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An investigation of Zimbabwe's manufacturing sector competitiveness

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Abstract

This research paper seeks to establish how effective to measure manufacturing sector competitiveness from existing literature. The objective of this research study is premised on establishing cause and remedies to gain manufacturing competitiveness. Survey data affecting manufacturing sector competiveness like crime, corruption, finance, technology, firm characteristics, workforce characteristics and trade openness was analysed. A regression of volume of manufacturing index (VMI) against imports, electricity usage, exports, GDP, proportion of GDP to electricity usage and FDI was done. It can be concluded that transaction costs need to be reduced and concentrate on improving exports, proportion of electricity per output and FDI.

Keywords: Manufacturing sector competitiveness, Volume of manufacturing index

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1. Introduction

The concept of competitiveness has received attention as a determining factor of firm performance and economic growth. World over economists have accepted competitiveness as multi faceted without a single agreed definition mainly as a result of difficulties in measuring it. It has been easy to measure it at firm level because of disaggregation but it becomes most exigent at national level to infer economic performance.

2. Background

The manufacturing sector in Zimbabwe has declined in line with the decline in economic activity for the past decade due to various factors including the hyperinflationary environment that peaked at an official figure of 231 million per cent in 2008 (CZI Survey, 2009). During this period, the business environment was characterised by a lack of working capital support, a shrinking domestic market, high utility tariffs, higher than regional tax structures, high wages, credit and liquidity crunch, and a variety of supply-side bottlenecks that included fuel, electric power, imported inputs and skills. Demand for local products has also declined as a result of a possible shift in consumption patterns in favour of cheaper imported goods.

Zimbabwe's macro-economic environments were ranked number 109 out of 117 countries according to the World Economic Forum's 2005 Global Competitiveness Report. Zimbabwe's economy declined by more than 40% of its real GDP since 1997 and exports have fallen by a proportion of more than half. FDI has dropped from USD 444 million in 1998 to USD 9 million in 2004. Industry officials say more than 400 companies have closed since 2000, leaving over 90% of people unemployed.

Going forward, the manufacturing industry requires a strategy to improve and restore the manufacturing competitiveness it once enjoyed. The local manufacturers need to recognize that the playing field has changed significantly and that the new business environment presents new challenges.

3. Overview

Globalisation and market liberalisation have become realities for Zimbabwe, and it brings along opportunities to the local industry in as much as it brings threats. Zimbabwean companies are facing increasing competition and are struggling to cope both on the exports and imports front in an international economic setting.

According to Karim (2009), "there are unprecedented pressures on companies to improve their operational efficiency for enhanced competitiveness and overall business performance". He further elaborates that such pressures include competition from foreign products, new product introduction by competitors, rapid technological improvements and shorter product life cycles, unanticipated customer shifts, and advances in manufacturing and information technology. He states that under the new economic

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conditions, the organization must deliver a reliable product, or service, on time and ensure that customer desires are fulfilled.

To survive these challenges and to benefit from the opportunities that come along with globalisation, Zimbabwean manufacturing companies need to become internationally competitive through improving operational efficiency and management practice. In addition, is important that Zimbabwe's domestic policies create an environment that allows local businesses to grow and to elevate the level of manufacturing superiority to attain international competitiveness. Zimbabwe's economy is at its crossroads where it can now recover from over a decade of contraction and regain regional competitiveness it once enjoyed.

The competitiveness of the local manufacturing sector in the new economic setting of a more liberal international and domestic environment will be critical to its long term prosperity and growth. An internationally competitive Zimbabwean manufacturing sector will create and contribute more towards attainment of a more sustainable and stable economy and this would in turn encourage both foreign and domestic investments.

3.1. Macro-environmental analysis

3.1.1. Political environment

The political climate in Zimbabwe is currently polarised stemming from the high political tension between the opposition parties and the ruling party. This political tension coupled with the Government policies like the Indigenous Empowerment Act aimed at economically empowering those defined by the Act as indigenous people, has increased the country's investment risk. The perceived high political risk is likely to prompt capital flight and this may result in further contraction of the manufacturing industry which may result in more job losses and the consequent shrinkage of Government's revenue base.

