The theory of budgeting in public sector has transformed from incrementalism to medium term expenditure framework in recent years. Incrementalism theory of budgeting assumes that the economy is operating with an environment of a steady economic expansion and government expenditure should increase so as to absorb increasing tax revenues. In other words, “budgeting for growth” (Schick, 1990).

Incrementalists postulates that, project expenditure is based on previous year’s budget with special attention given to a narrow range of increases or decreases. According to Good (2011) incrementalism theory postulates that, public officials who make expenditure decisions start from the status quo and seek to solve problems by increasing budgetary allocation rather than identify opportunities which may not necessarily be based on the fundamental assumptions of rationalist decision making.

2) Zero Based Budgeting Theory

Pyhr (1970) developed zero-based budgeting. The theory (ZBB) is based on assumption that expenditure for every project should start at zero level and each project must be evaluated to determine whether it should be funded. ZBB is a budgeting methodology where all expenditure must be justified in each financial year. The Theory of Zero-Base Budgeting was aimed at moving the organization away from incremental budgeting. The starting point becomes zero, with the implication that past patterns of spending are no longer taken as a given. ZBB evaluates the most efficient return on spending for every project. Figure 11 illustrates the process of ZBB and key advantages and disadvantages.

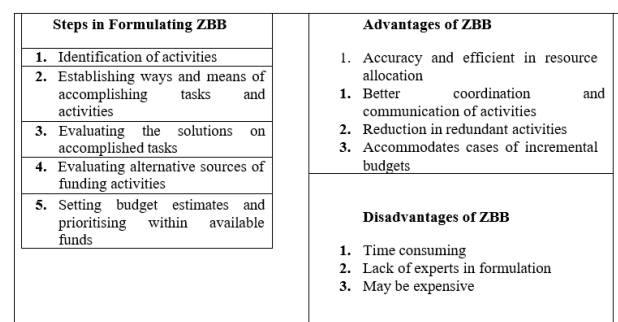


Fig. 11. illustration of ZBB

Government Finance Officers Association (2011) argue that ZBB can be used to focus on analysis and decision making instead of incremental budgeting; eliminate or reduce low priority projects; force decision makers examine financial cost-effectiveness of each project and ensure that public expenditure aim at effective utilization of resources. However, effort and time requirements of ZBB are its principal disadvantages.

3) Medium Term Expenditure Approach

In the late 1990s most government adopted medium term expenditure framework (MTEF). In theory, the Medium Term Expenditure Framework (MTEF) provides the “linking framework” that allows expenditures to be “driven by policy priorities and disciplined by budget realities” (World Bank, 1998a: 32). If the problem is that policy making, planning, and budgeting are disconnected, then a potential solution is an MTEF. According to the World Bank (1998a: 46), MTEF consists of a top-down resource envelope, a bottom-up cost estimation of existing policy and, ultimately, the matching of these costs with available resources in the context of the budget process. The top-down resource envelope is fundamentally a macroeconomic model that

indicates fiscal targets, estimates revenues and expenditures, including government financial obligations and high cost government-wide programs such as public finance reforms. To complement the macroeconomic model, the sectors engage in bottom-up reviews that begin by scrutinizing sector policies and activities (similar to the zero-based budgeting approach), with an eye toward optimizing intra-sectoral allocations. Given that this disconnect between policy making, planning, and budgetary processes is a common condition of developing country governance, the MTEF has increasingly come to be regarded as a central element of public expenditure management reform programs as stated by World Bank (2013) which has argued for adoption of the medium term expenditure framework (MTEF).

To achieve the intention of MTEF the various spending units are classified into sectors. The sector categorisation is usually is based on classification of government functions (COFOG).

The MTEF is annual, rolling three year-expenditure planning. It sets out the medium-term expenditure priorities and hard budget constraints against which sector plans can be developed and refined. To complement the macroeconomic model, the sectors engage in “bottom-up” reviews that begin by scrutinizing sector policies and activities with an eye toward optimizing intra-sectoral allocations. The six main stages involved in MTEF Budgeting Process are highlighted in table 1 below.

The key to the sectoral review process is the notion that within the broad strategic expenditure framework, which reflects the resource constraint as well as government policy, sectors have autonomy to manage by making decisions that maximize technical outcomes like efficiency and effectiveness.

Objectives of MTEF:

- Improved macroeconomic balance, especially fiscal discipline
- Better inter-and intra-sectoral resource allocation
- Greater budgetary predictability for line ministries
- More efficient use of public resources
- Greater political accountability for public expenditure outcomes
- Greater credibility of budgetary decision making (political restraint)

4) Programme Based Budgeting

To deepen the application of MTEF, the IMF (2003) introduced the adoption of programme based budgeting (PBB). By using PBB approach financial decisions taken should be able to link expenditure plans to goals, objectives and measures. The expenditure plan contain both financial and performance information and describe how these measures relate to the strategic plan and desired outcomes from the programme. A typical programme based budgeting may is as shown in figure 11.

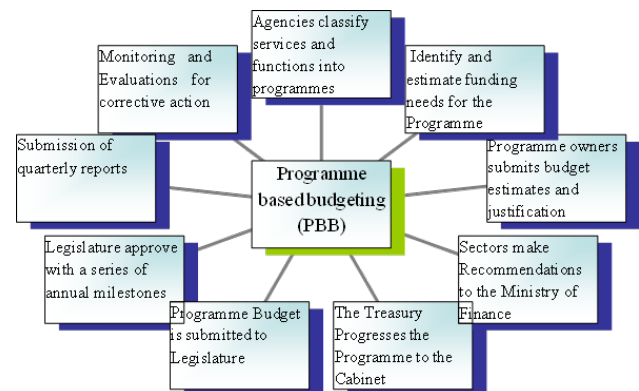


Fig. 11. Illustration of PBB Process

From the foregoing, expenditure planning may be a combination of incrementalism, ZBB, PBB and MTEF. The budgeting theory is relevant in providing the required grounding in developing the planning process. Further, ZBB, MTEF and PBB can be used as indicators of the planning process. In addition, the budget theory provides the principles underlying public sector expenditure planning, core guidelines

Table 1
Main stages MTEF Budgeting process

Stage	Activity	Characteristics
1.	Development of Macroeconomic/Fiscal Framework	Macroeconomic model that projects revenues and expenditure in the medium term (multi-year)
2.	Development of Sectoral Programs	Agreement on sector objectives, outputs, and activities Review and development of programs and sub-programs Program cost estimation
3.	Development of Sectoral Expenditure Frameworks	Analysis of inter- and intra-sectoral trade-offs Consensus-building on strategic resource allocation
4.	Definition of Sector Resource Allocations	Setting medium term sector budget ceilings (cabinet approval)
5.	Preparation of Sectoral Budgets	Medium term sectoral programs based on budget ceilings
6.	Final Political Approval	Presentation of budget estimates to cabinet and parliament for approval

for project development and its scope for dealing with real practical problems.

C. Theory of Cost-Benefit Analysis

A commonly applicable technique in public investment assessment is cost-benefit analysis (CBA) (Musgrave, 1989). Such analysis is widely used for planning, decision support, programme evaluation and selection. The theory of CBA focuses on determining how much benefit outweigh cost of a public project, investment or policy. It provides the basis for comparing investments, comparing total expected cost of each option with total expected benefits. According to Dreze and Stern (1987) project evaluation is the process of judging whether or not to accept a project by conducting CBA. CBA is a decision rule which consists of accepting projects that have positive profit at shadow prices. The cost-benefit process will generally take a process as outlined in figure 12 below.

