# COMPETITIVE RESPONSE, INNOVATION AND CREATING AN INNOVATIVE MILIEU
# THE CASE OF MANUFACTURING INDUSTRY IN BULAWAYO, ZIMBABWE

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## 1. INTRODUCTION

Innovation is increasingly recognized as a key variable in explaining local industrial growth. On the one hand, innovation has become a critical element in maintaining competitiveness. On the other hand, the capacity of firms to innovate depends not only on firm level characteristics but also on 'structure' and 'local conditions'.

Michael Best has given a powerful interpretation of the changing nature of competition, with his theory of 'new competition' (Best, 1990). New competition distinguishes itself from 'old' competition in four dimensions. Firstly, and at the centre of his theory is the entrepreneurial firm, which is "an enterprise that is organised, from top to bottom to pursue continuous improvement in methods, products and processes" (ibid:2). The latter constitutes the basis of strategic advantage, rather than lower production costs per se. Best rejects the notion of the product cycle, according to which technological innovation passes through a sequential process, ultimately leading to a low cost mass production technology. In stead, a firm would have to pursue continuous improvements, something that has organisational requirements and demands attention to detail. The second dimension is the importance of the production or commodity chain. Competitiveness depends as much on the firm itself as on that of its suppliers. Suppliers are an important source of innovation and improvement. Under new competition conditions supplier and buyer invest in long term relationships, consult and jointly establish quality norms and standards. The third dimension concerns the importance of so-called 'sector institutions': "A sector can include a variety of inter-firm practices and extra-firm agencies such as trade associations, apprenticeship programmes, labour education facilities, joint marketing arrangements and regulatory commissions, each of which facilitates inter-firm co-operation" (ibid:17). In other words, "firms not only compete, but they can also co-operate to provide common services, to shape 'the rules of the game' and to shape complementary investment strategies" (ibid). The fourth aspect is a strategic industrial policy on the part of government which would need to have a production rather than a distribution focus, seeking to shape markets, stimulating and undertaking complementary investments in support systems, and encouraging firms to develop strategic alliances.

Is the local 'structure' conducive to cooperation between firms? Local 'conditions' refer, amongst others, to basic infrastructure and to the existence of

institutions, such as science & technology centers, intermediary support organizations etc. Are local conditions conducive to innovation by firms? (Helmsing, 1998a). Indeed in developed countries, technology gaps help to explain (inter-)regional growth differentials (e.g. Landabaso, 1997). Technology gaps refer to the lack of innovation effort by public and private sectors and the poor adaptation of R&D efforts to the specific needs of firms in the region concerned. The EU has launched an ambitious program for the promotion of innovation in the less favored regions of the EU (the STRIDE program) which is seen by several commentators as an answer to the real causes rather than only dealing with symptoms of high unemployment. Morgan (1997) proposed the notion of learning region and emphasized that innovation is an interactive process between a firm and its environment. In the latter, clients, other firms and S&T and regulatory institutions play key roles. Storper (1992, 1995) argued that innovation requires both technological and organizational learning. Industrial agglomerations provide the basis for both. Not only in terms of localized input-output relations between firms, but also in terms of so-called untraded interdependencies. These include labour markets, local regional industrial practices, 'rules of the games', and public and collective institutions. Maillat (1992, 1997) formulated the notion of innovative milieu and argued that the (economic) attractiveness of a city or 'territory' is "no longer a function of the locational factor it offers but of its production system's ability to create specific resources and to generate innovation processes" (1998:9). The innovative milieu consists of patterns of interaction between firms and science & technology and regulatory institutions to enhance the innovative capacity of firms. Most of this theoretical discussion takes place on and in OECD countries. Do these propositions apply to middle income countries that have been going through processes of structural adjustment and liberalization? There is relatively little research on this and this paper is only a partial contribution.

The paper is based on a research project, entitled "Urban economic restructuring and local institutional response", which is currently being carried out. This research project has the following aims: i) to examine the competitive responses of manufacturing firms in the city of Bulawayo, to liberalization and opening up of the Zimbabwean economy; ii) to examine the use of support services, and, iii) to examine the role of business or producer services. Below some of the findings are presented and, in addition, we seek to address the following questions: a) To what extent have

firms followed innovative responses? Are there any differences between innovative and non-innovative firms in terms of their concrete actions, and in terms of the role played by support services? Do innovative firms differ in terms of their demand for business or producer services? By dealing with these issues, we seek to answer the question: is there a basis for creating an innovative milieu in Bulawayo?

Section 2 is devoted to a background review of recent changes in the Zimbabwean economy and of Bulawayo, where the research has been conducted. Section 3 introduces the research and describes threats, strategic responses and actions of all firms and examine differences between 'innovative' and 'defensive' firms. Section 4 examines the role of enterprise support services and institutional preferences of firms. Section 5 looks as business or producer services. The final section makes some concluding observations in terms of the basis for creating an innovative milieu in Bulawayo.

## 2. ZIMBABWEAN ECONOMY BEFORE AND SINCE STRUCTURAL ADJUSTMENT

### 2.1. Prior to ESAP

The immediate post-independence boom was cut short by a severe drought, poor world economic performance as well as acts of South African destabilization. The average economic growth was not more than 1.6 per cent per annum over the first five years after 1980. The second half of the eighties gave a more favourable picture. For the decade as a whole an average of 3.4 per cent real growth per annum was achieved. Given the high population growth (of nearly 3%), per capita income declined in the first half, and slightly improved during the second half of the nineteen eighties.

The 'boom-bust' performance of the economy is also reflected in the balance of payments. Its current account deficit worsened in the early and mid eighties only to recover and turn into a deficit at the end of the decade. It should be added though that in comparison to the boom-bust fluctuations of other countries those in Zimbabwe are much smaller and influenced by non-economic factors, such as recurrent droughts). Manufacturing industry has been and remained through out the 80s a net user of foreign exchange.

The industrial sector with all its diversity is relatively small. According to the Census of Manufacturing, there are less that 1100 units. They produce as many as 6000

products but markets are small, and competitors few. The domestic market had been almost completely shielded from competing imports since the early sixties and this generated monopolistic and heavy oligopolistic enterprises which over time diversified into other existing or new product market areas. Many of these economic activities are controlled by a small number of economic conglomerates such as Delta Corporation, the TM group, etc., in which the foreign investment component was and still is very high.

There was notably little 'structural change' in industry after Independence. The most noteworthy is the relative decline of metal and metal products, and the relative increase in drinks & tobacco and chemical & petroleum products subsectors. On balance the 80s resulted in a 3.6% increase in real output per annum and a 2.1% annual increase in employment.

Apart from the low employment growth, the most important disturbing post-independence feature has been the lack of industrial investment. Gross domestic capital formation (GDCF) was very low, and according to some (e.g. Green & Khadani), there was no net increase in the capital stock in the 80s. The rate of investment (GFCF / GDP 1980) fell in real terms from 15.3% in 1980 to an estimated low of 10.7% by 1989. It should be noted that the GDCF that did take place was too a large extent undertaken by the public sector, in the form of infrastructural investments.

It is difficult to get a reasonably balanced picture of the major constraints on investment. A survey in the late 80s reported the following factors influencing new investment (in order of importance): expected return on investment; forex availability; insufficient local demand; business confidence (Hawkins et al, 1988). Whatever the ‘success’ in Zimbabwe's industrial sector, the fact is that the investment rate dramatically declined in the 80s. The relative stagnation and the failure to generate employment and income generating opportunities for a fast growing labour force, is generally seen as the principal driving force that pushed the Government to adopt a package of economic reform measures, which became known as the Economic Structural Adjustment Program (ESAP).

## 2.2. Economic Structural Adjustment Programme

The ESAP was launched in 1991 in order to revitalize the private sector through deregulation and reduced government intervention and by decreasing the latter’s

absorption of resources[1]. The programme had a number of specific objectives of trade and exchange rate liberalization by creating a market based foreign exchange system and by gradually replacing the administrative import restrictions by a (reduced) tariff based protection.In addition, the programme aimed at a commercialization of public enterprises so as to reduce their operational losses which were constituting a heavy burden on the national budget. Furthermore, a civil service reform was meant to reduce the public sector wage bill by substantial reduction in the number of public sector employees. The last two mentioned policies would contribute to a substantial reduction of the central government budget deficit. A liberalization of the financial sector was announced. The program aimed at a domestic deregulation of product and labour markets and announced measures to promote foreign investment.

The ESAP program foresaw a number of 'supporting sectoral initiatives' which included amongst others, informal sector and small enterprise support. The latter focused on matters of deregulation concerning licenses and other legal restrictions and on access to (and cost of) finance. Promotional measures were announced to supplement the already existing activities of the Small Enterprise Development Corporation (SEDCO) and the small enterprise credit scheme of Zimbank. A Venture Capital Company of Zimbabwe was proposed and subsequently established.

