ABSTRACT
This paper assesses the owner managers’ perception of the impact of regulations on competitiveness of food processors in Tanzania. Specifically, the paper examines the perceived relevance of existing regulations in the food processing sector, the level of enterprises’ satisfaction with the regulatory authorities in the sector and the extent to which competitiveness of food processors is affected by regulations. Based on review of the legislations directed to the food processing sector and the results of a survey of 115 firms, the findings reveal that even though most enterprises appreciate the value of regulating the food sector, they are relatively dissatisfied with the level of services offered by regulatory authorities. The study also shows that due to over-regulation, enterprises operating in the food processing sector incur significant compliance costs, and this cost is detrimental to their competitiveness. In view of the theory of regulation, the paper recommends the review of regulatory framework by ensuring that regulations in the food sector are implemented based on the principles of the Regulatory Impact Assessment (RIA). Further research is also recommended to advance the theory of regulation in a context of the developing economy, and to inform policy makers on how best to harmonise regulations in highly regulated sectors.

Key words: Regulatory Framework, Enterprises’ Competitiveness, Compliance Costs

INTRODUCTION
The issue of regulations in the food processing sector and their effects on competitiveness of the sector has received little attention in both academic and policy related literature (Den Hertog, 2010). Most studies on regulations (e.g. ESRI, 2007; Poppe et al., 2008; Den Hertog, 2010) mainly focus on the general regulatory frameworks and are mostly based in developed countries. At the conceptual level, overriding views of regulations are still contradictory. On one hand, regulations are
generally seen as “a set of “incentives” established either by the legislature, government, or public administration that dictate conditions on the behaviour of citizens or enterprises” (OECD, 1994). On the other hand, it is argued that regulations always lead to socially sub-optimal outcomes because of “inefficient bargaining power between interest groups over potential utility rents” (Chittenden et al., 2003; Sanjay and Dennis, 2009). In many instances, regulations have been widely criticised by business associations, researchers and industry stakeholders as they act as one of the key barriers to business performance and growth (Charles, 2012; TAMPA, 2010; CTI, 2011; TDB, 2011). The argument is that most regulators impinge upon the competitiveness of the highly regulated sectors such as food processing by increasing the cost of doing business (TAMPA, 2010).

Despite the fact that the food processing sector is considered to be one of the vital economic contributors in Tanzania, accounting for 34% of manufacturing firms (URT, 2009), and the sector is highly regulated, there are limited studies on how regulations affect competitiveness of the food processors. Notwithstanding, the fact that several studies (e.g. Stevenson and St-Onge, 2005, ILO, 2003, Charles, 2009) identify regulations as one of the major limitations to performance of the private sector in Tanzania, none of the existing studies has attempted to provide a deeper understanding of the specific regulations directed to the food sector and the extent to which food processors are affected by regulations. Lack of evidence on how regulations affect the performance and competitiveness of the food processors is strange as the degree of regulation in the sector is increasing because of public concern about food safety and hygiene. Therefore, research focusing directly on how regulation generates its effects, and under what circumstances, is particularly useful in attempting to understand the role played by regulation in competitiveness of food processors.

It should be noted that in the presence of a number of economic policies that aim to promote private sector in Tanzania, there are also several policies highlighting the rationale for regulating food processors and promoting product quality and safety standards. The National Health Policy, for example, guides the establishment of the Tanzania Food, Drugs and Cosmetics Act enacted for purposes of regulating, *inter alia*, food and food products manufactured and/or imported in the country. The Food and Nutrition Policy(1992) covers extensively the issue of food hygiene and categorically insists that food quality and standard must be maintained. For the purpose of ensuring that the processed food stuffs meet nutritional requirements, the policy emphasises the need to control quality and standards of food. The government has therefore established a number of regulatory authorities to regulate food processing. These regulators govern the business registration, licensing, permits and inspections. There are also regulations designed to ensure that business operations comply with standards of protecting public
health, safety and environment. The government has enacted laws and acts in every business aspects to safeguard areas which regulators are mandated to govern. It has also enacted regulations which provide for regulatory authorities to collect fees and charges from enterprises to finance their activities and operations.

An outstanding empirical question that calls for a thorough investigation in the food processing sector is whether regulatory environment has a significant effect on competitiveness of food processing firms. Even with the understanding of effect of regulations on enterprises operating in the sector, there is also a knowledge gap on the areas in which regulations become a burden to the businesses. More specifically, the presence of so diverse regulations and plethora of laws which provide for the regulatory authorities to regulate food processors (CTI, 2011), makes an analysis of regulatory impact on those enterprises an important research area. Notably, the extant literature on regulations in the food processing sector does not depict thoroughly the relevance of each authority regulating the sector. Besides the concerns of food processors on the service delivery by regulators, the level of satisfaction of enterprises with the operation of regulatory authorities is unclear. This leaves a knowledge gap on how regulators are perceived by enterprises and on the degree of the enterprises’ satisfaction with the services offered by the regulatory agencies dealing with the food processors. Further, studies focusing on how enterprises perceive the effect of regulations on their competitiveness are almost absent. Therefore, studying the enterprises’ perception of regulators and their impact is essential as in most cases businesses comply with regulations to the extent that they see them as legitimate. In order to understand the prospects for compliance, it is important to understand the perception of people who run businesses that prepare food for public consumption.

In view of the above background, this paper aims to assess owner managers’ perception of the impact of regulations on competitiveness of food processors in Tanzania. Specifically, it examines owner managers’ perception of the relevance of existing regulations in the food sector, the level of enterprises’ satisfaction with the regulatory bodies in the sector and the owner managers’ perception of the effects of regulations on their competitiveness. The paper makes both theoretical and empirical contributions on the issue of regulations in the food sector. Theoretically, it builds on the existing theories of regulation to explain how the regulatory framework affects the food processing sector particularly in the context of a developing economy. In this way, it widens the knowledge on the role of regulatory framework in the success or failure of the sector. The research methodology adopted in the study that generated the findings presented in this paper provides some insights on how to measure the impact of regulations on enterprises’ competitiveness. On the practical aspect, the paper can
THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Defining Regulations
In the literature, there is no fixed definition of the term ‘regulation’. Some researchers (e.g. Den Hertog, 2010) consider and evaluate various definitions and attempt through systematisation to make the term amenable to further analysis. The OECD (1994) defines ‘regulation’ as: “a set of “incentives” established either by the legislature, Government, or public administration that mandates or prohibits actions of citizens and enterprises. According to the OECD, regulation covers “the full range of legal instruments and decisions through which governments establish conditions on the behaviour of citizens or enterprises”. Irwin (2008) defines ‘regulation’ as all statutory requirements, whether enacted by Parliament or by local government or additional rules prepared by agencies such as the tax authority. Regulation is also defined as “any government measure or intervention that seeks to change the behaviour of individuals or groups (BRTF, 2003). In Den Hertog’s, (2010) article, regulation is taken to mean the employment of legal instruments for the implementation of social-economic policy objectives. A characteristic of legal instruments is that individuals or organizations can be compelled by government to comply with prescribed behaviour under penalty of sanctions.