3.1.2. Economic environment

After a decade of economic contraction and hyperinflation which was fuelled by chronic fiscal deficits and speculator activities, Zimbabwe's economy grew about 4% in 2009, consumer prices fell about 8%, and bank deposits tripled, (Fiscal Policy, 2010).

Following the difficulties of doing business under a hyperinflationary environment for over a decade, the Zimbabwean economy is estimated to have shrunk since 2001 from $12 billion to $2.37 billion in 2009 and is now the third smallest in SADC.

The Zimbabwean economy is dynamic and currently characterised by high unemployment levels of over 90%, an inflation rate of 5%, low levels of investment, scarce and expensive finance and high purchasing power parity and 80% plus of the population is living in poverty on less than $1.25 a day.

Savings have collapsed and are estimated to be $ 6 million (0.2% of GDP) and accordingly, Zimbabwe has become a capital-scarce economy both at the level of long term fixed investment and working capital. Companies, therefore, must export or attract inflows of capital to finance their domestic operations for

working capital and growth programs. Zimbabwe's savings stock was wiped out by hyper-inflation and unpaid international debts remain un-serviced resulting in Zimbabwe's poor credit rating. The implications of this is that new loan capital as well as new inflows of investment capital will remain out of reach until policy changes are introduced to restore the country's tolerability as an investment option.

The dollarization of the economy was adopted in 2009 after the Zimbabwe dollar's real purchasing power had become '*moribund*' resulting in the official prices, salaries and exchange rates losing their economic function. The dollarization also meant that the policy used since 1980 of a depreciating exchange rate to offset excessive exchange rate losses in the domestic economy is no longer feasible.

Also, the Central Bank is in a limited capacity to control the money supply growth to balance out the impact of liquidity shortages on the market. The liquidity problems compounded with the current indegenisation laws further constrained the much needed capital inflows from abroad. Commercial agriculture, closely integrated with manufacturing, used to be the driver of the economy. With the relative decline of large-scale farming, manufacturing's share is now less than 10% of GDP and is unlikely to regain its standing in the economy if measures are not taken to restore competitiveness.

Government forecasts that interest rates will remain high and average 12% per annum in the next five years.

The money supply growth will remain low due to the dollarization and the constraint on the Central Bank of not being able to print money, which in turn will impact negatively on the velocity of money in the economy.

3.1.3. Social environment

The social and humanitarian situation in Zimbabwe has deteriorated vastly in the last decade, from the year 2000 to 2010. Shortages of basic food commodities and unreliable rainfall patterns have impacted negatively on food production and security over the years.

The contraction of the economy was simultaneously coupled to inefficient health delivery system, water supply shortages and poor sanitation facilities resulting in Zimbabwe's worst outbreak of cholera in many years.

These factors were in turn further compounded by the devastating impact of the HIV and AIDS pandemic on the effective population of Zimbabwe.

Poverty levels have increased with over 80% of the population leaving in poverty. Unemployment is at its highest with over 90% of the population being un-employed. The contraction of the economy resulted in many people losing their jobs and joining the skills exodus into the Diasporas.

Incomes inequalities have continued to worsen as a result, and the Gini Coefficient is estimated to be at 0.57 (World Bank, 1998b). The highest 20% of the population accounts for over 62% of the consumption whereas the lowest 20% accounts for only 4%.

Zimbabwe has a population of approximately 13 million and a literacy rate of 92%, the highest in Africa. On the other hand, Zimbabwe now has one of the lowest life expectancies in the world, estimated at 34 years for women and 37 years for men.

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3.1.4. Technological environment

Technological change on the Global scene is shifting industrial and trade structures towards more complexactivities. Competition now arises with immense concentration from all over the world, based on an incomprehensible plethora of new technologies, superior skills and sophisticated supply-chain and distribution techniques, Lall (1994). To survive it, producers must benchmark and adopt newer technologies and management practices at or near 'best practice'. Industrial firms are becoming less vertically integrated and more specialized by technology.

The situation calls for a concerted effort on policy shift and paradigm change to move economies from low growth, and technological course to another.

3.2. Zimbabwe manufacturing industry analysis

Zimbabwe's manufacturing sector has gone through a decade of de-industrialisation and is currently experiencing low capacity utilisation levels, low productivity levels and this has taken away the competitiveness that the local manufacturers need to compete with foreign products. Currently most Zimbabwean manufacturing businesses are resorting to the importation of finished products and this has consequently resulted in the loss of jobs, reduction of exports and a worsening Balance of Payments position for the country.