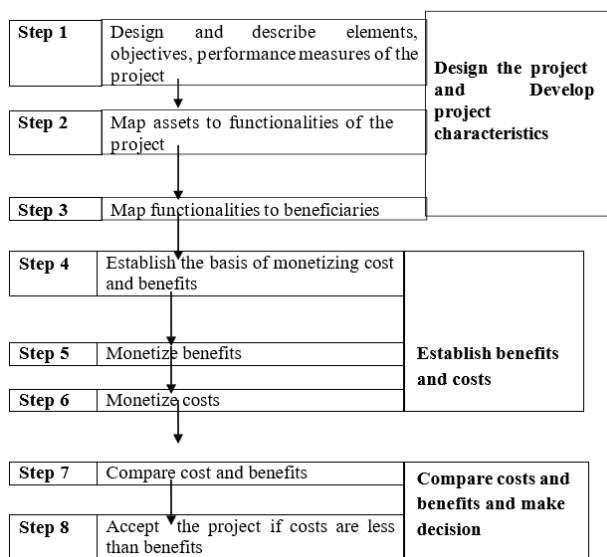


Fig. 12. Illustration of Cost-Benefit analysis

Brzozowska (2007) emphasises that, the basic rule of CBA is that projects should be selected only when discounted benefits would be higher than discounted investment expenditures. HM Treasury (2013) indicated that, a comprehensive CBA consists of main three components which are, identification of all the factors (favourable and unfavourable) which can flow into community because of that project, financial valuation of project costs and benefits and choice of the best alternative with net social benefits

D. Agency Theory

Jensen and Meckling (1976) defined agency relationship as a form of contract between owners and managers of a firm. The owners (principal) appoint an agent (managers) to manage the firm on their behalf. The principal delegates decision making authority to the management. Levacic (2009) in analyzing agency theory, stated that, some actor (or group of actors) called an agent undertakes an action on behalf of another actor (or group of actors) called a principal. In the principal-agent theory the agents may pursue projects for personal interests at the

expense of principals. The theory simply advocates for accountability and transparency of finance decision makers, who are compelled to choose projects that benefit the principal (the citizens). McKie and Walle (2010) state that, although it is useful to be cognizant of formal project expenditure decision processes, it is at best precarious to try to derive from them an understanding of how resource allocations are determined within principal-agent model.

Principal-Agent model is a useful with regard to the accountability and transparency of the finance decision makers (Sean, 2012). Therefore, the model should define the responsibility of the public Officer in making public expenditure decisions. Public expenditure are transactions governed by a contract in which a principal mandates an agent to provide goods and services for a stated price. Principal-agent relationship is a paradigm for analyzing public accountability. This is because it provides a flexible framework for modeling innumerable variations in institutional arrangements, and comparing their potential for inducing desirable behavior by agents. The agency theory is used to provide the management responsibility indicators of fiscal responsibility, accountability and transparency.

Review of existing literature points to three possible relationship of Principal-Agent; Principal-Principal and Agent-Agent as shown in figure 13 below.

Agent (Public entities)	Principal-Agent Model	Agent-Agent Model
Principal (Citizen)	Principal-Principal Model	Principal-Agent Model
	Principal	Agent

Fig. 13. Illustration of derivative models from agency problem

The principal-principal modelling is based on the argument that citizens or stakeholders get organised and intergroup conflicts of interest is likely to exist. Such principal-principal conflict change the dynamics of corporate governance, conceptualisation, design and implementation of public projects. Principal-principal problem is characterised by concentration of ownership, majority control, poor institutional framework for minority interest and weak governance structure.

The principal-principal approach in public finance is manifested in cases where citizens have competing interest and priorities. For example one set of citizens may prefer water projects while another group prefers a school. This may occur in the same society which therefore call for logical prioritisation of public projects. In company set up principal-principal model may apply in a case where the minority shareholders may be preferring dividend payout so as to increase their current cash balance demand while the majority shareholder prefer long-term investment so as to grow share value and generate wealth. The majority and minority may have different assignment but each group is pursuing aspirations. The solution to principal-principal conflict is have a logical framework for prioritising public projects.

The principal-agent model refers to a relationship where one entity (the agent) is authorized to make financial decisions and public project implementation on behalf of citizens (principal).

The dilemma occurs in circumstances when the agent is interested to act in a manner that is beneficial to his/her personal behalf contrary to the interest of citizens. Some of the mechanisms to address such self-interest in project implementation is to enhance management responsibility, undertake public participation, entrench transparency mechanisms, strengthen fiscal discipline and ensure accountability.

Agency-Agent model applies in cases where different institutions interact in a system to solve a given problem or complete a public-project. Agent-agent conflict occurs when different institutions pursue different finance decisions, have different priority projects operate on varying project work plans and interpret project outcomes differently. The agent-agent model is used in simulating actions and interaction of autonomous agents in order to understand the behaviour of the system and governance structure for expected project outcomes. In agent-agent model it is argued that there exists mixed strategy equilibrium.

Mixed strategy equilibrium occurs when each institution uses its own strategy which it considers to be the best against what other players are applying. Each institution is indifferent of actions of other stakeholders. Because of independence one contractor working a project may complete his part while the rest of the contractors are lagging behind. Therefore, for effective deliver there is need for a harmonised working programme and schedule. Undertaking critical path analysis becomes crucial and sharing information on specific progress being made on individual project components.

E. Information Asymmetry Theory

Akerlof (1970) postulate that information asymmetry exists where in a transaction one party has more and better information than the other party. Information asymmetry theory states that in a financial transaction one party has superior information compared to another which leads to improper decisions. Information asymmetry may lead to misrepresentation of facts by contractors; manipulation of reputation; and appropriating resources for projects that could be applied elsewhere thus reducing benefit of these resource to citizens.

Due to information asymmetry it is not surprising to find low quality project being priced (costed) equally with high quality projects. The contractors take advantage of ignorant project owners and end up using low quality material, poor workmanship and quote inflated prices.

The key components of information asymmetry is reflected in moral hazard and adverse selection. Moral hazard occurs when the government enters into contracts that has fiscal risks. For, example, governments takes on-board loans to finance projects without analysing the ability to repay the same loans in future or sometimes taking on board project loans at market interest rates instead of doing so at concessional rate. It is a moral hazard since it is the tax payers (citizens) who suffer the consequences. The private business may also be crowded out of the financial market.

Adverse selection occurs when the project selected do not

address the key concerns of the citizens. This entails designing and implementing projects with low impact to the economy. Because of the information asymmetry the lemons problems manifests. The projects selected for implementation could be of less derivative value to the citizenry than the economic costs. Akerlo (1970) argued that the market for lemons exist because salesmen are motivated to sell to people cars of less quality because most buyers cannot differentiate good cars from bad cars (Lemons). Extrapolating this to public projects decision-makers get bad deals from contractors due to information asymmetry. Contractors deliver shoddy work and design public projects that do not address needs of citizens.

The scenario for information asymmetry is amplified in cases where the contractor finances, builds and operates assets necessary for public infrastructure and services and then charges the government and/or end users. This approach is referred to as public-private partnership. (PPP). The PPP of such nature have contributed to managerial and financial inefficiency in delivery of public expenditure on public projects. The problem with this approach is information sharing and disclosure. The possible scenario in information asymmetry is as shown in figure 14 below.

Project Implementor	High Information Asymmetry	Secret dealings by Implementor	Possible Collusion
	Low Information Asymmetry	Gain sharing and mutual benefit	Exaggerated contract sum
		Low Information Asymmetry	High Information Asymmetry
		Project Contractor	

Fig. 14. Illustration of scenario in information asymmetry

Public official estimate and use that estimate to tender, negotiate and award projects to contractors. The contractor does the project on behalf of the implementor. The contractor decide how much he will be paid through bills of quantity which is compared to engineers estimate. In the process each party may be using different set of data in arriving at project estimates. The criteria for each party in making such decisions are private and is not disclosed to each party which cause information asymmetry.

The information asymmetry theory asserts that public official need to ensure that there is prespecified risk tolerance of the private sector so that when risk materializes each party will bear and where possible trigger justifiable negotiation. During project evaluation the essence is to reduce information asymmetry as much as possible. However, in some jurisdiction the public procurement law has restrictions on the kind of negotiation that can take place.

One way of limiting information asymmetry is that project designers and implementers should seek citizen participation and involvement of stakeholders so as to improve the quality of public projects Information asymmetry theory which originated in financial economics and attempts to elaborate on the fact that information is not homogeneously distributed in the market. The

market players possess different and unequal stores of market knowledge and facts.

F. Fiscal Synchronization Theory

The fiscal synchronization theory is also called Revenue-expenditure synchronization. The theory postulates that government expenditure should follow revenue and every expenditure must be synchronized with source of revenue. The theory proposes that financial planning in public sector should be based on pro-cyclical public expenditure policy. The pro-cyclical policy implies that public expenditure should increase during times of boom and go down during recession. However, in most development economies fiscal policy has generally been counter-cyclical in which case spending goes up even during recessions. The revenue-expenditure relationship can lead to a balanced budget or budget deficit or budget surplus. This relationship scenarios are summarised in figure 15 below.