A distinction is often made between economic and social regulation (Viscusi, et al., 1997). Economic regulation consists of two types of regulations: structural regulation and conduct regulation (Kay and Vickers, 1990). ‘Structural regulation’ is used for regulating market structure (restrictions on entry and exit and rules against individuals supplying professional services in the absence of recognized qualifications), while conduct regulation’ is used for regulating behaviour in the market (price control, rules against advertising and minimum quality standards) (Den Hertog, 2010). Social regulation comprises regulation in the area of the environment, labour conditions (occupational health and safety), consumer protection and labour (equal opportunities and so on). Instruments applied here include regulation dealing with the discharge of environmentally harmful substances, safety regulations in factories and workplaces, the obligation to include information on the packaging of goods or on labels, the prohibition of the supply of certain goods or services unless in the possession of a permit and banning discrimination on race, skin colour, religion, sex, or nationality in the recruitment of personnel (ibid). This study mainly focuses on the social regulations,
though not excluding economic regulations completely. Social regulations are the ones that are mostly exercised by the regulatory authorities in Tanzania.

**Economic Theories of Regulation**

The theory of regulation has developed along two major lines of thinking. The first group of regulation theories proceeds from the ‘public interest theories of regulation’ which assume that, an economic regulation is premised on the existence of significant market failures to protect public interests (Jalilian et al., 2006). These theories suggest that market failures may be more pronounced in developing countries and therefore the case for public regulation is stronger in those countries (Stiglitz, 1998). However, it is increasingly recognized that the existence of market failure does not mean that government regulations can necessarily improve upon the unregulated market, especially when one considers the positive role of market mechanisms (Antle, 1996).

The second group of economic traditions of regulation is the private-interest one that looks at regulations from the group interest perspective (Den Hertog, 2010). These theories suggest that a lot of regulations will create economic inefficiency. For example, the capture theory argues that regulation always leads to socially sub-optimal outcomes because of “inefficient bargaining between interest groups over potential utility rents” (Newbery, 1998). The theory of comprehensive rationality posits that political decision makers are self-interested utility maximizers who hold stable preferences and objectives and make strategic decisions to maximize the personal benefits of a given choice (Jonase et al., 2006). In the Chicago tradition of regulatory capture (Stigler, 1971), regulators are presumed to favour producer interests because of the concentration of regulatory benefits and diffusion of regulatory costs, which enhances the power of lobbying groups as rent seekers.

From the theories of regulation reviewed, various observations are made. First, it is possible that the market failure highlighted by the public theories of regulation to be removed by market factors. Through a strongly increasing demand for, for example, transport facilities, a natural monopoly can change into a competitive market (Den Hertog, 2010). Second, there could be more efficient alternatives to regulation for solving the problem of market failure. It is also possible that better insight exists into the envisaged and non-envisaged effects of regulations. The Chicago theory of regulation postulates that shifts can come about in the relative political power of pressure groups, for example, as a result of the more efficient combating of free-riding, the more efficient use of media or as a result market changes. In view of this, deregulation can arise when politically effective groups believe that they can better promote their economic interests in an unregulated market by self regulation.
In general, the reviewed theories of regulation provide a lot of insights on the regulatory issues, but, they still lack a number of issues that are relevant for food processing firms especially in the context of a developing economy. Indeed, most theories are of the Western origin, the environment which is different from that of developing countries in terms of economic and cultural settings. Especially in the food sector where regulatory stringency has been a dominant instrument for achieving food safety and hygiene, regulation theories do no provide sufficient explanations on how food processors are affected. Although regulations governing food production, processing and marketing may create benefits by increasing the hygiene and safety level of the nation’s food supply, these regulations can also increase producers’ costs and potentially raise food prices. According to Antle (1996), the costs of food safety regulation include the industry’s cost of compliance, borne by both industry and the consumers of their products, as well as administrative costs borne by taxpayers and the deadweight loss associated with taxation.

**Regulations and Competitiveness of the Firms**

Most regulations have an effect on the attractiveness of the industry in which the firm is operating (Kohn, 1998) and on competitiveness of the firms (Palmer et al., 1995). In view of the economic theory, effective regulations are likely to create a better business environment for the private sector to operate and increase competitive capability of the businesses operating within it (Charles, 2012). This concurs with the argument that competitiveness of firms is largely dependent on deliberate action ("man-made advantages") through the interaction of private and public actors, including the government (ibid). In view of this perspective, a regulation that changes the cost structure of an industry can alter the structure, performance and competitiveness of that industry (Kohn, 1998). Reviewed studies (e.g. Chittenden et al., 2003; Beale & Lin, 1998; Sanjay and Dennis, 2009; SBS, 2002; Blackburn, 2003) show that regulation essentially affect competitiveness of the private sector negatively. However, Porter and van der Linde (1995) believe that the effect of regulations on competitiveness has been primarily analysed from the static model rather than a dynamic model in previous literature. Hence, they argue that stricter regulations, specifically environmental regulations, can improve an industry’s competitiveness by inducing innovation which reduces overall costs. Palmer et al., (1995) dispute the overall conclusion of Porter and van der Linde (1995) by showing that there are conditions in a dynamic market where competitiveness is negatively affected by regulations. With respect to food industry, Antle (1996) argues that regulations add costs to food processors, and this affects productivity and competitiveness of the industry. Since administrative burdens increase transaction costs in the market and impede the competitiveness of food firms, it can be argued that excessive administrative burdens can reduce competitiveness as scarce resources are used to satisfy legal requirements for food safety and quality. Therefore,
the challenge is to ensure that the regulations maximise the net benefits of increasing food hygiene and safety.

**Empirical Literature**

Although there are empirical studies examining the effect of regulations on competitiveness of the private sector, evidence on the impact of regulation on competitiveness of enterprises operating in the food sector is scarce. Nevertheless, general studies on the effects on regulations on competitiveness of the firms are reviewed to provide some insights on what is already known and the existing gaps. As in the case of theoretical literature, existing studies have developed along two major lines. The first line is dominated by the studies that have found negative impacts of regulations. The second line of thinking includes few studies arguing for the positive impact of regulations.

One of the studies on regulations that covered a number of countries is Chittenden et al. (2003). The study analyzed several studies from the UK, USA, Australia and New Zealand to estimate the compliance cost per employee of a particular enterprise. The review suggested that small firms incurred a higher regulatory cost burden than larger businesses. However, the study had no consensus on the size of the regulatory burden due to variations in how the ‘small business’ was defined and in the methods of data collection and analysis. A recent study by Bontemps et al., (2012) assessed whether food safety regulations imposed by the European Union in the 2000s might have induced a slow-down in the productivity of firms in the food processing sector in French. The authors developed an original iterative testing procedure based on the comparison of the distribution of efficiency scores of a set of firms. The results confirmed that productivity decreased in major food processing sectors at the time when safety regulation was reinforced.

Sanjay and Dennis (2009) conducted a study to measure the cost of regulation to businesses in the State of California. The study used original analyses and a general equilibrium framework to identify and measure the cost of regulation as measured by the loss of economic output to the State’s gross product, after controlling for variables known to influence output. It also measured second order costs resulting from regulatory activity by studying the total impact-direct, indirect and induced. The study found that the regulatory cost was borne almost completely by enterprises. Van Stel et al., (2007) investigated the effects of business regulations on the formation of new enterprises for 35 countries (though few of these are developing countries and only South Africa is included from the African continent). They found no evidence that number of procedures, time and cost to start a business had a significant impact on start-up rates. The authors argued that “do not subscribe to the view that heavily
‘regulated’ countries (in terms of entry regulations) need only to reduce such ‘burdens’ in order to become more enterprising and by implication more wealthy. What seems more likely is that entry regulation influences the distribution of business activity between the formal and the informal economy, rather than influencing the total volume of activity.