The manufacturing sector was at its peak in the 1990s and was well known for its diversity of products and as an important contributor to the country's GDP (16%), (RBZ Monetary policy Review, and 2009). The manufacturing sector played a key role in the economy as it supplied 50% of its output into the Agricultural sector. At the beginning of the year 2009, the sector was operating at estimated capacity utilisation levels of less than 10% (Fiscal Policy Review 2009). Capacity utilisation had been hampered over the years by hyperinflation, foreign exchange controls, price controls and shortages of foreign currency, energy disruptions, water shortages, working capital constraints, amongst many other factors.

The introduction of the multicurrency system in January 2009 ushered in a period of stability for the sector and some companies have shown some improvement in capacity utilization and productivity. The ministry of Finance estimates that the sector will require about USD 1.0 billion dollars to quickly recoup lost capacity and then move onto new expansionary projects. Immediate requirements for retooling and recapitalising the manufacturing sector amounts to about US$ 1.0 billion.

On the other hand, the majority of Zimbabwean Enterprises are micro-single-owned operations and mostly in the informal sector. The size of the firms is small compared to the firms at international scales. As a result, volumes are low, technology levels are low and this adversely compromises the competitiveness of the Zimbabwean manufacturing sector.

Table 1. Reasons for manufacturers failing utilize competitiveness

	REASON	***PERCENTAGE (%)***
1	Foreign Currency Shortages	80.8 %
2	Raw Material Shortages	71.8 %
3	Working Capital Problems	9.0 %
4	Low Domestic Demand	42.3 %
5	Power cuts	6.4 %
6	Fuel Shortages	9.0 %
7	Exchange Rate Policy	3.8 %

Sources: CZI (2005) and Mzumara et al. (2005)

4. Concepts and benchmark indicators of competitiveness

WEF and IMD (1990) have come up with factors that determine competiveness. These are: domestic economy- the existence of competition in the local market prepares firms to be productive and efficient; internationalization- when a nation is more open to international activities its performance enhances minimization of state interventions in the economic activities; availability of finance and support infrastructure; availability of sound management; promotion of science and innovation; and availability of skilled manpower and positive attitude to productivity.

5. Literature review

5.1. Competitiveness theories

Wignaraja (2003) has contributed to literature on manufacturing sector competitiveness by highlighting the macroeconomic perspective, business strategy view a technology and innovation approach.

5.2. Macroeconomic perspective

This perspective hinges on the fact that exchange rate is the necessary instrument for achieving international competitiveness. It defines international competitiveness "as the level of the real exchange rate which in combination with the requisite domestic economic policies achieves internal and external balance" (Wignaraja 2003). Therefore appreciation of the real exchange rate causes a loss in a country's international competitiveness, whilst on the other end depreciating will improve international competitiveness.

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This international competitiveness can be proxied by relative price of non-tradeables goods to tradeables goods, real effective exchange rates, relative consumer prices, relative wholesale prices and relative unit labour costs in the manufacturing sector (Vignes and Smith, 2005). The proxies that can be used depend on the availability of data and the context under consideration. Though some of the proxies under this perspective do not contain constraining factors like poor infrastructure and a lack of scientific and engineering skills, the measures are widely used in examining competitiveness in developing and developed countries.

5.3. Business strategist perspective

This approach to competitiveness is skewed to firm competition and therefore strategies by firms become key in determining local and international competitiveness. This approach utilises Porter's "Diamond Model" in which he identified four interrelated factors necessary for sustaining competitiveness, which are: firm strategy, structure and rivalry, demand conditions, related supporting industries and factor conditions. This theory has assisted many studies in defining competitiveness (Vignes and Smith, 2005).

5.4. Technology and innovation perspective

It asserts that technology is paramount in defining the manufacturing sector competitiveness path of a country. In most developing countries technology sources are foreign direct investments and the innovation stems from training, research and development. Technology brings the efficiency ingredient whereas innovation fosters mastery in order to register competitiveness.