Other than the above mentioned deregulation and market based reforms, ESAP did not foresee other sectoral initiatives directed to strengthen the competitive capacity of small enterprises or of manufacturing industry at large. In fact, the analitical focus is primarily macro-economic and there is little explicit analysis of micro or firm level adjustment needed at the level of the manufacturing firms. Firm level learning and restructuring was not considered a constraint. Firm level responses would be forthcoming. The only pronouncement concerned the importance of speed of implementation: it was expected that "the faster the pace of adjustment measures, the greater the likely extent of retrenchments and short term frictional unemployment"... "On the other hand, the faster and more effective the adjustment program, the more new jobs will be created and the more the social costs of unemployment will be minimized" (ESAP, 1991:8).

[1] GoZ, 1991. Zimbabwe. A framework for economic reform (1991-95). Harare.

The reform program was initially implemented largely in line with the proposed schedule of measures that was incorporated in the ESAP document. Notable progress was made in the areas of international trade, exchange rate and financial sector reforms, the removal of price and wage controls and labour market restrictions, the establishment of collective bargaining, and the promotion of foreign investment (by creating the Zimbabwe Investment Centre). However, the country faced considerable "headwinds" caused by a drought affecting agriculture which also required large scale drought relief in rural areas (1993), the deterioration of the country's terms of trade, and the international recession in the early 90s. Most importantly, the implementation of the fiscal policies and public sector reforms was seriously deficient, leading to continued high levels of government expenditrures and borrowing, and ever higher interest rates[2]. The failure of government to implement fiscal policies and the macro-economic effects of the 1993 and 1995 droughts are the principal factors explaining the lack of recovery in the first five years after the launching of ESAP (e.g. Bloch & Robinson, 1996).

The above mentioned reform measures, that were partially or wholly implemented, had direct impacts on the operations of manufacturing industry. In their detailed review of manufacturing industry trends, Braunerhjelm & Fors (1996) estimated that in the first two years of ESAP manufacturing employment shrank by some 20 000 jobs (Braunerhjelm & Fors, 1996: pp 25-28). The sectors that lost heavily were metal & metal products (5300), textiles (2600), clothing & footwear (2100) and the paper industry (2600). The relative decline in employment is however somewhat less than the decline in output in the same period. ESAP and drought exerted their toll. Exports did not grow as had been expected on the basis of the large initial devaluation of the local currency (in early 90s). When the exchange rate later stabilized, in spite of high levels of inflation, it became even less attractive for industries to export. The two authors examined macro economic policy issues arising from their review (esp. in relation to export growth) but also emphasized micro level adjustments. They concluded that "notwithstanding that certain sectors are more likely to expand than others, on the firm level the outcome will to a large extent depend on the actions and preparations taken by firms themselves, independent of which sectors they belong to.

[2] For a review of the ESAP, see Bloch E & Robinson, J, 1996. Zimbabwe: Facing the facts. Chapter 1 A change of direction. Harare: Thompson Publications and GoZ, 1996, Programme for Economic and Socials Transformation, ZIMPREST. Harare: Ministry of Finance

How this process will carry on is an important subject for future study" (ibid, 1996: 88/9). In this paper we aim to shed more light on these firm level adjustments.

### 2.3 City of Bulawayo

Bulawayo is the second largest city of the country. It is located in the southern region and represents an important international transportation node for traffic flows between South Africa and countries north of the Limpopo river. During the early period of white settlement of what became known as Rhodesia, Bulawayo was the largest and most important urban center. Only to be surpassed by Harare (formerly known as Salisbury), when that city became the administrative center of the then 'self governing colony' and later became the capital of the country. Generally the pace of life in Bulawayo is slower than Harare, and the mood is more provincial.

Bulawayo is the second largest industrial center. Notwithstanding, the industrial community is fairly small and well established. Most sectors are dominated by family owned businesses. Their owner/managers have often technical rather than financial orientation. Its manufacturing industry represented, according to CSO figures of 1994, 30% of total manufacturing employment in the country. The table below gives an overview of the composition of formal sector employment since 1980. The city didn't participate much in the early post-Independence boom. The Matabeleland region as a whole suffered from domestic political troubles which negatively influenced economic performance. Only in the second half of the 80s and after the domestic political settlement in 1987, did Bulawayo employment grow.

Table 1
Formal sector employment and average annual growth rates, Bulawayo

| | 1980 | 1985 | 1990 | 1994 | 80-85 | 85-90 | 90-94 |
|---|---|---|---|---|---|---|---|
| Agriculture | 80 | 123 | 265 | 77 | 9.0 | 16.6 | -26.6 |
| Mining | 107 | 85 | 86 | 0 | 4.5 | 0.2 | -100 |
| Manufacturing | 45676 | 44578 | 56452 | 62116 | .05 | 4.8 | 2.4 |
| Energy | 1478 | 1552 | 1650 | 1482 | 1.0 | 1.2 | -2.6 |
| Construction | 7321 | 1938 | 4346 | 9743 | -23.3 | 17.5 | 22.4 |
| Finan. services | 1977 | 2219 | 2197 | 2481 | 2.3 | -0.2 | 3.1 |
| Distribution | 13664 | 13954 | 16007 | 16655 | 0.4 | 2.8 | 1.0 |
| Transport | 14550 | 16066 | 14285 | 12108 | 2.0 | -2.3 | -4.0 |
| Public admin. | 9320 | 9192 | 8597 | 7154 | -0.3 | -1.3 | -4.5 |
| Education | 3732 | 4896 | 9943 | 10295 | 5.6 | 15.2 | 0.9 |
| Health | 3185 | 3652 | 4130 | 4239 | 2.8 | 2.5 | 0.7 |
| Domestic workers | 23098 | 21521 | 22375 | 22364 | -1.4 | 0.8 | 0.0 |
| Other services | 8763 | 11679 | 13866 | 15620 | 5.9 | 3.5 | 3.0 |
| Total | 132951 | 131455 | 154199 | 164334 | -0.2 | 3.2 | 1.6 |

Source: CSO, various years, Quarterly Digest of Statistics. Harare and unpublished CSO data

The manufacturing sector is the most important source of formal sector employment in the city. It represents 38% of the total, a share that has been rising somewhat. Immediately after Independence in 1980 employment growth stagnated and declined marginally, but both in the remaining pre-ESAP period and in the 90s employment growth of Bulawayo exceeded the national average[3]. For Bulawayo the manufacturing sector remains a key provider of formal sector employment, along side construction and education (the latter thanks to the extension of primary education and the establishment of a new National University of Science and Technology).

Notwithstanding this performance, employment growth both in manufacturing

industry and other sectors, has been insufficient to create sufficient jobs for a fast growing labour force, depending on the estimates it varies for Bulawayo between 4 and 6% per annum. The informal sector has been growing at a much higher pace though figures vary considerably.

There is little concrete evidence on the impact of adjustment on sectors and firms in Bulawayo. A search in the archives of the local newspaper, The Chronicle, generated little information of concrete events and impacts[4]. In 1991, the signs of ESAP were positive, low interest rates, ample savings, export incentive scheme to import

[3] Bulawayo 85-90: 4.8% p.a.; 90-94: 2.4% p.a.; Zimbabwe 85-90 2.9% and 1.2% respectively. Source: CSO Quarterly Digest, various issues.

[4] What follows below is based on interviews with several local bank managers, namely of Stanbic Bank, Standard Chartered and Zimbank, carried out in March 1996.

inputs and government program to finance the import of machinery & equipment to enable the manufacturing firms to modernize their equipment. Firms began to invest financed using bank borrowing. However, in 1992/3 the picture changed radically. Real interest rates rose rapidly, as did inflation. Import liberalization opened markets to competing imports, drought reduced domestic demand further, as the Zimbabwe dollar depreciated imported inputs and equipment became more expensive. Firms were hit unaware while being in the middle of their modernization programs. Some of them got caught in a debt trap and ran into liquidity problems. Assets that served as security became overvalued, and were insufficient to cover debts.

A number of firms actually collapsed in 92/93, such as G&D shoes, ZECO Engineering Ltd, two textile mills, an electrical consumer goods manufacturer and smaller clothing companies[5]. Other survived by downsizing, retrenching workers and by economizing. Again others sought to return to their core business but found it difficult to find buyers for their non-core operations. Some other managed to penetrate export markets but did not diversify their export clients and markets, being at risk. Again others sought (links with) foreign buyers or franchising. Micro level adjustment strategies varied across sectors and firms and it is to that issue that we will now turn.