Focusing on developing countries, Bennett and Estrin (2006) construct a model to study the effects of bureaucratic delay and license fees. In testing their model, they found that the regulations served to reduce entry into business. They also found that because laissez faire leads to ‘excessive’ entry, a license fee can increase welfare by discouraging entry. When entry fee is zero, excessive entry takes place. In the presence of a license fee, bureaucratic delay creates a strategic opportunity, which can result in both greater entry by first movers and a higher steady-state number of firms. Delay also leads to speculation, with entrepreneurs taking out licenses to obtain the option of immediate entry if they later observe the industry to be profitable enough. The study therefore suggests if the entry fee is raised from zero, welfare first increases and then declines, thus implying that regulatory barriers of certain levels increase welfare.

A study by Agboli and Ukaegbu (2006) examined the business environment and entrepreneurial activity in Nigeria. Using a stratified random sample of 212 enterprises drawn from a population of privately owned firms, the study assessed the regulatory policies, administrative practices and infrastructure services. Defined in terms of infrastructure, access to credit, bureaucratic practices and regulatory policy, the business environment in Southeast Nigeria was found to be stressful, and so had the capacity to limit entrepreneurial activity. The study found that smaller firms were more constrained by regulations for new businesses and business expansion. This is consistent with the observation by Spring and McDade (1998) that regulatory requirements in Africa work against micro and visibly small and medium businesses. Likewise, a qualitative study by TAMPA, (2010) on improving competitiveness of the dairy sector in Tanzania through rationalization of the regulatory framework found that the compliance cost for the dairy sector was one of the major barriers to the firms operating in the sector.

Overall, the literature shows that opponents of regulations (e.g. Chittenden et al. 2003, Sanjay and Dennis, 2009, TAMPA, 2010) argue that most regulations restrict business start-up, impedes successful performance and growth, and contributes to business failure. The ‘problem’ of regulation for business owners involves the diversion of scarce resources away from what are argued to be productive, profit-generating activities and towards the discovery, understanding of, and compliance with regulations. One might say that regulation distorts market signals, reduces the rewards.
of business ownership, disincentivises market entry, investment, innovation and business growth, all of which leads to a sub-optimal level of economic activity from which businesses, workers and consumers suffer. The literature has identified several problems which increase the administrative costs associated with regulatory enforcement: excessive form-filling; emphasis on inspection rather than advice; inconsistent application of rules by different regulators, or even different individual inspectors within the same regulator; and duplication of information requirements from different regulators.

On the other hand, supporters of regulations argue that although regulations have some costs to business enterprises they confer benefits on business owners and others (Vickers et al., 2003). The underlying argument is that government regulations are needed to correct market failures, promote fairness, ensure public safety and protect the environment (SBS, 2002). It could be added that regulation, by supporting property rights and contract facilitate the development of small business owners who are able to trade. Intellectual property rights such as patents and registered trade-marks are an obvious manifestation of this sort of protection for business owners (Blackburn, 2003). Indeed, because the benefits of regulation are taken for granted or viewed as diffuse and long-term, they may go unacknowledged or under-valued by business owners themselves. Regulations which enable business owners to act, or contribute to changed conditions which encourage owners to act in particular ways, are likely to be taken for granted; in contrast, the problems of regulation are often perceived by business owners as specific and pressing. Edwards et al., (2004) and Ram et al., (2003) have in a series of publications provided the most adequate understanding of regulatory impacts on firm performance to date. The primary conclusion of much of this research is that the law often exerts only a limited impact on owner-managers' decision-making and business competitiveness.

Review of the extant literature has highlighted a number of issues which any research inquiry aiming to enhance understanding of the impact of regulation on firms must address. First, while recognizing the potential costs and problems which regulations might impose on business owners, there is a need to balance this view with some recognition of the benefits of regulation for both business owners and others. This requires researchers to disentangle the impact of regulation from the many other factors shaping business performance such as competitive pressures arising from product and labour markets, workplace social relations, the availability and cost of technology, and owner-managers’ knowledge and skills. In the food processing sector a certain level of regulation is needed to ensure that food processors comply with food safety and health standards. The main issue is how to ensure that regulations are not excessive and they don’t affect the competitiveness of the food processors.
Regulations Governing the Food Processing Sector in Tanzania

The food processing sector in Tanzania is governed by a diverse set of regulations. They include those directed to the manufacturing firms in general and the specific regulations focusing on the food processing sector. Some regulations tend to vary from one type of food to another depending on the manufacturing complexity of the food and the sub-sector in which it belongs. Nevertheless, in this paper, we review the regulations that in one way or the other govern the food processing sector. The regulations being reviewed are grouped into various categories based on the level at which the business is or the purpose for which the regulations were designed.

Establishment, Registration and Licensing of Food Processing Firms

The establishment of food processing firms in Tanzania is governed by a number of legislations and regulations that normally govern business registration in the industrial sector. Some of the legislations cut across various sectors, whereas others are specific to a particular type of foodstuff. The review of the regulatory system shows that mandatory requirements for registration are laid down in different legislations. For instance, the Business Licensing Act No. 25 of 1972 (Cap 208 R.E. 2002) requires any person natural or corporate carrying on business in Tanzania for profit or gain to be licensed. The law also provides for business name registration under the Business Name Registration Ordinance (Cap 213) requiring any person trading in name other than in one’s own name or partnership to register it. The Business Regulation Act provides for procedures and issuance of the Certificate of Registration upon payment of the business registration fee. The Business Activities Registration Act requires all business undertakings or entities established in certain jurisdictions to be registered and obtain certificates of registration upon payment of prescribed fee. The Business Activities Registration and Trade License Act also establishes the Business Registration and Licensing Authority (BRELA), which is mandated with registrations of all business undertakings in the area of its jurisdiction. The Company Ordinance (Cap 212) provides for company registration where companies obligated under this ordinance are obligated to take out a business license under the Business Licensing Act prior to commencement of business, irrespective of whether the business is regulated under another regulation.

In addition to the general business registration, there are specific legislations guiding registrations of businesses under specific sectors. For example, the Industries and Licensing and Registration Act No. 10 of 1967 (Cap 46 R.E. 2002) provides for the licensing of industries, while the industrial license holders are also required to take out another license under the Business Licensing Act. The Tanzania Food, Drugs and Cosmetics Act provides for mandatory registration for premises dealing with
manufacturing of food products regulated under it. The Act prohibits a person to manufacture for sale, sell, supply, and import or store food products regulated unless the product is registered and issued with the license or permit by the Authority. TFDA is mandated to register food, drugs, cosmetics, biological and herbal drugs. The Public Heath Act provides that “a person shall, for purposes of compliance with public health matters, not engage in food manufacturing within the area of the Authority without being registered by the licensing Authority.” The Dairy Industry Act (DIA) provides that, any person who deals in milk or milk products shall, with effect from the commencement of this Act, register with the Board to undertake milk production, processing or marketing agent, milk or milk products importation, dairy input supplies, manufacturers or importers and retailer. The Veterinary Act establishes the Veterinary Council of Tanzania which is mandated to effect registration of all practicing veterinarians and veterinary facilities upon payment of prescribed fees. The Fisheries Act No.22 of 2003 empowers the Minister responsible to impose mandatory licensing and registration on all fishing vessels which could also be registered under the Business Licensing Act. The Cashew nut Industry Act of 2009 requires every cashewnut dealer, being a buyer, processor, importer, exporter or warehouse owner or operator to register with the Cashew nut Board. The Coffee Industry Act of 2001 establishes the Coffee Board with the power to register and issue a license for coffee buying, liquoring, processing, roasting, warehousing and exporting. The Tea Act No. 3 of 1997 (Cap 275 R.E. 2002) prohibits the manufacture of tea for sale without a license issued by the Board even though the tea manufacturers must have a business registration license. The Sugar Industry Act of 2001 (Cap 251 R.E. 2002) establishes the Sugar Board with the power to issue licenses to sugar manufacturers and small scale sugar operators. The Public Health Act of 2009 provides that all premises registered for food manufacturing must maintain and adhere to the prescribed public health standards throughout the duration of registration.