6. Measures of competitiveness

6.1. Real Effective Exchange Rate (REER)

REER is deemed a good measure of competitiveness of domestic goods at the international market. Mathematically, the index can be written as:

$$REER_t = \frac{S_{it}}{P_{it}} * w_i \quad \text{(Vignes and Smith, 2005)}$$

S_{it} - represents the nominal exchange rate index of the home currency at time t in terms of an index of the *ith* countries currencies. (Relative to the base period)

w_i - is the appropriate trade weight assigned to currency *i.*

P_{it} - represents an index of price relatives between Zimbabwe and its *ith* trading partners at time t. (Relative to the same base period as S_{it}).

6.2. Unit Labour Cost (ULC)

Labour is generally regarded as a major cost driver that has a bearing on manufacturing sector competitiveness. The ULC can be conclusively represented as the ratio of labour compensation to labour productivity, which is output per man hour.

$ULC_n = W_n / (Q / H)$ (Vignes and Smith, 2005)

Where,

W_n represents the nominal wage rate,

Q represents domestic production

H denotes the number of hours worked

(Q / H) is equal to labour productivity

The ration shows that, ULC_n is directly related to the nominal wage rate and inversely related to labour productivity.

6.3. Terms-of-Trade (TOT)

Export and import prices are important variables in determining competitiveness in nowadays open economies. TOT can be obtained as:

$$TOT_t = \frac{\underline{P}_t^x}{P_t^m}$$

where:

$\underline{P}_t^x$ - represent the index of average unit values of export at time t and relative to a base year and

P_t^m - represent the index of average unit values of imports at time t and relative to a base year.

This ratio is interpreted such that an increase suggests an improvement in the terms of trade and can lead to a possible increase in international competitiveness. The converse is true for a decrease in the ratio. The major shortcoming of the net barter approach is that it assumes that the impact of changing market conditions on a country's trade balance is influenced solely by prices and not by volume. The influence of changes in trade volume is captured by the income approach which multiplies the net barter terms of trade index by trade volumes.

7. Empirical analysis

7.1. Enterprise Surveys methodology

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7.1.1. Data details

Data was collected from 599 companies during the period April 2011 through to March 2012. The surveys were administered to 232 micro/small firms, 221 medium and 146 firms were large using the Enterprise Surveys methodology. Manufacturing firm amounted to 376, retail 89 and 134 were from other services. From the surveyed firms, 504 are domestically owned and 95 foreign owned whereas 564 of the total surveyed firms are non- exporters leaving us with only 34 exporters.

The sampling methodology is stratified random sampling with replacement. The Enterprise Surveys used defined firm size levels as follows; 5-19 employees (small), 20-99 employees (medium), and 100+ employees (large-sized firms). The firms were grouped into manufacturing, retail, and other services.

7.2. Enterprise surveys analysis

7.2.1. Corruption

Corruption has a bearing on manufacturing sector competitiveness as it increases transaction costs and subsequently the price of the commodity thereby increasing the price. In Zimbabwe it was found out that 32,6% of the firms identified corruption as a major constraint in doing business as compared to corruption levels of 37,6% in the Sub- Saharan region (Table 2).

7.2.2. Crime

Security costs to avert crime divert productive resources and this has a negative effect on domestic and foreign investor perception. Commercial disputes reduce productivity and are costly especially in weak legal institutions. Even though few firms 6,7% identified crime in the firms as a constraint, 91,9% of the firms are paying for security. Security costs as a percentage of sales amounted to 1,6% whereas real annual sales growth was going down.

7.2.3. Finance

Excessive reliance on internal funds is a sign of potentially inefficient financial intermediation. Working capital and collateral levels relative to the value of the loans have an impact on bank loans and credit lines. Financial services on bank loans or lines or credit and on the deposit mobilization side, by measuring the percentage of firms with checking or saving accounts affects firm liquidity. 63,7% of the firms identified finance as the major constraint whilst the world's average is 31,8%.

7.2.4. Infrastructure

High tech and good infrastructure enhances the competitiveness of an economy and generates a foundation for firm growth and development. Firms, customers and suppliers need to be at interface in order to synergise on information sharing and efficient production methods. Electricity, water supply, telephone

connections are vital for manufacturing competitiveness in Zimbabwe. Infrastructural fatigue and poor service delays impose costs on manufacturing firms. Electricity is a constraint to 46,8% of the firms whereas the manufacturing is faced with 6,7% electricity outage. Kariba and Hwange are producing 1050 mega watts and operating at a capacity of 54% (Mzumara, M. 2012). In Zimbabwe 10,1% of the firms have transport problems though not an exception in the region and the world.