## 3. FIRMS LEVEL RESTRUCTURING: THREATS, STRATEGIC RESPONSES AND ACTIONS

### 3.1 Introduction to the research

In 1996 researchers of the Institute of Social Studies (ISS), and the Institute of Housing & Urban Development (IHS) launched a collaborative research effort on urban economic restructuring and local institutional responses. The research has the following particular aims:

- to improve understanding of the nature and dynamics of economic restructuring processes, in particular economic, institutional and physical processes;

[5] Chronicle, 6/10/94. The Chronicle of 27/6/95 reported that in the first half of 1995 22 firms had been liquidated. Since 1991 a total of 130 manufacturing companies had gone into liquidation, another 82 were declared insolvent and at least 10 other were placed under judicial management. These are nation wide figures.

- to improve understanding of appropriate policy responses that may be undertaken by local institutions, incl. local governments to promote local economic development.

The joint research effort consisted of several research projects on economic and urban management aspects of restructuring and was implemented with research partners in Colombia, India and Zimbabwe[6]. One of these project focussed on examining processes of economic restructuring in Bulawayo, Zimbabwe, the strategic responses and concrete actions that were adopted by local firms, business interest associations, government agencies and by the Bulawayo City Council to improve the capacity of local firms to respond to competitive challenges and to strengthen the capacity of local institutions to cope with future economic challenges. The data presented and analysed in this paper is generated by this research project

In view of the overall orientation of the research project and its resource limitations, the research concentrated on a limited number of sectors that make up an important part of the economy of Bulawayo. On the basis of interviews with local business and government leaders, and unpublished data of the national Central Statistics Office (CSO), it appeared that wearing apparel (3220), furniture (3320) and metal fabrication (3810) were the three largest sectors in terms of the number of manufacturing firms. The inclusion of the fourth sector, non-electrical machinery & equipment (3820), has been motivated by its importance as a capital goods producing sector. Together these sectors provide 33% of manufacturing employment in Bulawayo in 1992/3[7]. An attempt was made to obtain data from the CSO concerning the enterprise sector and size structure for Bulawayo. Unfortunately, it was not possible to obtain the CSO listing of the firms and their basic characteristics, on the basis of which a sample might be drawn. It was therefore necessary to construct a basic listing and it was decided to begin with the membership lists of the Matabeleland Chamber of Industries[8]. The Chamber represents only a part of all manufacturing firms, therefore the list had to be complemented by other means[9]. Additional sources used were the Directory of

[6] The programme was financed by the Co-operation between the International Education Institutes and the Agricultural University (SAIL).
[7] CSO, 1995, Census of Industrial production 1992/93 report. Harare: CSO
[8] The chamber is a member of the Confederation of Zimbabwean Industries (CZI).
[9] On the basis of our estimates, the membership of the local chamber currently covers approximately 40% of all registered firms.

Brand Names and Products, published by the Zimbabwe National Chamber of Commerce and the Bulawayo Yellow Pages. An USAID sponsored local project of CZI to identify of opportunities for subcontracting, provided additional data to complement the basic list of names of firms. According to local informants this generated a fairly complete list of all manufacturing firms in the selected sectors in Bulawayo. Subsequently, the firms in the sample were selected in a systematic random manner from this basic list. The operational target was 30 interviews per sector in order to facilitate comparisons. In total 121 firms took part in the survey.

The leading questions guiding this research may be summarised as follows:

1. What types of economic factors/shocks have affected competitiveness of firms in Bulawayo during the past 3 years?
2. What type of competition is faced by firms and what have been the principal changes therein during the last 3 years?
3. What strategic responses were adopted by the firms and what concrete actions have been undertaken by the firms?
4. What enterprise support services have played an important role and is the demand for support services shifting as a result of changing terms of competition?
5. What is the use of specialised producer services and have processes of externalisation taking place?
6. What are the contact patterns of firms in relation to the development of the firm?

A first round of results have been presented separately[10]. In this chapter the focus is on the threats that firms perceived, the nature of their responses and the concrete actions they have undertaken.

### 3.2 Threats

Competitive threats in the period 1993-1996 have arisen in the domestic market as well as in export markets[11]. Firms found it more difficult to maintain their position and profitability. In the domestic market, the main force of competitive threats emanated from existing rival firms and from newly entered firms. Competitive threats emanating from clients and from competing imports were of secondary importance.

[10] Helmsing, A.H.J. 1998b. Survey of economic restructuring & competitiveness of manufacturing industries, Bulawayo Zimbabwe, 1993-1996. Research Report. The Hague: ISS (mimeo).
[11] For details see Helmsing, A.H.J. 1998b.

Finally, suppliers and substitutes were not considered important new sources of competition ESAP has no doubt contributed to the emergence of these competitive threats, directly via its liberalization of imports (raw materials, intermediate and capital goods) and allowing the emergence of competing imports (hitherto an negligible issue, except for 'popular' smuggling) and indirectly by reducing impediments to private sector development. In export markets firms reported increased competitive threats, which as in the domestic market, were primarily caused by existing rival firms and newly entered firms and by more price sensitive clients.

The second most important threat in the period has been unrelated to ESAP, namely the 1994/1995 drought. In the case of Bulawayo the drought had not only demand side but also supply side consequences. The first consisted of a severe cut in consumer demand of the drought affected rural population, and the reduction in general demand because of decling purchasing power as a result of high inflation caused by government spending on drought relief. Supply side problems emanated from shortages in water supply and water rationing in the second year of the drought, affecting the operations of industry.

Macro-economic issues have pre-occupied the firms but these preoccupation's centered on inflation affecting purchasing power and threats emanating from trade liberalization. Financial variables such as interest rate and exchange rate were less of a concern.

In input markets two issues played a role. The one was the rising price levels of (imported) inputs. The other refers to the increased availability of inputs. In the past pre-ESAP period, access to inputs was controlled by firms existing in the market through their (near preferential) allocation of foreign exchange. With liberalization existing firms lost that advantage and potential rival firms obtained easier access to needed inputs, raising competition.

### 3.3 Strategic responses

How have firms responded to these threats? The survey instrument identified 16 different responses (and one open option) and respondents were asked to indicate one or more that firms considered best describing the course(s) of action formulated and actually followed by them in the past three years. These strategic responses are listed in the box below.

The 16 responses may be grouped into five categories: i) exit responses; ii) client oriented defensive responses; iii) belt tightening defensive responses; iv) rationalization of productive processes, and v) development of new markets and products. Below we discuss each in more detail.

One of the passive exit responses is that a firm decides to adjust to lower sales volumes, leading to a downsizing of operations and possibly to retrenchments of staff and workers. A firm responding in this way, would accept that the terms and conditions of competition in the market have changed, and that it would be beyond the control of the firm itself to regain market share and/or sales volume to restore profitability. In the case of Zimbabwe, the protection of the domestic market was lifted by the change in policy regime. Another response is that firms that have been active in the end assembly of imported components and parts, exit wholly or partially from manufacturing and switch to (import) trade. They recognize the difficulty of competing with superior or better priced imports but consider their own distribution networks as an important asset. Obtaining exclusive distribution rights of major international brands is in such a case often a complementary strategic action.

Strategic responses

a) adjustment to lower sales volumes, leading to downsizing of operations and retrenchments of staff/workers
b) exit from manufacturing and switch to (import) trade or combination of the two
c) increasing sales efforts to retain customers
d) reduce price and accept lower profit margin
e) reduce costs by economizing (reducing/postponing outlays)
f) reduce cost by efficiency measures
g) subcontracting (upward/downward) parts of manufacturing to others in order to lower costs
h) (h) outcontracting of producer services in order to reduce costs
i) intensify marketing efforts, looking for new clients
j) improve client services
k) improve product quality by improving product design
l) improve product quality by improving production process
m) change market orientation by moving towards export markets
n) change market orientation by developing new market segments
o) develop new products
p) networking & alliances with other firms
q) other (to be specified by the respondent)

Client oriented defensive responses refer to those where firms step up sales efforts in order to maintain a market position, increase efforts to acquire new clients and/or try to retain customers by improving client services. These are typically immediate responses to declining sales i.e. they may be undertaking without radically altering firm practices.

'Belt tightening' responses are also immediate ones. One is simply economizing. That is to say to reduce costs either by not doing or by postponing cash outlays (skimming). A stepped up version of cost reduction would be the adoption of efficiency measures, whereby the firm critically reviews inputs in relation to outputs. A third belt tightening response would be to accept lower profit margins in an attempt to 'ride out the storm, hoping for better times'. These three responses are primarily responses of a 'status quo' nature. Firms do not change radically what they do and how they do it.