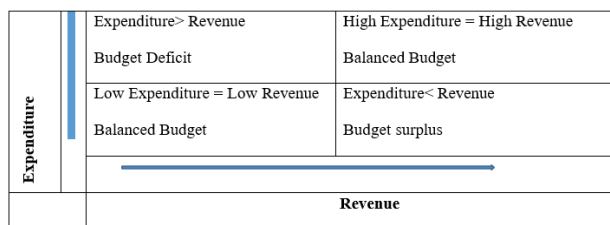


Fig. 15. Illustration of fiscal synchronisation

Budget deficit occurs when public expenditure exceeds national revenue. The amount of expenditure is more than total amount of revenue. According to Saleh (2003) there is a relationship between budget deficits and macroeconomic variables. These macroeconomic variable include gross domestic product, foreign exchange rate, trade deficits and interest rates among others. Empirical results showed that there is relationship between inflation, interest rates and budget deficit within an economy. Consequently, if budget deficits are not well managed they can send an economy to the “south”.

A budget surplus is a situation where government has excessive tax collections relative to the desired level of public

spending. This portrays a phenomenon where the National Treasury of a given economy has some saving after meeting public expenditures. According to James Burton (2017) there are a few countries with budget surplus. These countries include Tuvalu, Macau, Qatar, Tonga, and Palau, Denmark, Germany, Botswana and Qatar. Within these economies, budget surplus is a useful indicator to financial stability. Budget surplus, is a sure sign that the government is running its operations in a proficient way. With a budget surplus, countries such as Denmark and Qatar are able to make substantial improvements in living standards for society without becoming indebted to others.

Balanced budget is a condition where planned expenditure is equivalent to planned revenues. Countries achieve budget that is balanced by utilizing funds from sale of non-recurrent and existing reserves to finance ongoing expenditure. A true structurally balanced budget is one in which there is financial sustainability for multiple year in the future. However, low balanced budget may stifle economic. The possible budget outcome has its own merits and demerits as illustrated in table 2 below.

According to Ghamdi (1991) fiscal synchronization theory argues that there is a relationship between government spending and revenue. This relationship is important so as to facilitate evaluation on how to address fiscal imbalances. Therefore, in the long-run, expenditure decisions are not made in isolation from revenue decisions. The gist of the matter is that changes in expenditure should follow changes in revenue within a given fiscal framework.

Meltzer and Richard (1981) advanced the fiscal synchronisation hypothesis. According to this hypothesis, government decision to spend must be tied to available revenue in order to maximise welfare economics of the citizens. Obioma and Ozughalu (2010) advanced fiscal synchronization hypothesis, which is based on the belief that public revenue and public expenditure decisions are jointly determined. It is, therefore, characterized by contemporaneous feedback or bidirectional causality between government revenue and government expenditure.

Table 2
Merits and demerits of budget outcome

Type of Budget	Merits	Demerits
Budget Deficit	- Accelerates economic growth. - Enables us to undertake welfare activities - Allows government to borrow for targeted public projects	- Leads to public borrowing and interest payments - Vicious cycle of debt, wherein governments have to take additional loans to pay off past debts. - Excessive dependence of a country on debt can hamper economic growth in the long term. - Has been associated with corrupt loans to meet budget deficits - Lowers levels of Investment - Deflationary Effect - Economic Decline
Surplus Budget	- Manifestation of effective government operations - Can provide funds for emergencies - Fights Inflation - Fiscal Flexibility - Low Interest rates - Reduces Government Debt	- The process of economic growth can be hindered. - Welfare activities may be restricted - Could hamstring government in times of economic crisis or other emergencies when additional spending is required.
Balanced Budget	- Ensures financial stability. - Avoids wasteful expenditure. - Helps governments to avoid excessive spending - Allows government to focus funds on areas and services that are critical and a priority - Allows governments to save on interest rate charges that accrue on large loans from lenders	

Fiscal policy therefore in traditional analysis was to address economic dilemma of how to contain tax burden without increasing public expenditure. The desire is to limit tax increases to avoid public revolts, avoidance and evasion. The political public and financial debates have swirled around proposal that tax burdens are beyond ability to pay for the majority of citizens and hinders the ability of the economy to grow. It stifles household consumption and discourages enterprise expansion and additional investments. On the other hand, government must continue spending on public service such as goods, national security, environment protection, transport among others. Because public expenditure is growing at a rate faster than revenues, then public debt swings in. This has therefore led to what is referred to as economic trilemma of taxation, expenditure and public debt. The trilemma is shown in figure 16 below.

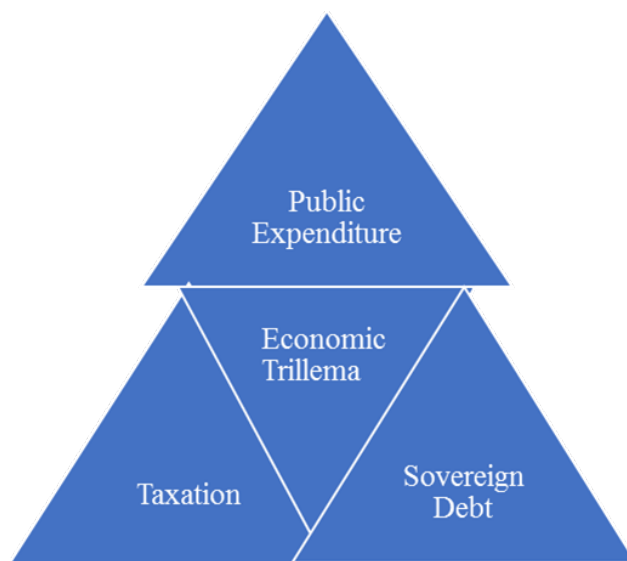


Fig. 16. Illustration of Economic Trilemma

The difficult is how to balance these three variables within an economy. The essence of sovereign debt is to raise funds to meet budget deficits, address fiscal risk within an economy and Maintaining an efficient financial market development. Some governments borrow so that it can enable increased spending without increasing taxes. The question is how to understand how taxation relates to public expenditure; how taxation relates to sovereign debt and how public expenditure relates to public debt.

G. Value for Money Theory

In discussing public expenditure a finance person need to understand that we need to get value for money that is spent. The value for money approach has so far identified areas of calibrating benefits of public expenditure. Jackson Kilimba from ESAMI (2022) defines value for money (VFM) as the optimal application of public resources to achieved planned outcomes. Optimality is the most desired possible results given that public resources operating within restrictions and constraints. The key to achieving good value for money is finding a balance among efficiency, effectiveness, economy

and equity.

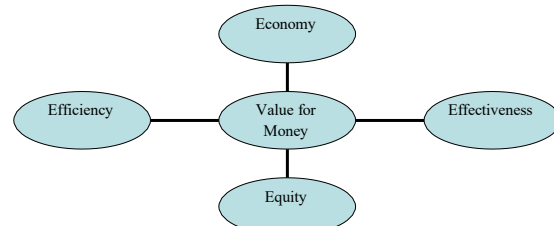


Fig. 17.

VFM is utilizing public resources in a way that creates and maximizes public value. Public resources is an embodiment public projects, prioritization of expenditures, stewardship of assets and raising revenues. Public value is the total well-being of citizens and the economy as a whole. Value for money is seen as an appropriate framework for measuring performance in all organisations. This is because value for money reflects not only the cost of providing a service but also the benefits achieved by providing that service to citizens.

Good value for money is the optimal use of resources to achieve the intended outcomes. Optimal' means the most desirable possible given expressed or implied restrictions or constraints". The key to achieving good value for money is finding an appropriate balance between the 4Es. That balance is obtaining appropriate quantity and quality of resources at the lowest cost possible while optimising the resources for maximum output.

Economy is obtaining the appropriate quantity and quality of resources at the lowest cost possible. Optimising the resources (inputs) which an organisation has. Efficiency can often be measured in terms of the cost of providing a service per unit of resource used, per unit of output, or per beneficiary served (in the context of a service).

Effectiveness is the relationship between the organisation's intended and actual results (outputs); the extent to which it achieves its objectives. For example, one of the indicators which is often used to measure schools' performance is exam results, and this provides a measure of effectiveness. Is the tuition which pupils receive building their knowledge and, in turn, helping them to pass their exams? Potential conflict Between the Three E's Although the aim of value for money is to achieve an appropriate balance between the four Es, though it can often be difficult to achieve.

Equity reflects the extent to which services are available to, and reach, the people they are intended for, and whether the benefits from the services are distributed fairly. For example, if an advice service provided to residents by a local authority is provided in a language that some residents do not speak, those residents will not be able to benefit from the service. Each of the Es aims to achieve different – potentially conflicting – outcomes in an organisation.

The potential conflict are bound to occur when trying to balance the 4 Es. For example, if the number of teachers employed by two schools is the same, but the first school has twice as many pupils as the second, we could say the first school is more efficient, because the staff costs per pupil will be lower.