Table 2. Corruption

Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms expected to give gifts to public officials "to get things done"	7.2	35.1	25.5
Percent of firms expected to give gifts in meetings with tax officials	12.6	18.2	15.7
Percent of firms expected to give gifts to secure government contract	3.7	34.0	23.7
Value of gift expected to secure a government contract (% of contract value)	0.1	3.2	2.2
Percent of firms expected to give gifts to get an operating license	5.3	19.6	15.0
Percent of firms expected to give gifts to get an import license	10.4	16.0	14.3
Percent of firms expected to give gifts to get a construction permit	44.0	26.2	23.2
Percent of firms expected to give gifts to get an electrical connection	12.4	21.4	16.0
Percent of firms expected to give gifts to get a water connection	26.2	21.3	15.4
Bribery depth (% of public transactions where a gift or informal payment was requested)	9.4	18.4	15.1
Percent of firms experiencing at least one bribe payment request	16.2	23.7	19.4
Percent of firms identifying corruption as a major constraint	32.6	37.6	36.1
Percent of firms identifying the courts system as a major constraint	7.0	14.7	19.1

Source: enterprisesurveys.org

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Table 3. Crime

Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms paying for security	91.9	63.1	57.5
Security costs (% of annual sales)	1.6	2.2	1.6
If the establishment pays for security, average security costs (% of annual sales)	1.7	3.9	3.0
Losses due to theft and vandalism against the firm (% of annual sales)	0.5	1.7	1.0
If there were losses, average losses due to theft and vandalism (% of annual sales)	2.3	6.5	4.7
Products shipped to supply domestic markets that were lost due to theft (% of product value)*	0.2	1.0	0.9
Percent of firms identifying crime, theft and disorder as a major constraint	6.7	28.3	26.6

Source: enterprisesurveys.org

7.2.5. Innovation and technology

Obtaining international quality certifications may support creating more efficient or effective operations and improve employee's motivation, awareness, and morale. They also provide a sign of high quality that may help reduce waste and increase productivity. Additionally in order to penetrate the national and international market, information and communication technologies becomes important in business transactions.

7.2.6. Informality

The informal sector is competing away market share for the formal private sector. The informal sector poses unfair competition for formal firms as they do not pay registration and membership fees.

7.2.7. Trade

International trade assists manufacturers with wide markets and input source. This will aid domestic output and sustainability in the output and input markets. These open markets are supposed to raise the manufacturing competitiveness but in Zimbabwe this is constrained by trade regulations, transport logistics, export and import licensing and customs operations. 2,3% of the sales made by Zimbabwean firms are

exported of which 32,7% of the inputs used are of foreign origin. Zimbabwe and the region are also taking around 5-7 days to clear goods at ports of entry.

Table 4. Finance

Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms with a checking or savings account	93.5	86.5	87.9
Percent of firms with a bank loan/line of credit	12.5	22.7	35.9
Proportion of loans requiring collateral (%)	81.4	80.4	78.0
Value of collateral needed for a loan (% of the loan amount)	261.3	158.3	163.8
Percent of firms not needing a loan	19.4	34.7	39.4
Percent of firms whose recent loan application was rejected	23.1	19.1	18.9
Percent of firms using banks to finance investments	13.1	15.0	26.4
Proportion of investments financed internally (%)	84.7	79.1	68.6
Proportion of investments financed by banks (%)	8.6	10.1	17.0
Proportion of investments financed by supplier credit (%)	6.0	3.6	4.5
Proportion of investments financed by equity or stock sales (%)	0.4	1.9	4.5
Percent of firms using banks to finance working capital	12.8	20.6	30.1
Proportion of working capital financed by banks (%)	5.5	8.4	12.4
Proportion of working capital financed by supplier credit (%)	11.8	12.5	11.9
Percent of firms identifying access to finance as a major constraint	63.7	45.3	31.8