A more radical set of responses concern rationalization of the productive processes of the firm. Firms often begin with improving the existing production processes, investing in new equipment so as to improve quality and raise efficiency. Firms that have establish themselves in the context of import substitution in small domestic markets, often have taken on the production of parts and components in absence of domestic suppliers but also in their attempt to expand their share in the value chain. Foreign exchange scarcities provided an additional stimulus to manufacture these components internally despite the small demand and problems of quality. Lifting domestic trade protection and financial liberalization therefore often leads to a rationalization of production processes. Several aspects have been identified. One response may be to subcontract the manufacture of parts and components, or to outcontract producer services or may even refer to development of networks and alliances with other firms. Thus, while downsizing is a passive and negative response, rationalization is an active and innovative response. It is recognized that old production processes and arrangements (incl. vertical integration) cannot be sustained anymore in the face of changing market conditions, and new production arrangements are introduced.

The fifth category of responses concern the development of new markets and of improved and new products. Five specific responses have been identified. A firm may change market orientation by developing new market segments in existing product

markets, export markets may be another option. improvement of product quality may take place by improving the design of the product. Lastly, the firm may opt to develop entirely new products.

The working hypothesis is that firms have adopted anyone type of response[12]. However, one should take into account the possibility that firms have not developed any explicit response. Several reasons may be forwarded. A firm may be part of a large group of firms or be a subsidiary with no autonomy in these matters. Furthermore, it is conceivable that the management of firms may simply not have responded in an alert or explicit manner or may have discussed the strategic choices but was unable to choose at any concrete response. Lastly, some firms were very recently established and hence no change in behaviour may be noticeable. In order to separate these situation, a filter was applied. It turned out that of the 121 firms interviewed, 106 (88%) has discussed external threats, their implications for their competitiveness and have set out concrete line(s) of action. The findings presented below are restricted to these 106 firms. Table 2 below gives an overview as to the specific types of strategic responses.

The six most frequently cited responses were all in the market oriented and belt tightening categories. Improving process design and improving product design were specific responses of secondary importance (reported by more than 20 firms). Differences between sectors are not very pronounced except in some instances. Down sizing is typically a response practiced in the clothing sector, while switching to trade is an exit response of non-elec machinery firms. The latter are also more active in increasing sales efforts among existing clients, while the clothing sector puts more emphasis on seeking new clients in existing markets and on improving client services.

Belt tightening responses are practiced across the board with little sectoral variation, except that the clothing sector is notably more reluctant to accept lower profit margins. Sub contracting appears to make more sense in the furniture industry than in the other sectors, like non-elec. machinery. This sector has a wide range of products which are often made in small batches. Hence, subcontracting is more difficult to organize compared to furniture making. Improvement of product design is a more frequent response in the consumer goods industries than in the capital goods producing

[12] The survey instrument the possibility was kept open that firms would respond with other types of responses. In the Zimbabwe survey only one instance this option was used.

sectors. Clothing firms have been relatively speaking more active in developing new markets including abroad.

Table 2
Type of strategic response, by firm
selected sectors, Bulawayo

| Type of response | Total (#) | Total (%) | Clothing (%) | Furni-ture (%) | metal fabr. (%) | non-elec mach. (%) |
|---|---|---|---|---|---|---|
| Exit responses | | | | | | |
| - downsizing | 17 | 3.3 | 5.1 | 3.8 | 2.2 | 1.8 |
| - switch to trade | 7 | 1.4 | 0.0 | 0.0 | 1.4 | 4.5 |
| market oriented responses | | | | | | |
| - increasing sales efforts | 79 | 15.5 | 14.1 | 15.1 | 15.9 | 17.3 |
| - seek new clients | 44 | 8.6 | 10.9 | 5.7 | 9.4 | 7.3 |
| - improve client services | 44 | 8.6 | 10.3 | 7.5 | 8.7 | 7.3 |
| Belt tightening responses | | | | | | |
| - economizing | 50 | 9.8 | 9.0 | 9.4 | 10.9 | 10.0 |
| - efficiency measures | 64 | 12.5 | 12.8 | 11.3 | 13.8 | 11.8 |
| - lower profit margins | 52 | 10.2 | 6.4 | 11.3 | 11.6 | 12.7 |
| Rationalization of production | | | | | | |
| - subcontracting manuf' | 9 | 1.8 | 1.3 | 3.8 | 1.4 | 0.9 |
| - outcontracting services | 3 | 0.6 | 0.0 | 0.9 | 0.7 | 0.9 |
| - improve process design | 34 | 6.7 | 7.1 | 7.5 | 7.2 | 4.5 |
| - networking & alliances | 9 | 1.8 | 1.3 | 1.9 | 1.4 | 2.7 |
| New markets and products | | | | | | |
| - improve product design | 42 | 8.2 | 9.6 | 10.4 | 5.8 | 7.3 |
| - new products | 23 | 4.5 | 4.5 | 5.7 | 3.6 | 4.5 |
| - new market segment(s) | 18 | 3.5 | 3.8 | 2.8 | 3.6 | 3.6 |
| - new export markets | 15 | 2.9 | 3.8 | 2.8 | 2.2 | 2.7 |
| | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Survey

Table 3 below summarizes responses by category of response. Defensive strategies have been most prevalent. Undertaking efforts in existing markets and belt tightening have been the predominant responses of the Bulawayo firms. New markets and new products and rationalization of production have received much less attention. Exit responses are surprisingly unimportant. It should be added though that the survey was only applied to firms still in operation at the time of the survey. Firms that had exited altogether have not been covered, leading to an underestimation of responses in this category. Looking at differences by sectors. It may be observed that the clothing and metal fabrication sectors have had a greater preference for market oriented

responses than the other sectors. The belt tightening has also a more preferred option in the engineering sectors. On the other hand, clothing and furniture have developed more responses aiming at new markets and new products. Rationalization of productive processes is more predominant in furniture.

If one would qualify the exit, market oriented and belt tightening as defensive responses and the rationalization of production and new products and markets as the innovative responses, then we may conclude that the defensive responses of the firms have predominated. Innovative responses constitute only 30% of all strategic responses. From a sectoral point of view it may be concluded that the furniture sector has the highest proportion of innovative responses, while metal fabrication and non-elec. machinery have the least proportion of innovative responses. The clothing sector finds itself in an intermediate position.

Table 3
Category of strategic response,
Manufacturing firms, selected sectors, Bulawayo, Zimbabwe

| Category of response | Total (#) | Total (%) | clothing (%) | Furni-ture (%) | metal fab (%) | non-elec mach(%) |
|---|---|---|---|---|---|---|
| exit responses | 24 | 4.7 | 5.1 | 3.8 | 3.6 | 6.4 |
| market oriented responses | 167 | 32.7 | 35.3 | 28.3 | 34.1 | 31.8 |
| belt tightening responses | 166 | 32.5 | 28.2 | 32.1 | 36.2 | 34.5 |
| rationalization of production | 55 | 10.8 | 9.6 | 14.2 | 10.9 | 9.1 |
| new markets and products | 98 | 19.2 | 21.8 | 21.7 | 15.2 | 18.2 |
| | 510 | 100 | 100 | 100 | 100 | 100 |

*From strategies to firms*

The above tables presented aggregate picture on the frequency and relative importance of the different strategic responses. The next step is to examine patterns of response at the level of firms. It is important to note here that respondents could indicate more than one response.

Examining patterns at the level of each firm, several interesting findings emerged. First of all, there are firms that had chosen exclusively defensive responses, but there are no firms that had adopted exclusively innovative responses. In other words, innovation takes place in the context of defensive measures.

Some firms are more focused than others in their response (as indicated by the number of responses that were marked by them). For the purpose of the analysis below, firms have been categorized into three groups. Firstly, firms that have adopted only

defensive responses. Firms that combined defensive with innovative responses. The final group consists of 'indecisive' firms that have either not effectuated any strategic choice (i.e. firms that did not pass the filter mentioned above) or their responses had been so broad and multiple and was seen as lacking any real choice.[13] Table 4 below presents overall and sectoral pattern. There is no clear tendency towards any category of response and it would appear that strategic responses and sector are unrelated to each other[14]. The latter confirms the hypothesis expressed by Braunerhjelm and Fors (1996), and referred to above, that restructuring depends on firm behaviour that is largely independent of the sector to which they belong.

[13] Selection of firms was done with the following criteria. Firms that had not explicitly taken measures to implement their adopted strategies were excluded. Furthermore, firms that adopted more that 6 responses were excluded from the analysis. The cut off criteria is somewhat arbitrary and intuitive. It is motivated by the need to screen out undeciding entrepreneurs and non-revealers. The defensive and innovative category is defined as firms having responses in both categories. The overall percentage of firms retained in the sample is 68% and varies some what by sector. Clothing and metal fabrication have the highest proportion of firms screen out (62 and 59% respectively), while three quarters of the furniture firms and 81.5% of the engineering firms were retained.