But there may no effectively learning and teacher distribution has failed to achieve equity

3. Empirical Framework Underpinning Public Projects

A. Government Expenditure and Public Projects

Plotnikova (2005), analysed determinants of government expenditure on public projects in USA. The analysis examined explanatory variables of planning process, project selection and cost estimating techniques and financing practices. The results supported a claim that government spending is determined by public capital and source of its financing, political decision-making factors, infrastructure and control for spending culture, and budget composition/spending rules. Plotnikova (2005) evaluated the variables in a developed economy which is a different contextual environment from a developing economy such as Kenya. Kanano (2006) examined the determinants of public expenditure growth in Kenya for the period 1980 - 2004. The main objective was to analyze government budgetary resource composition and the impact of the government budgetary resources on public expenditure growth. It was concluded that public expenditure is on the rise yet the GDP is marginally increasing to sustain the public expenditure growth. From the findings, it is important that the government avoids over reliance on internal borrowing for financing public projects as this has detrimental effect on economic growth due to crowding out of the private sector.

IMF (2003) proposes that, government expenditure on public projects should be rooted in planning and economic theory and to do so, the projects should be directed by centrally, perhaps by strategic plan. With a strategic plan government may identify and continuously evaluate long-range policy actions and projects that best create economic wealth commensurate with a national's strategic strengths. Aruwa (2010) broad-based conceptual framework on what makes up Quality Public Expenditure (QPE) has been missing and attempts to close this gap by developing an empirical-dimensional approach on QPE. The framework aimed at furthering the findings of previous studies that have so far mostly been studied in isolation by establishing the links between QPE and long-run economic growth, based on a growth-accounting approach. Strongly recommended was that, project expenditure should take account of the nature of expenditure with particular allocation of resources to identified productive areas. The reason for this is that project investments mainly increase productivity. It was however observed that, there is an ambiguity in the array of determinants used in analyzing and the method of measuring public project expenditure. Therefore, there is need for further analysis to address some of this ambiguity, provide a critical examination what determines project expenditure and what policies can then be recommended to alter and improve flagship project expenditure.

Morgues (2012) addressed determinants of public expenditure policies, by reviewing theories and empirical investigations of what features explain the budget process and how the various attributes of actors—including politicians, bureaucrats, interest groups, and donors—and of institutions

and political and economic governance environments affect the prioritization of public projects and investments. He explicitly examined the formal budget process in understanding how decisions are actually made. At the end of it all, it is imperative to establish whether or not there are any systematic economic or other factors that influences how public expenditures are apportioned across competing needs and projects.

B. Planning Process and Project Expenditure

Ndiritu (2007) revealed that the public sector ends up losing huge cash amounts due to lack of established operational plans and strategies to harmonize revenue collection and project expenditure. It was concluded that, poor project planning in making expenditure decisions, rendered these decisions very ineffective. It was however, recommended that for valuable and effective expenditure decisions, there is need to set standards, act in a coordinated and harmonized manner to ensure that the expenditure objectives are achievable. One of the limitation with Ndiritu (2007) was its being a case study that evaluated a single public firm instead of the government expenditures.

Jones et al (2009) argued that, in pursuing public projects and institutional interests, decision-makers are expected to act strategically as advocates, protecting public funds and request small increases from the previous year. Most advocates are, however, risk averse 'adjusters' who proceed through a series of small increments. Certainly, most project implementers are 'incrementalists' who are more concerned with protecting the current level of expenditure rather than maximising allocations and do not entertain a reduction in the expenditure allocations. As a consequence, project expenditure reflect not just their institutional goals, but also the anticipated response, so that final allocations are determined through a process of mutual adjustment. According to Tulkoff et al (2011), PBB is one of the key components of the expenditure planning, programming and budgeting systems reform. PPB is an attempt to use rational means of fusing planning processes, programming efforts, and the expenditure decisions.

While little was really new among these components, the uniqueness was in the attempt to combine planning in determining goals and programs to help achieve them. Programming would assist in administering efforts to efficiently accomplish goals. Expenditure decisions would come up with financial estimates of resources needed by agencies to execute the plans. At the national level, while many countries were using or developing a PPB system, it had not really penetrated the decision making arenas of public entities which is a gap that must filled and see how PPB application in Kenya can be enhanced.

Ottosson and Weissenrieder, (2011) states that, project expenditure proposals should only be considered when they include a detailed disclosure of the expected operating costs, indicating how these are accommodated within existing resource envelopes or making an explicit proposal for additional financing of the operating costs. In addition, the proposals should only be considered after the spending agency has explained how it fully cover the maintenance of its existing fixed assets. PricewaterhouseCoopers (2012) identified the

challenges experienced in government expenditure on public project decisions as; increases in demand-led support and reduced tax incomes and would be delivered more effectively through change in system, processes and policy. One of the recommendations was that, to deliver a perfect expenditure decision, government should apply a mix of approaches ranging from the traditional, through to the forward thinking, innovative (and sometimes controversial) approaches. It is suggested that government should consider budgetary process as a complex mix of environment, rules, practice, values, people and behaviour that is evolving and requires constant effort and work to drive forward reform and improve. The attempt should be focusing on filling gaps on how to deliver government expenditure on public projects with a clear financial framework approach

Qi and Mensah (2012) examined the association between PBB at the government level and aggregated government expenditures and examined whether PBB affects combined functional spending and other expenditures. It was found out that the implementation of PBB was negatively associated with total expenditures from consolidated fund and positively associated with total expenditures from other state funds. The effect of PBB on combined functional spending is significantly negative for functional spending and other expenditures. Qi and Mensah (2012) concluded that PBB is effective in getting state governments to reorganize their spending priorities. These findings and conclusion are very beneficial in providing information about the usefulness of PBB as component of planning process.

According to World Bank (2013), in the middle to late 1990s saw the proliferation of medium term expenditure frameworks (MTEFs) throughout the developing world and many countries are at various stages in the process of adopting MTEFs. The top-down resource envelope is a macroeconomic model that indicates the fiscal targets, revenue estimates and projected expenditures. As such, the main objectives of the MTEF are: improved macroeconomic balance, especially fiscal discipline; better inter- and intra-sectoral resource allocation through linking policy, planning and budgeting; greater budgetary predictability for line ministries; more efficient use of public resources through achieving performance and service delivery at least cost; greater credibility of budgetary decision making; greater political accountability for public expenditure outcomes through more legitimate decision making processes.

C. Project Appraisal Criteria and Project Expenditure

Anuar (2008) pointed out that though it is a good tool, the conventional net present value can lead to erroneous conclusions in the public sector, under-investment or even the loss of opportunities when the flexibility of the investment is ignored. Therefore, it is important for public sector decision-makers to consider various determinants when appraising development investments. This enriches the whole procedure of project expenditure and investment for a better understanding of benefits derived from those investments. Ergas and Robson (2009) examined public project evaluation decision making based on rigorous cost-benefit analysis. It was however

established that significant development projects had been approved either with no cost-benefit analysis or with cost-benefit analysis of poor quality. It was found that the decisions makers paid insufficient attention in the evaluation process to options that would avoid investment, or that would focus on securing greater efficiency from the existing capital stock. It was found that infrastructure investment appeared to be viewed as a benefit, rather than a cost.

Ergas and Robson (2009) recommend that changes to cost-benefit analysis processes were inevitable. These changes includes; cost-benefit analyses to be disclosed and highlight which projects had not been subjected to economic project evaluation; greater and systematic auditing of cost-benefit analyses (both at the stage of the financing decision and post-project completion); establishment of a centre of excellence or reference for cost-benefit analysis (preferably in an independent entity). Beria, Maltese and Mariotti (2011), in comparing cost-benefit analysis (CBA) and Multi-criteria Analysis (MCA) found that these two methodologies present strengths and weaknesses. For instance, MCA does not evaluate public expense efficiency, but only its effectiveness towards the goals achievement. On the contrary, CBA appears less effective in managing some intangible benefits (and costs), which are very relevant, especially at this scale, for achieving sustainable mobility and urban quality of life.

Beria et al (2011), recommends that the joint use of the two methodologies so as to overcome the weaknesses above mentioned, providing a coherent methodology for assessing both efficiency and effectiveness of public policies and projects. The joint use might be done by developing a CBA and evaluating soft effects with a MCA and developing a MCA for a broad screening of options and evaluate public expenditures and consumer surplus with CBA. The joint use can guarantee a deeper analysis (and knowledge) of project priorities and impacts of an action; may drive to contrasting results among the alternatives; does not lead to distortions in the decision, lowering ambiguity and misleading on the hierarchy/prioritization; create a stronger public participation in the process of decision making, spreading out knowledge, not only about the goal, but also about the alternative solutions to problems. However, there is no methodological framework for the implementation of the conjoint methods to scenarios, or real cases. Therefore there is need to build on this state of affairs and attempts must be made to provide methodological framework for determining government expenditure on public projects.