Source: enterprisesurveys.org

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Table 5. Infrastructure

Indicator	Zimbabwe	Sub-Saharan Africa	World
Number of electrical outages in a typical month	6.7	8.9	7.4
Duration of a typical electrical outage (hours)	5.0	5.2	3.1
If there were outages, average duration of a typical electrical outage (hours)	5.9	6.7	4.8
Losses due to electrical outages (% of annual sales)	6.9	5.0	3.1
If there were outages, average losses due to electrical outages (% of annual sales)	8.8	7.0	5.1
Percent of firms owning or sharing a generator	53.0	43.9	32.4
Proportion of electricity from a generator (%)	3.1	12.9	7.0
If a generator is used, average proportion of electricity from a generator (%)	10.0	26.0	20.8
Days to obtain an electrical connection (upon application)	30.0	31.2	33.4
Percent of firms identifying electricity as a major constraint	46.8	49.2	39.1
Number of water insufficiencies in a typical month*	2.5	2.5	1.8
Proportion of products lost to breakage or spoilage during shipping to domestic markets (%)*	0.4	1.5	1.6
Percent of firms identifying transportation as a major constraint	10.1	26.9	21.9

Source: enterprisesurveys.org

7.2.8. Workforce

The composition of government involvement, private sector and foreign sector involvement has a bearing on the manufacturing sector competitiveness in Zimbabwe. This has a bearing on equity, efficiency and firm performance in general. Labour regulations have a direct effect on the type of employment favoured by firms and they may have a different impact by gender. Zimbabwe boast of 53,7% of full time workers of which 30,9% are offered training. Mainly big firms had problems with labour regulations and 5% of the firms complained about inadequately educated workforce.

Table 6. Innovation and technology

Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms with an internationally-recognized quality certification	18.0	14.8	16.4
Percent of firms using technology licensed from foreign companies*	16.4	13.4	15.1
Percent of firms having their own Web site	31.0	19.4	34.9
Percent of firms using e-mail to interact with clients/suppliers	79.1	48.3	64.2
Percent of firms with an annual financial statement reviewed by external auditors	54.5	44.3	48.4

Source: enterprisesurveys.org

Table 7. Informality

Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms competing against unregistered or informal firms	71.8	65.6	56.2
Percent of firms formally registered when they started operations in the country	94.7	82.0	87.8
Number of years firm operated without formal registration	0.3	0.7	0.9
Percent of firms identifying practices of competitors in the informal sector as a major constraint	47.0	38.7	31.7

Source: enterprisesurveys.org

7.2.9. Firm characteristics

Indicators show the participation of the government, the domestic private sector, the foreign sector and other sectors in the ownership of the typical firm. The distribution indicates insight into their levels of equity in the private sector of the economy.

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Table 8. Trade

Indicator	Zimbabwe	Sub-Saharan Africa	World
Days to clear direct exports through customs	4.9	7.6	7.1
Percent of firms exporting directly or indirectly (at least 1% of sales)	11.0	9.9	17.1
Percent of firms exporting directly (at least 1% of sales)	6.4	6.3	12.9
Proportion of total sales that are domestic sales (%)	97.7	95.9	92.6
Proportion of total sales that are exported directly (%)	1.2	2.3	5.3
Proportion of total sales that are exported indirectly (%)	1.1	1.7	2.1
Days to clear imports from customs*	7.6	13.5	11.4
Percent of firms using material inputs and/or supplies of foreign origin*	63.4	60.8	62.0
Proportion of total inputs that are of domestic origin (%)*	67.3	60.0	62.1
Proportion of total inputs that are of foreign origin (%)*	32.7	40.0	37.9
Days of inventory of main input*	48.2	24.7	32.7
Percent of firms identifying customs and trade regulations as a major constraint	7.1	21.8	17.8

Source: enterprisesurveys.org

8. Regression methodology

A linear regression was done using e-views econometric package. Volume of manufacturing (VMI) index was regressed against terms of trade (TOT), electricity usage (ELE), exports (EXPO), imports (IMPO), foreign direct investment (FDI), Gross domestic product (GDP) and proportion of electricity usage in GDP (GDPELE).