[14] The cross tabulation yielded a chi square (6.862), significance (.334)

Table 4
Strategic behaviour of firms, Selected manufacturing sectors, Bulawayo, Zimbabwe

| Strategy | Total | Clothing | Furniture | Metal Fabri-cation | Non-Elec Machinery |
|---|---|---|---|---|---|
| Indecisive | 38 (31.4) | 13 (38.2) | 7 (25.0) | 13 (40.6) | 5 (18.5) |
| Defensive only | 40 (33.1%) | 10 (29.4%) | 11 (39.3%) | 11 (34.4%) | 8 (29.6%) |
| Defensive & Innovative | 43 (35.5%) | 11 (32.4%) | 10 (35.7%) | 8 (25.1%) | 14 (51.8%) |
| Total | 121 (100%) | 34 (28.1%) | 28 (23.1) | 32 (26.4%) | 27 (22.3%) |

Table 5 examines strategic behaviour by firms size. Smaller firms are somewhat more prone to adopt an innovative strategy than larger firms. Small firms and even more so medium sized firms are also more indecisive in comparison to large and very large firms. Large and very large firms have a more than proportional representation in the defensive and combination strategies. Differences are however small. When looked at in terms of size, it would seem that strategy and size are unrelated to eachother.[15]

Table 5
Strategic behaviour of firms and firm size
Selected manufacturing sectors, Bulawayo, Zimbabwe

| Strategy | Total | <=25 | 26 - 100 | 101 - 250 | > 250 |
|---|---|---|---|---|---|
| Indecisive firms | 38 (31.4%) | 12 (34.3%) | 16 (42.1%) | 3 (15.0%) | 7 (25.9%) |
| Defensive only | 40 (33.1%) | 10 (28.6%) | 12 (31.6%) | 7 (35.0%) | 10 (37.0%) |
| Defensive & Innovative | 43 (35.5%) | 13 (37.1%) | 10 (26.3%) | 10 (50.0%) | 10 (44.4%) |
| Total | 121 (100%) | 35 (100%) | 38 (100%) | 20 (100%) | 27 (100%) |

### 3.4 Concrete actions taken by firms

The strategies that firms formulate in response to perceived threats are statements of overall goals and of broad indications as to how these may be achieved. These strategies guide subsequent action in the main functional areas of the firm, such as the physical process of manufacturing, physical aspects of the products, management, finance, labour relations and human resource development, marketing,

[15] The crosstabulation gave a chi square of (5.91), significance (.433)

networking and inter-firm relations. The second part of the research consists of examining how overall strategies are translated into concrete actions in each of these functional areas of the firm. By analising concrete actions a more detailed picture is generated firm level restructuring patterns.

The field instrument identified a series of possible courses of action. These concrete actions were grouped under 9 categories. These are:

1. Downsizing actions involving reduction of manufacturing operations.
2. Physical product changes and product innovations, which refer to improving, revising and changing the products/services on offer.
3. Physical manufacturing process innovations which lead to a revision and improvement of production processes.
4. Management which concerns the revision and improvement of management capabilities, management organization and processes.
5. Financial restructuring concerning changing ownership structure, debt conversion and rescheduling.
6. Human resource development involving the strengthening of knowledge, skills and expertise of employees.
7. Markets and marketing which concerns the revision and improvement of knowledge about current and prospective clients and improving knowledge of current and prospective clients about the firm and its products.
8. Networking which concerns subcontracting of manufacturing operations, outcontracting of producer services, franchising and manufacture under license.
9. Inter-firm co-operation involving mutually agreed joint undertaking of particular activities in domestic/export markets.

A detailed enumeration of actions identified under each of the areas see appendix 1 of the research report (Helmsing, 1998b)

Table 6 below gives an overview of the categories and of the most important actions within each category. This table is based on the indicated "dominant action" within each category[16]. It may be concluded that five types of concrete actions have

[16] Respondents could give multiple answers in each category as well as add their own actions different from the ones listed. In order to reduce the range to be analyzed firms were asked to indicate which of the selected actions has been the dominant one.

predominated. First of all, more that 90% of the firms have undertaken concrete actions to change the physical process of manufacturing and physical aspects of the products. Thus, product and process innovations of different type and intensity have been adopted by a large majority of the firms. The most prevalent type of action is of an engineering type. The other three important categories of action were marketing, human resource development and management. Areas of action such as networking, inter-firm co-operation, finance and down sizing have only been adopted by a small proportion of firms.

In terms of product innovations the emphasis has been on improving the technical specifications and change in physical characteristics of existing products, and for a minority of firms it consisted of introducing new products and new product groups. Two sectors show some variation. One is the furniture making industry which has put a far greater effort on improving technical characteristics of existing products and proportionally far less effort on new products and new product groups. The other is the clothing industry which has shown a much greater propensity to develop new product groups and towards changing physical appearance.

As regards process innovations, the emphasis has been generally on improving quality control and on upgrading existing plant and equipment and acquiring new plant and equipment. A physical re-design of the organization of production processes, so as to improve workflow, has been much less practiced, except in the furniture making industry. An organizational re-design of operations, including decentralization of production decisions, involving workers in quality control have not been important actions among the firms.

The concrete actions in the area of marketing have the same order of priorities, namely first and foremost on clients and products in existing markets and market development for existing products (notably in the clothing industry) and much less in relation to market development for new products. Again the furniture making industry is, in relative terms, a favourable exception.

The concrete actions in the area of human resource development have been fairly conventional. That is to say, skill upgrading in areas of immediate need has been, by far, the most important (but narrow) concern of the firms, while only a small minority has given more attention to delegation of responsibilities and to personnel development programs. Other areas of action, such as worker involvement in decision

making, change in reward systems have hardly figured among the dominant actions taken by the firms in the past three years. It is interesting to note differences between sectors which relate to skill content of production processes. The clothing industry has been notably less active in the area of human resource development, on the other hand, metal fabrication and machinery sectors have paid far more attention to these issues.

Strengthening of management capacity is the fifth area of concrete actions, undertaken by the firms. Most attention has been given to increase the financial & cost control and control of internal operations by management and to a lesser extent on management of quality control. The integration of production and sales/marketing management so as to be able to translate changes in markets more swiftly into products and production has only been adopted by a small minority of firms. Other important areas such as human resource management, sourcing of inputs, research & development and strategic management have received very little attention.

Table 6
Concrete actions undertaken by firms in past 3 years,
selected sectors, Bulawayo, 1996

| Dominant action | Total | clothing | furniture | metal fab | machinery |
|---|---|---|---|---|---|
| Downsizing | 18,2 | 32,4 | 32,1 | 3,1 | 3,7 |
| - discontinue least profitable | 14,0 | 23,5 | 28,6 | 0,0 | 3,7 |
| | | | | | |
| Product innovations | 92,6 | 97,1 | 89,3 | 90,6 | 96,3 |
| - improve technical spec'tns | 29,8 | 14,7 | 46,4 | 28,1 | 33,3 |
| - change physical charac'tics | 13,2 | 23,5 | 14,3 | 6,3 | 7,4 |
| - new products | 16,5 | 17,6 | 10,7 | 18,8 | 18,5 |
| - new product groups | 14,9 | 26,5 | 3,6 | 15,6 | 11,1 |
| | | | | | |
| Process innovations | 90,9 | 85,3 | 96,4 | 96,9 | 85,2 |
| - quality control | 24,8 | 20,6 | 17,9 | 28,1 | 33,3 |
| - upgrading plant & equipment | 19,0 | 14,7 | 17,9 | 18,8 | 25,9 |
| - acquisition new plant & eq. | 15,7 | 20,6 | 21,4 | 12,5 | 7,4 |
| - improving inputs | 11,6 | 17,6 | 10,7 | 12,5 | 3,7 |
| - re-design plant/process | 11,6 | 8,8 | 21,4 | 9,4 | 7,4 |
| | | | | | |
| Management | 83,5 | 85,3 | 75,0 | 87,5 | 85,2 |
| - financial management | 20,7 | 17,6 | 17,9 | 31,3 | 14,8 |
| - internal control | 15,7 | 11,8 | 25,0 | 12,5 | 14,8 |
| - quality mgmt | 12,4 | 5,9 | 7,1 | 18,8 | 22,2 |
| - integration prod/sales mgmt | 11,6 | 11,8 | 3,6 | 9,4 | 22,2 |
| | | | | | |
| Financial restructuring | 23,1 | 29,4 | 17,9 | 18,8 | 25,9 |
| - rescheduling of debts | 8,3 | 8,8 | 7,1 | 9,4 | 7,4 |
| | | | | | |
| HRD | 86,0 | 73,5 | 85,7 | 93,8 | 92,6 |
| - skill upgrading | 31,4 | 32,4 | 28,6 | 40,6 | 22,2 |
| - delegation responsibility-'s | 19,8 | 17,6 | 25,0 | 25,0 | 11,1 |
| - personal career development | 11,6 | 2,9 | 7,1 | 9,4 | 29,6 |
| | | | | | |
| Marketing | 86,8 | 88,2 | 85,7 | 84,4 | 88,9 |
| - existing markets | 28,1 | 38,2 | 21,4 | 21,9 | 29,6 |
| - existing products | 19,0 | 17,6 | 10,7 | 21,9 | 25,9 |
| - new products | 12,4 | 11,8 | 17,9 | 9,4 | 11,1 |
| - specific advertising | 9,9 | 5,9 | 14,3 | 12,5 | 7,4 |
| | | | | | |
| Networking | 27,3 | 23,5 | 25,0 | 34,4 | 25,9 |
| - subcontr.subprocess | 9,9 | 8,8 | 14,3 | 3,1 | 7,4 |
| - subcontr compts local | 9,1 | 2,9 | 3,6 | 21,9 | 11,1 |
| | | | | | |
| IF co-operation | 28,9 | 41,2 | 14,3 | 31,3 | 25,9 |
| - joint marketing | 9,9 | 14,7 | 3,6 | 15,6 | 3,7 |