Chen (2011) found out that, project appraisal plays an important role in choosing the right project and is crucial to the final success of public investment projects. The importance of project appraisal rises when the scale of investments increases. It was observed that, some OECD countries have project appraisal mechanisms for major investment projects at either national level or sectoral level. Research questions answered by Chen (2011) include how major public investment projects are proposed and appraised before approval and implementation of the project; what measures are taken to ensure quality at the entry stage before the projects are approved, what kind of documents are required during the application process for the

public financing, what are the roles of central governments, experts, the general public and the political leaders respectively in the process. Based on the Chen (2011) findings it is important that countries like Kenya should begin to develop country specific tools for project appraisal.

D. Sources of Funds and Project Expenditure

Shah (2005) affirmed that most governments use four major vehicles for delivering government expenditure on projects: direct spending through its departments and agencies as recorded in budgetary transactions, direct spending through funds that are not included in the budget, indirect spending through business enterprises it owns or controls, and spending programs delivered through tax system. He established that only the first two items are usually included in expenditure incidence analysis, partly because those are the items that define the government sector in official statistical publications. According to International Monetary fund (2007) source of funds for public development expenditure can take the structure shown in the table 3.

The table 3 represents the possible sources of funding public projects these sources include tax and property revenues, surpluses from current account, proceeds from borrowing, privatization proceed and support from development partners.

Jacobs (2009) indicates that government expenditure on projects should be based on a consolidated budget approach, incorporating all revenues and expenditures, foreign-financed projects and extra-budgetary funds with investment activities. Decisions regarding expenditures should be taken in the context of a hard planned budget constraint. IMF (2010) observed that developed countries may not consciously seek to optimize current-development spending balance, they nonetheless aspire to achieve consistency and efficiency within the context of their on-going resource allocation and budget management decisions. In fact, getting the right balance between current and development spending across whole range of budget interventions and projects depend substantially on the quality of budget planning systems and capabilities. While these issues may involve a much wider range of determinants than simply the extent of budgetary integration per se, there is no doubt that there is need to develop better systems, policies and capabilities in project implementation and resultant expenditure.

Communication and Management Institute (2010) identified various problems associated with the revenue mobilization as: contradiction in the legal framework on revenue mobilization; poor revenue assignment provisions; lack of clarity on revenue bases and revenue sharing system between layers of government; weak incentive or structure for fiscal autonomy;

unclear expenditure needs and financial impact of the transfer of tasks devolved to Local Governments; poor administrative capacity to assess the revenue base and enforce the taxes, political pressure to relax tax administration and revenue collection. Although CMI (2010) touched all the aspects of source of revenue, it failed to give a detailed analysis of how the various sources are used in determining financing of projects. Thus decision makers must explore specific source of funds and established how they determine project expenditure.

Chen (2011) findings show that project appraisal processes differ according to funding sources and scale of projects. He indicated that, funding sources of government investment include direct government investment, capital injection, government and sovereign bonds, government subsidy and interest subsidy. Chen (2011) showed that, major public projects with government funding in the form of direct government investment and capital injection, need approval documents including project appraisal, feasibility study and project design. Direct government funding is for public infrastructure projects which require a dominant role of the government. Capital injection can be used when projects may have significant impacts on the domestic economy and have other strategic importance. For projects that generate profit but need government funding to cover part or all of their investment, the State can carry out investment through purchase of stocks of the project and become the Government owner of shares.

According to Chen (2011) projects expenditure effected through government subsidies take two forms: grants and additional paid-in capitals. For non-profitable projects, government subsidy is a grant and is delivered for free. For projects that generate profits, government subsidy is given in the form of additional paid-in capital or capital surplus. Different from a grant, premium should be paid on the additional paid-in capital/capital surplus. In addition, sovereign bonds may be issued by the government to finance strategic projects. Sovereign bonds could be used when projects contribute to economic and social development and promote development nationwide. The last type of government investment channels is through interest subsidy via bank loans. Although the banking system has undergone significant changes the banking industry still remains in the hands of government since most of the domestic development banks and institutions are owned by the state. The gap in Chen (2011) is that, it did not give PPP as part of a potential source of funding government expenditures.

Al-Zeaud (2011) examined the causal relationship between government revenues and project expenditure. It was

Table 3
Illustration of fiscal synchronization

Source of Funds	Project Expenditures
Taxes and property revenues for development projects	Acquisition of existing fixed assets
Surpluses from the current account	Acquisition of new fixed assets
Proceeds of borrowing:	Development transfers
Domestic	Transfers to other levels of government
External	Transfers to state-owned enterprises
Sales of property and Privatization	Construction of bridges and buildings
Development grants	Purchase of computers, fittings and furniture

Source: International Monetary fund (2007)

established that there was bidirectional causality running between revenues and expenditure, which showed that government, made revenues and expenditures decisions simultaneously. It was also found that allocated expenditures decided the amount of revenues which in turn affected the size of expenditures for the current year and the following year(s). It is recommended project expenditure decision makers need to pay attention to the bidirectional causality between government expenditures and revenues which might complicate the government's efforts to control the budget deficit and may contribute in explaining the high national debt figure (Al-Zeaud, 2011). Al-Khulaifi (2012), which examined the relationship between government revenue and expenditure found government revenue and expenditure were co-integrated. This means that there was a long-run relationship existing between the two variables; Government revenue and government expenditure. Al-Khulaifi (2012) further, showed that there was significant relationship between source of funds and public expenditure decisions.

Petanlar and Sadeghi (2012) investigated the causality and the long-run relationships between government expenditure and government revenue. The findings revealed a positive unidirectional long-run relationship between source of funds and government expenditure. Al-Khulaifi (2012), Adnan and Jalil (2010), and Petanlar and Sadeghi (2012) confirmed findings by Hussain (2003), which determined the relationship between total government expenditures and total tax revenue and found that unidirectional effect from expenditure to revenue suggesting the preference of controlling the spending decisions to reduce the tax revenue-expenditure deficit. However, no findings were established on the level of influence of sources of funds on the specific public project expenditure.

From the Kenya Economic Survey, 2010, (Republic of Kenya, 2010) the main sources of public finance in Kenya are tax revenue (taxes on income profit and capital gains). In addition there are licensing fees which are received for paying for a permit or license. They may seem like a tax as well and not much different, but it should be treated as a separate government revenue stream. The reason being is that many licensing and permit programs charge to pay for their particular oversight function. More important, many licenses and permit revenues are purpose specific, which, unlike taxes, makes sure they are not used for general purpose spending in a government. However, development partners funding cannot be wished away.

E. Management Responsibility and Project Expenditure

According to Ablo and Reinikka (1998), development expenditure tracking surveys revealed that in Uganda only 30% of resources intended for non-salary education and health services actually reached the field level. The Government of Uganda's solution has been to introduce conditional grants, paid by Ministry of Finance and Economic Planning to Districts, who are required to pass the full amount on to schools at a standard rate per pupil enrolled, with mechanisms to ensure transparency. Shapiro (2006) emphasizes that, where performance is taken into consideration in determining

expenditure, it provides significant incentives for personnel, even if the pecuniary rewards are not significant. Shapiro recommends that, financial incentives may also be used to promote desirable institutional behaviour. For example, where agencies are allowed to carry-over efficiency savings at the end of the financial year they have a clear incentive to cut-costs since they are the beneficiaries of these savings. This is not the case where, as in most countries, savings have to be surrendered to the common fund. The logical conclusion of this approach is that government expenditure can be controlled by restricting inputs since appropriate targets and incentives have been put in place.

Since decision makers have a better understanding of citizens' needs than central agencies and politicians, expenditure targeting can allow managers to improve on the decisions they make. This has been the approach favoured under New Public Management reforms (Strehl, Reisinger & Kalatschan, 2007). Strehl, Reisinger & Kalatschan, (2007) findings indicates that, effective expenditure management and accountability may not exist in many developing countries. In fact, contracts may not be enforced; patron-client relationships may prevail, making it difficult to associate performance or non-performance with expenditure budgetary allocations. Fozzard and Foster (2001) concluded that, managerial approach implies a wider institutional scope than has traditionally been the case, extending beyond the core functions of Ministries of Finance to include expenditure management at agency level, down to the point where clients and citizens access public services. At the same time, public expenditure management has also moved upstream, recognizing that expenditures are policy decisions and that system performance can only be assessed in relation to policy goals. In tandem with the new focus on performance, public expenditure decision and management systems have also come to be viewed as a key instrument of governance. Consequently, public expenditure decisions should not only be transparent and accountable, but also involve citizens in decision making.