8.1. Regression analysis

The study found out that there is a positive relationship between VMI and TOT, about 20% of our changes in production, value of output produced, real sales and quantities of input used. GDP, ELE and IMPO have an infinitely small positive effect on VMI. FDI and GDPELE have a negative effect of over 20% on VMI. EXPO has a negative impact on VMI of about 8%. This means that VMI in Zimbabwe is largely and positively influenced by TOT and largely negatively influenced by EXPO, FDI and GDPELE.

Table 9. Workforce

Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms offering formal training	31.2	30.9	35.4
Proportion of workers offered formal training (%)*	30.1	50.5	46.8
Years of the top manager's experience working in the firm's sector	19.0	13.5	15.9
Number of permanent full-time workers	53.7	27.6	43.4
Number of temporary workers	10.5	5.5	6.5
Number of permanent production workers*	54.4	40.7	51.0
Number of permanent non-production workers*	16.9	10.9	16.0
Number of permanent skilled production workers*	23.1	22.4	29.9
Number of permanent unskilled production workers*	41.5	16.9	17.8
Proportion of unskilled workers (out of all production workers) (%)*	46.2	36.8	32.3
Percent of firms identifying labor regulations as a major constraint	9.6	8.8	11.8
Percent of firms identifying an inadequately educated workforce as a major constraint	5.0	22.2	27.1

Source: enterprisesurveys.org

Table 10. Firm characteristics

Indicator	Zimbabwe	Sub-Saharan Africa	World
Age (years)	33.4	13.3	15.8
Proportion of private domestic ownership in a firm (%)	94.2	80.9	87.6
Proportion of private foreign ownership in a firm (%)	5.1	14.7	9.7
Proportion of government/state ownership in a firm (%)	0.5	0.8	0.7
Proportion of a firm held by the largest owner(s) (%)	61.8	86.0	81.7

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Indicator	Zimbabwe	Sub-Saharan Africa	World
Percent of firms with legal status of privately held Limited Liability Company	15.5	24.9	37.4
Percent of firms with legal status of Sole Proprietorship	17.6	54.8	37.8
Percent of firms with legal status of Partnership	3.2	9.7	9.5
Percent of firms with legal status of Limited Partnership	57.4	5.3	6.3

Source: enterprisesurveys.org

9. Conclusions and recommendations

The economy still remains fragile. The current recovery may not be sustained in the long term without meaningful and deeper reforms being undertaken to sustain GDP and other crucial indicators. There is a need of appropriate policies to encourage FDI. FDI through transnational companies bring in improved technology, superior management and have the ability to alter terms of trade in favour of the host country. They have also the ability to create large employment levels with a single investment. Zimbabwe needs such investment to clear the backlog of unemployed and those who are in other countries to return. Capacity utilisation although improved needs to improve further. Production still remains low. In the absence of significant exports the country will continue to experience liquidity problem. The pressure to export is genuine as earnings from exports are now part of domestic currency which circulate in the absence of a national currency. The monetary policy has almost disappeared with the inability of the Reserve Bank of Zimbabwe to perform basic roles such as lender of last resort. Although the use of multi-currency has brought stability, Zimbabwe needs to look beyond transitional phase. The government should seriously consider the IMF recommendation of adopting the South African rand as its currency. It is difficult to manipulate the USA dollar to make exports competitive. However, within the rand zone it is possible to manipulate it in order to encourage exports and Zimbabwe will be part of the rand zone. It will have an input in the decision affecting the rand. Currently Zimbabwe has no input in the monetary policy of the currencies it is currently using and this is not good. With KPCS approval, Zimbabwe's benefits can increase if it uses the right exchange rate. The Indigenisation and Economic Empowerment Act may threaten new investment and recovery if analysed together with the land reform programme. There is a need to first evaluate the land reform and focus on the return of production or increase of production on the farms before embarking on further indigenisation in other sectors. .The big problem that the government faces is unemployment. There is no model or empirical evidence in literature where all citizens of a particular country became owners of the means of production which is normally reserved for owners of capital. Countries which have prospered

have done so by creating job opportunities. The immediate problem of high school and college graduates is to get their first job upon completion of their studies not to own a factory. Later in life after they have accumulated savings their paradigm can shift to run and own a factory. The models which reduce unemployment levels exist and the government should explore them so it can create jobs. The only people who will benefit most under the indigenisation are the elite who already have money and need no job. Otherwise the rest of the Zimbabweans their realistic goal is to secure a job that provides them security.

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