**Inspections of Business Premises and Equipment**

Several regulatory authorities are mandated to inspect food processing firms to ensure that they comply with regulations and legal requirements. For example, in addition to the registration of food processing firms, the Tanzania Food, Drugs and Cosmetics Act provides for the appointment of inspectors and their powers. The Authority has power to inspect any premises and carry out routine inspection after the product being introduced in the market. In addition, there are TFDA enacted Import and Export of Food Regulations (2006), the Food Hygiene Regulations, (2006), Fee and Charges (2005) as well as Treatment and Disposal of Unfit Food (2006) that provide for inspections of premises of food processors. The Public Health Act of 2009 provides the authorities under the Act (i.e. Health Officers) with, inter alia, powers to carry out inspections. The Business Activities Registration and Trade License Act
appoint officers who are empowered to conduct inspections. The Fire and Rescue Act provides the Commissioner or any fireman or other person authorised by him, the right to enter any premises and inspect fire safety standards. The Act also states that the applicant for the fire and rescue service shall pay to the Commissioner for the services of any fireman, and for the use of equipment fees as may be prescribed by the Minister. In the Dairy Industry Act, the Minister may, upon advice of the Board, make regulations providing for the inspection of dairies and persons in or about dairies who have access to milk or milk products, or to any vessels or containers used therein. The Veterinary Act mandates inspectors to inspect veterinary facilities. The inspector is vested with the power to issue a prohibition notice to the owner, seize and detain any drug, equipment, record or anything.

**Labour Related Regulations**

The labour related legislations are also found in the list of legislations providing for registrations. The Employment and Labour Relations Act requires employers, including food processors, to register to the Labour Commissioner a plan to promote equal opportunity and eliminate discrimination at workplaces. The Occupational Safety and Health Act provides that a person being the owner or occupier of a factory or workplace before operating needs to register such factory or workplace under the Act. The National Social Security Fund Act lays down the mandatory requirement of the registration of every contributing employer (unless such employer has been registered under the existing Fund), within one month and in the prescribed manner. The Labour Institutions Act empowers labour officers appointed under it to effect inspection in relation with employment related and labour issues. At the same time, the Occupational Safety and Health Act appoints inspectors mandated to inspect workplaces or factories by day or night without prior notice. Inspectors have powers to: enter, inspect and examine a factory or workplace, and every part thereof; enter, inspect, and examine part of any building of which a factory or workplace forms part; exercise such other powers as may be necessary to inspect and examine any machinery, plant, or appliance in a factory or workplace; require any person whom found in a factory or workplace to give such information as to who is the occupier of the factory or workplace; and to examine any person, either alone or in the presence of any other person, as one thinks fit, with respect to matters under this Act. The National Social Security Fund Act establishes a Board which is mandated to appoint inspectors for conducting inspections under the Act. The inspectors are empowered to enter, at all reasonable times, on the premises or place and there make any examination and inquiry necessary to obtain information.
Environment Management Regulations

The National Environment Management Act requires inspection for environmental compliance. The Act provides for legal and institutional framework for sustainable management of environment, principles of management of environment, prevention and control of pollution, waste management and environmental quality standards. It empowers the Minister responsible to disapprove and recommend to the licensing authority that the project in question should not be licensed or where the license has been issued, be cancelled if the project or undertaking does not comply with the environmental standards set by the Act. The Industrial and Consumer Chemicals (Management and Control) Act, 2003 establishes the National Chemist Laboratory with the power to ensure that any chemical producer complies with the Good Manufacturing Practices and undertakes Environmental Impact Assessment before undertaking operations. This Act also empowers the Chemical Laboratory Agency to issue licenses for production, transportation, importation, exportation, storage and dealing in chemicals at a prescribed fee. This overlaps with other Business Licensing Authorities.

Fair Business Practice Regulations

The Fair Competition Act of 2003 was enacted to promote and protect effective competition in trade and commerce, to protect consumers from unfair and misleading market conduct and to provide for other related matters. Section 49(1) of the Act provides that no person shall supply goods that are intended to be used, or are of a kind likely to be used, by a consumer if the goods are of a kind—in respect of which there is a prescribed consumer product safety standard and which do not comply with that standard. The Act establishes the Commission for Fair Competition with powers to study government policies, procedures and programmes, legislation and proposals for legislation so as to assess their effects on competition and consumer welfare and publicize the results of such studies; as well as to investigate policies, procedures and programmes; of regulatory authorities so as to assess their effects on competition and consumer welfare, and publicize the results of such studies. The Act empowers the commission to charge fees for business licenses. The Commission is also funded by the funds allocated to it from funds of the Energy and Water Utilities Regulatory Authority (EWURA), Surface and Marine Transport (SUMATRA), the Tanzania Communications Regulatory Authority, the Tanzania Civil Aviation Authority and such other regulatory authorities for work done by the Commission, or as provided in the other relevant legislation or as may be agreed between the Commission and those authorities. However, since most regulators charge fees to businesses, the funds allocated to the commission from those authorities is borne by the business thus increasing the cost burden to the business enterprises.
Penalties and Fees

Most Acts and Regulations that have been reviewed above impose penalties for non-compliance that are supposed to be paid by enterprises. The Business Activities Registration Act, for instance, imposes a penalty on failure to comply with requirements laid down therein; the penalty imposed depends on business turnover/production. The Standard Act imposes a penalty for contravening provisions of the Act. Tanzania Food, Drugs and Cosmetics Act penalizes any person distributing or selling food which is unfit for human consumption. The Public Health Act imposes a fine not exceeding ten million shillings for refusing an officer to perform inspection. There are also some penalties in the labour related Employment and Labour Institutions Acts making it an offence for anyone who fails to comply with the mandatory requirement of registration of the employer’s plan to eliminate discrimination at workplace. The Act imposes a penalty that does not exceed five million shillings. The Labour Institutions Act imposes a penalty to any person obstructing a labour officer to perform inspection. The Occupational Safety and Health Act imposes a penalty for failure to comply with its provisions. The National Social Security Fund Act imposes a penalty to any person knowingly evading payment of contribution that is a fine not exceeding one hundred thousand shillings or imprisonment for a term not exceeding two years or both.