Public finance has been re-focusing requirement to produce annual statements of intent that emphasize a strategic outcomes framework (Webber, 2004). An explicit consequence of this focus has been less reliance on the previous, narrower, output-based planning. This more explicit focus on outcomes in the planning process is required to be reflected and reinforced by parallel adjustments in post-performance reporting. It was also shown that by shifting budget focus from accounting for input to output; devising performance measures and moving toward more appropriate accounting standards, were instrumental in underpinning in ensuring transparency and accountability. This status of affairs was referred to as the second generation of fiscal rules and frameworks, an innovation where transparency and accountability are essential elements. The credibility of fiscal rules and objectives is strengthened if such measures are accompanied by enhanced fiscal transparency, as this openness complements a rules-based approach in three ways: by removing any tendency to be nontransparent to meet rules; by facilitating judgments of actual fiscal performance against rules, which makes transparency an essential requirement for

rules to be effective; and by allowing justifiable flexibility in the application of rules.

Webber (2004) insists the need for transparency and accountability in project expenditure which is an essential element of the expenditure analysis. However, they failed to show how ensuring transparency and accountability determines project expenditure in the public sector. Rauchhaus (2009) shows that, while it is possible to improve the credibility of government expenditure decisions by improving the design of budget procedures and institutions, this fails to resolve the underlying problem: agents act against the principals' interests because their interests diverge. One means of resolving this is through performance management systems. Targets should be set for public agencies and staff, linked to Government's policy goals, and mechanisms should be established to monitor projects against these measures.

Jones et al (2009), gave an insight into the nature of project expenditure budgeting, its intellectual justification, its antecedents, and its present and future use in the public sector. They observed that, it is not a straight forward task and cannot exhaustively be explained how responsibility expenditure decision is used and how it works. Responsible expenditure decisions make sense only as a part of a framework of structural, procedural, and monitoring and reporting relationships. At the same time, responsibility budgeting and accounting, or their functional equivalents, make an essential contribution to the efficacy of this broader framework of relationships. Jones, et al (2009) asserts that the efficacy of administrative relationships depends upon their congruity with each other as well as with the purposes and products of the entity in question and the productive and information processing technologies available to it. Researchers and finance experts, based on these findings can investigate management responsibility as a determinant of government expenditure on public projects.

4. Conceptualising Determinants of Government Expenditure on Flagship Projects

A. Basic Conceptual Framework

Conceptual framework is an attempt to explain the key concepts, constructs, indicator and variables and the relationship between and among that are under study and or analysis. This section highlights the various relationship that exist when one wants to analyse public flagship projects. Based on theory and empirical literature finance experts conceptualize that, government expenditure on public flagship project can be determined by the planning process, project appraisal criteria applied, source of funds and management responsibility. However, this relationship is also subject to be moderated and mediated by other variables which affect government expenditure.

Finance experts indicate that from empirical literature there are various factors that influence public expenditure. These include inflation, foreign exchange rates, gross domestic product, population intensity, planning process, sources of funds, management target among others. Public projects have

potential to open new markets, lower private production costs, reduce transaction costs, increase competition and provide model solutions to specific problem areas. This relationship between government expenditure and expected results can also be modelled. The diagrammatic representation of this relationship is shown figure 17 below.

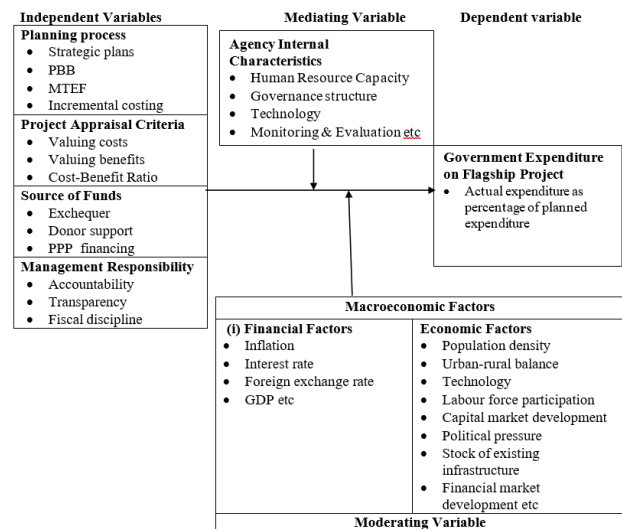


Fig. 17. Illustration of conceptual framework for flagship projects

The conceptual framework in Fig 17 above consists of the independent variables on the left and dependent variable on the right. The planning process can be evaluated based on various indicators such as strategic plans, MTEF, PBB and incremental costing while project appraisal criteria is a composite of valuing cost, valuing benefits and cost-benefit ratio. The source of funds components can be exchequer, development partners and public-private partnerships. The exchequer support are funds availed by the National Treasury. The indicators for management responsibility are usually fiscal discipline, transparency and accountability. Government expenditure on the flagship projects is operationalised by calculating actual expenditure as a percentage of planned cost outlay for the project.

B. Constructing Moderation Process

Moderation occurs when public expenditure decision on flagship projects is influenced by some other factors outside the implementing agency. These factors include macroeconomic variables such as inflation, Interest rate, changes in gross domestic product, foreign exchange rate, increase in target population among others. When one intends to construct moderation using macroeconomic factors the diagrammatic representation may be extracted and represented as shown in figure 18 below.

Rockwood and Hayes (2020) point out that moderation occurs when the effect of a variable to another depends on another variable. It was argued that moderating effect can be modelled by getting the product effect of independent variables and moderating variable. The moderating effect model is to evaluate the effect of macroeconomic variable on the relationship between independent variable and government

expenditure. For example using panel regression the moderating effect will be as shown in model 3.1 below.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 M_{it} + \beta_5 X_{1it} * M_{it} + \beta_6 X_{2it} * M_{it} + \beta_7 X_{3it} * M_{it} + \mu_t$$

Model 3.1

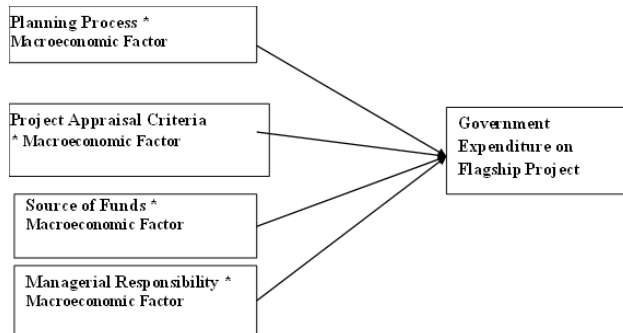


Fig. 18. Illustration of Moderation Effect Model

Where:

- Y_{it} is the government expenditure on flagship project at time t ;
- X_{1it} is the planning process for implementing agency i at time t ;
- X_{2it} is the project appraisal result for implementing agency i at time t ;
- X_{3it} is the source of funds for implementing agency i at time t ;
- X_{4it} is the management responsibility for implementing agency i at time t ;
- M_t is the measure of macroeconomic variable in the analysis at time t ;
- $X_{it} * M_t$ is the interactive product of each of the independent variable and macroeconomic factor for implementing agency i at time t ;
- μ_t is the error term take care of stochastic variations at time t .

The parameters $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 are coefficients for the moderating effect. These parameters are to measure the amount of change in Y_{it} due to a unit change in the respective product effect of the variables. Moderating effect is said to exist when β_5, β_6 and β_7 are statistically significance.

1) Constructing Mediation Process

Mediation refers to a situation that includes three or more variables, such that there is a causal process between all the variables. In mediation relationship, there is a direct effect between an independent variable and a dependent variable. There are also indirect effects between an independent variable and a mediator variable, and between a mediator variable and a dependent variable. The mediating variables may be the internal factors that affect the decision maker such as human capacity, governance structure, technology, monitoring system among others. The diagrammatic representation of this relationship is shown figure 19 below.