Source: Survey

The four areas in which firms have been least active in the period analised were networking, inter-firm co-operation, financial restructuring and down sizing. Starting with the latter, it is important to note that downsizing has been restricted primarily to clothing and furniture making industry. In the other two sectors downsizing (other than a complete closure of the company) has been negligible. In almost all instances, downsizing focused on closing down least profitable product groups, without switching to trading. Other alternatives, such as closing down sub processes or manufacture of components and parts, with or without subcontracting, have not been contemplated on any scale by the respondents. This is a somewhat surprising result. The reason being that firms that have established themselves in a long period of (forced) import substitution would have, in all likelihood, engaged themselves in the (sub-optimal) manufacture of components and parts in order to save the very scarce foreign exchange. One would expect trade liberalization to trigger micro-level adjustment in the composition of production processes.

Surprisingly few firms engaged in financial restructuring. Most actions concentrated on debt rescheduling and debt conversion. Other actions such as expanding equity, acquiring new domestic or foreign partners were hardly registered. Zimbabwean industry has traditionally been self financing. The debt problem that emerged in the early/mid 90s had several causes. One is the substantial investments made by firms in plant and equipment which was partly financed with bank loans. The second is the unexpected high level of interest rates which followed the financial liberalization and the third was the rapid decline in sales as a result of recession and drought[17].

Networking and inter-firm co-operation have been relatively unimportant areas of action undertaken by the firms in the past three years. Networking has primarily focused on subcontracting of subprocesses and the manufacture of components by local firms. Its relatively minor importance (less than 10% of the firms undertook some action) is consistent with the observations made earlier in relation to process innovations where subcontracting was found to be adopted by only a small proportion of the firms. International networking, either through subcontracting components or parts or through manufacture under license, have not played any significant role. Inter-

[17] Source: field notes 1997, press reports in Chronicle

firm co-operation focused on joint marketing efforts in export markets. Other forms of co-operation, such as sharing or pooling facilities, jointly purchasing or contracting inputs and services or co-manufacturing and joint tendering have not been practiced.

Overlooking these responses, one is tempted to conclude that the firms in Bulawayo are as yet adopting fairly conventional actions, in areas of product and process innovations, in marketing, in HRD and in management. 'New' competition and micro-level transition towards an 'entrepreneurial firm', as defined by Michael Best above, would however require more actions in the areas of product and product group development not necessarily via more hardware but via reorganization of production processes within the firm, changing management of internal processes as well as more actions in the areas of networking and inter firm co-operation.

*Actions by defensive versus actions by innovative firms*

Do innovative firms adopt similar actions as defensively responding firms? Below we have examined this issue with respect to the actions undertaken by the firms in the 1992-1995 period as well as on the actions that were identified, by the respondents, to be undertaken in the next three years[18]. In the table below we have summarized those instances where differences in the distribution are significant, using the chi square test. In all instances, innovative firms are more prone to adopt these actions than defensive firms.

With regard to actions in the past three years, the differences between the two types of firms, have not been very strong and are restricted to only 4 issues, namely, diversification into new product groups, integrating management of production, sales and marketing, research on existing markets and individual advertising. Nevertheless, these are relevant ones in terms of innovation and 'new competition'. One possible explanation for the lack of differentiated responses between predominantly innovation and defensive firms is that the two groups partially overlap (there are no exclusively innovative firms) That is to say all firms undertake certain immediate defensive responses. A second factor could be the time lag in developing actions addressing the

[18] For each action the respondent could respond yes or no. Cross tabulating for two subgroups of firms generated 2*2 tables for which chi squares were computed. These are reproduced in table 7 in the main text.

longer term. In other words it would take time for differences in strategies to manifest themselves in actions.

Table 7
Past and future actions: Defensive only and Innovative firms

| Type of action | | Chi Square | Signif'ce |
|---|---|---|---|
| Actions in past 3 years | | | |
| Diversifying into new product groups | I>D | 2.726 | .09867 |
| Integrating production, sales and marketing management | I>D | 3.201 | .07360 |
| Research on existing markets | I>D | 4.372 | .03653 |
| Individual advertising | I>D | 2.986 | .08399 |
| Desirable future actions | | | |
| Downsizing switching to trading | I>D | 8.236 | .00411 |
| Improve technical characteristics existing ppal product | I>D | 2.960 | .08536 |
| Change physical appearance | I>D | 4.723 | .02975 |
| New product development | I>D | 3.616 | .05720 |
| Diversify into new product group | I>D | 3.020 | .08223 |
| Upgrading plant & equipment | I>D | 7.432 | .00641 |
| Improve inputs | I>D | 4.155 | .04152 |
| Improve quality control | I>D | 5.382 | .02034 |
| Strengthening internal control of operations | I>D | 9.103 | .00255 |
| Integrating production, sales and marketing management | I>D | 4.359 | .03680 |
| Procurement/Sourcing of inputs | I>D | 7.274 | .00700 |
| Management of research & development | I>D | 2.795 | .09454 |
| Skill upgrading | I>D | 3.394 | .06542 |
| Management training | I>D | 5.032 | .02488 |
| Component subcontracting | I>D | 8.236 | .00411 |

Source: computed from survey

With regard to areas of future action, there are more differences between the two types of firms. In comparison to defensive firms, a greater proportion of innovative firms seeks to be active in product innovations (of both existing and new products), pay more attention to process innovation in terms of upgrading of equipment, improving quality of inputs and improving quality control. Also in the area of management, innovative firms orient themselves more to strengthening of control of operations, integrating production, sales and marketing, put more emphasis on sourcing of inputs and management of R&D processes. More attention to management is also reflected in future training efforts. Lastly, innovative firms are more prone to engage in component subcontracting than defensive firms. One is tempted to conclude that although overall the actions of the Bulawayo firms have followed existing paths, at least among the innovative firms, some elements of 'new' competition become visible.

## 4. ENTERPRISE SUPPORT SERVICES

The research has made an inventory of enterprise support services and has established which of these have played a key role to the firms for the implementation of their strategic actions. In addition, respondents to the survey have been asked to indicate which support services are important for their planned future actions. The comparison of the two gives some indication of the trends in demand for support services. In addition respondents were asked to indicate their institutional preferences. That is to say they were asked to identify which would be the most desirable institutional forms through which particular support services ought to be delivered in the future.

The following support services were identified: 1) general information and enterprise support technological support services; 2) marketing support services; 3) financial support services, and, 5) training services. The details of the enumerated support services in each of these categories and of the institutional modalities are found in the Appendix 2 of thie research report (Helmsing, 1998b). The table below presents an overview of the support services which according to the respondents have been instrumental in the success of the firm in the past three years.