The Town and Country Planning Act sets it clear that any person who wilfully does any act, or wilfully fails to do any act, in contravention of a provision contained in a scheme, on conviction shall be liable to a fine. The Stamp Duty Act provides that, anyone who contravenes the Act shall be guilty of an offence and on conviction shall be liable to a fine or imprisonment, and shall pay the duty which would have been paid had the offence not been committed. The Income Tax Act also provides for offences and penalties. The general provisions relating to offences, impose a fine or imprisonment, or both. The Value Added Tax Act provides for offences and penalties ranging between two hundred thousand shillings and two million shillings depending on the offence committed. The main intention behind enacting legislations is to make sure that there are check and balances of the conduct of producers and owners of manufacturing plants, but not to encourage penalties. The penalties imposed by different legislations to regulate the private sector lead to double penalty for the same offence, which is not encouraged by the law.

METHODOLOGY

The methodology used to generate the information and data presented in this paper entailed both qualitative and quantitative approaches. On the qualitative side, our analysis was based on the review of legislations directed to the food processing sectors, interviews with a few selected firms which were done in qualitative phase and
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interactions with industry experts. The major findings generated from the qualitative part were used to inform us about the regulatory challenges examined in this paper. Therefore, the paper dwells mostly on the examination of enterprises’ perception of the variables determined in the qualitative phase rather than presenting the prior findings. However, in the discussion the findings from the literature, qualitative phase and the current study are merged for the purpose of providing adequate explanations on some issues.

On the quantitative part, we drew the population of the study from the list of enterprises existing in the database of the Tanzania Food Processors Associations and Confederation of Tanzania Industries, from which the firms were identified according to the number of workers as defined in the National SMEs Policy. Using the database of 300 firms, the simple random sampling was used to draw a sample of 115 firms involved in the study. The main data collection instrument was a semi-structured questionnaire where respondents were asked to rate their perceptions using the 5 point Likert-scale questions. A semi-structured questionnaire was used to ensure that both quantitative and qualitative data would be captured. We use the basic descriptive statistics and student t-distribution approach to assess the perceived impact of regulations on competitiveness the food processors in Tanzania. Although the approach used has some limitations in terms of statistical rigour, it is considered to be an advancement of the existing research seeing that research on regulations has largely been qualitative due to complexity of analysing the impact of regulations using quantitative techniques. This is considered to be a good start of developing a rigorous analysis of regulations and their impact in the context of a developing economy. Why did you perform factor analysis? There is an appendix with factor analysis output put, thus the need to state why you did so?

FINDINGS

Profiles of the Firms Studied

The analysis of the profiles of the firm studied focused on the sub-sectors covered, location of the firms, number of employees and the year of establishment. In terms of the sub-sectors, the respondents were asked to indicate the sub-sector in which their enterprises belonged during the time of survey. As shown in Table 1, over 36% of the firms were in grain milling, 20% in biscuits and bakeries, 9.6% in confectioneries and 5.2% in beverages. All other sub-sectors form a small proportion of the surveyed firms each making less than 2% of the sample. Over 14% of the firms covered were in activities other than the ones included in the questionnaire being animal feed processing, salt processing, cassava processing and tea processing. Although the sub-
sectors covered in this study do not entirely show the composition of food processors in Tanzania, they indicate that the food processing sector is quite diverse. However, some of the activities that are not highly represented in this study such processing of sugar, processing of tea and coffee are mostly done by large firms. In view of this, the sample covered in this study makes a reasonable representation of food processors.

Table 1: Food Processing Sub-sectors Covered by the study

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<tbody>
<tr>
<td>Fish Processing</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Grain Milling</td>
<td>42</td>
<td>36.5</td>
</tr>
<tr>
<td>Milk Processing</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Edible Oil Processing</td>
<td>5</td>
<td>4.3</td>
</tr>
<tr>
<td>Confectioneries</td>
<td>11</td>
<td>9.6</td>
</tr>
<tr>
<td>Fruit Processing</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Biscuits and bakery</td>
<td>23</td>
<td>20.0</td>
</tr>
<tr>
<td>Manufacturing of canned food</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Beverages</td>
<td>6</td>
<td>5.2</td>
</tr>
<tr>
<td>Others (animal feeds processing, salt processing, cassava processing and tea processing)</td>
<td>17</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>115</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The study covered the major commercial cities of Tanzania namely Dar es Salaam, Arusha and Mwanza, where most food processors are also found. Statistics indicate that 50% of food processors in Tanzania are found in Dar es Salaam, 13% in Arusha and 11% in Mwanza (URT, 2010). Given that Dar es Salaam is the largest commercial city with the highest concentration of the food processing activities 84% of enterprises were drawn from Dar es Salaam. The distribution of the firms that were covered in Dar es Salaam is such that 48.9% were in Kinondoni, 31.1% in Ilala and 20% in Temeke. This distribution reflects the concentration of business enterprises in the region revealed by the National Economic Survey (URT, 2010).

Table 2: Number of Employees

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>19</td>
<td>16.5</td>
</tr>
<tr>
<td>5-49</td>
<td>81</td>
<td>70.4</td>
</tr>
<tr>
<td>50-99</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>100 and above</td>
<td>12</td>
<td>10.4</td>
</tr>
</tbody>
</table>
The number of employees in this paper is classified in a way that is consistent with the definition of enterprise size stipulated by the SME Development Policy. Based on this, Table 2 shows that composition of the sample is dominated by small food processors when the size is measured by number of employees. The predominance of small firms in the sample mirrors a more general pattern of firm distribution in the country, where medium and large firms are a considerably small minority. This is also the case in the food processing sector where the majority of food processors are micro and small enterprises. It could be a good demonstration of the “missing middle” situation which is quite common in developing countries. This calls for adequate policies to promote growth of micro and small enterprise in order to cover the existing gap.

Most enterprises (77.8%) were established before 2010 with the largest proportion depicting a high frequency (72%) of firms established within 10 years. On the whole, the mean age of the firms in the sample is 8 years. This shows that the majority of the firms were already established businesses which had been operating for at least three years. However, in view of the fact that the study focused on regulations affecting businesses at all stages of their development cycle, the findings from the businesses at different stages are relevant.

Enterprises’ Perceptions of the Relevance of the Regulatory Authorities

One of the objectives of this paper is to assess the enterprises’ perception of the relevance of the main regulatory authorities governing the food sector in Tanzania. This assessment is done to provide evidence on the overriding view that some regulators in the food processing sector are redundant. In this case, enterprise were asked to express their perception of the relevance of regulators in the sector using the Likert-scale question with a scale ranging from very important to very unimportant. As shown in Table 3, 67 % of enterprises involved in the study generally recognise the importance of the regulatory authorities governing the food processing sector in Tanzania. The proportion of enterprise that felt that regulators were not important is relatively small making 12% of the sample. Therefore, the majority enterprises appreciate the importance of regulators governing the food processing sector. This is consistent with previous findings (e.g. Charles, 2012, CTI, 2011) that enterprises recognise the value of regulations in the food sector based on the need maintain the maintain public health and welfare.

However, the degrees of importance attached by enterprises to specific regulators differ. The regulators perceived to be very important are Tanzania Food and Drug Authority (TFDA) - 53% and Tanzania Bureau of Standards (TBS)-30%. Other important regulators, though not perceived as been very important are National
Environmental Management Conical (NEMC), Business Registration and Licensing Authority (BRELA) and Local Government Authorities (LGAs). Although very few enterprises (11.40%) rated Local Government Authorities (LGAs) as a very important regulator, 42.1% rated them as important. This is surprising as there have been a lot of complaints about the hurdles caused by the LGAs (Charles, 2012) on the operations of enterprises in the manufacturing sector. Notwithstanding the finding, one of the explanations could be the fact that LGAs are close to enterprises surveyed most of which were small and perhaps, due to nature of food processors’ operations, they had closer interactions with them.