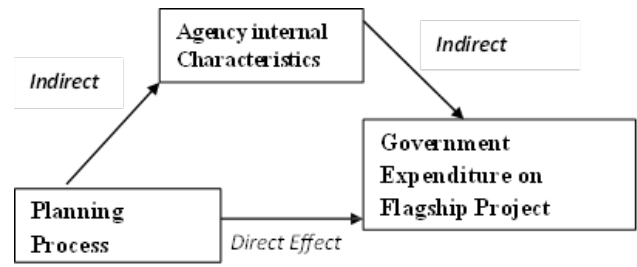


Fig. 19. Illustration of mediation effect model

The main difference from the moderation model is that we now allow for causal relationships between the variables. When we include a mediator variable, that direct effect will change as a result of decomposing the causal process into indirect effect of agency internal characteristics. The degree to which the direct effect changes as a result of including the mediating variable of is referred to as the *mediational effect*.

Generally, a mediation model like the one above can be implemented by doing a series of separate regressions. Mediating effect model is used to compare the relationship between dependent and independent variables before and after adjustment for mediating variable. Most analysis uses the approach suggested by Baron and Kenny (1986) four stage mediation analysis. In stage I the analysis attempts to establish whether there is direct statistically significant relationship between independent variable and dependent variable. In stage II the analysis aims to establish whether independent variable has a statistical significant effect on mediating variable. In stage III one conduct analysis to show whether there is statistical significant effect of mediating variable on independent variable. The last stage is determine whether independent variables have statistical significant effect on dependent variable when regressed together mediating variable. For example using panel regression the mediating effect model is as reflected in model 3.2 below.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 C_{it} + \mu_t$$

Model 3.2

Where:

- Y_{it} is the government expenditure on flagship project at time t ;
- X_{1it} is the planning process for implementing agency i at time t ;
- X_{2it} is the project appraisal result for implementing agency i at time t ;
- X_{3it} is the source of funds for implementing agency i at time t ;
- X_{4it} is the management responsibility for implementing agency i at time t ;
- C_{it} is the agency internal characteristics for implementing agency i at time t ;
- μ_t is the error term across time period of analysis for firm i at time t .

Stage 1 to 3 are used to ascertain the existence of zero order associations amongst the variables. The mediating effect is to be determined by comparing the relationship before and after

adjusting for internal characteristics for implementing agency. The mediating effect is said to exist when β_4 in model 3.4 is statistically significant. The basis for highlight the above conceptual framework is to help researchers, scholars and finance experts to be design a researchers that can provide eventful information on public finance especially on flagship projects.

In attempting to model the relationship the analyst has the option of choosing the appropriate empirical model. These empirical models include multiple regression, panel data analysis, probit regression, structural equation, discriminant analysis, among others.

5. Conclusion

This paper presented an overview on public flagship projects, basic understanding and perspective from Kenya as a developing economy

References

- [1] H. Abdullah and S. Maamor, "Relationship between National Product and Malaysian Government Development Expenditure: Wagner's Law validity application," *Int. J. Bus. Manage.*, vol. 1, no. 5, pp. 88–97, 2010.
- [2] E. Ablo and R. Reinikka, "Do budgets really matter? Evidence from public spending on education and health in Uganda," World Bank, Washington, DC, USA, Policy Research Working Paper 1926, 1998.
- [3] Q. M. Adnan and A. Jalil, "Revenue and expenditure nexus: A case study of Romania," *Rom. J. Fiscal Policy (RJFP)*, vol. 1, no. 1, pp. 22–28, 2010.
- [4] A. S. Al-Khulaifi, "The relationship between government revenue and expenditure in Qatar: A cointegration and causality investigation," *Int. J. Econ. Finance*, vol. 4, no. 9, pp. 142–148, 2012.
- [5] H. A. Al-Zeaud, "Government revenues and expenditures: Causality tests for Jordan," *Interdiscip. J. Contemp. Res. Bus.*, vol. 4, no. 7, 2011.
- [6] M. A. Anuar, "Appraisal techniques used in capital investments: Conventional capital budgeting and real options approach," Ph.D. dissertation, Loughborough Univ., Loughborough, U.K., 2005.
- [7] C. S. Aneshensel, "Univariate analysis: Central tendency, spread, and associations," Univ. of California, Los Angeles, Los Angeles, CA, USA, Instructional Paper, 2004.
- [8] S. A. A. Aruwa, *The Quality of Public Expenditures in Nigeria*. Kaduna, Nigeria: Nigerian Defence Academy, 2010.
- [9] E. Babbie and J. Mouton, *The Practice of Social Research: South African Edition*. Cape Town, South Africa: Oxford Univ. Press Southern Africa, 2001.
- [10] J. E. Bartlett, J. W. Kotlik, and C. Higgins, "Organizational research: Determining appropriate sample size in survey research," *Inf. Technol., Learn., Perform. J.*, vol. 19, no. 1, pp. 43–50, 2001.
- [11] P. Beria, I. Maltese, and I. Mariotti, "Multicriteria versus cost benefit analysis: Comparative perspective in the assessment of sustainable mobility," *Eur. Transp. Res. Rev.*, vol. 4, no. 3, pp. 137–152, 2011.
- [12] N. E. Bowie and R. E. Freeman, *Ethics and Agency Theory: An Introduction*. New York, NY, USA: Oxford Univ. Press, 1992.
- [13] C. Brooks, *Introductory Econometrics for Finance*. New York, NY, USA: Cambridge Univ. Press, 2008.
- [14] W. Chen, "A review on the project appraisal processes for major public investments in China," Master's thesis, Faculty of Engineering Science and Technology, Norwegian Univ. of Science and Technology, Trondheim, Norway, 2011.
- [15] Communication and Management Institute, "Report on a study to identify sources of revenue, revenue mobilization capacity and expenditure needs in mountainous (Himali) districts," Communication and Management Institute Publishers Ltd., Kathmandu, Nepal, Rep., 2010.
- [16] H. Ergas and A. Robson, "The 2008–09 fiscal stimulus packages: A cost benefit analysis," Crawford School of Economics and Government, Australian National Univ., Canberra, ACT, Australia, Res. Rep., 2009.
- [17] European Union, "Digital Agenda for Europe: A Europe 2020 initiative," European Commission, Brussels, Belgium, Rep., 2014.
- [18] J. Ferejohn, "Incumbent performance and electoral control," *Public Choice*, vol. 50, no. 1–3, pp. 5–25, 1986.
- [19] N. J. Foss, "Agency theory in management," *Organizations and Markets*, Aug. 17, 2007. [Online]. Available: <http://organizationsandmarkets.com/2007/08/17/agency-theory-in-management/>
- [20] A. Fozzard and M. Foster, *Changing Approaches to Public Expenditure Management in Low-Income Aid Dependent Countries*. Tokyo, Japan: United Nations Univ. Press, 2001.
- [21] S. Gailmard and J. W. Patty, "Slackers and zealots: Civil service, bureaucratic discretion, and policy expertise," *Am. J. Polit. Sci.*, vol. 51, no. 4, pp. 873–889, Oct. 2007.
- [22] D. A. Good, "Still budgeting by muddling through: Why disjointed incrementalism lasts," *Policy Soc.*, vol. 30, no. 1, pp. 41–51, 2011.
- [23] Government Finance Officers Association, *Zero-Base Budgeting: Modern Experiences and Current Perspectives*. Chicago, IL, USA: Government Finance Officers Association, 2011.
- [24] L. G. Grimm and P. R. Yarnold, Eds., *Reading and Understanding Multivariate Statistics*. Washington, DC, USA: American Psychological Association, 1995.
- [25] C. Hertzog, "Research design and issues in aging and cognition," in *Cognition and Aging: Research Methodologies and Empirical Advances*, Washington, DC, USA: American Psychological Association, 1995, pp. 161–179.
- [26] HM Treasury, *The Green Book: Appraisal and Evaluation in Central Government*, Treasury Guidance, London, U.K.: The Stationery Office, 2013.
- [27] C. J. Huberty and S. Olejnik, *Applied MANOVA and Discriminant Analysis*, 2nd ed. Hoboken, NJ, USA: John Wiley & Sons, 2006.
- [28] M. H. Hussain, "On the causal relationship between government expenditure and tax revenue in Pakistan," *Lahore J. Econ.*, vol. 9, no. 2, pp. 105–120, 2004.
- [29] Institute of Economic Affairs, "Budget 2013/14: The onset of the devolved government and the hurdles ahead," Institute of Economic Affairs, Nairobi, Kenya, Budget Policy Brief, 2013.
- [30] International Monetary Fund, *World Economic Outlook April 2010: Rebalancing Growth*. Washington, DC, USA: International Monetary Fund Publication Services, 2010.
- [31] International Monetary Fund, *Performance Budgeting: Linking Funding and Results*, M. Robinson, Ed. Washington, DC, USA: Palgrave Macmillan, 2007.
- [32] D. F. Jacobs, "Capital expenditures and the budget," Public Financial Management Technical Guidance Note 8, Fiscal Affairs Department, International Monetary Fund, Washington, DC, USA, 2009. [Online]. Available: <http://blog-pfm.imf.org/files/capital-expenditures-and-the-budget.pdf>
- [33] J. Jin and H. Zou, "Fiscal decentralization, revenue and expenditure," *Econ. Transition*, vol. 13, no. 2, pp. 271–291, 2005.
- [34] B. D. Jones *et al.*, "A general empirical law of public budgets: A comparative analysis," *Am. J. Polit. Sci.*, vol. 53, no. 4, pp. 855–873, Oct. 2009.
- [35] Kenya Institute for Public Policy Research and Analysis (KIPPRA), *Kenya Economic Report 2013*. Nairobi, Kenya: KIPPRA, 2013.
- [36] A. G. Kanano, "Determinants of public expenditure growth in Kenya," Master's thesis, Univ. of Nairobi, Nairobi, Kenya, 2006.
- [37] J. C. Kathuri and D. A. Pals, *Introduction to Educational Research*. Njoro, Kenya: Egerton University Education Book Series, 1993.
- [38] S. Kvale, *Doing Interviews*. Thousand Oaks, CA, USA: SAGE Publications, 2007.
- [39] M. Labonte, "The size and role of government: Economic issues," Congressional Research Service, Washington, DC, USA, Rep. RL32162, 2010.
- [40] R. Levačić, "Teacher incentives and performance: An application of principal–agent theory," *Oxford Dev. Stud.*, vol. 37, no. 1, pp. 33–46, 2009.
- [41] L. W. Martin and G. Vanberg, "Multiparty government, fiscal institutions, and public spending," *SSRN Electron. J.*, 2013. [Online]. Available: <http://ssrn.com/abstract=2020533>
- [42] K. McKie and N. van de Walle, "Toward an accountable budget process in Sub-Saharan Africa: Problems and prospects," *Soc. Res.*, vol. 77, no. 4, pp. 1281–1310, 2010.
- [43] K. Mogues, "What determines public expenditure allocations? A review of theories, and implications for agricultural public investment," International Food Policy Research Institute (IFPRI), Washington, DC, USA, Discussion Paper 01249, 2012.