Table 8
Relative importance of enterprise support services

| Category - type of support service | Frequency |
|---|---|
| General information and enterprise assistance | |
| • general information & promotion | 33 (27%) |
| • local/regional promotion | 25 (21%) |
| • information regulatory policies | 19 (16%) |
| • small enterprise promotion | 12 (10%) |
| Technological support services | |
| • product design services | 57 (47%) |
| • quality control and standards | 39 (32%) |
| • R&D on manufacturing technologies | 26 (21%) |
| • technical assistance and industrial extension | 12 (10%) |
| • databases & technological information services | 5 (4%) |
| Marketing support services | |
| • organisation of domestic fairs | 47 (39%) |
| • general market & export information services | 25 (21%) |
| • identification of export opportunities | 20 (16%) |
| • representation in international fairs | 15 (12%) |
| • identification of buyers abroad | 11 (9%) |
| • identification of international trading firms | 10 (8%) |
| • information on design & standards for exports | 10 (8%) |
| • distribution of publicity material abroad | 6 (5%) |
| • representation in international tenders etc. | 1 (1%) |
| Financial support services | |
| • investment loans | 58 (48%) |
| • venture capital | 11 (9%) |
| • leasing | 7 (6%) |
| • loan guarantees | 7 (6%) |
| • credit insurance | 6 (5%) |
| • reprogramming of debts | 6 (5%) |
| • cofinancing of training projects | 1 (1%) |
| • cofinancing of technological updating projects | - |
| • cofinancing of marketing projects | 2 (2%) |
| • cofinance of management improvement programs | 1 (1%) |
| Training services | |
| • vocational training | 50 (41%) |
| • technological updating | 29 (24%) |
| • management training | 28 (23%) |
| • training supervisory management | 38 (31%) |
| • financial management training | 40 (33%) |
| • training in marketing & exports | 24 (20%) |

Several conclusions may be drawn. First of all, enterprise support in the past few years has been oriented primarily towards training services. Of the ten most frequently cited support services, firms list 5 training services. This is somewhat

unexpected as Zimbabwe doesn't have a specialized training service for industry nor a particular performance record in this area. Bulawayo counts however with an important Polytechnic College specialized in trades for industry and the National University of Science & Technology which was established in Bulawayo in the late 80s to respond to demands for high level technical training.

A large number of firms mention investment loans as a key support service. This may be explained by the World Bank financed, loan facility that was made available to manufacturing industry under the Economic Structural Adjustment Programme. Marketing support services have been of a relatively limited importance, in spite of the increasing attention firms have begun to pay to maintaining existing and entering new markets. The Bulawayo Industry Fair is the country's second largest domestic fair (after Harare's Agricultural Show) and is the most important one to the local industry. With regard to technological support services, firms list quality control & standards (Southern African Institute of Standards) and product design as key areas where they used support services.

*Differences between defensive and innovative firms*

Do innovative firms demand different support services than defensive firms? Table 9 gives the results of the comparisons. Differences are found in marketing and general promotion & information and reprogramming of debts, On the whole the evidence is however not very strong and at this moment would not warrant a plea to steer the development of the support system in any special direction.

Table 9
Use of support services in past three years: Defensive and Innovative firms

| Support services used in past three years | | Chi Square | Signif'ce |
|---|---|---|---|
| General Enterprise promotion and information with local orientation | I>D | 5.8286 | .01577 |
| Technological support: Technological databases | I>D | 2.895 | .08884 |
| Marketing support: info on product standards, design & packaging | I>D | 2.895 | .08884 |
| Marketing support: distribution promotion materials abroad | I>D | 2.895 | .08884 |
| Marketing support: introduction ot foreign buyers | I>D | 3.909 | .04802 |
| Financial support services: reprogramming of debt | I>D | 2.895 | .08884 |

Source: computed from survey

*Institutional preferences for service delivery*

In the past decade or so, enterprise support systems underwent considerable changes in many countries. State or public sector services lost their dominant position due to their performance and to changes in the demand for services. On the whole, a greater institutional diversity emerged. Public or parastatal services exist alongside private sector and there is a great variety of mixed public-private modalities. One would readily accept a certain degree of 'path dependency' as regards the evolution of institutional support services. I.e. that the historical institutional context in a particular country or region would have a considerable influence as to which kind of institutional modality form would have greater acceptance than others. There is however relatively little theory to explain what is the most appropriate institutional form in which particular support services can be organized and delivered.

Taking this into account the research approached the matter in an empirical manner and focused on identifying the institutional preferences of the users of these services, the firms in our survey. The following procedure was adopted. First a list of specialist support services was given and respondents were asked to identify which they considered important taking into account the actions they had in mind to strengthen their competitive capacity in the near future. Subsequently, and based on international literature, various institutional delivery options were listed out of which the respondent could make a choice[19]. The answer to our questions varied by type of service. The next table presents on overall view of the findings.

[19] Levy, B. 1994. Succesful small and medium enterprises and their support systems: a comparative analysis of four countries. Washington: World Bank.
Levitsky, J. 1993. Private sector organizations and support for small and microenterprises. In: Helmsing, A.H.J. & Kolstee, Th. Eds. 1993 *Small enterprises and changing polices*. London: IT Publications.
Levitsky, J. 1994. Business associations in countries in transition to market economies. *Small enterprise Development*, 5, 3, 24-34

Table 10
Support services and institutional preferences

| Type of Service | Frequency | Preferred institutional modality |
|---|---|---|
| General enterprise support services | | |
| • general business advice | 56 (46%) | industry or sector association |
| • local economic development promotion | 52 (43%) | local government |
| • business information centers | 48 (40%) | industry association |
| Technological support services | | |
| • quality control & standards | 68 (56%) | government agency |
| • R&D on manufacturing technology | 56 (46%) | sector association |
| • product design services | 54 (45%) | commercial firms; sector association |
| • technical assistance & industrial extension | 34 (28%) | sector association; equipment suppliers |
| • data bases and technological information services | 32 (26%) | sector association |
| Marketing support services | | |
| • organization of domestic fairs | 66 (55%) | government agency |
| • information services on export markets | 41 (34%) | sector associations; government agency |
| • representation in international fairs | 26 (22%) | government agency; international trading firms |
| • identification of export opportunities | 22 (19%) | government agency; sector association |
| • export insurance | 7 (6%) | government agency; sector association |
| Financial services | | |
| • investment finance | 61 (50%) | commercial banks |
| • venture capital | 26 (22%) | central government |
| • loan guarantees | 19 (16%) | commercial banks |
| • rescheduling of debt | 11 (9%) | commercial banks |
| • credit insurance | 10 (8%) | central government agency; commercial banks |
| • cofinancing of techn. updating projects | 8 (7%) | government agency |
| • cofinancing mgmt improvement programmes | 5 (4%) | sector association |
| • cofinancing of marketing projects | 3 (3%) | government agency |
| Training services | | |
| • vocational training | 81 (67%) | academic centre |
| • training of supervisory staff | 52 (43%) | sector association; academic center |
| • management training | 52 (43%) | sector association; academic center |
| • financial management training | 50 (41%) | academic center |
| • technological updating | 45 (37%) | sector association; private consultants |
| • training in marketing and export | 38 (31%) | private consultants; sector associations |

Source: Survey

As regards general assistance services there is a clear preference for general or sector specific business associations and for local government. Private and non-profit foundations, which do exist for the purpose of enterprise development play little or no role in the institutional preferences of the respondents.

The firms have a clear preference for sector associations as providers of technological support services. Government is only seen to play a role in the specification and testing of quality control and standards. Equipment suppliers are often seen as important sources of technological information to firms. In our case they do, but less prominently. For product design private or commercial providers are seen as an important source. Academic centers play a relatively minor role as regards technological support services, in spite of the establishment of the National University of Science & Technology in Bulawayo (with specialization in engineering).

The interviewed firms continue to see a considerable role seen for central government in the provision of marketing services, especially in relation to export markets (roles currently performed by ZIMTRADE) and in the organization of domestic trade & industry fairs. Inter-firm organization at the sector level is, once more, considered an important secondary option to organize marketing support services. Private sector based specialist marketing consultants are not considered to be viable alternative.

As regards financial services, the dominant role of commercial banks is re-affirmed though there remains a role seen for government, especially as regards venture capital (Zimbabwe Venture Capital Company). The latter is somewhat unexpected given the rapid expansion and diversification of Zimbabwe's financial sector since financial liberalization in the early nineties. Partnerships between the public and private sector for industrial restructuring and innovation has not gained much credibility. Only a small minority of firms consider these as relevant options. Last but not least, training services remain firmly in the realm of academic centers, but there is a clear shift towards sector associations and private commercial providers.

Do defensive firms have different institutional preferences than innovative firms. Are the latter "loners" and the defensive firms more dependent on government? This issues has not yet been researched.

## 5. PRODUCER SERVICES

Under ‘new competition’, producer services (such as accounting, publicity, finance, computer, design, transport & distribution, engineering, procurement, marketing etc.) play an important role. The reason being that determinants of competitive capacity of enterprises have become manifold and are extended into all major functional areas of the enterprise (Goe, 1991). In the majority of cases these services, if provided internally from within the firms, represent high fixed costs and often have a high cost risk. Often a firm may not have sufficient internal demand or the services have a high level of complexity which makes it difficult for a company to internalize them. In these cases it would be advantageous for the firm to draw external expertise. It is often argued also that firms that grew up under protected markets of the import substitution era, have either incorporated certain functions for control purposes (e.g. transport) or have not developed certain functions, such as marketing (cf Helmsing, 1993). The existence of a ‘seller’s market gave the firms little incentive to do so. Alternatively, functions may not have been available in the market and firms therefore have to internalize them (e.g. computer hardware and software). Thus, there are several factors that may lead to the hypothesis that firms would increasingly rely in external expert services as competition heightens (due to liberalization) and the terms of competition change (due to ‘new competition’).