The rating of the Weight and Measure Authority (WMA) is relatively low where 15.50% of enterprises rated WMA as a very important authority and 37.2% as an important regulator. This might reflect the fact that the WMA’s role has been perceived as one of the functions that should be under TBS as a Metrology Unit to reduce duplication of regulatory functions. Experience of other African countries (e.g. Ghana and Rwanda) also shows that the weight and measure section is placed within the Bureau of Standards. Surprisingly, the Business Registration and Licensing Authority (BRELA), which is considered to be an important authority in business formalisation was ranked low where over 23.5% of respondents considered it to be very unimportant and 19.4% rated it as unimportant. Other regulators such as Occupational Safety and Health Authority (OSHA) and Fire and Rescue (FIRE), Veterinary Department (CTD) are considered to be quite relevant. Even though the ranking of Tanzania Autonomic Energy Commission (TAEA) is seen slightly important, over 40% of respondents rated it as unimportant regulator.

Table 3: Enterprises’ Rating of the Relevance of Regulatory Authorities

<table>
<thead>
<tr>
<th>Authority</th>
<th>Very Important</th>
<th>Important</th>
<th>Somewhat Important</th>
<th>Unimportant</th>
<th>Very Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRELA</td>
<td>27.3%</td>
<td>13.9%</td>
<td>11.3%</td>
<td>19.4%</td>
<td>23.5%</td>
</tr>
<tr>
<td>TRELA</td>
<td>30.4%</td>
<td>50.4%</td>
<td>17.4%</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>TFD</td>
<td>30.4%</td>
<td>50.4%</td>
<td>17.4%</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>NEMC</td>
<td>22.8%</td>
<td>22.6%</td>
<td>50.9%</td>
<td>4.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>OSHA</td>
<td>22.8%</td>
<td>22.6%</td>
<td>49.6%</td>
<td>1.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>LGA</td>
<td>11.4%</td>
<td>42.1%</td>
<td>17.4%</td>
<td>4.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>WM</td>
<td>15.5%</td>
<td>36.9%</td>
<td>42.1%</td>
<td>9.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>FIRE</td>
<td>24.2%</td>
<td>38.4%</td>
<td>42.1%</td>
<td>9.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>VTD</td>
<td>26.0%</td>
<td>34.0%</td>
<td>34.0%</td>
<td>6.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>TAEA</td>
<td>34.0%</td>
<td>34.0%</td>
<td>34.0%</td>
<td>6.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

88
Enterprises’ Rating of the Satisfaction With Regulatory Authorities

The study assessed the level of enterprises’ general satisfaction with the services offered by the regulatory authorities governing the food processing sector. Using a Likert-scale question, with a scale ranging from very satisfied to very unsatisfied, the findings indicate that only 12.1% of enterprises were very satisfied with the services offered by the regulatory authorities (see Table 4). The majority of respondents (40%) were fairly satisfied with the services offered by the regulatory authorities. Given these findings, it was important to assess the level of satisfaction with the services offered by each regulator so as to see a more detailed picture. Comparison of the level satisfaction with the regulatory authorities shows that respondents were mostly satisfied with the services of TFD, BRELA and TBS with the degree of satisfaction being higher than 50% for each regulator. On the other hand, respondents were very dissatisfied with the services of WMA and TAEC. The services of other regulators such LGAs, FIRE, VTD, OSHA and NEM were fairly satisfactory with less than 45% of respondents together rating each of them as satisfactory and very satisfactory.

Table 4: Enterprises’ Ratings of the Satisfaction with the Regulatory Authorities

<table>
<thead>
<tr>
<th></th>
<th>BREA</th>
<th>TRS</th>
<th>TFDA</th>
<th>NEMC</th>
<th>OSHA</th>
<th>LGA</th>
<th>WMA</th>
<th>FIRE</th>
<th>VTD</th>
<th>TAEC</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>24.6%</td>
<td>15.4%</td>
<td>32.8%</td>
<td>3.4%</td>
<td>8.2%</td>
<td>9.2%</td>
<td>9.1%</td>
<td>7.1%</td>
<td>17.6%</td>
<td>10.5%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>28.1%</td>
<td>36.9%</td>
<td>43.3%</td>
<td>39.0%</td>
<td>34.4%</td>
<td>24.6%</td>
<td>10.9%</td>
<td>41.1%</td>
<td>23.5%</td>
<td>5.3%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Somewhat Satisfied</td>
<td>17.5%</td>
<td>32.3%</td>
<td>22.4%</td>
<td>45.8%</td>
<td>54.1%</td>
<td>50.8%</td>
<td>47.3%</td>
<td>30.4%</td>
<td>35.3%</td>
<td>42.1%</td>
<td>40.4%</td>
</tr>
<tr>
<td>Unsatisfied</td>
<td>17.5%</td>
<td>10.8%</td>
<td>1.5%</td>
<td>8.5%</td>
<td>3.3%</td>
<td>13.8%</td>
<td>25.5%</td>
<td>19.6%</td>
<td>17.6%</td>
<td>21.1%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Very unsatisfied</td>
<td>12.3%</td>
<td>4.6%</td>
<td>0.0%</td>
<td>3.4%</td>
<td>4.0%</td>
<td>1.5%</td>
<td>7.3%</td>
<td>1.8%</td>
<td>5.9%</td>
<td>21.1%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Impact of Regulations on Enterprises’ Competitiveness

Measuring the impact of regulations on competitiveness of the firm is quite complex since performance of the firm is affected by so many factors. However, one way of sorting out the effect of regulations on competitiveness of the firm is to assess the perception of the enterprises on the extent to which various regulatory challenges impinge on the competitiveness of their enterprises. In this study, we used a Likert-scale question to examine the perception of enterprises of the effect of various compliance issues identified in previous qualitative study (Charles, 2012) on their competitiveness. The value added in this case, is to examine the perception of enterprise in larger sample rather than relying on the qualitative findings of the previous study. The results show that there is a variation of enterprises’ perception of
the effect of the specific aspects of the regulatory challenges on the firms’ competitiveness. The five top most impingements with very significant impacts on competitiveness of the firms are delays and bureaucracy (40.3%), increased product price due to cost of regulations (40%), multiple licensing (33.3%), rent seeking behaviour (32.3%) and multiple testing of products (30.2%). Other regulatory challenges with significant impacts are annual fees charged by regulators (29.7%), multiple inspection of premises (25.4%) and repetition of similar regulatory functions (23.4%). These findings indicate that multiplicity of inspections, duplication of regulatory functions, bureaucracy and delays as well as high charges imposed by regulators affect competitiveness of food processors. Indeed, the rent seeking behaviour of regulators is likely to associate with bureaucratic process, and an attempt to raise finance for running their operations. This suggests that unless regulators are adequately funded, it is not easy to manage the rent seeking behaviour. It is also important to note that factors like increased product prices due to compliance costs and increased costs due to rent seeking behaviour are mostly to negatively affect competitiveness of the firms.