- [44] O. M. Mugenda and A. G. Mugenda, *Research Methods: Quantitative and Qualitative Approaches*. Nairobi, Kenya: African Centre for Technology Studies (ACTS) Press, 2003.
- [45] R. A. Musgrave, *The Theory of Public Finance: A Study in Public Economy*. New York, NY, USA: McGraw-Hill, 1959.
- [46] National Conference of State Legislatures, "What is zero-base budgeting?" NCSL, Denver, CO, USA, 2011. [Online]. Available: <http://www.ncsl.org/default.aspx?tabid=12578>
- [47] G. M. Ndiritu, "Effectiveness of cash budgeting in public institutions: A case study of Telkom Kenya Ltd," Master's project, Univ. of Nairobi, Nairobi, Kenya, 2007.
- [48] C. Okafor and O. Eiya, "Determinants of growth in government expenditure: An empirical analysis of Nigeria," *Res. J. Bus. Manage.*, vol. 5, no. 1, pp. 44–50, 2011.
- [49] C. O. Otiende, "Factors affecting implementation of the Kenya Vision 2030 strategy in public sector: Kenyatta International Conference Centre," Master's thesis, School of Business, Kenyatta Univ., Nairobi, Kenya, 2013.
- [50] E. Ottosson and F. Weissenrieder, "Linking capital allocation to individual capital expenditure decisions," CVA Development AB, Stockholm, Sweden, Res. Rep., 2011.
- [51] D. A. Palmer, "Financial management development," Financial Management Development, Rep., 2012. [Online]. Available: www.FinancialManagementDevelopment.com
- [52] S. K. Petanlar and S. Sadeghi, "Relationship between government spending and revenue: Evidence from oil exporting countries," *Int. J. Econ. Manage. Eng. (IJEME)*, vol. 2, no. 2, pp. 33–35, 2012.
- [53] P.-R. Agénor, "A theory of infrastructure-led development," Centre for Growth and Business Cycle Research, Univ. of Manchester, Manchester, U.K., Discussion Paper Series 83, 2006.
- [54] M. Plotnikova, "The effect of a capital budget on capital spending in the United States of America," Master's thesis, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA, 2005.
- [55] PricewaterhouseCoopers, "Good budgetary processes: Comparators case studies from the public and private sector," National Audit Office, London, U.K., Rep., 2012.
- [56] P. A. Pyhrr, "Zero-base budgeting," *Harv. Bus. Rev.*, vol. 48, no. 6, pp. 111–121, Nov.–Dec. 1970.
- [57] Y. Qi and Y. M. Mensah, "An empirical analysis of the effect of performance-based budgeting on state government expenditures," China University of Petroleum, Beijing, China, Working Paper, 2012.
- [58] R. Rauchhaus, "Principal-agent problems in humanitarian intervention: Moral hazards, adverse selection, and the commitment dilemma," *Int. Stud. Q.*, vol. 53, no. 4, pp. 871–884, Dec. 2009.
- [59] Republic of Kenya, Vision 2030: First Medium Term Plan (2008–2012) – A Globally Competitive and Prosperous Kenya. Nairobi, Kenya: Government Printer, 2008.
- [60] Republic of Kenya, *Kenya Economic Survey 2010*. Nairobi, Kenya: Government Printer, 2010.
- [61] Republic of Kenya, *Programme Based Budgeting Manual*. Nairobi, Kenya: Ministry of Finance, 2011.
- [62] Republic of Kenya, *Eye on Budget, Spending for Results: Comprehensive Public Expenditure Review*. Nairobi, Kenya: Ministry of Devolution and Planning, 2013.
- [63] Republic of Kenya, The Strategy for Public Finance Management Reforms in Kenya (2013–2018). Nairobi, Kenya: National Treasury, 2013.
- [64] Republic of Kenya, *Second Annual Progress Report on the Implementation of the First Medium Term Plan (2008–2012) Kenya Vision 2030*. Nairobi, Kenya: Ministry of State for Planning, National Development and Vision 2030, 2011.
- [65] J. Rowley, "Designing and using research questionnaires," *Manage. Res. Rev.*, vol. 37, no. 3, pp. 308–330, 2014.
- [66] S. Gailmard, "Accountability and principal–agent models," in *The Oxford Handbook of Public Accountability*, M. Bovens, R. E. Goodin, and T. Schillemans, Eds., Oxford, U.K.: Oxford Univ. Press, 2014, pp. 90–105.
- [67] A. Schick, "An inquiry into the possibility of a budget theory," in *New Directions in Budget Theory*, I. S. Rubin, Ed., Washington, DC, USA: Georgetown Univ. Press, 1988, pp. 56–69.
- [68] A. Shah and J. von Hagen, *Budgeting and Budgetary Institutions*. Washington, DC, USA: World Bank, 2007.
- [69] S. P. Shapiro, "Agency theory," *Annu. Rev. Sociol.*, vol. 31, pp. 263–284, 2005.
- [70] South African Medical Research Council, "Flagship projects: Request for applications (RFA)," SAMRC, Cape Town, South Africa, Call for Proposals, 2013.
- [71] F. Strehl, S. Reisinger, and M. Kalatschan, "Funding systems and their effects on higher education systems," OECD Education Working Papers 6, OECD Publishing, Paris, France, 2007.
- [72] M. M. Tatsuoka, *Multivariate Analysis: Techniques for Educational and Psychological Research*. New York, NY, USA: John Wiley & Sons, 1971.
- [73] M. L. Tulkoff, C. V. Gordon, R. D. Dubin, and W. P. Hinkle, "Planning, Programming, and Budgeting System (PPBS)," Institute for Defense Analyses, Alexandria, VA, USA, Rep., 2011.
- [74] United Nations Industrial Development Organization (UNIDO), *Public Goods for Economic Development*. Vienna, Austria: UNIDO Publication, 2008.
- [75] K. Weaver and J. K. Olson, "Understanding paradigms used for nursing research," *J. Adv. Nurs.*, vol. 53, no. 4, pp. 459–469, Feb. 2006.
- [76] D. Webber, "Managing the public's money: From outputs to outcomes – and beyond," *OECD J. Budgeting*, vol. 4, no. 2, pp. 101–122, 2004.
- [77] World Bank, *Public Expenditure Management Handbook*. Washington, DC, USA: World Bank, 1998.
- [78] World Bank, *The Kenya Economic Update: Time to Deliberate*, 8th ed. Washington, DC, USA: World Bank, 2013.