The research has sought to establish the status of producer services, their recent evolution and the factors that have caused any changes in the manner in which a firm caters for them. The next table gives a panoramic overview of these issues for each of the 20 producer services.

Table 11

Producer services: internalised and contracted, combination, and frequency of change

| Producer service | Key service in past 3 yrs* | Desirable service in future** | Internal service | Fully externally contracted service | Partially contracted | Proportion contracted (n) | Frequency of change in past 3 yrs*** |
|---|---|---|---|---|---|---|---|
| Accounting | **20.5** | **46%** | 48% | **31%** | **23%** | 46% (27) | 2% |
| Advert. & Publicity | **26.8** | **55%** | 58% | **16%** | 9% | 69% (14) | 2% |
| Banking & Fin Serv. | 11.1 | 31% | **92%** | 6% | 2% | 35% (7) | 2% |
| Catering | 0.8 | 7% | 40% | 5% | 5% | 26% (10) | 2% |
| Cleaning | 19.5 | 7% | **77%** | 7% | 14% | 33% (20) | 0% |
| Comp. Hardware | 14.7 | 37% | 53% | 7% | 6% | 29% (7) | 1% |
| Computer Software | 12.9 | 35% | 35% | **16%** | 7% | 30% (10) | 2% |
| Design services | **20.0** | **50%** | **86%** | 5% | 3% | 24% (9) | 0% |
| Employment agency | 2.6 | 12% | 67% | 14% | 13% | 29% (20) | 1% |
| Labour recruitment | 2.9 | 19% | 75% | 9% | 10% | 27% (16) | 0% |
| Engineering & repairs | 9.9 | 24% | 34% | **24%** | **40%** | 24% (55) | 0% |
| Legal services | 2.3 | 11% | 2% | **85%** | 1% | 90% (5) | 0% |
| Maintenance grounds & buildings | 19.3 | 5% | 67% | 11% | 5% | 71% (11) | 0% |
| Management services | 10.7 | 29% | 69% | 12% | 13% | 46% (22) | 0% |
| Marketing | **21.5** | **45%** | **86%** | 5% | 5% | 70% (9) | 0% |
| Procurement | 7.3 | 16% | **88%** | 2% | 8% | 61% (15) | 0% |
| Security | 7.8 | 14% | 42% | **19%** | **37%** | 55% (50) | 0% |
| Training | **31.1** | **69%** | 6% | 1% | 2% | 25% (2) | 0% |
| Transport & distribution | 9.0 | 19% | 59% | 4% | 2% | 73% (7) | 0% |
| Transport of staff | 3.5 | 14% | 78% | 2% | 4% | 56% (10) | 0% |

* respondents were asked to assess on a scale of 1 to 5 the role the service played in raising competitiveness of the firm; these assessment were summed and divided by the sum total maximum score for each service.

** percentage of firms responding

*** number of firms that has changed the provision of the service in the past three years increasing contracting

Source: Survey

It is worth noting that certain services are not readily used by all firms. For example, catering services, advertising & publicity, computers. For these services, these firms don't make a choice for either 'make' or 'buy'[20].

The services that are most frequently contracted externally are legal services, accounting services, engineering & repairs, security and advertising & publicity and computer software. It is worth noting that most of these outcontracted services are not considered critical to raise competitiveness. e.g. legal services, engineering & repairs, and security, and possibly with the exception of accounting services and advertising.

The services in which one would expect more external (specialist) contracting for the purposes of strengthening 'new' competition capacity, such as design services, financial services, marketing and procurement (global sourcing), externalization is not taking place. Indeed 3 of the 5 services that are considered, by the firms, as being a key to raising competitiveness, there is little outcontracting (notably design, training and marketing). The only positive sign is the fact that the mentioned services are considered to be services which the respondents would wish to have locally available in the future.

Even in traditional services such as industrial and office cleaning, logistics & distribution, transport of staff, external contracting of services is relatively low.

Finally, it is important to stress the lack of change with respect to the outcontracting and externalization of producer services. In this respect the situation is not much different from the one concerning industrial subcontracting. In both instances there is, on the whole, a relatively low degree of externalization.

In view of these evidence, the hypothesis formulated above needs to be rejected: Zimbabwean firms are not 'vertically disintegrating' in as far as producer services are concerned. Externalization is generally at low levels and no significant increase can be detected.

Are there differences in the pattern of externalization and outcontracting of producer services between defensive and innovative firms? As we saw above, there is generally little externalization and outcontracting and little changes were observed in the period 1992-1995. The numbers are small and the differences between innovative and defensive firms are too small to be significant.

[20] This explains why the percentages of columns 4, 5 and 6 do not add up to 100.

## 6. CONCLUDING OBSERVATIONS

With the implementation of the structural adjustment programme 'old' institutions have fallen away (e.g. forex allocation, import controls, seller's markets) and firms have been exposed to a greater variety of external and competitive threats. Not all firms responded to these external changes in innovative ways. A large number is 'indecisive' and made no explicit real choices. Others reacted defensively, and these firms may take indeed the 'low road' of (de-)industrialization. The strong impression the research (survey and interviews) has generated is that these defensive responses are born out of necessity and lack of knowledge as to possible avenues and options of change (incl. the 'how to change'), while keeping the business running 'as usual' but under increasing stresses and strains.

In adjusting to liberalized markets, firms have to redefine their routines and practices on many fronts, i.e. not only in terms of technology. Product and process innovations are needed but also strengthening of management, developing of marketing functions and engaging in HRD. In this context, we do observe some differences between defensive and innovative firms. The latter pay more attention to areas that are listed as critical to 'new competition' (product and product group development, better integration of production, marketing and sales and other management improvements, and those in the area of marketing).

The competitive capacity of firms depends not only on its internal capacity, but also on the efficiency and capacity of its suppliers and on the environment in which they operate. Support institutions are part of this environment. One of the 'blind spots' in structural adjustment policies has been the creation of new institutions that enable firms to compete effectively in liberalized markets. Enterprise support services for industry continue to play a role, but there is little theory that guides its institutionalization. This study has shown that there continues to be use of and demand for enterprise support services. These are not limited to technology, but extend to financial services, marketing, training and general business services. The enterprise support system itself is being liberalized, where government has become less dominant and sector associations have become more prominent.

As to the institutional modalities of services delivery and the preferences of firms, it may be concluded that firms in Bulawayo have not 'en masse' turned away from public agencies, though the functions these agencies play, are more narrowly

defined than in the past. Private sector firms perform only particular roles (notable product design, training and international trade). Sector associations have become one of the key intermediaries through which firms acquire information and support. The general industrial association, the Confederation of Zimbabwe Industries, has lost importance as is evidenced by declining membership[21], while sector associations have increased in importance.

The notion of 'innovative milieu' centers around public, collective and private institutions involved in R&D, generating and transmitting technological innovations. In an innovative milieu there is interaction between firms and the institutions concerned in order to coordinate the direction of information gathering and R&D efforts. Perhaps the most sobering point is in the case of Bulawayo is the notable absence of academic institutions among the agencies most preferred to deliver technological support services. This would seem to be indicative of an absence of concrete interactions. Sector associations are the key intermediary with respect to technological support services. with commercial firms and government agencies performing particular roles. The role of these sector associations, their strengths and weaknesses, are as yet not well understood[22].

Producer or business services refer to functions that support internal coordination and external transactions as well as direct services that support manufacturing operations. There is some overlap between these producer services and the enterprise support services examined above. Both types of services contribute to the creation of an innovative milieu. Specialist producer service firms that establish themselves in response to externalization of these services by established manufacturing firms, create agglomeration advantages for other (and smaller) firms that hitherto had not internalized these services nor had any access to them. The research found that relatively little externalization of these producer services had actually taken place among established manufacturing firms since adjustment began. The ones that have been externalized refer to 'conventional' producer services, but not to those that play a role in 'new' competition. Very few firms shifted towards outcontracting of producer services during the period analyzed, and no differences could be detected between innovative and defensive firms. It would therefore seem reasonable to

[21] Partly this may be explained by having lost its function in the (pre-ESAP) forex allocation system.

conclude that in the case of Bulawayo, producer services do not as yet contribute to creating an innovative milieu.

For the creation of a local innovative milieu 'it takes two to tango'. Both firms and support systems have to come into tune with each other. However, both have been subjected to adjustment. There is a tendency towards 'vertical link up' via the sector associations. There would seem to be however, as yet, insufficient interaction between the firms themselves and between firms and the support institutions to coordinate actions to strengthen local competitive capacity.

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[22] See Levitsky, 1992, 1993 and 1994.

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