Table 5: Enterprises’ Responses on the Extent to Which Regulations Affect Competitiveness

<table>
<thead>
<tr>
<th>Competitiveness Impingements</th>
<th>Very significant</th>
<th>Significant</th>
<th>Somewhat significant</th>
<th>Not significant</th>
<th>Not significant at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple licensing</td>
<td>33.3%</td>
<td>9.5%</td>
<td>7.9%</td>
<td>12.7%</td>
<td>36.5%</td>
</tr>
<tr>
<td>Multiple site Inspections</td>
<td>14.8%</td>
<td>36.1%</td>
<td>32.8%</td>
<td>13.1%</td>
<td>3.3%</td>
</tr>
<tr>
<td>High business registration fee</td>
<td>15.6%</td>
<td>45.3%</td>
<td>31.3%</td>
<td>6.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Multiple inspections of premises</td>
<td>25.4%</td>
<td>22.2%</td>
<td>15.9%</td>
<td>23.8%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Delays and bureaucracy caused by regulators</td>
<td>40.3%</td>
<td>6.0%</td>
<td>9.0%</td>
<td>9.0%</td>
<td>35.8%</td>
</tr>
<tr>
<td>Annual fees charged by regulators</td>
<td>29.7%</td>
<td>18.8%</td>
<td>29.7%</td>
<td>17.2%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Multiple testing of products</td>
<td>30.2%</td>
<td>11.1%</td>
<td>23.8%</td>
<td>22.2%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Cost of administration</td>
<td>14.1%</td>
<td>15.6%</td>
<td>26.6%</td>
<td>32.8%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Cost of lost sales due to restricted access to markets</td>
<td>14.3%</td>
<td>22.2%</td>
<td>23.8%</td>
<td>28.6%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Cost of vehicle inspections</td>
<td>14.8%</td>
<td>16.4%</td>
<td>19.7%</td>
<td>37.7%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Repetition of similar regulatory functions</td>
<td>23.4%</td>
<td>15.6%</td>
<td>10.9%</td>
<td>25.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Cost of meeting the reporting requirements</td>
<td>16.4%</td>
<td>11.5%</td>
<td>23.0%</td>
<td>27.9%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Rent seeking behaviour (corruption)</td>
<td>32.3%</td>
<td>12.9%</td>
<td>4.8%</td>
<td>19.4%</td>
<td>30.6%</td>
</tr>
</tbody>
</table>
For the purpose of further assessment of the impact of the regulatory challenges on the competitiveness of food processors, we applied a one-sample t-test to measure the level of significance of each challenge. According to the results of 114 firms which responded to this question (see Table 6), all regulatory challenges have significant impact on enterprises’ competitiveness with t distribution at 95% confidence interval (p= 0.00). These findings suggest that enterprises are seriously concerned with the significant impact of multiplicity of regulatory interventions, duplication of functions and both direct and indirect costs of regulations. Since one of the greatest predictor of managers’ compliance with regulations is how they perceive the effect of regulations on competitiveness of the enterprises, it is important for regulators to be aware of the findings of the study. Although regulatory challenges do not have uniform effects on business, understanding the perception of the enterprises of how they see them and their effect on firm competitiveness is critical. However, for further generalisation there is a need to go further and analyse in detail the effect of each regulatory constraint. This therefore opens for the future research opportunities in the area of regulations.

Table 6: Regulations Impact on Enterprises’ Competitiveness: Results of T-Test

<table>
<thead>
<tr>
<th>Competitiveness Impingements</th>
<th>Test Value = 0</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
<td>Sig. (2-tailed)</td>
<td>Mean Difference</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------</td>
<td>--------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Multiple licensing</td>
<td>25.750</td>
<td>114</td>
<td>.000</td>
<td>3.0952</td>
</tr>
<tr>
<td>Multiple site Inspections</td>
<td>37.206</td>
<td>114</td>
<td>.000</td>
<td>2.5410</td>
</tr>
<tr>
<td>High business registration fee</td>
<td>38.432</td>
<td>114</td>
<td>.000</td>
<td>2.3281</td>
</tr>
<tr>
<td>Multiple inspections of premises</td>
<td>28.698</td>
<td>114</td>
<td>.000</td>
<td>2.7619</td>
</tr>
<tr>
<td>Delays and bureaucracy caused by regulators</td>
<td>23.027</td>
<td>114</td>
<td>.002</td>
<td>2.9403</td>
</tr>
<tr>
<td>Annual fees charged by</td>
<td>29.342</td>
<td>114</td>
<td>.000</td>
<td>2.4844</td>
</tr>
</tbody>
</table>
A further analysis was done to assess the proportion of compliance costs to annual sales lost by enterprises, and establish the correlation between the compliance costs and sales lost. The underlying assumption of this analysis is that if compliance costs have significant effects on sales performance of enterprises, they affect competitiveness of those enterprises. Compliance costs is measured in terms of costs of meeting compliance obligations including business and premises registration, inspections, product testing costs, workers’ inspection and annual fees. The findings show that the average ratio of compliance cost to sales is 5%. When the annual cost of paying the staff responsible for compliance is included in the costs of the firms the average ratio goes up to 18%. It must be noted that the compliance costs considered here do not include indirect costs associated with time wasted in compliance issues, and the opportunity costs incurred due to interference of the regulators with enterprises.

Furthermore, we attempt to establish statistically if there is a correlation between the total compliance costs incurred by the enterprises and the total sales lost. The findings presented in Table 7 indicate that there is a positive correlation between the total compliance cost and sales lost with the significant level of p=0.007. The regression weight (0.578) shows that an increase in compliance cost positively relates to sales lost with an effect size of over 57%. This can affect competitiveness of the firms
significantly bearing in mind that this is just one of the factors that affect performance of the firms.

**Table 7: Correlation between Compliance costs and Sales lost**

<table>
<thead>
<tr>
<th></th>
<th>Sales Lost (Tshs)</th>
<th>Total Compliance Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales lost (Tshs)</td>
<td>Pearson Correlation</td>
<td>.578(***), 1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>114, 114</td>
</tr>
<tr>
<td>Total compliance costs</td>
<td>Pearson Correlation</td>
<td>.578(**), 1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>114, 114</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (2-tailed)*

**DISCUSSION OF THE FINDINGS**

The central goal of this paper is to examine the enterprises’ perception of the impact of regulations on competitiveness of food processors. Review of literature and assessment of legislations directed to the food processing sector in Tanzania indicates that the sector is highly regulated with a variety of regulations aimed at maintaining public safety and public welfare. The findings show that regulations in the food sector are generally acceptable by enterprises though the perception of the relevance of regulatory authorities differs between one authority and the other. The regulators perceived to be very important are the one responsible for governing safety and health compliance, as well as the regulator facilitating food processors to access market, in this case, TFDA and TBS respectively. In addition, the findings indicate that enterprises recognise the value of regulators responsible for protecting public welfare such as NEMC since their role is considered legitimate in the sustainable development of the economy. While enterprises are not generally against regulations they don’t see the relevance of the authorities duplicating the functions of the other authorities.

This suggests that enterprises recognise the value of regulations aimed at protecting consumers healthy and facilitating them to have better access to market, but, they do not like duplications of the functions. This is in line with Antle’s (1998) view that one of the benefits of safety regulations is to enable firms to comply with consumer concerns about food quality and safety as well as enhancing firms’ access to market. As suggest by Kaplowitz and Ten Eyck (2006), there are several advantages that some businesses may see in regulation, which make them perceive regulators as relevant. Depending on the extent to which consumers are concerned about the safety of a
product, they may be reluctant to buy it. To the extent that regulations assuage such concerns, they can be good for business. Moreover, those businesses that incur extra costs to ensure that their products are safe have an additional interest in regulations. Regulations prevent any competitors who might ignore safety from obtaining lower costs through cutting corners and offering a less safe product. Finally, if a business has a safety problem, having followed the regulations may provide protection from both legal liability and a bad public image.

Regarding the degree of satisfaction with services offered by regulators to enterprises, the findings indicate that the majority of enterprises are fairly satisfied, and very few of them are very satisfied. Likewise, other research suggests that in most cases business owners are dissatisfied with the volume and complexity of legislation (FSB, 2002). For instance in their latest study of 18,000 member business owners, the Federation of Small Businesses found that a majority of respondents were either ‘dissatisfied’ or ‘very dissatisfied’ with various aspects of legislation such as the volume, complexity and rate of change of legislation, and the cost of compliance. Although our study did not explore specifically the level of satisfaction with the various aspects of regulatory interventions, we examined the degree of satisfaction with specific regulatory authorities. It is apparent from the findings that most enterprises are satisfied with regulators facilitating enterprises to comply with safety standards and access to markets namely TFDA, TBS and BREAL. Enterprises are somewhat dissatisfied with regulators appearing to duplicate the functions of the primary regulators. This can be explained by two major factors. First, it could be the fact that the regulators ranked high are well established to deliver their role, and given their size, they have facilities to deliver better services. Second, since enterprises see the relevance of those authorities, especially TBS and TFDA, their level of satisfaction might have been influenced by their perception of relevance. Nevertheless, regulators ought to enhance their service delivery so as to enhance their acceptance by enterprises and encourage them to comply voluntarily. This complements the previous findings by Charles, (2012) that most enterprises are concerned about poor service delivery by regulators calling for improving relationship of regulators with enterprises.

In terms of the regulatory impingement on competitiveness of food processors, it is seems that duplications of roles, multiplicity of regulatory functions, bureaucracy and delays as well as charges imposed by regulators add compliance costs to firms and in that way they affect competitiveness of the food processors. There are additional burdens to food processors in terms of reducing sales, limiting product range in the market and increasing prices. This definitely affects the competitiveness of the food processors since a regulation that changes the cost structure of an industry can alter the performance and competitiveness of that industry (Kohn, 1998). The findings of our
study whose sample is dominated by SMEs supports the 2001 Small Business Service Omnibus Survey of small and medium-sized business owners that found that 49% viewed regulation as an obstacle to the success of their business (Michaelis et al., 2001). Indeed, if regulatory costs are large enough to affect the market price, then a complete analysis would need to consider market equilibrium effects of the regulations. The administrative cost of regulation also should be included in the overall regulatory impact assessment.

Further evidence shows that there is a strong positive correlation between compliance costs and sales lost. Logically, this is understandable since raising compliance costs leads to increased product prices and this is likely to lower the sales level and competitiveness of the firms. This concurs with Antle’s (1996) argument that regulations add costs to food processors and affect their performance. It shows that as regulations add some benefits to enterprise, they also impose significant costs burden to food processors. In view of this, there is a need for regulatory authorities to look into possibilities of reducing cost burden that is shifted to enterprises and for the government to fund those authorities, if possible, to meet their operational budget fully.

Given the fact that additional regulatory costs paid by firms operating in the food sector increase the burden to businesses and therefore affect their ability to compete, the question of rationalisation of the regulatory framework in the sector is a necessity. However, a proper understanding of the impact of regulation on performance of enterprises needs to go beyond business owners’ general perceptions of regulation issues and investigate the impact of specific regulations in specific business contexts. There is a need to go much further beyond asking owner-managers whether regulation is a constraint or, more pejoratively, a ‘burden’ on their business. The focus on compliance costs, though useful up to this particular point requires further quantification of the impact on a wide set of performance variables.

CONCLUSION AND IMPLICATIONS

Even though regulations in the food processing sector are inevitable, excessive and uncoordinated regulations add significant costs to enterprises which ultimately affect competitiveness of the food industry. This draws from the public and private interest theories of regulations which present both positive and negative views on regulations respectively, and from the findings of our study that highlight benefits and costs of regulations. Whereas the public theory perspective views regulations as beneficial to the public, the private interest theory argues against regulations. Also, as enterprises appreciate the value of regulations in the food processing sector, they also have a negative perception of the effects of the regulatory challenges on their competitiveness.

This suggests that rationalisation of the regulatory system in the food processing sector...
so as to ensure that food processors enjoy the benefits of regulations and comply without necessarily incurring excessive costs is needed. The government in this case, ought to look into the advantages and disadvantages of every kind of regulation that may merit its intervention and recommend regulation when it is the best option. This involves balancing a number of different and often competing regulators so as to ensure balanced regulations. It calls for the application of the recommended tools such as the Regulatory Impact Assessment (RIA) to measure the impact of regulations before introducing a new legislation.

Based on the findings that have been presented in this paper the following recommendations are made: First, it is high time for the current regulatory system in the food processing sector to be reviewed in order to comply with international best practices. This entails: i) removal of unnecessary controls on business activities; ii) simplification of processes to reduce compliance costs for businesses and administrative costs for the government; iii) separation of competing functions of regulation and revenue generation; iv) transparency and information provision to reduce uncertainty and risks to businesses and v) inter-agency coordination to improve consistency and efficiency in administration. Second, with the recognition of the potential benefits, costs and problems of regulations, there is a need to balance the regulatory level. Third, the Government should consider seriously increasing the budget allocation to regulatory authorities and minimising their dependence upon the revenue generated through inspections, licensing and permits.

Although the paper is quite informative, the main findings are based on enterprise perceptions and descriptive analysis. The paper though opens a way for research to further develop methodological approaches that tell us how regulation generates changes in owner-manager behaviour and wider effects on enterprise competitiveness. Therefore, building on this paper, there is a need to extend an academic research to measure the impact of regulations on competitiveness and performance of the firms in an attempt to provide more rigorous analysis. Future studies may embark on comparative analysis of the firms based on their size, industry and type of activity that will provide a greater picture on effect of regulations on performance of the private sector. After determining the effect of regulations at the firm level, there is a need to establish their impact on the industry as a whole and develop strategies that will guide a dialogue between the policy makers and the private sector. This requires an analysis of the regulatory framework and its impact on the sector, and a study of the advocacy strategies that may be used to influence policy change.
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ENDNOTE

1. Section 8 (a)
2. Section 11(3)
3. Sections 8 and 14
4. Section 18(1)
5. Section 22(a)
6. Section 138
7. Section 17-(1)
8. Section 5(1) (a)
9. Sections 38 & 39
10. Section 15 (1)
11. Section 12(1)
12. Section 12 (1)
13. Sections 134 and 135
14. See sections 105 and 106.
15. See sections 5(g), 7(a) and 118.
16. Sections 26 and 27
17. Section 6(1)
18. Section 32
19. sec. 11
20. 2004
21. Section 7(2)
22. Sections 15-17
23. RE 2002
24. Section 11
25. Section 43 (4)
26. Section 45
27. Sections 4 -6.
Whereas micro enterprises employ up to 4 workers, small enterprises employ between 5 and 49 workers, and medium enterprises employ between 50 and 99 people (URT, 2003).